in many ways a building is like a human being

A casual glance at a person gives an impression only of stature, age and whether that person is pleasing to the eye. Further acquaintance enables you to know their personality and something of the life they have led. These are the outward manifestations of that entity known as a human individual.

Similarly, a casual glance at a building tells you its size, general appearance and age. Association with a building lends to it a personality and meaning through your eyes. But these, too, are only outward signs of an integrated marvel of architecture and engineering.

As important to a building as its facade and interior styling are the arteries which transform it from a mere hulk into an almost living thing.

Above acoustical ceilings, under tiled floor and behind paneled walls is concealed the heart of a building.
PREHISTORIC HERITAGE

ABOUT 70,000 YEARS ago the hunting bow was invented. What has this fact to do with modern engineering? The drive belt or V belt used today to transmit power from electric motors to machines developed from the bow.

Here is the story: During the Stone Age the bow was used also as a fire drill and as a drill in general. Since 2000 B.C. the bow was used to rotate the turners lathe. This usage was the same until four hundred years ago. During the eleventh century A.D., the bow in Europe had been developed into the crossbow, which was so powerful that it released more than a 1,000 pounds of pressure. This weapon would have made the armor of medieval knights useless, but the Pope in 1139 A.D. outlawed its use as a weapon among Christians. In the sixteenth century the crossbow replaced frequently the bow as a power source in industry.

Our picture shows a lathe from about the year 1650, the end of the Thirty Years War, which in fact represents a pre-stage to the modern turret lathe. It was used to turn wooden screws for presses, winches and other wooden machinery, also legs and trimmings for furniture. (See samples in foreground.)

One can see the crossbow attached to the ceiling and connected by a rope with the treadle on the floor, on which the worker stepped to use the elasticity of the crossbow to drive the lathe. The back and forth movement is turned into a continuous oneway movement by the crank and flying wheel combination. Here we are on the doorsteps of modern technology in which Detroit plays such an important part.

*This is the eighth of a series of paintings entitled "Adventures in Time", painted in full color by Marvin Beerbohm, from material prepared by Dr. George Lechler, Wayne University scientist, for the Harlan Electric Company.
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the clique in the chapter

Word has been received by the Board of Directors of the chapter that it is run by a clique. Upon investigation we find this statement is true. Furthermore, we find the clique is composed of faithful members who are present at every meeting, who accept appointments to committees, who give willingly of their time, energies and efforts, and who sincerely believe that the more one puts into his Chapter the more he will get out of it. There is no question that the enthusiasm, responsibility and efforts of these members are of inestimable value to your chapter. And we would, therefore, suggest that you join this clique. It is not a difficult matter to do—in fact, it is very easy. Begin by attending meetings regularly; take a more lively interest in chapter activities; make helpful, constructive suggestions, and accept responsibilities to serve on committees. Show a continual interest in all affairs pertaining to your chapter. Before you realize it, you will become a member of the clique and you would be surprised to know how eager they are to have you.

(Adapted from writings of A. Stanley Ezekiel)

Thanks to Owen A. Luckenbach, A.I.A.

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monthly bulletin, michigan society of architects, volume 28, no. 8

including national architect

OFFICIAL PUBLICATION—National Council of Architectural Registration Boards.

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Executive Committee consists of aforementioned officers and Roger C. Kirchoff, Milwaukee, Wis., Council Board of Review; Walter F. Mortensen, Charleston, W. Va.; Louis White, Philadelphia, Pa., Chicago, Md.; Ralph Edward Winlow, Troy N. Y.

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Listed in Standard Rate & Data Service. For further information, see page 4 by Theodore G. Seeveyer, Jr., Advertising Director, 120 Madison Avenue, Detroit 26, Mich. 3-9000.

Address all inquiries concerning National Council of Architectural Registration Board to William L. Perkins, Secretary-Treasurer, 726 Lucas Ave., Chardon, Iowa.

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michigan society of architects

9454 West Farmington Road, Southfield, Michigan 48034
metropolitan art association

The Metropolitan Art Association has re-elected W. Hawkins Ferry, Chairman, and William A. Bostick, vice-president and secretary. Mrs. Rose Reed was elected treasurer, and Mrs. M. Stern was named publicity chairman. Others elected members of the board of directors are Irma Coveney, Florence Davies, Mrs. Albert de Salle, Rocco di Marco, Murray Douglas, Helen L. Fassett, Lawrence A. Fleischman, Helen J. Gordon, C. Allen Harlan, Mrs. Harvey Luce, Talmage C. Hughes, Wallace Mitchell. Marco Nobili, Sarkis Sarkissian, Ernest Scheyer, Mrs. Margaret Stern, Carl Sundberg, Donald Thrall, Mrs. Carl Van Leuven, Jean Wagner, Lydia K. Winston and William Wollenden.

The Association, each year, brings to Detroit speakers on various subjects in the field of art. An affiliate of The Detroit Institute of Arts, it joins with The American Institute of Architects, Detroit Chapter, each season, for one lecture on architecture. This season Jose Luis Sert, architect and city planner, now on the faculty of Harvard University's Graduate School of Design, will be a speaker at the Association's meeting November 17.

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new president

Fred L. Markham, A.I.A., recently elected President of the National Council of Architectural Registration Boards, has gained an enviable position as an architects' architect in his native State of Utah. Much of his work has been in the field of designing educational buildings and other institutional structures, while serving local, State and national groups in a public-spirited manner.

The new President, who succeeds Charles E. Firestone, F.A.I.A., had served as NCARB Vice-President since 1949. He was born in Spanish Fork, Utah in 1902. He studied at MIT from 1927 through 1930, after having received his BS degree from Brigham Young University in 1923. He worked for Claude S. Ashworth, A.I.A., then became a partner in 1939, and this partnership continues today. Offices are at 440 No. 5 West, Provo, Utah. His wartime service was spent with the George A. Fuller Company on the construction of the Geneva Steel Plant.

His many university buildings include those at Brigham Young, the College of Southern Utah, at Cedar City; Utah State Agricultural College, at Logan, and at the University of Utah, Salt Lake City. He is now a member of the Advising Committee on Design for the new campus of Weber College, at Ogden; Advisory Committee for Campus Development at Utah State Agricultural College; Advising Architect for Brigham Young University. He was architect for the Latter Day Saints Tabernacle at Ogden.

Mr. Markham is a member of the Utah Chapter, A.I.A. (past president); Utah State Architects Examining Committees, 1942 to present; Provo City Zoning Commission, 1938-45; Utah County Planning Commission, 1942 to present (now chairman). For the national A.I.A. he has served as a member of the Committee on Urban Housing, 1952-54, and the 1950 Survey Commission for Architectural Education and Registration.

architects in the news

California

Regents of the University of California have appointed the Los Angeles firm of Allison and Rible as supervising architects for the recently expanded Riverside campus.

Southland projects designed by the firm include Claremont College for Men, engineering building on the UCLA campus; Downey (North) Junior High School, Huntington Beach High School and research facilities for the California Research Corp. at La Habra.

Six San Francisco architectural firms have been awarded honors by the American Institute of Architects. They are: Anshen & Allen, two awards; John Carl Warnecke, two awards; John Lyon Reid, two awards; Ernest J. Kump & Associates; Stone & Mulloy and Partners, and George A. Downs.
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This fact was demonstrated in a 65 x 120 ft. two-story office building erected for the Mutual Credit Bureau of Los Angeles.

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A national organization to improve and extend the uses of portland cement and concrete through scientific research and engineering field work
The Berkeley firm of Michael Goodman also received an award.

California architects, including the Bay Area firms, carried off 19 of the 38 national awards bestowed by the Institute.

"Bigness is not the limiting factor in a community; workability is what tells," according to Architect Richard J. Neutra, who addressed the Art Directors Club of Los Angeles at a meeting at the Hollywood Masquers.

The internationally known city planner and housing expert discussed the rapidly growing population of Los Angeles, adding that "cities must be designed for expansion...to move with people, never against them."

The Pasadena architectural firm of Whitney R. Smith & Wayne R. Williams won two A.I.A. national design awards.

One award was made for the design of a children's chapel at the Neighborhood Church, Pasadena. The other was for the design and layout of the Blue Ribbon tract in Reseda.

BERNARD JENSEN, 26, of Lockeford, San Joaquin County, a graduating senior in the College of Architecture on the Berkeley campus, University of California, has been awarded the Edward Langley scholarship by the American Institute of Architects. Jensen is the first graduate from the UC College of Architecture to be selected for the honor since the scholarship was founded in 1935. He was chosen from students in architectural schools and academies throughout the United States and Canada, and is the fifteenth student to receive the award. Its purpose is to support outstanding students of architecture in their studies.

colorado

DENVER—FRANK LLOYD WRIGHT has broken his long-standing rule of working alone and joined with a number of other firms under the name of Kitty Hawk Associates to offer services on the Air Force Academy to be built at Colorado Springs. The project cost an estimated $126,000 for land and buildings, is expected to be completed in 1957.

florida

A new architectural firm, Barrett and Marshall, has recently been formed in Tallahassee. Members of the new firm are Pearce Barrett and Willoughby Marshall.

Barrett is a graduate of the University of Florida, and a native of Jacksonville. He served in the Marine Corps in World War II.

Marshall is a native of Apalachicola, a graduate of Notre Dame University and served in the Army during World War II.

Both members of the new firm are members of the American Institute of Architects. The firm is located in the Brinkley building, 308 N. Monroe street.

HENRY HOHAUSER, Architect of Miami Beach has announced that Robert E. Baxter had become associated with the firm of Henry Hohauser and Associates.

JAMES L. DEAN has removed his offices to 110 Ponce de Leon blvd., Coral Gables, and Thomas J. Madden to 2344 Biscayne Blvd., Miami.

illinois

At the Illinois Society of Architects' 57th annual meeting and election of officers in Chicago, Benjamin Franklin Olson of Chicago, well known architect specializing in church architecture, was elected president.

The other officers elected were:

1st Vice-President, A. Reyner Eastman (Rockford); 2nd Vice-President, Alexander L. Levy (Chicago); Treasurer, Virgil E. Gustafson (Chicago); Secretary, Alfred F. Schimek (LaGrange); Financial Secretary, Gerald L. Palmer (Chicago).

Ludwig Mies van der Rohe, director of the department of architecture at Illinois Institute of Technology, Chicago, was honored by the American Institute of Architects for "distinguished performance in design."

The internationally known architect was named a Fellow by the American Institute of Architects.

Mies, one of the founders of contemporary architecture, is known for his "skin and bones" theory of architecture and for purity of design. He believes buildings should be primarily functional and that beauty of structure should be brought out through clear construction.

The 68-year-old architect, former director of the famed Bauhaus design school in Dessau, Germany, is responsible for the modern campus plan at Illinois Institute of Technology.

The 110-acre project, nearly one-half completed, represents the first modern Ameri-
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Louisiana

The Thorny Lafon elementary school for Negroes was one of six selected for honor awards of the American Institute of Architects.

The New Orleans school was designed by the architectural firm of Curtis and Davis, New Orleans.

David L. Perkins of Mt. Hermon, fifth year student in the Tulane university school of architecture, has been awarded the American Institute of Architects Scholarship medal.

This medal is awarded annually by the A.I.A. through its Department of Education and Research to the architectural student having the best record throughout his college years.

A New Orleanian was among four architectural engineering students at Louisiana State university who received awards at a luncheon-meeting of the Baton Rouge chapter of the American Institute of Architects in Baton Rouge, recently.

Those receiving awards were Thomas Allen Knight, Bogalusa; Charles K. Hutchison, Baton Rouge; Robert G. Williams, New Orleans; and Barron F. Tabor, Shreveport.
michigan

The Ann Arbor Junior Chamber of Commerce has announced the results of its architectural competition.

Eighteen entries were judged by Professors Theodore Larson, A.I.A., Walter Sanders, A.I.A., and George Brightman, A.I.A., of the University of Michigan School of Architecture. The following winners were chosen: Earl E. Moursund of Bloomfield Hills, Mich., employed by Albert Kahn, Architect-Engineer, 1st prize of $400; and best kitchen layout $50; Ted Smith of Ann Arbor, employed by Daniels Associates, 2nd prize of $100; Charles W. Pearman, University of Michigan faculty member, in cooperation with Edward Hammarstrom and Ronald Goodfellow, 3rd prize of $50; Honorable mentions of $25 each were awarded to Robert J. Meacham of Detroit, Donald D. MacMullan of Ann Arbor, and David W. Oster and Allen Balta also of Ann Arbor.

This competition was open to all architects and students of architecture or anyone interested in home designing between the ages of 21-36 who live in the AIA Detroit Chapter and Saginaw Valley Chapter areas in Michigan. The competition was made possible through the sponsorship of the Lennox Furnace Co. of Columbus, Ohio, Mary Christensen St. Charles Kitchens of Ann Arbor, and Eugene R. Young and Johnny Johnson, contractors of Ann Arbor, Michigan.

new york

Harold D. Hauf, presently director of public and professional relations, American Institute of Architects and former chairman of the Department of Architecture at Yale University and editor-in-chief of Architectural Record, has been appointed head of the Department of Architecture at Rensselaer Polytechnic Institute, Troy, N. Y.

Three new buildings and an addition to a fourth, totaling nearly 1,000,000 square feet of floor space, will be constructed at Ford Motor Company's huge Research and Engineering Center in Dearborn, Mich.

The new construction will complete the major part of an Engineering Staff facilities expansion program begun in 1947 as a memorial to the late Henry and Edsel Ford.

Largest of the new structures will be the body engineering building. It will cover 551,201 gross square feet of floor space. Of this total, 334,637 square feet will be used for offices and drafting areas and 216,564 square feet for experimental body shop activities.

A new scientific laboratory and research building will provide 385,638 gross square feet of floor space for applied and basic research. This facility will house the scientific laboratory and the research department in separate wings connected by a central library and a common lobby.

A new cafeteria building of 32,656 square feet will accommodate approximately 900 employees.

The addition will be a new wing for the Engineering Staff administration building to house various activities. It will provide 24,000 square feet of floor space for transmission department activities.

All construction will be of reinforced concrete with brick and aluminum exteriors in conformity with the other buildings in the area. Special emphasis will be placed on modern lighting. All drafting, office, and laboratory areas will be air-conditioned and adequate parking space will be provided near all buildings. Architects are Voorhees, Walker, Foley and Smith, New York City.

ohio

RONALD A. SPAHN, of the architect's firm of Spahn & Barnes, has been elected new president of the American Institute of Architects, Cleveland chapter, succeeding Joseph Cerulli.

Elected with him are George F. Dalton, III, vice-president; Lottie B. Helwick and John C. Bonebrake re-elected respectively, secretary and treasurer. Robert N. Yoder and

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Gilbert P. Schafer were elected to the chapter’s executive committee.

The Cleveland chapter ranks sixth in the country among units of the American Institute of Architects, having 306 members.

South Carolina

Teebee P. Hawkins was elected president of the Charlotte Council of Architects at the annual election meeting of the group. Mr. Hawkins is a member of the firm of Marsh and Hawkins, architects and engineers, of Charlotte, N. C.

S. Scott Ferebee of Higgins & Ferebee was named vice president, with Charles H. Wheatley of Sloan and Wheatley being elected secretary-treasurer.

The Charlotte Council of Architects was organized in 1955 and is composed of 62 registered architects, representing firms practicing in the Charlotte area.

The new president is an architectural graduate of Clemson College and has practiced with M. R. Marsh in Charlotte since 1945, becoming a partner in the firm in January, 1954. He served in the Army in World War II in the Pacific theater and holds the rank of lieutenant-colonel in the U. S. Army Reserve, Corps of Engineers.

texas

B. Magruder Wingfield, Jr., Houston architect and Rice Institute graduate, has been awarded a Texas Swedish Cultural Foundation scholarship to study in Sweden.

He will leave the United States late in August.

A navy veteran of World War II and a graduate of Lamar High School in 1945, Mr. Wingfield received a bachelor of arts degree from Rice in 1951 and a bachelor of science in architecture in 1952.

His architectural talents won him the American Institute of Architecture gold medal, the Alpha Rho Chi medal to an architecture student, and the M. N. Davidson Fellowship while at Rice. He was co-winner of the Walsh Prize also.

While in Sweden he will study that country’s experiments in city planning as well as past and contemporary Swedish architecture.

Two Dallas architects have been advanced to fellowship in A.I.A.

They are Herbert M. Tatum and Donald S. Nelson, the Texans chosen for fellowships in the 1954 election of the A.I.A. jury of fellows. Two other Dallas architects, Thomas D. Broad and Arthur E. Thomas, hold the honor by previous elections.

Tatum was chosen for his work in design and his service to the institute. Nelson’s election was on the basis of distinguished work in design. Other fellows in the 1954 class are the internationally known Walter Gropius, Mies van der Rohe and William Wurster.
Architecture is among the finest callings a young man can have, a retired Dallas architect, who could draw houses before he learned the ABC's, is convinced.

"But it's different from the old days, when a man made a few sketches and called himself an architect," says D. D. Swindle, 78, newest and second life-time honorary member of the Dallas Chapter of the American Institute of Architects.

"Architecture just sorta came natural with me, but it took a lot of studying," he recalled. "But a man today has to be educated in architecture to get work. If a young man is interested in architecture, he should have work for college training."

Active in the architectural field in Dallas from 1918 until last January, Mr. Swindle received a certificate of honorary membership in the Dallas chapter, A.I.A., at the group's recent meeting at the Melrose Hotel.

Newsweek's feature article on Houston (July 5) quotes Kenneth Franzheim, F.A.I.A., as saying, "I came here twenty years ago, and there were only 25 architects here then—now there are 250, and they're all busy. I tell you this is a frontier."

Perhaps the most famous of the Franzheim buildings, says Newsweek, is the $18,000,000 Folet's, the country's first windowless department store (which also features a separate five-story garage for customers).

Uta

"In the last 20 years the major change in the architectural design of schools has been to fit the buildings directly to the needs of the school system.

This is the opinion of John Lyon Reid, San
tec. Mr. Reid addressed a public meet-
ing recently at the University of Utah.
He appeared under the joint sponsorship of the University's Department of Archi-
tecture and the Utah Chapter of the American Institute of Architects.

"School buildings formerly were designed primarily as shelters," the architect said. "Now they are designed primarily as an instrument to help the teacher teach bet-
ter."

On the durability of schools, Mr. Reid said: "You have to build a school like a battle-
ship. That is because we want schools to last. And also because children are natur-
ally active and inevitably subject the school to much heavier use than other types of buildings undergo."

Mr. Reid said the trend now is toward one-story buildings because they "are cheaper, much better educationally and safer."

Virginia

Two Virginians have been appointed fel-
lovs of the American Institute of Archi-
tects.
A. O. Budina of Richmond and Louis Smith-
ey of Roanoke have received the awards.
Paul D. Woodward, Norfolk unit president of the Virginia chapter of the A.I.A., made the announcement.

The architects were told the A.I.A. ob-
jected to a provision of the 1954 housing act pertaining to mortgages.

Marcellus Wright Jr. of Richmond said the A.I.A. was against the provision per-
mittin a 100 per cent mortgage for 40 years. He said it was through the efforts of the A.I.A. that the Senate Banking Committee changed the provision to one per-
nitting a 95 per cent mortgage for 30 years.

Otherwise, Wright said, the A.I.A. end-
orsed the act with only a few suggestions.

Wright is the A.I.A.'s middle Atlantic region director.

Wright, a Richmond architect, was named by the Virginia chapter to handle legis-
slative matters for the architects.

A Norfolk structural engineer, Werner Blum, told the architects labor represents a greater percentage of the total cost of building. He saw a great need for labor saving ideas.

William N. Layman, formerly employed by the firm of Hayes, Seay, Matter and Mattern, has opened an architect's office at 1320 Grandin Rd., SW. He received his degree in architecture from VPI in 1950.

Wisconsin

John J. Flad and Associates, Madison architects who designed the new Holy Cross school, Kaukauna, Wisc., have planned more than seventy schools and other large buildings since World War II.

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Michigan Society of Architects

The Michigan Society of Architects has
submitted its report to the National
Architectural Education Board. The
report, prepared by 23 A.I.A. mem-
bers, is designed to help the board
in its program of improving archi-
tectural education and training.

The report, which covers all phases of
architectural education, points out
that the future of the profession de-
pends upon the quality of its educa-
tion. It emphasizes the importance of
a strong foundation in the liberal
arts, as well as in the technical
fields of architecture.

The report also stresses the need for
better facilities and equipment in
architecture schools and for more
practical training in the profession.

The Michigan Society of Architects
is one of the many organizations that
have been active in the promotion of
improved architectural education in
the United States.
"Man really knows nothing, save what he has learned by experience."

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Plans for a dormitory and classroom project that will rise above the banks of the Raritan River and canal along George Street, New Brunswick, N.J., has been approved by the Rutgers University Board of Trustees. The project will house 972 students and will include 60 classrooms and a student center.

Designed by Kelly & Gruzen, Newark architects, the Rutgers student housing and classroom project will take full advantage of its site "On the Banks of the Old Raritan"—the title of the University's best known college song—and will be noted for simplicity of design, spaciousness of study and living quarters, and economy.

"The plans will give the State University one of the finest housing developments of any similar institution in the nation." Dr. Lewis Webster Jones, president of Rutgers, declared. "It was designed first to give our students spacious, comfortable and well-lighted quarters in handsome surroundings, and secondly, to give us the greatest possible amount of building at the least cost. Our architects have given us plans for a project that will establish Rutgers as a leader in dormitory construction designed for the purpose to which it will be put."

Dr. Jones said that the new dormitories will harmonize with the new $4,000,000 library now under construction across the street and together with it will form a focal point of student life.

By making use of the canal bank site and placing the first two stories of the project below the George street level, the architects have achieved the unusual combination of residence halls and classroom sections each developed as separate units within common buildings.

The estimated cost of the project is approximately $3,500,000.

The project will consist of three residence hall and classroom buildings each 44 by 244 feet, and a student center. The dormitory-classroom structures will rise seven stories above George street and nine stories from the level of the canal bank. The lower two stories will include the classroom sections set into the canal bank and facing the river.

The classroom sections below grade will be separated from the residence units by an open space the height of a single story. This space will make it possible to retain a view of the Raritan River from George street and will provide an open terrace that will accommodate student traffic to and from classes.

Approximately 18 per cent of the entire site will be occupied by the buildings, the remainder to be used for parking, circulation areas and lower level—canal bank—terraces. Parking lots will be located at both ends of the project.

The buildings will be of steel frame and masonry construction. The red brick facing will be similar to that used in other Rutgers buildings. The classroom sections will contain large areas of glass to achieve maximum natural lighting. The student center will also have large glassed areas and will be surrounded by terraces on two sides. The windows of the residence halls will be oversize, each room containing a three-unit window of double hung and fixed sash combination.

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august '54 monthly bulletin
department store

Work has begun on a new department store in Salem, Oregon, representing an investment of $8,000,000.

The two-story Meier and Frank structure will occupy a full city block in downtown Salem, bordered by High, Church, Center and Marion Streets, where demolition of present buildings is now in progress.

Actual construction is scheduled to begin Sept 1. Completion is planned for Fall, 1955, according to Welton Becket, F.A.I.A., whose nationally known architectural firm is "totally designing" the store and its 75 service and selling departments.

Unique feature of the store will be its close correlation with a spiral, four-level covered garage and roof-deck so that motorists can virtually park within a few yards of the section they wish to visit. There will be parking facilities for 700 cars.

In all, there are to be seven public entrances to the store—four on the ground level—so that the shopper, whether he arrives by car or by foot, can reach his desired destination in the shortest possible time.

Architecturally Meier and Frank's store will be completely contemporary in design. When finished, it will be the first department store in Oregon to be "integrated designed," with every component of its architecture and interior carefully coordinated to create a perfect merchandising unit. In this respect the "total design" will represent the close collaboration of the executives of Meier and Frank, James L. Payne, Associate Architect, and architect Becket's 200-man staff of specialists, who together will develop not only the details of the building itself but all furnishings, fixtures and interior appointments from the color of the walls to the size and shape of door handles.

Constructed of reinforced concrete with mosaic tile and brick facing, the building will have the added attractiveness of wide expanses of sheer glass walls at the main entrance. Salem's popular silver birch trees will remain in the main entrance terrace, and will be incorporated in the general landscape of the new store.

Special incandescent and fluorescent lighting fixtures and effects are being created for the interior. The entire store will be air-conditioned, and for further customer convenience, there will be both passenger elevators and escalators.

Automobile approaches to the store will be free of truck traffic, with the installation of an off-street dock for all receiving and deliveries.

hospital

The Williams County General Hospital, Montpelier, Ohio, which was designed in the unique shape of a cross, nearly Maltese, is ideally suited to central control, radiating in four directions from the center of operations.

The nurse station is placed in the center of the cross, and other facilities so arranged that steps are reduced to a minimum. The distance that personnel must travel to and from the central point is nearly equal in all departments. Service facilities such as meals and medications, too, are speeded by their easy access to patient areas.

The hospital was built to fill a pressing need for more beds in this northwest Ohio county, and in addition, provides space for district health offices, a health center, and an out-patient clinic. The building, which contains 42 beds and 23 bassinets, was designed by Britsch & Mungen, Toledo, Ohio, architects.

A breakdown of the $625,035 construction cost to $14.900 per bed establishes a minimum cost to the community for a modern institution.

Including the bassinets on a two-for-one basis cuts the cost even further—to $11.450 per bed. Medical and hospital authorities believe $15-16,000 to be a reasonable figure.

The one-story building was decided upon after township trustees discarded details of a rectangular two-story plan. Officials felt, and their choice has proven itself, that the cross design is more functional and allows ideal natural lighting and ventilation. The hospital site is on the edge of town and every room has a scenic view of the surrounding landscape.

The one-story plan also eliminated stairways and elevators and offered easier escape in event of fire. Land space is not a problem and any expansion up to 60 beds is possible without disturbing the present service facilities. Expansion would be on the ends of the wings.
Associated Engineers and Architects, have been named by Detroit's Mayor Cobo to membership on a committee to plan the Detroit of 1975. Also appointed to the committee are Harold M. Morrison of Darin & Armstrong, Inc., Robert Bryant of Bryant & Detwiler, and Paul Calkins, Engineer. Co-chairmen are Selden B. Dzune, president of the Detroit Trust Co.; Walter L. Cisler, President of The Detroit Edison Co., and James B. Weber, executive vice-president of The J. L. Hudson Co.

VICTOR GRUEN, A.I.A., with offices in Detroit and Los Angeles, received an award of merit for his Northland Shopping Center in Detroit for The J. L. Hudson Company.

Gruen, a specialist in such projects has designed many throughout the country. The Northland Regional Shopping Center in Southfield Township, near Detroit, is the largest in the nation.

The award was made at The American Institute of Architects' recent annual convention in Boston, Mass.

ARTHUR O. A. SCHMIDT, A.I.A. is not one who believes the adage that shoemakers' children should go barefooted.

He has just completed remodeling and re-decorating his offices at 1118 Buhl Building.

Refurnishing is not confined to the executive offices but include also the design and drafting rooms, with open planning, modern lighting and a sweep of windows overlooking the Detroit river. Needless to say, the theme for both architecture and furnishings is "modern."

CHRISTIAN W. BRANDT, A.I.A., announces the removal of his office from 2608 North Woodward Ave. in Royal Oak to his residence at 2831 Glenwood Ave. in the same City, where the telephone number is Lincoln 1-1370.

CLINTON MOCHON, A.I.A. has transferred his membership in The American Institute of Architects from the Virginia Chapter to the Detroit Chapter, it is announced by Gerald G. Diehl, Detroit Chapter secretary.

Mochon, who holds bachelor of architecture and master of architecture degrees, was educated at La Salle Institute, Troy, N. Y., Rensselaer Polytechnic Institute, Cranbrook Academy of Art, and the University of Berne, Switzerland. He has traveled and studied in Mexico, Canada and Europe.

He is author of several works on architecture and he has taught at the University of Texas and University of Virginia. After practicing in Virginia under the firm name of Markelaki & Mochon, he became engaged by the Kawneer Company, of Niles, Mich., where he is now supervisor of architectural research.

AMEDEO LEONE, president of the Detroit Chapter, American Institute of Architects, and Mrs. Leone have just returned from a tour of Europe, where they visited England, Sweden, Switzerland, Italy and France.

While in Italy they spent some time in the City of Salerno, Mr. Leone's birthplace.

"Of more interest to me were the northern countries, especially Sweden," Leone said, "rather than the archeological countries of southern Europe. In the Scandinavian countries there is much of interest that has relation to our way of life, while in Paris, for instance, there appeared to be practically no change since I was there ten years ago—not even a coat of paint."

Architect Leone attributes this largely to the fact that the southern countries are still paying the price of the wars.

TALMAGE C. HUGHES, F.A.I.A., has resumed his duties as executive secretary of the Michigan Society of Architects and Detroit Chapter, A.I.A., following a two months absence because of illness.

MALCOLM R. STIRTON, A.I.A., of the firm of Harley, Ellington & Day, Inc., Architects and Engineers, and Ray Giffels, of the firm of Giffels & Vallet, Inc. L. Rossettii,
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DAVID W. NESMOUR, A.I.A., announces the opening of his office for the practice of architecture at 10620 Gratiot Ave., Detroit 3, Mich. The telephone number is WAlnut 5-1120.

A native of Russia, Nesmour was educated at John Huntington Polytechnic Institute of Architecture and Western Reserve School of Architecture. His early experience was gained in Cleveland, Ohio and New York City before he came to Detroit, where he was employed by the offices of Albert Kahn Associates & Engineers, Inc; Gillies & Vallet, Inc., L. Rossetti, Associates Engineers and Architects; and Smith, Hinchman & Grylls, Inc., Architects and Engineers.

Nesmour resides at 925 Whitmore Road in Detroit.

EDWARD H. LAIRD, of Wilcox & Laird, landscape architects, 355 Henrietta, Birmingham, Mich., was elected a fellow of the American Society of Landscape Architects at its recent annual meeting in Boston.

He was one of 14 members from throughout the country so honored. His citation was for "having made an outstanding contribution to the profession by excellence in executed works of landscape architecture."

Laird's work includes projects in Michigan, Ohio, Indiana, New York, Arizona, New Jersey and Canada.

He is landscape architect for the Birmingham Board of Education and consultant to the Oakland County Planning Commission. He is an associate member of The American Institute of Architects, Detroit Chapter.

Leinweber, Yamazaki & Hellmuth, Architects, of Detroit, have been honored by a national architectural magazine for their Grosse Pointe Elementary Parochial School.

The five-page illustrated article entitled "New Demands on Old Buildings" praises the school as a notable example in school design trends, "which though entirely contemporary and progressive in architectural expression, nevertheless harmonizes with the school's older buildings."

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LOUIS G. REDSTONE, A.I.A., who moved into his own new architectural offices at 10811 Puritan Avenue about a year ago, reports a volume of work amounting to approximately $9,000,000.

Three of his projects are shopping centers, ranging in price from $1,000,000 to $2,500,000. One of these, the Northwood Center, is under construction in the Woodward-Coolidge-Thirteen Mile road sector of Royal Oak. Others are the Tel-Ford in Dearborn Township, and the 7-Mack Center in Detroit.

Redstone is also serving the Industrial National Bank on new buildings and remodeling, and he has under construction a warehouse and administration building for the Michigan Liquor Control Commission. In the preliminary stage is his Holbrook development in Hazel Park.

Early this year Redstone made a tour of South America to study their architecture, and there he found that much emphasis is being placed on city planning.

"Many projects are constructed in the form of complete neighborhoods," he said, "and they include large-scale housing, mostly cooperative, together with all of the facilities to make up a complete community."

WILLIAM M. COOLEY, A.I.A., of 532 Busse Highway, Park Ridge, Ill., has become a non-resident member of the Michigan Society of Architects, it is announced by James B. Morison, A.I.A., Society secretary.

Cooley attended Illinois Institute of Technology, then the University of Illinois, where he graduated in architectural engineering. He traveled and studied in Europe, Mexico and South America before becoming employed by the office of Carl Metz, A.I.A., architect and engineer, of Chicago. He entered his own practice in 1949, and in 1953 he entered partnership with Charles E. Stade, which connection continues at present as Stade & Cooley & Associates. The firm specializes in churches. Cooley is a registered architect in Illinois, Michigan and Iowa.

Non-resident membership in the Society is open to members of the A.I.A. in other states who are registered in Michigan.

LEWIS W. SIMPSON, architect, of 22120 Edison, Dearborn, now employed by the firm of George D. Mason & Co., Architects, in Detroit, has moved to Baltimore.

A native of England, Simpson began his early experience in England by measuring churches for restoration. He became specialized in church design in that country and in New York City, where he was with the architectural firm of Bertram G. Goodhue for 17 years. In Detroit he has been designer and associate on such churches as the Metropolitan Methodist, Trinity Lutheran, and Grosse Pointe Memorial. Recently he has been engaged on the design of Kirk of the Hills, Bloomfield Township.

Simpson is a past member of the Royal Institute of British Architects, and The American Institute of Architects. He is a member of the Commission on Episcopal Church Architecture.
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The Department of Educational Administration, College of Education, Wayne University, Detroit, Michigan, is sponsoring a workshop in "Planning Tomorrow's Secondary School Buildings" August 9th through 20th. Questions to be considered are:

1. How do the results of research in child growth and development affect the secondary school program?
2. What is the place of the secondary school in our society?
3. How do parents, architects, board and staff members plan together for tomorrow's secondary school buildings?
4. What are the educational specifications for plant facilities for such areas as: Academic "Common learning," vocational, industrial, or related arts, social and recreational.
5. How does the architect use the educational specifications in designing school facilities?

Members of the workshop will visit outstanding school buildings, attend movies and discuss case studies, dealing with the problem of planning secondary school buildings.

Among the consultants who will work with the group are:
- Wilfred Clapp, Assistant Superintendent of the Michigan State Department of Public Instruction;
- Edgar J. Johnston, Professor of Education, Wayne University and President of the North Central Association of Secondary Schools and Colleges;
- John C. Sullivan, Professor of Educational Psychology, Wayne University;
- Gerald Baysinger, Associate Professor of Education, Wayne University and President of the National Industrial Arts Association;
- Roland G. Pounce, Associate Professor of Education, Wayne University, and author of Administering the Secondary School;
- John J. Considine, General Superintendent, Parks and Recreation, City of Detroit.

Full-time staff members of the workshop include:
- G. W. Boicourt, L. N. Nicholas and W. Ray Smittle, Professors of Educational Administration, Wayne University.

Representatives of Architectural firms will work with the members of the workshop in presenting preliminary drawings illustrating various aspects of planning. Architects are also invited to enter exhibits of models and plans of secondary schools. Requests for space or facilities should be addressed to Professor L. N. Nicholas, Room 580 Student Center, Wayne University.

The Department of Landscape Architecture, Professor Walter B. Sanders has been appointed Chairman of the Department of Architecture; Associate Professor Aare K. Lohi, Acting Chairman of the Department of Art; and Professor Horlou O. Whittemore, Chairman of the Department of Landscape Architecture.

A refresher course for architects and engineers preparing to take the State Registration Examinations in January 1955 will be held at The Engineering Society of Detroit beginning on September 11, 1954. The review will include Part I (fundamentals for engineers) and Part IV (structural design for architects). The starting date for Part I for engineers will be September 11, 1954 and will consist of fourteen two-hour periods, meeting on successive Saturdays. The architectural part of the review will consist of four four-hour periods also to be held on successive Saturdays with the starting date to be announced later.

Tuition for both courses will be $18.50. Additional information and application forms may be secured from The Engineering Society of Detroit, 100 Farnsworth, Detroit 2, Michigan.

Modern school architects must forget tradition and concentrate on "space for teaching," according to Stanley Sharp of Ketchum, Gina, and Sharp, New York architects, speaking at the annual meeting of the National Education Association of the United States recently.
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See Sweet's Industrial File

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Architects, Producers, their families and friends are cordially invited to attend the Midsummer Conference of the MSA to be held August 5th, 6th, and 7th at the Grand Hotel, Mackinac Island.

Subject matter for this conference will be "Mr. and Mrs. Architect."

The entire program is being planned to be equally enjoyable to both the men and their ladies. On Saturday before the banquet there will be a cocktail dance with corsages for the feminine contingent.

Plan to arrive on the island Thursday and enjoy a program of games, relaxation, fellowship, intermixed with interesting seminars, dining, dancing, and take a break from the routine of the home and office.

Don't forget that construction is underway on one of Michigan's largest building programs, the Mackinac Bridge, and that we plan a complimentary escorted tour of the bridge activities with 5 trips in groups of 20 persons under the direction of Merritt Chapman & Scott, the bridge builders.

For those who haven't enjoyed an MSA Midsummer Conference on the "island" we can promise that you will wish you had come when you hear what went on at this one.

Hotel rates (see reservation form) are inexpensive when you realize that they include your room and the finest meals to be found in Michigan.

The Registration fee is five dollars per couple or per single registrant, so bring your wife or girl friend.

There will be some very fine door prizes for the seminars, and prizes for golf, bridge and other games.

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In the picture above, Mr. Rinna senior, father of the brothers, is removing loaves from the 72-Bun Pan Traveler Oven. This modern, efficient oven has a capacity of 1120 one-pound loaves per hour. The bread bakes for 40 minutes at 425°F. And during the baking process, low-pressure moist steam (from the boiler at right in photo) is injected into the oven. The steam serves to mellow the heat and give the loaves symmetry, good volume and a delicious, thin golden crust.

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- Double Rooms with lavatory only, convenient to bath facilities, $12.50 per day per person.

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- Single Rooms, north exposure, $16.00 per day.
- Single Rooms, with lavatory only, convenient to bath facilities, $14.00 per day.
- Single occupancy of double room at three-quarters of the double rate.

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- One bedroom and connecting parlor, $55.00 and $47.00 and $44.50 daily for two persons.
- Two bedrooms and connecting parlor, $95.00 and $79.00 and $76.50 daily for four persons.

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The Michigan Society of Architects Eleventh Annual Mid-Summer Conference at The Grand Hotel on Mackinac Island offers architects from far and near, as well as others in the building industry, an opportunity to bring their families and friends to one of the most delightful vacation resorts in North America, with just enough
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talks by outstanding speakers.

Few places in all the world have so much natural beauty or so romantic a history as Mackinac Island, where the Michigan Society of Architects will hold its Eleventh Annual Mid-Summer Conference, August 5, 6, and 7, 1954.

Red men called it "The Place of the Great Dancing Spirits." They held it to be the loveliest spot in creation—the place where the Manitou had chosen to dwell. Men of other races have been equally susceptible to the Island's magic. Artists, writers and world travelers have found its beauty unsurpassed on any continent.

White men first established themselves permanently on Mackinac Island in 1779, when the British, then fighting to suppress the American Revolution, began the construction of the stronghold now known as Old Fort Mackinac. They completed it in 1780 and occupied it in May, 1781. It was not until 1796 that they turned it over to the Americans.

In 1812 before the American garrison was notified of the outbreak of war, a force of British and Indians landed at night on the far side of the Island and placed a cannon on the height above and behind Old Fort Mackinac. Surprised and hopelessly outnumbered, the Americans surrendered without firing a shot. Two years later a force of Americans landed on the Island but was driven off. After the close of the war the fort again was turned over to the Americans.

The fur trade reached its zenith during the 20 years that followed. Mackinac Island was headquarters for John Jacob Astor's American Fur Company, which dominated fur trading throughout a vast area. In early summer the streets were thronged with gaily clad traders, trappers and canoe men. Indian tepees lined the beaches.

Old Fort Mackinac remained a military post until 1865, when the fort itself and all the government's extensive holdings of land on Mackinac Island were turned over to the State of Michigan as a State Park.

Mackinac Island contains 2,221 acres, of which about 1,700 constitute the Mackinac Island State Park. The Park includes Old Fort Mackinac with its 35 buildings, its stone fortifications and its spike-topped log stockade; Fort Holmes (which the British built in 1812 after capturing the Island), the Summer Residence of the Governor of Michigan, and the sites of many imposing "cottages" that line the bluffs. Owners of these residences have leased the sites from the State. Many other summer homes stand on privately owned land. The Grand Hotel grounds and most of the land occupied by the "village" (the community really is a city) also are privately owned.

Senator Francis B. Stockbridge of Michigan purchased the site of the Grand Hotel in 1852. He wanted Michigan to have a great summer hotel and he vowed that he would hold the land until it was used for construction of the world's largest and finest summer hotel.

Gurdon S. Hubbard, pioneer State Street merchant of Chicago, was the first to undertake promotion of the hotel, but his plans did not meet the high demands of Senator Stockbridge. Others followed with unimpressive plans, but the Senator turned them down. He wanted a big hotel.

John Oliver Plank was the country's leading resort operator at that time. He was operating three fashionable hotels in New England. His friend George Pullman urged him to undertake the Mackinac venture. Mr. Plank became interested and in 1887 he promoted and built the Grand Hotel. He was a large stockholder, lessee and general manager until he sold his interests in 1890.

Commodore Cornelius Vanderbilt was the first president of the hotel company. Stockholders included high officials of the Pennsylvania Railroad Company, the New York Central Railroad Company, and the Detroit and Cleveland Navigation Company.

Some of the stockholders desired that the hotel be named "Hotel Vanderbilt." Others wanted an Indian name. Some thought Mr. Plank's name should be used. It was finally decided that Chauncey Depew should be delegated to select a name.

He decided upon Grand Hotel but stipulat-
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ed that as long as Mr. Plank managed it, he might advertise it as "Plank's" Grand Hotel.

The hotel opened on July 10, 1887. Mr. Depew presided as toastmaster at the opening dinner. Among the guests arriving that day were Mrs. Potter Palmer and a group of friends from Chicago. As was often the custom of those days, her equipage included three teams, saddle horses, tally-ho and carriages. Also, from Chicago came members of the Swift, Cudahy and Armour families. Adolphus Busch and his family of St. Louis spent that summer and many more at the hotel. From Detroit came the Whitney's, Algiers, Newberrys, Campaus and Clarks. During the first week the hotel was taxed to more than capacity with an average of 1,000 guests registered every night. Governor Cyrus G. Luce of Michigan and his family spent the entire summer at the hotel and ever since it has been the custom of Michigan governors to make this their summer headquarters. The apartment of the Governor of Michigan is one of the notable suites of the hotel.

FROM THE RECORDS

The site of the hotel, particularly the ground under the ballroom and lobby was used for centuries as an Indian burial ground. Not only was ample evidence of this discovered when the hotel foundations were laid but also local history and Indian traditions bear this out. The Indians believed the Island was a sacred gift from their gods as a place for burial of their illustrious dead. Indian chiefs throughout the entire Great Lakes area were brought here for burial. Residents of the Island have described what they themselves saw here many years ago, a few canoes coming in occasionally from far-off places bringing Indians and the remains of some departed chief for burial. The funeral cortège seldom spoke to anyone or each other, going away as silently and mysteriously as they came.

In the construction of the hotel only clear, virgin white pine was used. Timber of this quality is no longer available. It has always been considered the finest and most enduring of building timber and appraisers have reported that the hotel structure is as sound as the day it was built.

Mackinac is a world apart, a quaint island retreat where colonial America is preserved. No automobiles, no trains, no commerce other than that which serves the tourist. Landscaped grounds and gardens are on every hand, with beautiful vistas overlooking the forests, cliffs and lakes. Historic Fort Mackinac, primitive Fort Holmes, the original Astor Fur Post, Old Mission Church and other landmarks grace the scene as in pioneer days. There is every facility for sport, entertainment and enjoyment of nature's rich profusion. The ornithologist finds at Mackinac a sanctuary of innumerable species. The artist may use his brush with varied pleasure amidst gorgeous coloring and engaging scenes. Cycling and riding are at their best on this well-groomed island where no motor cars may interfere. Much of the Island is maintained by the State of Michigan as its most notable State Park.

Situated on a high elevation, with a great porch and colonnade two blocks long, Grand Hotel looks down upon the gardens, swimming pool and recreation grounds, commanding a majestic view of the Straits of Mackinac. Here one may live graciously and delightfully during the summer months enjoying the famed Mackinac air, purest in the world. Two golf courses, dancing concerts and sports provide entertainment and recreation.

The hotel is spacious and its grounds extensive. Service is kept at highest standards. One may rest or play, participate or be a spectator in the many hotel activities.

In 1895, the public-spirited Senator Stockbridge wished to see the hotel enlarged but the majority-stockholders opposed such plans at that time. The Senator had already interested his brother-in-law James J. Hill in building two great steamships, the Northland and Northwest, for connecting Mackinac Island abounds with sites of historic interest and pioneer adventure.
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transcontinental traffic at Buffalo with the Hill railroads at Duluth, the steamers stopping en route at Mackinac Island. When the hotel company refused to enlarge its property, Senator Stockbridge interested Mr. Hill in a plan to buy from the government the site of Fort Holmes on the high plateau in the interior of the Island and erect there another large hotel. Mr. Hill agreed to the plan and between them they made every effort to secure the land from the United States government but they were unsuccessful. Instead the government turned over all their Mackinac property to the State of Michigan with the understanding that it would be preserved as a State Park. Shortly after that the Grand Hotel did proceed with additions to the hotel, and the Senator and Mr. Hill made no further effort of this kind.

The cedar grove in front of the hotel is a natural growth. These trees were not planted but began their development naturally about 1880. For one hundred years prior to that the site of the grove was used for cleaning fish by local fishermen. The resulting refuse which accumulated created a fertile top soil that gave root to this present luxurious growth of cedar.

The original hotel structure was approximately one-half its present size. Additions were built in 1897 and 1912. The entire property was remodeled and enlarged in 1919. The records show that from 1925 to 1937 over $500,000.00 was expended for improvements.

The hotel grounds comprise 500 acres. Adjoining is the 1,600 acres of the Mackinac Island State Park.

The buildings are approximately 5,000,000 cubic feet in size. It is the largest summer hotel in the world.

The main building is 880 feet in length. The front porch is the longest in the world. Robert Ripley pictured this longest porch in his "Believe It or Not!" cartoon on August 27, 1936. The porch is exactly 100 feet above the lake level.

The automatic sprinkler system was installed in 1926 at a cost of $104,000.00. It is the largest fire-protective apparatus ever built. Nine carloads of pipe were used in its construction. The insurance rate was reduced to one tenth of the former rate by installation of this equipment. The National Fire Protection Association has maintained a complete record of fires in this country for the past twenty-five years. Their records show where sprinkler equipment has been used such as is maintained here, every fire has been promptly extinguished. The record shows 100% safety from fire for buildings like the Grand Hotel of today. The record is less favorable in case of so-called fireproof hotels without this sprinkler protection.

There are 30,000 yards of carpet in the main building. From the east end of the main dining room to the west end of the lobby floor corridor extends the longest piece of carpet ever made. It is two blocks in length. Bigelow-Sanford Carpet Company, who made this carpet, have carried national advertising in leading publications describing and picturing this longest carpet.

Mr. Plank as lessee and manager operated the hotel from its inception in 1887 until 1890. James J. Hays, a prominent Michigan hotel man, leased the hotel from 1890 to 1900. Henry Weaver of St. Louis leased and operated the property from 1900 to 1910 and in that period acquired a controlling stock interest from the railroads. He sold his interest in 1911 to Frank Noble of St. Louis and Charles J. Holden of Mackinac Island. J. Logan Ballard of French Lick bought the house in 1918. A new organization took over the property in 1925, comprised of Joseph L. Ballard, Eugene J. LaChance and W. Stewart Woodfill. In 1928 Mr. Woodfill sold his interests, and in 1929 Mr. LaChance sold his interest, to Mr. Ballard. In 1933 Mr. Woodfill again engaged in the business and purchased the property at that time. Since then he has continued as owner and managing director of the institution.

COSTS OF OPERATION

Hotel patrons do not generally realize the extraordinary expense to which fine hotels are subjected in maintaining high standards and superior service. In the case of the Grand Hotel auditors have shown that a saving of $750.00 a day could be
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made, or a total of $50,000.00 saved every summer by economizing in various depart­ments. This would of course permit lower rates, but would also bring about lower standards of service. Twenty per cent or more could be saved on food costs by using some canned vegetables, ordinary cuts of meat, a few cold storage products and less elaborate menus. Other plans for economizing would include elimination of the sprinkler system and attendant protection afforded the guests from fire. Twenty-five per cent could be saved on the payroll but with resulting slower and less-satisfactory service. Twenty per cent or more could be saved on food costs by using some canned vegetables, ordinary cuts of meat, a few cold storage products and less elaborate menus. Other plans for economizing would include elimination of the sprinkler system and attendant protection afforded the guests from fire. Twenty-five per cent could be saved on the payroll but with resulting slower and less-satisfactory service. Inexpensive music and entertainment has been suggested. Many other savings could be effected, but if these things were done this would not be the Grand Hotel and this institution, just as it has always been in the past, is dedicated to the very best possible service and entertainment for its guests.

With respect to the dining room it is interesting to note that absolutely no cold storage meats or poultry are used.

Fresh-caught fish from the Straits of Mackinac is purchased every day. Strictly fresh vegetables are served, no canned goods being used whatsoever. The hotel makes its own ice cream and sherbets using only fresh fruits and pure ice cream. The hotel bakery prepares all of the bread, rolls and pastry used in the establishment.

The menus list an unusually elaborate assortment of food and very generous portions of each dish is served. It is the rule that guests may have more than one portion of any item if desired. The menus offer the most extensive American-plan service to be found anywhere.

Back-stage or behind the scenes a great miscellany of equipment, machinery and service is maintained with a large staff of employees in charge.

The kitchen is two and one-half stories high. Fifty cooks and employees serve in this department. The ranges are forty-seven feet in length. Seven walk-in coolers and sixteen large ice boxes are used. There is a boulangerie, butcher shop, ice cream plant, food storeroom and numerous pantries.

In addition to the food storerooms, and several smaller storerooms, there is a large general storeroom for household supplies, a linen room, wine cellar, uniform room, baggage room, printing shop and china room.

Five large dining rooms are operated for the service of employee meals. There are several buildings for housing the four hundred employees. In addition there is the Superintendent’s residence, stables for fifty horses with numerous carriages and wagons, tool house, heating plant, electric plant, ice house, refrigerating plant, machine and tool shop, wood-working shop, paint shop and the club house which is provided for the entertainment of employees.

On the ground floor is the hotel laundry with twenty-five employees turning out 7,500 pieces of laundry every day. A dress shop is the tailor shop which provides pressing and dry cleaning service.

Eight offices are required within the hotel for members of the staff and executive offices are maintained the year around in Chicago.

Several maintenance employees are retained at the hotel throughout the winter months. One hundred employees are in service six to eight weeks before the opening and a similar number for several weeks after the close of the season. During the summer the number of employees extends up to 412 men and women. Approximately 1,200 meals a day are served to employees alone. From 1,500 to 2,500 meals are served daily to guests.

Some of the average food supplies used daily include 1,500 pounds of meat, 50 bushels of fruit and vegetables and 250 pounds of butter. From $1,000 to $1,500 of food is used daily.

Because of the large quantities of provisions required, it is necessary to purchase most of the supplies in Detroit and Chicago. The supplies are shipped to the Island generally by steamer, sometimes by rail. Shipping costs average $90.00 a day.

The payroll averages $1,200.00 a day. The cost for musicians and entertainers is $225 a day. Taxes pro-rated through the season amount to $200 a day. The total cost of operation averages about $3,500 a day.

The hotel is closed for 81% of the year. The average normal season is only 70 days, probably the shortest of any resort hotels. It is apparent that a large property open for so short a period should neces-
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800 miles north for work which lasts only
two months of the year. The employees
are largely recruited in Detroit, French
Lick and Chicago. During the two short
months of service the employees must be­
come trained to their duties and adjust
themselves to the particular routine and
standards of this institution. If there
should be occasional mishaps in the ser­
vice, one should consider the peculiar
difficulties of operating with so large a
staff and so short a period.

The parlors and rooms of this revered ho­
tel have felt the tread of many illustrious
and great men. Each year brings new, dis­
tinguished guests. President Franklin D.
Roosevelt selected the presidential suite
of the Grand Hotel for an international con­
ference with the Premier of Canada. Twice
within recent years the governors of the
United States have assembled here. Pres­
ent-day guests include men and women
highly prominent in the nation's business
and public life.

Among departed guests who should be
especially commemorated are President
Grover Cleveland, President Theodore
Roosevelt and President William Howard
Taft. Vice-President Warren Fairbanks and
Vice-President Thomas R. Marshall spent
many summers here, as did Speaker Jo­
seph Cannon. Speaker Henry T. Rainey
last visited the hotel only a month before
his death in 1934. General Leonard Wood
and his staff made this their headquarters
during the summer of 1920 when he was
a presidential candidate. General Lewis
Seangood was a regular visitor. Dr. John
B. Murphy called this his summer home
and suffered here his last illness. The lova­
bale Samuel Clemens (Mark Twain) found
much enjoyment in his many visits and
wrote at length of the hotel in his memoirs.
One could continue with many, many
names but the following is a roster of a
few outstanding guests who made history
in the world of business and whose loyalty
and love for Mackinac never wavered
—Julius Rosenwald, Ogden Armour, Wil­
liam Waldorf Astor, Marshall Field, Potter
Palmer, Cornelius Vanderbilt, Gurdon S.
Hubbard, George Pullman, Chauncey De­
pew, James J. Hill and George Eastman.

Mackinac Island, situated in the Straits
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views of either the lake and bluffs or the
gardens. Electric elevators and a tele­
phone in each room make them accessible
and communication perfect. From its fa­
\mous great porch and colonnade, two
blocks long, may be viewed the beautiful
gardens, swimming pool and recreation
grounds. Every comfort is available with­
in the hotel proper and the village offers
many shops in which to browse. The Ca­
sino will be the scene of the convention
sessions and the Terrace Room will be a
favorite, for here will be informal dancing
and entertainment during the week. There
is a colorful sports club house with its
snack bar where the golfer may relax.
The serpentine swimming pool has a new
sandy beach.

In fact, the Grand Hotel and its staff of­
fers every modern convenience for comfort
and entertainment which will combine
to make a perfect convention week.

Grand Hotel affords recreation of all kinds
on its estate of five hundred acres. There
is swimming or sun bathing, at the pool
or on the beach, two golf courses, saddle
horses, tennis, badminton, volleyball, soft
ball, shuffleboard and other games. Every
evening there is a concert in the
main parlors, cards, games and other en­
tertainment. There is dancing every after­
noon at tea in the garden and in the Ter­
race Room at night.

Bicycles, rolling chairs and carriages con­
tinue as always to provide local transpor­
tation. No automobiles are permitted on
the island. The fishing waters at nearby
Les Cheneaux afford the best of that sport
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**mackinac bridge**

Linking Michigan’s two peninsulas, the new Mackinac bridge will rank with the world’s largest in weight and length: Approximately 70,000 tons of steel will be used in fabricating and erecting the structure. Total estimated cost is in excess of $80 million.

It will be 26,444 feet in length, including the approaches, and will have a 48 foot roadway. With a central span of 3800 feet, the suspension will rank second only to the Golden Gate Bridge of San Francisco, which has a span of 4200 feet. Towers rising to a height of 552 feet will support the suspension cables. The minimum clear height at the center of the span will be 148 feet, permitting passage of the largest Great Lakes vessels.

While the total length with approaches will be five miles, the bridge structure itself will be four miles. Its length over water will be 17,918 feet which exceeds that of the San Francisco Oakland Bay Bridge, because that structure is split into two crossings by an island.

Seventeen truss spans resting on heavy concrete piers, and extending 4694 feet will connect the suspension bridge with the shore to the south. To the north, thirteen truss spans extend 3610 feet to meet a 3507 foot rock mole section.

Approaches at either end measure 465 feet at Mackinaw City and 4284 feet at St. Ignace. Bridge clearances will be from 148 to 155 feet under the main span to 20 to 84 feet under the approach viaducts.

In its cables, towers and anchorages, the design follows closely the practices established in the construction of other long span suspension bridges. Two cables, each 24.25 inches in diameter carry the four lane structure. Each cable is composed of 37 strands of 248 wires, 0.196 in diameter. All wire is galvanized; and the total number used is 12,876 wires per cable. The cable sag of 350 feet being less than in some similar type bridges, gives the bridge a graceful sweep, and offers greater stiffness to the mix-structure.

The steel towers will be of the conventional flexible type, with fixed bases. Towershafts are of cellular construction, reaching a height of about 552 feet above lake level. The two shafts of each tower are connected by horizontal struts of open trusses construction.

Contracts for construction were awarded to two firms. The U. S. Steel’s American Bridge Division will erect the superstructure for $44,500,000; the Merritt-Chapman and Scott Corporation will erect the sub-structure for $26,000,000. Approximately 1,000 men will be employed in the work, stretching over an approximate period of 44 months. Completion is expected by November, 1957.
the
beaumont
memorial
at
mackinac

By Alfred H. Whittaker, M.D.
Past President and Trustee,
Detroit Historical Society

Near the beginning of the nineteenth century several things were happening which were later to result in the interesting episode about which this essay is written.

While the beautiful island known as Mackinac Island was being settled and developed as a military fort as well as a trading post in the straits between Lake Huron and Lake Michigan, in far-off Montreal there was born a French-Canadian by the name of Alexis St. Martin, and 15 years before the beginning of the new century an American by the name of William Beaumont was born at Lebanon, Conn.

In the year 1822, these three factors resulted in a medical discovery which was to benefit all mankind and which was to bring great credit to the state of Michigan.

Jean Nicolet in 1635 was the first white man to visit Michilimackinac Island. Captain Patrick Sinclair on May 12, 1781 persuaded the chief of the Chippewas to sell the island, and by formal cession Michilimackinac passed into the possession of George III of Great Britain, supplanting the French who had occupied the island.

The American troops took over on October 2, 1796.

Following the change of sovereignty Mackinac soon became a great commercial seat in the wilderness. The chief commodity was furs. In time these operations assumed a larger and more systematic form under the control of strong chartered companies.

By 1818 the American Fur Company, owned largely by John Jacob Astor, was in full control. This company brought a large number of clerks from Montreal and from the United States, some of whom were good Indian traders, and one of whom, Gurdon S. Hubbard, Esq., then a youth of 16, was to be an eye witness and was to give a first hand description of the accident of Alexis St. Martin.

In the Spring of 1822, a 19-year-old French-Canadian voyageur, an engage of the American Fur Company, had recently been sent out from Montreal, probably by Mr. Mathews, who was in charge of securing clerks and voyageurs. In June, a time when the trappers, arriving in canoes and bateaux after their winter's work, were crowding the company's retail store on the island, on the evening of June 6, the recently arrived voyageur, Alexis St. Martin, was present in the crowded store. Accidentally a shotgun was discharged and from a distance of about three feet the shot struck St. Martin in the left chest and abdominal wall, creating an opening in the stomach. The injured youth was carried to a cot and medical aid was sent for, the Post Surgeon arriving in about three minutes.

William Beaumont, the Post Surgeon of the fort, who had served with great distinction in the War of 1812 with Great Britain, had resigned from the army and had re-enlisted March 18, 1820, being commissioned Post Surgeon. He had immediately been ordered to Fort Mackinac where he was to report to General Alexander Macomb, under whom he had served at the battle of Plattsburg. Meeting the General in Detroit, he traveled with him on the "Walk in the Water" to Mackinac Island.

Doctor Beaumont administered first aid and returned later. Finding St. Martin still alive he had him transferred to the hospital in the Fort, where he, by skillful care, obtained healing of the wound with the exception of the opening into the stomach.

Pictures accompanying this article were used, through the courtesy of Wayne County Medical Society and Michigan State Medical Society. The pictures were a part of the Historic Citizen of the Month exhibit in the Hall of Citizenship when William Beaumont was honored in April.

Editor's Note: Warren Rindge, A.I.A., of Grand Rapids, Michigan, Architect for the restoration of the Beaumont House, has also been retained for the restoration of the Biddle House on the Island, a project being undertaken by a joint committee headed by A. N. Langius, F.A.I.A., and including various elements of the building industry.
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which persisted, the opening being covered by a flap of skin.

Through this opening it was possible for Doctor Beaumont to observe the function of the stomach.

After recovery from the injury, St. Martin continued in the employ of Doctor Beaumont. The accident was reported to the Surgeon General in 1824, and the report was published in the "Medical Recorder" early in 1825, entitled "A Case of Wounded Stomach."

Following this, Doctor Beaumont devised a series of experiments to study the function of digestion and became the first investigator to establish that the digestive processes were chemical in nature.

At the urging of friends, in 1833, Doctor Beaumont published the experiments in detail, "Experiments and Observations on the Gastric Juice and the Physiology of Digestion." The 3,000 copies were quickly exhausted and a second edition appeared in 1847. The book was republished in England, France, and Germany, and created a sensation in the medical world.

All writers quoted from it and it became the standard authority among all physiologists.

In time the contribution of Doctor Beaumont in Michigan became almost forgotten, but toward the latter part of the century, with interest increasing in the physiology of digestion, attention was again focused on this valuable contribution.

The Chairman of the Mackinac Island Park Commission, Mr. William F. Doyle, was in the hospital at the University of Michigan for examination, and there discussed with Doctor Frederick Collar, who later for a time was the Chairman of the Beaumont Committee, the contribution which Doctor Beaumont had made to the physiology of digestion. Later Mr. Doyle discussed this story with Doctor Charles Duchess, then the Medical Director of Parke, Davis and Company. The subject was of mutual interest—the restoration of the old "Earley House" on the island into a Beaumont Memorial.

Mr. Doyle discussed with the Board of Directors of Parke, Davis and Company the purchase of the property, and the board approved a $10,000 grant for the purchase of the property from some 19 heirs scattered throughout the United States.

Of the original $10,000 Parke, Davis and Company grant, some $5,100 was used to purchase the land and make land surveys. Soon after this purchase the chairman became the Chairman of the Beaumont Committee. Appearing before the Council of the Michigan State Medical Society, he asked that the Society might receive the remainder of the grant which had been offered by Parke, Davis and Company, and might proceed immediately with the restoration.

This program of restoration was then formalized. With the enthusiastic support of Doctor Otto W. Beck, who became President of the Society, a campaign of fund raising was started throughout the states, and from 1,722 contributors, $22,428.00 was obtained.

Some of the original money had been appropriated for the use of Professor Emil Lorch, Professor Emeritus of the College of Architecture of the University of Michigan. Professor Lorch used this fund for research in both the State of Michigan and Canada. As a result of this research the plans of restoration were formally drawn up, the basis of the restoration being planned after the habitant cottages along the St. Lawrence. This was necessary because no actual photograph of the original building on the island was available.

The plans having been drawn up, the Medical Society arranged with Mr. Warren L. Rindge, A.I.A., an architect of Grand Rapids, to act as the supervising architect. In the summer of 1953, the more modern section of the building which had been placed over the original building was removed and the walls of the original retail store building were rebuilt, using the same stone which had been present in the building in 1822. According to the plans of Professor Lorch, the roof was placed over this original building resulting in a most beautiful structure.

The restored building for which the cornerstone was laid on July 17, 1953, is established as a memorial to Doctor William Beaumont.

The building is situated on Market Street, at its eastern end where it adjoins the park at the Fort.

During the winter of 1954, some articles of Beaumont association value have been obtained from the descendants of the Doctor. A loan of a great deal more material has been arranged from Washington University in St. Louis, the University of Chicago, and the University of Pennsylvania, and the Wayne County Medical Society in Detroit. These articles of association value, with the Beaumont picture by Dean Cornwell, which was painted after the restoration of the Wyeth Corporation of Philadelphia and given to the Michigan State Medical Society, will be placed in the building. Thus, at the time of the dedication on July 17, 1954, the building as a structure will represent the memory of the Doctor, and the furnishings and association material will add greatly to the interest of this occasion.
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photos by eliot peck, detroit, michigan
winter scenes by ebb warren, gaylord, michigan
left: Log Mark Terrace
and Forest Lodge to right
right: Forest Lodge
upper left: "At Night" Main Club Entrance

left: "Log Mark" Resident Guest Lounge Building

above: Main Club House
upper left: Fire Place, Main Club Lobby

left: Concourse, Forest Lodge

above: Forest Lodge and Log Mark to left
above: Chalets
right: Tog Shop, Main Club
below: Loft Lodges
above: Dormitory at Right
Loft Lodges in Distance

left: Guest Cottage

below: Gift Shop, Main Club
CASE STUDY NO. 19

Planned Lighting... and 30,000 springs per day

PROBLEM  Automotive Spring Company, Detroit, was aware that ordinary lighting slowed a critical spring inspection. The usual overhead plant lights cast shadows about the springs. Shadows which obscured unwanted burrs on coil ends, and caused undue eye fatigue.

SOLUTION  Edison lighting consultants designed an inspection table which has a top of white, translucent plastic. Beneath the plastic is a standard circular fluorescent tube. The evenly diffused under-lighting gives totally shadow-free illumination which sharply delineates the smallest burr. Inspection is now more accurate—with greater eye comfort.

When you have an inspection lighting problem—any industrial or commercial lighting problem—Edison Lighting Consultants can easily be reached. In metropolitan Detroit call WO 2-2100, Extension 9221. Elsewhere call your nearest Edison office. There's no obligation.
products news

G. W. SCOTT of the Building Product Division of The R. C. Mahon Co., Detroit, Michigan, has sent out to all the architects who visited his plant during the M. S. A. Convention last March a handsome illustrated brochure entitled "A Picture Story of The R. C. Mahon Company" as a memento of their visit.

THE MULTI-COLOR COMPANY, having supplied the blue print needs of architects in the Detroit area since 1893, announces the opening of its fourth office at 16606 James Couzens Highway at McNichols Road.

"The new northwest branch will serve its fast-growing area, and will maintain while-you-wait as well as pickup-and-delivery service," said Albert Fuchs, company president.

RAY T. LYONS COMPANY, 15115 Charlevoix Ave., Grosse Pointe 30, announce new telephone numbers: Valley 1-7822 and Valley 1-7823. The company represents manufacturers in the building field.

CLAUDE McCAMMON, Sales Mgr., Horn Fuel & Supply Co., Detroit, announces their appointment as Michigan Distributors of Dur-O-Wal, masonry wall reinforcing, manufactured by Cedar Rapids Block Company.

They carry adequate stocks in their Detroit warehouses and can make immediate deliveries or can accept orders for a full truck load direct from factory in Cedar Rapids, Iowa.

McFADDEN CORPORATION of Lansing, Michigan have been appointed sales representatives for the Brunswick-Balke-Collender Co. to distribute their completely new line of Brunswick classroom furniture and Horn gymnasium equipment including folding gym seats, partitions, stages and wardrobes.

gold medal

Brunswick executives congratulate partners of the Dave Chapman design firm, Chicago, on being awarded the annual Gold Medal of the Industrial Designers' Institute for their work on the new Brunswick line of school furniture. Left to right are Kim Yamasaki and Bill Goldsmith of the Chapman firm, Howard Barber, vice president and general sales manager of the Brunswick-Balke-Collender Co., Chicago, and Dick Reineman, head of Brunswick's industrial design staff who supervised work on the furniture design.

Presentation of the award was made at Chicago's Ambassador East Hotel recently. The emphasis in recent years on group participation, visual aids, learning by doing and similar education methods has created a need for a type of classroom furniture that is highly flexible. Chapman and Brunswick's own industrial design staff worked specifically to meet this requirement in the development of a line with movable units that can be stacked, nested or grouped.

Since the establishment of this professional design award in 1951, no more than three designers of mass-produced products have been presented with the annual I.D.I. Design Award in any one year. Judged by a committee of leading industrial designers, the medal is awarded on the basis of design merit as shown in a fresh approach to a design and function, combined with a practical use of appropriate materials.

On being informed of the award, Chapman expressed pleasure on two counts. The first was for the recognition given to the work of bringing classroom seating into line with the most advanced concepts of school and home architecture, educational standards of practice and contemporary standards of furniture design. Second was the fact that the closely coordinated development program with the manufacturer's own industrial design staff and the top management of the company resulted in a new type of school furniture.
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