EIGHTH ANNUAL MID-SUMMER CONFERENCE
The Grand Hotel, Mackinac Island, August 2, 3, 4 and 5, 1951
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At the Michigan Society of Architects 8th annual midsummer conference at the Grand Hotel on Mackinac Island, August 2-5, Michigan's new senator, Blair Moody will be the guest of honor and speaker at the banquet concluding event, Friday evening, Aug. 4. The conference proper will take place on Friday and Saturday, with Thursday for arrivals and Sunday for departures.

The conference will open with a reception and cocktail party given by Society president, Leo M. Bauer of Detroit, Thursday afternoon.

An open meeting of the board of directors will be held Friday morning, with the president presiding. Welcome will be extended by James A. Spence, of Saginaw, president of the Saginaw Valley Chapter of The American Institute of Architects. Greetings will be heard from Clair W. Ditchy of Detroit, Institute national secretary, and John N. Richards, Great Lakes Regional Director of the Institute.

Friday afternoon the group will be treated to a carriage ride, compliments of the Society, conducted by Warren L. Rindge and Charles Norton of Grand Rapids. These architects are well informed about the interesting features of the Island, as they were engaged by the U. S. Department of the Interior to survey and record by drawings and written data the historic buildings there. Friday afternoon, following the tour, Messrs Gardner Martin and Paul F. Rice, of the Portland Cement Association, will be hosts at a cocktail party.

At a business session Saturday morning, Professor Ralph W. Hamnett, of the College of Architecture and Design, University of Michigan, will preside. A paper will be presented by John C. Thornton, past president of the Society, on the subject of The Relationship Between Surface Physics of Masonry Units and Permeability of Walls—in other words, leaks. Mr. Thornton has recently made some revolutionary discoveries on this subject, following extended research. Another portion of this session will be devoted to interior decorating, color and design, that will be of particular interest to the ladies as well as others.

Time will be allowed for recreational activities, including dancing, swimming and other sports, for which the Grand Hotel is famous.

All members of the building industry, and others interested, their families and friends, are invited to attend the conference.

WORLD'S LARGEST FINANCIAL TRANSACTION BEGAN AT WORLD'S LARGEST SUMMER HOTEL

The Front Porch must be a good place to talk business.

After the passing of the Dodge brothers, John F. and Horace E. in the early 1920's, the trustees of both estates decided to sell the company, a difficult undertaking, in view of the vast size of the organization.

Negotiations were placed in the hands of Mr. John Ballantyne, one of the trustees of the Horace E. Dodge estate, and Mr. Stone and Mr. Spicer of the Detroit Trust Company. Interested parties first met at the Grand Hotel on Mackinac Island, and, from all accounts, it was quite a party preceding the announcement of the deal.

Subsequently a sale was made to Dillon, Read & Company, of New York, for $146,000,000—said at the time to be the largest single industrial transaction in the history of the country.

Mr. W. Stewart Woodfill, President of the Grand Hotel, recalls the distinguished visitors very well, only he has a faint recollection that the amount was to have been $147,000,000. He is puzzled as to what happened to the other million. A tip, no doubt.
HONORABLE BLAIR MOODY, United States Senator from Michigan, will be the Guest of Honor and Speaker at the Michigan Society of Architects Banquet in connection with its Eighth Annual Midsummer Conference at the Grand Hotel on Mackinac Island, August 2-5, 1951.

Senator Moody was recently appointed to his present high office by Governor G. Mennen Williams, to fill the vacancy left by the passing of our distinguished Statesman and Senior Senator from Michigan, Arthur H. Vandenberg, of Grand Rapids.

(ARTHUR EDSON) BLAIR MOODY was born in New Haven, Connecticut on February 13, 1902, the son of Arthur Edson Blair and Julia (Downey) Moody.

He received his A.B. degree from Brown University in 1922. His marriage to Mary Williamson on June 6, 1923 bore a son, Arthur Edson Blair, now a student at the University of Michigan.

On September 14, 1940, he married Ruth Curtis Amadon, and they have two children, Christopher Sorensen and Robert Orton.

Blair Moody was instructor and coach at The Moses Brown School, Providence, R. I. in 1922 and 1923. He became employed by The Detroit News in 1923, first serving as sports writer, then reporter. He became Washington correspondent and columnist for the News in 1933, and continued in that position until his appointment to the senatorship.

During his Washington career, he was also correspondent for Barron’s Financial Weekly (1934-48), and National American Newspaper Alliance (NANA), since 1936. He was war correspondent for The Detroit News in North Africa, Italy, Iran and Britain in 1944, foreign correspondent parts of 1947 and 1948.

Since 1946, he had been moderator of the radio program, “Meet Your Congress,” which was televised (NBC) since 1949. He was consultant to the Committee on Economic Development in 1944-45.

His fraternity memberships include Phi Beta Kappa, Psi Upsilon, and Sigma Delta Chi.

Other affiliations: Gridiron Club, National Press Club, Overseas Writers, University (Washington), Detroit Club, Detroit Athletic Club, Cammarran (Providence, R. I.). He is author of “Room or Bust,” published in 1941. His home is at 5006 Tilden, N.W., Washington, D. C., also at 2688 Lawrence Avenue in Detroit.

During his newspaper career, he maintained offices in the Colorado Building in Washington, and at the Detroit News in Detroit.

As our speaker on this occasion, Senator Moody should have much of interest to say. His background and experience have certainly fitted him to speak on the vital issues of the day.

Senator Moody believes that America must increase her military strength to prepare for a decision Russia must soon make—either to abandon world revolution or to start a war by which she would doom herself.

This country must help to force Russia to make the choice, because failure to do so would mean “surrender of our freedom on the installment plan,” according to Mr. Moody’s belief. He adds that we can force their choice by our policy of containment and punishment of aggression.

“And when they reach the moment of decision, it is up to us to have built around them such a corridor of American and Allied strength, and have at our command such an irresistible supply of atomic and other weapons, that it will be entirely clear what their choice must be—to change their policy or doom themselves,” he concluded.
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8TH ANNUAL MID-SUMMER
CONFERENCE PROGRAM
THEME: RELAXATION—HAVE FUN
THE GRAND HOTEL,
MACKINAC ISLAND
August 2, 3, 4 and 5, 1951
THURSDAY, AUGUST 2nd
9:00 A.M. - 4:00 P.M.
Arrival of Members and Guests (registration free) Open for Recreation
6:00 P.M.
Pre-Conference Reception, President Bauer's Suite
7:00 P.M.
Dinner—Main Dining Room [all meals American Plan]
FRIDAY, AUGUST 3rd
8:30 A.M.
Breakfast—Main Dining Room
9:30 A.M.
Open Meeting, Board of Directors Club Room, President Leo M. Bauer, Presiding
Welcome to Mackinac Island Conference 3rd Vice President President James A. Spence Greetings: Clair W. Ditchy, Secretary A.I.A. and John N. Richards, Regional Director, Great Lakes Dist., A.I.A.
12:30 P.M.
Luncheon—Buffet Style, outdoor Garden
2:00 P.M.
Organized Horse-Drawn Buggy Trip for Members and Guests—A scheduled drive under the direction of Architects Warren L. Ringe and Charles M. Norton (free trip given by M.S.A.)
5:00 P.M.
7:00 P.M.
Dinner—Main Dining Room
1:30 P.M.
Mid-Summer Conference Dance Terrace Room
SATURDAY, AUGUST 4th
8:30 A.M.
Breakfast—Main Dining Room
9:30 A.M.
Business Session—Club Room First Vice-President Ralph W. Hammell, Presiding
2. Lecture: By John C. Thornton, A.I.A. Subject: Mortars and Masonry, illustrated with slides
11:30 A.M.
12:30 P.M.
Luncheon—Main Dining Room
2:00 P.M.
Open for Recreational Activities
6:00 P.M.
Cocktail Hour
7:00 P.M.
Banquet of the 8th Annual Mid-Summer Conference Terrace Room [evening dress optional] Toastmaster: Adrian N. Langius, 2nd Vice-President Michigan Society of Architects, and Director, Building Division for the State of Michigan Speaker: The Honorable Blair Moody, U.S. Senator from Michigan
10:30 P.M.
Dancing—Terrace Room
SUNDAY, AUGUST 5th
Departures

Friends gather on The Grand Hotel porch, day and evening, for rest and relaxation. It is cleared before bedtime in order that guests may have undisturbed sleep.

MACKINAC ISLAND BY BOAT
Chicago, Duluth & Georgian Bay Transit Company's S.S. North American leaves Detroit each Thursday at 5:30 p.m. and arrives at Mackinac Island at 3:00 p.m. Friday. Returning she leaves Mackinac Island Sunday at 9:00 p.m. and arrives at Detroit Tuesday, at 4:00 p.m. The return trip is via Georgian Bay. All schedules are on Eastern Standard Time.

The round-trip fare, per person, is $69.75, $66.75 or $62.25, depending upon whether rooms are on A, B or C Deck.

GRAND HOTEL, MACKINAC ISLAND
SCHEDULE OF RATES (Average about $14.00) — American Plan

<table>
<thead>
<tr>
<th>Type of Accommodation</th>
<th>Rate (per person)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deluxe Rooms, Twin Beds</td>
<td>$16.50 daily</td>
</tr>
<tr>
<td>Lakeview Rooms, Twin Beds</td>
<td>$15.00 daily</td>
</tr>
<tr>
<td>Northern Rooms, Twin Beds</td>
<td>$13.00 daily</td>
</tr>
<tr>
<td>Single Rooms, With Bath (A Few With Connecting Bath)</td>
<td>$14.00 daily</td>
</tr>
<tr>
<td>Double Room for Single Occupancy, 75% of Full Double Rate Rooms With Lavatory</td>
<td>$15.00 daily</td>
</tr>
</tbody>
</table>

Make your requests for reservations early, direct with the Hotel. State number in your party, kind of accommodations wanted, expected time of arrival and departure.
Plan to Attend This Year's Summer Conference at the Grand Hotel, Mackinac Island

THE MICHIGAN SOCIETY OF ARCHITECTS invites you to attend the 8th annual mid-summer Conference on Mackinac Island. The Conference dates are August 2, 3, 4, and 5th, 1951. The first and last days are for coming and going. The actual sessions and programs will be held on August 2nd and 3rd.

As a suggestion, the committee recommends that you and your family plan your summer vacation at this time. After stopping at the mid-summer Conference you can have that wonderful opportunity to continue your vacation trip in the Upper Peninsula—a land too few Michiganders know—and at the same time attend Conference at the Grand Hotel. If you care to linger on the island, the hotel will work out arrangements for an extended visit.

Whether you plan to go to the Conference only, or plan an extended vacation in Michigan, you can, in these trying times, build up new energy and enjoy yourself in this water wonderland of Michigan.

THE ISLE OF YOUR DREAMS

MACKINAC ISLAND in the Straits of Mackinac, is one of America's true historic shrines, a rare vacation retreat. On this "dream isle" are a never-ending variety of activities in ballrooms, magnificent parks, swimming, yachting, golfing and many other recreational attractions.

Historic and scenic splendor is everywhere. Old Fort Holmes, built by the British in 1812 and restored by Michigan a few years ago, was the scene of many bitter battles in the nation's early history.

Here John Jacob Astor opened his first trading post, the start of a great American fortune. His structure still stands and is open to visitors to view the countless relics displayed.

The Michigan governor has his summer home on the island; there's a statue of Father Jacques Marquette, explorer and priest who founded the Michigan mission; old trading posts established by the French; the landing site of the explorer Nicolet, first white man ever to view this gorgeous land; the parade grounds where Revolutionary soldiers trained; an old English guard house; old Fort Mackinac on "history hill," and hundreds of other sites of equal importance in history.

There are scenic wonders in all directions: there's Fairy Arch, a natural limestone formation, reached by the Giant's Stairway; Arch rock on the east shore road, a rare spot for pictures; the Crooked Tree drive, an avenue through scenic splendor; Sugar Loaf, a 79-foot rock by the roadside; the alluring Straits of Mackinac from high hills, old churches of early American design and a thousand undiscovered sights.

Automobiles are not permitted on the Island. Horse-drawn carriages are available for sight-seeing and transportation.

Perhaps you wish to get away from the heat and noise of a city and want a period of relaxation; possibly you prefer a vacation packed with active sports and entertainment. Mackinac Island will appeal to you, and the friendly spirit of its people bids you WELCOME.

"If you care to linger on the Island, the Hotel will work out an arrangement for an extended visit."
ARCHITECT'S TOUR

A Visitors' Map of
Mackinac Island
Michigan
Showing main roads and trails and points of interest

Main Roads
- Point aux Pins
- British Landing
- State Pier
- Fort Holmes

Main Trails
- Scott's Cave Road
- Devil's Kitchen
- Point Lookout
- Scotty's Cave
- Eagle Point Cave

Lake Huron
- "Stonecliff"
- Lovers Leap Cliff
- Devil's Kitchen
- Pontiac's Lookout

Grand Hotel
- Bathing Beach
- Largest Summer Hotel in the World

Private Land

1. Old Fort Mackinac
2. Grand Hotel
3. Headquarters of John Jacob Astor House
4. Old Mission Church
5. Arch Rock Natural Bridge
6. Point Lookout
7. Sugar Loaf Rock
8. Skull Cave
9. Port Holmes
10. Marquette Park
11. Scotty's Cave
12. Robinson's Folly Cliff

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**Grand Hotel**

MACKINAC ISLAND  
MICHIGAN

**World's Largest Summer Hotel**
In planning the Michigan Society of Architects 8th Annual Midsummer Conference at the Grand Hotel on Mackinac Island, Michigan, scheduled for August 2-5, 1951, Society president Leo M. Bauer of Detroit, is led to the belief that the front porch may again come into its own—that is if people are informed as to what takes place on porches when people talk business there.

Bauer relates that after the death of the Dodge Brothers, in the early '20's, he estate decided to sell the company, difficult undertaking in view of the size of the organization. But during the summer, the heirs met at the Grand hotel, to go over prospective purchasers, Dillon, Read & Company, and here the largest single industrial transaction in the history of the country was negotiated. On May 1, 1925 a check was issued, to consummate the deal, in the amount of $148,000,000.

W. Stewart Woodfill, owner of the hotel, recalls the visit vividly, but says that at the time reports were that the amount was to be $147,000,000. The thing that worries him is what became of the other million dollars. "A tip, no doubt," says Bauer.

The July issue of the magazine "Holiday" carries a 15-page illustrated article entitled "Holiday in Michigan," by Phil Stong, a good portion of which is devoted to Mackinac Island and the Grand Hotel. Considerable space is about the hotel's "$32,000,000 barber shop," a story which was first published in the Bulletin of the Michigan Society of Architects, and which today is framed and hangs on the walls of the shop.

Says "HOLIDAY":

"Sometimes on Mackinac Island there are even 'a millionaire no one has ever heard of,' as Stewart Woodfill discovered in 1939, when his friend Walter Scott, then president of Northwestern University, telephoned from Chicago to say, 'Stu, you've got an unidentified rich man staying in your hotel. All I know about him is that he has no heirs and wants to endow a college. How about finding him and steering him toward Northwestern?"

"When Mr. Woodfill searched the register, he found an abundance of millionaires, but all of them had families. He questioned the staff, but none of them had noticed an unknown guest making like a millionaire around the place. 'That's understandable,' he explained to us, 'the quietest guests we have are the richest.'"

"Finally, it was the fox that came to the hunter. Woodfill was having a shave in the hotel barber shop when a man in the next chair said suddenly, 'I've got a problem. I want to leave some money to some kind of school or charity, but I don't know which. Something like a barber chair.'"

"I guess, since I've made so much of money there. I thought of Chicago."

"Mr. Woodfill considered, 'But that's the Rockefeller school, isn't it? They're pretty well oiled. Now let me see—there's Northwestern—fine university in Chicago. It's beautiful, campus is patron of the poor."

"Job's fias. ' (A misstatement of considerable proportions.)
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1987, plans are still on file in the Mason office, which is now carried on by David H. Williams, Jr., Albert C. McDonald and Eugene T. Cleland, at 406 Griswold Street in Detroit.

Mr. Cleland, who now lives in a house he had said when he was first called to the Island by the owners, they wanted quick action. Having nary a tape, nor even a rule, he paced off the distances, estimated levels of the ground, and proceeded. They had less than 100 members, a move toward public, and even among members. was much confusion—of the press, the organization, its chief purpose being to act for architects in the State. Naturally, there were following suit.

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Detroit Chapter of The American Institute of Architects, along with other affiliate societies, will have on exhibition at The Engineering Society of Detroit the week of July 23-28, in connection with the celebration of Detroit’s 250th birthday, it is announced by Amedeo Leonardi, Chief Engineer. The exhibit is intended to show the development of architecture during the City’s growth, and also to inform the public of the what the architect does.

An architect will be on duty to answer questions during the week of July 23-28, in connection with the celebration of Detroit’s 250th birthday, it is announced by Amedeo Leonardi, Chief Engineer. The exhibit is intended to show the development of architecture during the City’s growth, and also to inform the public of the what the architect does.

Detroit Chapter, A.I.A., was founded in 1887. As the only chapter in Michigan then, it was known as the Michigan Chapter. Its name was changed to the Detroit Chapter in 1923, when the Greater Detroit Chapter, now the Detroit Chapter of Michigan, was established. In 1945 the Saginaw Valley Chapter was formed.

In 1914 the Michigan Society of Architects was formed as an independent organization, with the chief purpose being to promote the passage of a registration act for architects in the State. The Society grew to have seven divisions throughout the State. Naturally, there was much interest in the purposed bill, the public, and even among members.

About a decade ago, when the Chapter had less than 100 members, a movement for unification of the profession began, and now the Chapter has 406 corporate members, 106 associates and 275 student associates. The State Society is made up of members of the three chapters, numbering about 80% of all architects registered in Michigan. In addition the Chapter has 80 non-resident members — architects registered in Michigan but having their homes and principal places of business in other states. In this movement, Michigan has led the way and other states are following suit.

The Chapter holds its regular monthly meetings at The Engineering Society of Detroit. Its official publication is the Monthly Bulletin of the Michigan Society of Architects, which has had editor Talmage C. Hughes in 1926 and edited and published by him since. The Bulletin recently published a special issue containing photographs and biographical sketches of all Society members. Theodore G. Scemeyer, Jr., is advertising director.

Detroit is known internationally for its large architectural offices—pioneered by the late Albert Kahn, and including many others. The Chapter has pledged its heartfelt support to the government in the present emergency, as it did during the last war.

Talmage C. Hughes, F.A.I.A., flew to Birmingham, Ala., July 12, for the opening of THE CLUB, that South’s newest and swankiest, atop Red Mountain, overlooking the Pittsburgh of the South.

The event was televised; the architects, Warren, Knight & Davis taking photographs at their guest. The members of the firm are all graduates of Alabama Polytechnic Institute, at Auburn, Ala., as is Hughes. The three senior members have sons who are also graduates of Auburn and are now members of the firm.

THE CLUB will be featured in the National Architect for July. Incidentally, Detroit is the home of this up-and-coming architectural magazine, founded in 1925 by Hughes, and edited and published by him since. Hughes is this year celebrating his 75th birthday and in his Monthly Bulletin of the Michigan Society of Architects.

Besides his editing chores, Hughes finds time to design theatres in the outlying communities. He has just received the 1951 award of "Best of the Year" for his Rapids Theatre in Eaton Rapids, Mich., of which Cash Beecher is owner. Albert S. Johnson was theatre consultant. Architect Hughes’ other practice consists mainly of looking houses for himself, living in each for a while, then selling it. He now has his fifth under construction on Harbor Hill in Grosse Pointe Farms.

Eero Saarinen, President of the Detroit Chapter of The American Institute of Architects, has received notification of the appointment of Michigan men to national committees of the Institute.

Clair W. Ditchy, of Detroit, who is national secretary of the A.I.A., has been named a member of the Committee on By-laws; Leo M. Bauer, of Detroit, president of the Michigan Society of Architects, has been appointed a member of the Committee on Architecture and the Government, while Robert B. Frantz, a member of the Saginaw Valley Chapter, was appointed to membership on the Committee on International Relations.

Saarinen, who became president of the Chapter upon the death of Andrew R. Morison on April 26, reported that the Morison Memorial Scholarship Fund had reached a total of more than $1,500.

Clair W. Ditchy, F.A.I.A., of Detroit, national secretary of The American Institute of Architects, will conduct a Fall Trek of Architects to Europe, for five weeks, beginning September 1, 1951. Mrs. Ditchy will accompany him. Architects from throughout the country, their families and friends, will visit five countries of Western Europe and be entertained by architectural organizations in each. On the itinerary will be London, Stockholm, Zurich, Lucerne, Florence, Rome, Nice, Paris, and the Chateau country.

In addition to the Ditchys, others from Detroit will be architects Raymond C. Perkins and George F. Diehl.

On a Spring Trek similarly conducted by Mrs. Wright, Mr. and Mrs. R. Sleeper of New York, Detroit architect, J. H. Gustav Steffens was in attendance.

Frank Lloyd Wright, world-famed (and most bemedaled) architect, was a visitor to Detroit recently. At a dinner preceding his lecture, when mention was made of the 1951 convention of The American Institute of Architects in Chicago, he said, "I understand they gave the medal to a man named May Beck (Bernard Maybeck of San Francisco). I wonder what that makes the medal worth."

Reminded that Philadelphia newspapers had quoted him as saying he wore the British medal because it was the only one that had a ribbon, he denied the statement, saying "that’s just newspaper rubbish. The real reason is that the British medal is the only one that means anything.

Mr. and Mrs. Wright left Detroit for Europe, where he was awarded Italy’s Star of Solidarity, just before the opening of an exhibition of his work at Strozo Palace in Florence.

Milo Quaife’s slick new book, “This Is Detroit,” official publication of Detroit’s 250th Birthday celebration, is a splendid document of our architecture down to date.

The current pages: architect Saarinen’s conception of our Civic Center development at the foot of Woodward Avenue, and Suren Pilafian’s Wayne University campus.

Largest permit of Detroit’s Department of Buildings and Safety Engineering: the new City-County building going up at Woodward and Jefferson. However, it’s being done by installments.

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Construction
received a penny post card from Alfred C. Brozo, permit chief, that his department was ready to issue the permit. This is the same procedure followed in the case of a two-car garage—except that the fee is $1,074.50, and this is only for the foundations. * * *

The State of Michigan Board for Registration of Architects, Professional Engineers and Land Surveyors, announces that at the last examination, held on May 25, 1951, the following architects were newly registered to practice in Michigan:


All were registered by reciprocity, having been registered in other states. * * *

Cornelius L. T. Gabler, Architect, president of the Downtown Lions Club, took part in ceremonies in front of the City Hall last week in which his Club presented a mobile playground unit to the City of Detroit. Mayor Albert E. Cobo was the recipient.

Architect Stanley Fleischaker has moved his home to 20489 Litchfield Road, Detroit 21; Werner B. Anderson, from 11700 Coyle Avenue to 4708 Sheridan Dr., Pontiac, Mich.

Solidarity House, international headquarters of UAW-CIO, at Jefferson Avenue, the River and Parker Avenue, in Detroit, is soon to be published in the Architectural Forum, Magazine of Building. Hugh Taylor Millar is the architect. Parts of the building are designed to take ten more stories in the future. * * *

Giffels & Vallet, Inc., L. Rossetti, Associated Engineers and Architects, Inc., were recipients of an award of merit for their Veterans Hospital in Fort Wayne, Ind., on which Alvin M. Strauss of Fort Wayne, Ind., was associate architect. The occasion was the Annual Convention and National Honor Awards of The American Institute of Architecture in Chicago recently.

The Detroit Chapter, A.I.A. will make the presentation to Mr. Rossetti at a special ceremony in September. * * *

Linn C. Smith, of the firm of Eberle M. Smith & Associates, has been named chairman of the 38th annual convention committee for the Michigan Society of Architects, scheduled at the Hotel Statler in Detroit, March 5-8, 1952.

Smith announces that there will be a comprehensive display of building materials and products, which enterprise was begun last year under the direction of Sol King, of the firm of Albert Kahn Associated Architects and Engineers, Inc.

Smith's firm has done some outstanding school buildings for the Detroit Board of Education and other communities, which have received national recognition. * * *

Thomas H. Hewlett, of O'Dell, Hewlett & Luckenbach, Architects, director of the Detroit Chapter, The American Institute of Architects, reports word from Washington headquarters that the Institute's 1952 Annual Convention will be held at the Waldorf-Astoria Hotel in New York City, June 22-27, inclusive; 1953, in Seattle, Washington; 1954, in Boston, Mass. * * *

Detroit Chapter, A.I.A. is recruiting architects as volunteer civil defense building inspectors, under Joseph P. Wolff, Commissioner of Buildings, who heads a unit of Detroit's civil defense program under Major General Clyde E. Dougherty. Eberle M. Smith is the Chapter's representative; Talmage C. Hughes, alternate.

ISLAND HOME of Michigan's Great Woman Pioneer

"You have killed my husband!" The anguished cry broke the stillness of the Pottawattomie village on Lake Michigan where Madeline and Joseph Laframboise were spending the night. Enraged at the fur trader's refusal to give him liquor, Nequat, a young brave, had stolen into their tent and slain the devout Joseph as he knelt in prayer.

The Pottawattomies who were outraged by the wanton murder of their trusted friend eventually captured Nequat and brought him to Madame Laframboise for judgment. Though she was the granddaughter of Returning Cloud, famous Ottawa chieftain, she followed the Christian faith of her French father and even when confronted by the slayer of her beloved husband, she heeded the Biblical admonition to forgive one's enemies. "Set him free," she told Nequat's captors. The Indians reluctantly obeyed but later Nequat was found in the forest with a knife through his heart.

After her husband's death Madeline Laframboise carried on the business in which she had assisted her husband since their marriage in 1796 when she was seventeen. Noted both for her personal charm and her enterprise, she became one of the Northwest's greatest fur traders. She spoke French like a Parisian and in middle age she taught herself to read and write the language fluently.

Her home on Mackinac Island where she spent the last years of her life was built for her in the early 1820's by her son-in-law, Captain Benjamin Pierce, commandant of Fort Mackinac and brother of Franklin Pierce, who became President. The home, now privately owned, is preserved as a survival of Michigan's early days.
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A musical joy ride, the picture featured The Grand Hotel. Here Esther Williams, Johnnie Johnston, Jimmie Durante and Dick Simmons celebrate an approaching wedding.

Old Fort Holmes is another of the Island's historic features.

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GENERAL CONDITIONS
Contributed by George S. Hawes,
A.I.A., Saginaw Valley Chapter
Addendum No. 1

1. Scope: This addendum shall consti-
tute the guiding rules under which all
construction shall proceed and by
which all plans and specifications shall
be interpreted.

2. Interpretation: The plans and spec-
ifications are to be taken together. Any-
thing shown on the plans and not men-
tioned in the specifications, and any-
thing in the specifications and not
shown on the plans is to be considered
as both shown and specified, and any-
thing wanted by the owner or any of his
friends, or by anybody else (except the
contractor) shall be considered as
shown, specified, implied and required,
and shall be provided by the contractor
without expense to anybody but him-
self. If the work has been done without
expense to the contractor, the work
shall be taken down and done over
again until the expense is satisfactory
to the owner. Coincidence between the
plans and executed work shall not be
considered a claim for extra compensa-
tion. The architect is not required to
recognize coincidence.

Anything that is right on the plans is
to be considered right, anything that is
wrong on the plans shall be discovered
by the contractor and shall be
made right without telling the architect
or indicating it in the bills. Anything
that is forgotten or left out of the plans
and specifications, but which is neces-
sary and required for the comfort and
convenience of the owner, whether he
thought of it before or after the execu-
tion of the contract, shall be provided
by the contractor to the satisfaction of
everybody.

3. Rules and Regulations: The work
throughout shall comply with all rules,
regulations, caprices and whims of all
City, County, State, National and In-
ternational Departments, Bureaus, and
officials, having or not having proper
jurisdiction.

4. Materials: All materials shall be
of the best of their several kinds, and
the contractor is expected to know and
provide the best, irrespective of what is
specified in detail.

Further, the architect reserves the
right to change his mind about what is
the best. Any changes necessary to
make the work and material fit, to the
mind of the architect, shall be made by
the contractor without extra cost.

5. Arbiter: In case of any dispute
arising as to the nature of character of
the work, specified or implied, the mat-
ter shall be decided by referendum and
recall after which the decision may be
reversed by the architect.

6. Payments: Payments, if any, shall
be made only on the architect's certifi-
cate. Architect's certificates shall not
be considered negotiable nor are they
legal tender. When once issued, the
architect assumes no responsibility for
their usefulness.

Partial payments shall be made as
the work progresses in the amount of
eighty-five per cent of the value of the
work done, as judged by the architect.
In no case shall the judgment of the
architect include more than enough to
cover the payroll every Saturday night.
The material men must take the cus-
tomary chances. The final payment (if
any) shall be made only when every-
body (but the contractor) is satisfied.
Any evidence of satisfaction on the part
of the contractor shall be considered a
just cause for withholding the final
payment.

Courtesy of "The Elements of
Specification Writing"
by Richard Shelton Kirby, C.E.
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LETTERS . . .

We should like to express our interest
in the Monthly Bulletin and our feeling
that it is an outstanding contribution to
architectural literature. It certainly in-
dicates the progressive attitude of the
State of Michigan.

We are particularly interested in the
publication of work of individual offi-
ces because we feel that there is very
little other opportunity for distribution
of information and because we feel that
it provides a medium for proper inte-
gration of the architect in any commu-

J. Stewart,
Sobel & Stein, Chicago.

Mr. J. F. Chamberlin, of Architec-
tural and Industrial Models, 20193
Appoline, Detroit 25, Mich., announces
a service of model-making for archi-
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makers. He has done work for such
architects as Charles Hannan, Ted
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phone at University 3-3106.

AMERICAN SOCIETY OF HEAT-
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DETROIT CHAPTER has elected
George Akers President. Other new offi-
cers are Charles A. Strand, Vice Pres-
ident; R. H. Oberschulte, Secretary;
Edward F. Glanz, Treasurer. Board of
Governors: Dave Falk, C. F. Donohoe,
Don McConachie.

BELOW: Our Fellow Member, the late
George D. Mason, F.A.I.A. was architect
for The Grand, Hotel, which was opened
in 1887. Mr. Mason passed on since our
last Summer Meeting.
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KOREA HAS CHANGED PATTERN OF OUR LIVES

Members who heard Philip L. Graham, publisher of the Washington Post, at the August meeting have rated his talk as one of the best in recent years. We are pleased to give a resume of his discussion of "Current Developments in the News."

(Washington Building Congress Bulletin)

Mr. Graham divided his talk into three sections: 1. Some aspects of the Korean War. 2. What lies ahead in U. S. foreign policy after Korea? 3. How all of this will affect our daily lives at home.

WHY WE ARE IN THE KOREAN WAR

The United States is a sincere member of the United Nations and is pledged to oppose naked aggression such as that of the communists in attacking southern Korea on June 24. Another reason is that when the Soviet attack in Korea, it struck in one of the few places where we had a chance to stop aggression. Japan is practically the only place where we had power enough to be able to resist.

HAVE WE Fought BADLY in KOREA?

An objective examination of the facts will show that there is nothing to be ashamed of. Because of the difficulties of reporting such a situation, the American newspapers have not made clear the important fact that the operation there has been a planned withdrawal and not a retreat. As a nation we have been puzzled and humiliated by the withdrawal, which is ironic, since it was just this sort of strategy which won fame for generals George Washington and Robert E. Lee in earlier wars.

General MacArthur had two alternatives. He could evacuate the troops in Korea, wait until he had adequate forces from the U. S. and take Korea by means of amphibious landings later. Or he could take the more difficult position of committing his troops piecemeal in delaying the enemy's withdrawal. He took the second alternative, which was less costly in American lives, and it has been brilliantly carried out. It now appears that the U. N. forces will hold in Korea, unless the Soviet itself should decide to enter the conflict.

1945 PEACE TERMS

On every side we hear complaints about how badly we did in the 1945 negotiations for peace. The truth of the matter is that while we think we were seduced by the peace, from Russia's point of view we did very well indeed. We ended the war with the two most important industrial complexes, Japan and the Ruhr, within our control. They are the two chief targets of Russia.

When General Bradley, Secretary Louis Johnson, and John Foster Dulles visited Tokyo a few months ago, they reported that we were moving closer to a peace treaty with Japan. The Russians, realizing that no representatives of Russia or China would participate in drawing up this treaty, felt that this was the time to strike. We had withdrawn our troops from Korea at the request of the U. N. and Russia probably thought she could gain control of all of Korea without a widespread conflict.

This was a major error on the part of the Soviet, since the action solidified the U. N. against them and ended our fear of the evils of international communism and our need to be on guard against it.

WHAT LIES AHEAD FOR US NOW?

We have learned that our armed forces have been maintained at too low a level. While Defense Secretary Louis Johnson is partially to blame for this situation, it is also largely the fault of all the American people. We are too anxious to pin the blame on someone. Until the Korean attack occurred no one appeared anxious to have his taxes raised 20% or to have universal military service. The blame really rests on all of us.

For the next few years military expenditures will be between $30 and $40 billion, instead of the present $15 billion. The U. S. budget will probably be $60 to $70 billion dollars. What will be the reasonment by reminding us of our three sections: 1. Some aspects of the Korean War. 2. What lies ahead in U. S. foreign policy after Korea? 3. How all of this will affect our daily lives at home.

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BANNISTER

No generation of men has ever lived in more complex times. In politics, social organization, material equipment and art, it is difficult to discern that purpose and unity which could give us reassurance and confidence to meet the future. It is small wonder, therefore, that too often we seek comfort in easy slogans and casual oversimplifications.

Modern architects are not immune to these dangers. Frequently, they seek some aspect of their art and inflate it out of all proportion to truth. They forget that understanding and mastery of the nature of architecture, one of the most complex of man's activities, cannot be attained by superficial theorizing, but must be won by close study, careful analysis, and firm reasoning.

It is our purpose here to examine some of our common beliefs about modern architecture, to test their validity, and to attempt to discover some of the fundamental characteristics which give point and meaning to our own time. In this process it will be useful to cite many intriguing examples that do not appear in the usual course in the history of architecture. They amply prove that little is new and that our ancestors wrestled with, reacted to, and solved age-old problems much as we do today. History is often more modern than today's invention.

No more common belief exists today than that past ages were indifferent to personal hygiene and that we are the first and most enthusiastic patrons of building sanitation. It is a shock to some to learn that this is less familiar. In the simple country farmhouse at Bosco Reale, two miles north of Pompeii, built by J. Fannius Stock, the reign of Augustus, a suite for bathing stands close to the kitchen, so that the furnace room with its lead boiler adjoins the kitchen hearth. Lead pipes and valves conduct both hot and cold water to the basin and tub in the caldarium, which with the tepidarium enjoys radiant heat from hypocausts lining the floor and walls. Thus it is seen that the presence and prevalence of plumbing is not a novelty which was to be raised by air pressure supplied from below by a steam pump. In case of failure the air would cushion the cab and allow it to settle gently to ground level. Trevethick died the following year and the project ended, but pneumatic lifts had already been proved feasible in 1810 by Benjamin Gideon and in the Level Iron Works near Dudley.

About 1625, William Strutt, the famed mill owner of Derby, developed a factory elevator, or teagle, in collaboration with Mr. Frost, a Derby machinist. The wooden cab, with a capacity of six persons, ran in a six-foot-square shaft, and it and its counterweights were guided by plank rails. Power from the mill's shafting moved the cab at 120 feet per minute. Andrew Ure reported in 1835 in his Philosophy of manufactures, that he had ridden many such teagles and that mill owners adopted them to save workers' energy for more productive tasks than climbing stairs.

The application of steam power to mine hoists had been worked out during the last third of the 18th century. Long before that, however, hand-powered pulley hoists had been used in merchants' warehouses, and on occasion such devices were installed in palaces for the convenience of aged or ailing monarchs. In 1743, a central tubular shaft contained an elevator car for twenty-five passengers which was to be raised by air pressure supplied from below by a steam pump. In case of failure the air would cushion the cab and allow it to settle gently to ground level. Trevethick died the following year and the project ended, but pneumatic lifts had already been proved feasible in 1810 by Benjamin Gideon and in the Level Iron Works near Dudley.

A TALK BEFORE THE DETROIT CHAPTER OF THE AMERICAN INSTITUTE OF ARCHITECTS, MAY 24, 1951

TURPIN C. BANNISTER

Head, Department of Architecture, University of Illinois
To The Members of The Michigan Society of Architects

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Wood against metal . . . Free Acting.
from Soufflot's use in 1770 of an incombustible floor arches made of hollow iron. Thus Victor Louis accomplished a feat, epoch-making for his time, of a theatre constructed entirely of incombustible materials.

There is a strong suspicion that Louis drew upon an obscure architectural colleague, M. Ango, for aid in designing the wrought-iron portions of the structure. Three years earlier, in 1782, Ango had built in the suburban residence of Charles-Joseph Panckoucke, editor of the monumental Encyclopedia methodique, a mezzanine floor, the first to employ iron supporting members. Three wrought-iron lattice joists, quite like our own open-web joists, with reinforcing bars between them, were completely enclosed in a 9-inch thick plaster floor slab. The engraving of this floor is preserved to us today only because the owner inserted it in his own encyclopedia.

But both Louis and Ango drew inspiration from a more famous contemporary, the royal architect, Jacques-Germain Soufflot, who had designed in 1779, just before his death, a similar wrought-iron roof over a stair hall at the Louvre, and this in turn developed from Soufflot's use in 1770 of an incombustible wrought-iron armature which reinforced the flat-arched lintels and flat ceiling vaults of the huge portico of his masterpiece, the Pantheon in Paris. This armature in turn stemmed from Soufflot's observations while repairing and completing the east facade of the Louvre, where in 1667, Claude Perrault, the doctor, scientist, and amateur architect, had inserted an even more elaborate armature which literally sewed its stones together into a system of reinforced masonry, one of the technical progenitors of our own reinforced concrete. If we pursue reinforced masonry to still earlier periods, we meet it in Notre-Dame at Paris in the late twelfth century, where it was used in a vain attempt to contain vault thrusts before the introduction of flying buttresses. Still earlier, in the Parthenon at Athens, iron cramps were systematically used to increase the stability of the masonry.

The use of metal for load-carrying structural elements likewise goes back much farther than is usually suspected. The Marble Palace, begun in St. Petersburg in 1768 and built by Catherine the Great for her favorite, Count Gregory Orlov, had a sheet copper roof supported on cast-iron beams. The earliest dated cast-iron columns, thus far discovered, are eight which carry the great...

employed by Mies Van der Rohe in his famed Tugendhat House built in 1930, 138 years later.

William Strutt was directly inspired in these momentous structures by recent Parisian experiments. There, in 1785, the architect, Victor Louis, had used in the theatre and other additions at the Palais-Royal vaults of "hollow pots" just introduced by M. St.-Fart, architect and tile-maker. The ceiling vault of the theatre used these hollow pots, and above it rose a high roof framed with wide-span trusses of wrought iron. Thus Victor Louis accomplished a feat, epoch-making for his time, of a theatre constructed entirely of incombustible materials.

There is a strong suspicion that Louis drew upon an obscure architectural colleague, M. Ango, for aid in designing the wrought-iron portions of the structure. Three years earlier, in 1782, Ango had built in the suburban residence of Charles-Joseph Panckoucke, editor of the monumental Encyclopedia methodique, a mezzanine floor, the first to employ iron supporting members. Three wrought-iron lattice joists, quite like our own open-web joists, with reinforcing bars between them, were completely enclosed in a 9-inch thick plaster floor slab. The engraving of this floor is preserved to us today only because the owner inserted it in his own encyclopedia.

But both Louis and Ango drew inspiration from a more famous contemporary, the royal architect, Jacques-Germain Soufflot, who had designed in 1779, just before his death, a similar wrought-iron roof over a stair hall at the Louvre, and this in turn developed from Soufflot's use in 1770 of an incombustible wrought-iron armature which reinforced the flat-arched lintels and flat ceiling vaults of the huge portico of his masterpiece, the Pantheon in Paris. This armature in turn stemmed from Soufflot's observations while repairing and completing the east facade of the Louvre, where in 1667, Claude Perrault, the doctor, scientist, and amateur architect, had inserted an even more elaborate armature which literally sewed its stones together into a system of reinforced masonry, one of the technical progenitors of our own reinforced concrete. If we pursue reinforced masonry to still earlier periods, we meet it in Notre-Dame at Paris in the late twelfth century, where it was used in a vain attempt to contain vault thrusts before the introduction of flying buttresses. Still earlier, in the Parthenon at Athens, iron cramps were systematically used to increase the stability of the masonry.

The use of metal for load-carrying structural elements likewise goes back much farther than is usually suspected. The Marble Palace, begun in St. Petersburg in 1768 and built by Catherine the Great for her favorite, Count Gregory Orlov, had a sheet copper roof supported on cast-iron beams. The earliest dated cast-iron columns, thus far discovered, are eight which carry the great...
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There is still another unacknowledged debt to which the modern skyscraper must bow. Tall building is not a unique ambition of our own day. Even before iron framing was available, multi-story construction with incombustible masonry vaults had been successfully realized. Perhaps the example most stimulating to the builders of the first fire-safe English cotton mills was the recently rediscovered War, Marine, and Foreign Offices built at Versailles in 1769-1787 by the engineer, Jean-Baptiste Berthier, at the command of the Marechal de Belle-Isle. Berthier's section of the Marine and Foreign Office block reveals five stories, subdivided by six heavy rubble cross walls, producing 35 compartments, each of which was 19 by 27 feet and covered by a low segmental vault, one brick thick, laid in gypsum mortar, and rising only 16 inches above the spring line. The structure still stands after 150 years of service and today serves as the town library. Of similar construction and height was the Public Granary of Genoa, built in 1625 by the architect-engineer, Giovanni Aicardi. Each of the four storeys, each one covered by three aisles of brick groin vaults. The three huge superimposed slenderness ratio of 25.6, about twice that allowed today for masonry piers. At Notre-Dame the monolithic colonnettes high in the facade are 7 inches in diameter and 16 feet 9 inches high, giving an even bolder ratio of 29.3. Perhaps the most remarkable optical exploitation of structural slenderness of all time was the Sainte-Chapelle, built by Pierre de Montreue in 1246-1248 for Louis IX's most precious possession, the Crown of Thorns. Here, in order to create a translucent sparkling jewel box, wide windows reduced the walls to read-like shafts which in turn were so masked by statuettes and gilded patterns that the whole enclosure seems to float miraculously in mid-air. Just as in our own day our yearning for apparent structural effortlessness leads us to illogical and too ingenious tricks, Pierre de Montreue was forced by his own boldness to use numerous expedients, such as three tiers of iron chainages girdling the walls, and from armatures reinforcing the apse ribs. Whatever the cost in logic, the result is breath-taking and uniquely glorious. No later work embodies the eclectic conception of a building as a glass cage has approached it in sheer poignant beauty.

The medieval architect worked by trial, error, and intuition. To him the ability of modern practitioners to predict by mathematical calculations the strength and stability of a structure would appear to be black magic indeed. But engineering principles did not spring full-blown in the recent past. They have been developing for 400 years. Eaton Hodgkinson published in 1824 his first hesitant experiments to determine the breaking point of cast-iron beams. Pioloingh he tested plain and bracketed beams right side up and upside down, to discover what every modern student-architect knows, that is, that beam sections must be proportioned to compression above and tension below. Early tests to determine the strength of building materials were often induced by impending structural failures. Soufflot, in his Pantheon, for example, had aimed "to unite the lightness of the Gothic with the magnificence of classic Greece." All the vaults, as well as the masonry crossing dome, were to be carried on free-standing columns, which would act as well as look the part of true supports. Despite the warnings of his colleagues, Soufflot
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Mr. Architect

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and China. Yankee ingenuity took Britain, France, Germany, and Belgium, from the Atlantic coast, from Great ships to Californian forty-niners and chapels. Hundreds of prefabs were advantages, plantation houses, army barracks, York and Boston, sold panelized cot-
tings and Flint, lumber dealers of New and even from New Zealand, Tasmania, has a long history. In the 1860's, Skill-
economy. Nevertheless, prefabrication is inherent to a people such as ours, who yearned for. Nevertheless, he exhibited an idea of prefabrication, that watchword to architectural problems, which over succeeding centuries has provided the magic tool of modern beam theory.

Galileo was preceded by a century, however, by that ubiquitous and universal investigator, Leonardo da Vinci, whose notebooks contain many observations, speculations, and ideas on structural problems. In one sketch it is clear that Leonardo employed a parallelogram to calculate the resultant of two forces; in another he clearly shows an apparatus for finding the tensile strength of wire; and in still others, he reasons out the relationship between the size and strength of beams and columns. Unfortunately, the mathematics of his day was not equal to his insight—the idea of the square of the depth was completely beyond him—so that he could not find the formula he yearned for. Nevertheless, he exhibited the application of scientific method and thought to architectural problems, which over succeeding centuries has provided the magic tool of modern structural theory.

Surely we can claim as modern the idea of prefabrication, that watchword and panacea preached on every side by contemporary housewives. It seems in-herent to a people such as ours, who are so devoted to an industrialized economy. Nevertheless, prefabrication has a long history. In the 1600's, Skill-iron prefab palace to King Eymamo of the Guinea coast as a bribe for trading privileges. During the late 1820's, William Manning, carpenter and builder in London, built panelized wooden prefabs for the colonial trade and sent manyprefabs to Australia. To have time, the roof was formed by a

tarpaulin. In 1792, the Sierra Leone Company of London sent to their colony at Freetown four "patent houses" covered with oilcloth, together with pre-cut timber frames for houses, shops, two hospitals, a warehouse, and a church. The Governor's House was raised on piers, a la Corbusier, and may have had air conditioning in the form of cool air forced through wall ducts by a trompe, a water jet blower that had been developed in Germany for use with blast furnaces.

As early as 1727 and as late as the 1790's pre-cut house frames were shipped from New Orleans to the West Indies, and during the late 17th century Dutch carpenters on the Hudson also exported similar frames to the same market. In 1624 Edward Winslow brought with him from England the "Great House" which he erected on Cape Ann. The earliest prefab associated with the New World, however, accompanied Sir Martin Frobisher's gold mining expedition to Baffin Land in 1578, and consisted of a knocked-down wooden house, apparently cap-
able of sheltering the whole company of 100 men. Unfortunately, the idea miscarried when two walls and other
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The prefabrication of major portions of large buildings has long excited the ingenuity of builders. Few of us realize how widespread was the use of cast-iron facades throughout this country from the 1840's to the 1880's. In New York City, for example, there remains below Canal Street a frontage of iron facades totaling more than three miles. James Bogardus claimed that his own factory, erected in 1848-49, was the first, and ever since he has been credited with the invention. Nevertheless, Miles Greenwood of Cincinnati has recently come to light as a producer of cast-iron fronts beginning as early as 1843. Borgwardus, however, probably got the idea for his cast-iron front in London in 1839, when he could easily have heard of and inspected William Fairbairn's prefabricated cast-iron flour mill ordered by the Turkish Sultan for erection in Constantinople. Nine years earlier, in 1830, John Haviland, the Philadelphia architect, had used a cast-iron facade, the first in the United States, for the Farmers' and Miners' Bank of Pottsville, Pennsylvania. Haviland may have seen in St. Petersburg in 1815-16 the extraordinary products of Russian iron foundries, and after his arrival in America he may have heard through his uncle-in-law, Count Mordvinoff, Minister of the Marine, about the remarkable constructions of the 1820's in which cast iron was substituted for costly carved stone. One example was the Archives of the Czar's General Staff, designed by Carlo Rossi and cast at the Imperial Foundry by the director, the English engineer, Clark. Both Haviland and Clark probably knew of the well-publicized iron church of St. George, built at Liverpool in 1813-14 from the design of Thomas Rickman, and cast by the foundryman, John Cragg. But where metallic architecture begins is difficult to say. Bernini's great 90-foot-high baldacchino in St. Peter's was fashioned in 1624-1633 of large cast-bronze sections, and was a stupendous technical feat, and in antiquity both Roman and Greek architects had erected complete small shrine buildings of burnished bronze.

Turning from the realm of construction to that of functional planning, history reveals some striking premonitions of contemporary ideas. Consider for a moment the efficient handling of circulation in the Colosseum at Rome, a masterpiece of traffic control so effective that its basic scheme has not been surpassed nineteen centuries later. Begun in 71 A.D. and opened in 75, it provided accommodations for 50,000 spectators, each of whom entered it by that particular one of its 76 gates whose number appeared on his individual ticket. In dispersing the crowd, the huge bowl could have been emptied in about eleven minutes, if we assume the rate of flow specified by modern exit codes.

In the Middle Ages architects showed great skill in the planning of fortresses, a type of building in which functional efficiency was directly revealed by success in withstanding attacks. In many other medieval building types a certain generalized functionalism can be discerned, as in church, house, town hall, or hospital. Although most pre-modern societies had slight appreciation for the concept of saving labor or time, and had no precise techniques by which to measure the relative physical efficiency of buildings, we could probably recognize almost modern standards if we but knew more accurately the actual uses which these buildings served. A modern industrial architect, for example, would no doubt be quite at home if he could visit the vast and busy Naval Arsenal of medieval Venice. During the 11th century the Venetian fleet had swept the Adriatic clear of pirates, conquered the Dalmatian coast, and established a lucrative trade with the Near East. These operations soon called for increased maritime construction. In 1104, therefore, Doge Ordelaffo Falier gathered together the city's scattered shipyards and established the Arsenal at the eastern end of the city, to build and outfit ships for both war and trade. Covered shipways lined the western edge of the old basin. As commerce grew and as security of the fleet demanded recurring naval warfare, the Arsenal's accommodations were enlarged in 1301, 1325, 1474, 1539, and 1584. All the multifarious operations required by a fleet of 45 war galleys, 300 cargo ships, and 3,000 smaller vessels were concentrated here. Ordnance was cast. Hawsers and cables were twisted in Europe's largest ropewalk, 1,030 feet long, built by Giovanni de Ponte, the architect who also restored the Ducal Palace and built the Rialto Bridge. Vast warehouses held fittings and supplies enough for 2,000 ships. Vessels were fitted and loaded on a straight-line production basis by moving them along the docks to successive centers of supply. At its peak, the Arsenal employed 16,000 workmen, who were so effectively organized that in 1574, during the visit of King Henry III of France, they built and launched a galley and cast three cannons, all while the king was being entertained at dinner.

The logical arrangement of modern industrial buildings has been greatly facilitated by the device of organizational charts and diagrams. In 1909, Charles Day in his lectures at the newly established Harvard Business School, used such means to analyze the principle of direct flow of materials through a plant. Similar problems, however, evoke similar methods, and the earliest organizational chart thus far discovered is the work of an architect, Benjamin
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Henry Latrobe, who about 1810, just a century earlier than Day, drew up such a chart in studying the development of the Navy Yard at Washington.

Finally, let us consider the question of our modern aesthetic dogmas of functionalism and constructivism. In our devotion to these creeds we tend to look disdainfully at preceding ages. We like to think that we are the first to seek within utilitarian needs and structural necessities the key to form and the standard of aesthetic value. Every generation must have some creed around which to rally its energy, but let us not suppose that ours is unique in time or place. Horatio Greenough is often cited as the intellectual progenitor of an architectural rationalism which is supposed to be characteristic­ally Yankee in spirit, but one has only to scan the first half of the 19th century in England to find a full-blown functional aesthetic appropriate to an industrial age. In 1848, the following comments appeared in the London Builder under the title "Modern Architecture should meet Modern Requirements":

"(An architect) should analyze the motives and the habits of those who formed (past buildings); and, as the search would surely disclose that the (past) style was altered and modified to keep pace with the onward march of luxury and refinement, a suspicion might arise in his mind that the lapse of centuries since must necessitate a change still further. . . . The practice with which (our ancestors) produced the forms we venerate, was . . . different from ours.

When they planned a work, they sought beyond all, that it should befit its end; that it took its plan, its outline, and its details from the requirements of its purpose, and from them almost alone, and that that purpose was not marred because its necessities might suggest a change (or) a necessary feature (be) rejected because it might be new. . . . The works of each (of our revivalist architects) are painfully adapted and enervated to suit the requirements of an age and country whose clime, and habits, and customs are different from theirs . . . (but) Many a large factory at Manchester, with its long rows of honest windows, and one large simple corner crowning its immense front, has more majesty than a palace, more grandeur than a university, (and) more propriety than a hospital."

These mid-nineteenth century hopes for a characteristic modern architecture were matched twenty years before by early essays in industrialized furniture. About 1830, Robert Mallet, a Dublin engineer, designed a kitchen chair for mass production. The cast-iron back and arms, together with the gas-pipe legs, recall very markedly recent familiar examples of modern industrial design.

An earlier rationalist was the Franciscan friar, Carlo Lodoli, who died in 1761 after a long life of teaching at Cluny and its coterie of sister houses. Robert of Moleme led his small band of monks to isolated Citeaux and established there a rigorous regimen of ascetic puritanism. The rule governing the Cistercian order forbade display and renounced all things appealing to the senses, the better to concentrate on holy duties. Plain, unadorned materials replaced silks and fine linens; milk-white panes replaced resplendent stained glass; wood crosses replaced gold; their manuscripts permitted illuminations only in black. No spires, no curving ambulatories, no entertaining or instructive ornament, and no intricate tracery relieved the sober "constructivism" of their churches. The repetition of identical rib-vaulted bays created a quiet, restrained module that welded dormitory, refectory, chapter house, barn, and workshop into an orderly architectonic system. Fontenay, south of Paris, built between 1118 and 1147, still reveals the muted character of this Cistercian functionalism.

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The second major phenomenon underlying modern architecture is the revolution in clientele. Eighteenth-century architects served the needs of only a few aristocrats and a few merchant princes. As the 19th century progressed,
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political and economic power passed to ever-widening groups, first to the captains of commerce and industry, then to corporations and the middle class, and finally today to the whole people. Thus modern architecture has become truly "an art for all men," and modern architects are now primarily preoccupied with the development and transformation of many types of buildings formerly almost unknown or undifferentiated. This democratization process has given modern architecture much of its unique character. The public school, the factory, the huge housing project, the hospital, and the tall office building, to name but a few types, are unique in modern architecture because heretofore no other society had the need or resources to call them into being.

The new content of modern architecture has brought to the fore the problem of attaining high quality in design. Middle-class clients, so restricted in resources, cannot afford those flights of fantasy or pretentiousness which aristocrats once demanded. Projects for lower income groups are limited because of imbalance between widespread need and limited funds. Government and corporations must reject richness for fear of rebellious taxpayers and stockholders. The inevitable result has been to reduce the scope of aesthetic choice and thus constrict carefree fancy. Many architects have rationalized their predicament by asserting as a transcendental truth the dictum that quality is inherent in simplicity of functional expression. The danger in such a stand is that we cut our philosophy to suit the lowest common denominator and thus equate simplicity with poverty, meanness, and vulgarit.y. Another casualty of this attitude is that we dissipate our crafts through lack of exercise. In contrast to this reprehensible situation, however, the best of our colleagues have succeeded in creating works that in imagination and delight reassure us that we need not abdicate our honorable traditions.

Modern architecture, therefore, is more modern than our cliches and slogans indicate. It constitutes a contribution of signal worth to our civilization, but it remains, and always will remain, unfinished business because it is a dynamic art reflecting dynamic processes of life. Whether we shall be equal to the opportunity and worthy successors of our professional predecessors can only be judged a generation hence. To ensure a favorable verdict we must strive for quality of vision, quality of craftsmanship, and quality of that spirit which radiates today so vividly in our great monuments.

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Michigan Architects to Hold Annual Three-Day Meeting

Good Building to Be Theme

MORE THAN 200 reservations have been received by the Grand Hotel on Mackinac Island for the Michigan Society of Architects’ sixth annual midsummer conference scheduled for Aug. 4-7, it was announced today by Talmadge C. Hughes, executive secretary.

The theme of the meeting will be "Elements of a Good Building," Alden B. Dow, of Midland, society president, stated.

Outstanding speakers have been secured by Adrian N. Langius, conference chairman, to deal with various phases of the subject.

FRIDAY AFTERNOON Branch son V. Gamber, of Detroit, member of the National Architectural Accrediting Board, will speak on "A Good Architect.

This topic of the Architectural Forum. His subject will be "What Makes a Good Building?" Clair W. Ditthy, of Detroit, national secretary of the American Institute of Architects, will speak on what the AIA is doing, and Kenneth C. Black, of Lansing, Great Lakes district director of the AIA, will report on the last national convention.

ROUND-TABLE SESSION SATURDAY MORNING an open round-table session will be devoted to the subject of "New Methods and Materials of Construction.

Speakers will be: William E. Ogden, president of the Producers Council, Inc., Detroit chapter; Mark Atkin, president of the Detroit Builders & Traders Exchange; Fred C. Dorenbusch, president of the Grand Rapids Builders & Traders Exchange, and Robert E. Distel, president of the Lansing Builders & Traders Exchange.

The Grand Hotel has recently undergone complete refurbishing, at a cost of more than $75,000, the most extensive since it was opened in 1887. Architect for the building was the late George D. Mason, of Detroit, "Dean of Michigan Architects," President of the AIA and member of the MSA.

Cameron L. Davis, of Kalamazoo, president of the Associated General Contractors of America, Michigan Chapter, will talk on "Good Contractors.

J. Gardner Martin, of Lansing, district engineer, Portland Cement Association, will discuss "Good Materials," and Andrew McFarland, president of the Detroit Building Trades Council, on "Good Craftsmen..."

AT THE BANQUET Friday evening Roger Allen, of Grand Rapids, will be toastmaster and Douglas Haskel, of New York, the principal speaker.

Haskel is the newly-appointed architectural editor of The Architectural Forum. His subject will be "What makes a Good Building?"

Clair W. Ditthy, of Detroit, national secretary of The American Institute of Architects, will speak on what the AIA is doing.

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THE A, B, C AND D OF MARBLE

By Romer Shawhan, A.I.A., Managing Director, Marble Institute of America

The A, B, C—and D—of Marble . . . The alphabetical aspect of this paper will be apparent soon. But first, before the letters, comes the word—"the fact, the substance, the stone—the frozen moment of eternity that is marble itself.

Flip the pages of your dictionary granular to compact in texture, capable of taking a polish or being used for fine architectural work."

Technically that is accurate—and perhaps adequate. But it does not tell you why that word MARBLE has come ringing down the centuries as a symbol of strength and beauty in the structural and the fine arts. You have to talk about its inimitable richness of texture, its varied wealth in veining, its ability to soften and diffuse light, its unlimited color possibilities, before you begin to appreciate the beauty caught in the stone.

Yet beauty alone is but the beginning. Behind this stands the solid virtues. Marble is equal to the centuries. It is strong and durable and impervious to moisture. Its resistance to fire is unmatched among the building stones. It is ineribly clear, a delight to handle, economical in use, simple to maintain. It is found in many parts of the world and in quality quantities to meet every demand. In brief, it is the ideal material where utility and economy are essential—and beauty is paramount.

In a true and abiding sense, marble links the past with the present, a constant in the long story of human civilization, an index to the continuity of human achievement. It has held in trust the glory of the Greek masters, the grandeur that was Rome, the soaring art of the Renaissance and the architectural originality of our own pioneer builders. It is meeting today the ever-growing demand of the American public for high-grade decorative finishing materials, for enduring beauty in daily surroundings. It will hold much of the best that we build today in trust for later generations.

Yes, marble is old. Yet it is always new. It is one of those rare products that is "modern" in any age, for it speaks a language of honesty and distinction that is understood by everyone.

Long before Solomon's time, long before man inhabited this planet, marble was being formed by forces below the surface of the earth. The same forces that formed Malakai blocks of ancient Israel, the Parian marbles preferred by Phidias and the Carrara stones chosen by Michelangelo, also formed the marbles found in the United States.

All marble and all limestone were made by the same organic and chemical agencies. As you know, both are carbonate of lime. The owners of quarries today, as well as the owners of the quarries that supplied the builders of the Parthenon and the Coliseum, had their raw material made for them millions of years ago. And the original creators, the first benefactors in the geological marble-making process, were enormous numbers of little crustaceans whose myriad generations regularly left their tiny calcareous bodies on the bottoms of prehistoric seas.

Such seas, once clear, once teeming with these innumerable lime-producing little creatures, gradually changed to muddy seas, depositing clay, sand and gravel. In the long swinging cycles of time, such sediments, together with the calcareous beds, were formed again and again—until the deposits became many hundreds of feet thick.

If conditions had remained unchanged, these deposits could have continued to increase indefinitely. But the crust of the earth was very unstable. As the earth itself contracted from loss of heat, intense lateral pressures were produced. These flat beds were slowly raised above the seas. In many cases, the pressure was so powerful that it warped them into gigantic folds overlapping one another. Sometimes these folds broke and relieved the tension by thrusting one edge of the series of strata far over the other.

Meanwhile metamorphism was taking place, the sedimentary limestones were undergoing drastic changes. The combined action of pressure, heat and water was transferring them into crystalline aggregates. The character of the rock itself was transformed, resulting in a more compact and crystalline condition, giving it, as the dictionary tells us, the capacity to take a high polish. And the regional variations in the original carbonate formulae created the entrancing variations in color and markings that make the world's marbles ideally suited for decoration, sculpture and all fine building work.

All of that would be of scientific interest only, if marble were simply left where Nature placed it in the earth. The problem is to dislodge it, to make it available for the purposes for which it is so well suited.

It is customary to give the name "quarry" to any opening in the earth's surface that leads to a bed of marble. In strict fact, of course, a quarry is a mine, a stone mine. There are some cases in which quarries are completely underground, almost identical with what most people mean by the word "mines."

But there is one great difference between mining—or quarrying—marble and mining coal or other metal ores. Coal receives little respect from the coal miner. His job is primarily just to get it out of the ground. The size and shape of the pieces are relatively unimportant. And the metal ores, in this

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ancients probably used only one saw power. Our modern sawmills have from
blade at a time and operated it by man-
with the aid of waterborne sand. The
or wears its way through the marble
unchanged since the days of Pliny,

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Page 43

respects, are accorded even less respect.
After all, when they have been mined, their processing has just begun. They
still have to be smelted and refined. Marble miners—or quarriers—must
 treat their material with utmost care.
It must not be subjected to shock. It
must be removed in the right form for
specific purposes. On a rougher and
much larger scale, quarrying marble
is akin to the work of the skilled di-
mond-cutter.

Moreover, marble quarrying is us-
ually a much greater gamble than other
forms of mining. Even the most meticu-
lous calculations of the extent and di-
rection of a vein in a quarry may sud-
denly prove in error. As if to compen-
sate for this risk, however, marble of-
fers its quarriers an offsetting advan-
tage. It requires no smelting, no refin-
ing. It exists in its final state. The
problem, as stated before, is to dis-

Dislodging is done by a channel cut-
ting machine which operates an arm-
like device in a strong framework. At
the end of the arm are five blades, or
knives. Powered by air pressure, this
cutting arm moves back and forth on
 steel tracks, cutting one continuous
groove. The striking blades chip away
or pulverize the surface of the marble
until they wear cracks or crevices in
the quarry floor. The resulting long
narrow slits in the floor give the ap-
appearance of a huge checkerboard. Al-
other methods of severing marble are
used, including air-broaching machines,
which are used widely in the Tennessee
field. Also, wire saws have been used
to some extent. All through the cutting
operations, water is used to wash the
cuttings out of the groove, and to keep
the marble dust in the air to a mini-
mum.

Cutting the slits is one thing. Re-
moving the blocks is another. Every
level established on a quarry floor has a
“key block” which must be removed
to clear the way for easy removal of the
other blocks. A derrick pulls on this
particular block while one side is care-
fully wedged or pried until the block
breaks free at the new lower level. The
quarrymen can then dislodge the other
blocks with pneumatic drills and wedg-
es at the new level. As they are lifted
free, the blocks leave the quarry floor
by means of an electric crane, or guy
derrick, which places them on flat cars
for transfer to the saw mill.

The sawmill? Certainly. Marble is
sawed to order somewhat as wood is.
And here again, past and present are
linked. The fundamental principle of the
modern marble gang saw has been
unchanged since the days of Pliny,
when Rome dominated the western
world. A strip of iron or steel scratches
or wears its way through the marble
with the aid of waterborne sand. The
ancestors probably used only one saw
blade at a time and operated it by man-
power. Our modern sawmills have from
one to as many as forty-six sawing
compartments with multi-blade, pow-
er-driven saws.

A modern saw-frame may have as
many as seventy-two toothless blades,
one eighth of an inch thick. When these
have been set to the desired widths, they
are run swiftly back and forth in long
easy strokes over the surface of the
block, upon which a continual stream
of sand and water is fed. The blades
rub the mixture against the marble and
gradually wear it away. They cut about
an inch an hour—about two feet in a
twenty-four hour day.

At this point I could continue with
descriptions of the subsequent shop op-

GROUP A. These are sound marbles
with uniform and favorable working
conditions.

GROUP B. Marbles similar to those
of Group A but with working quali-
ties somewhat less favorable. They
have occasional natural faults and a
limited amount of waxing and stick-

GROUP C. These are marbles of un-
certain variation in working quali-
ties. They have geological flaws,
voids, veins and lines of separation,
and it is standard shop practice to re-
pair Nature’s variations by sticking,
waxing and filling and to employ
liners and other forms of reinforcing
when necessary.

GROUP D. Marbles similar to those
of Group C and subject to the same
methods of repair and finishing, but
with a larger proportion of natural
variations and maximum variations
in working qualities.

These groupings must not be con-
sidered as reflections in any way what-
soever, on the value of any particular
marble. They are simply classifications
of their natural qualities. If it were
not for the variations or defects, Nature
could not have been able to spread her
wonderful coloring into the innermost
deptlhes of the marbles. Actually, these
variations or defects are what make
various marbles ideal for specific pur-
poses. Many of those in Group D, for
example, which includes the maximum
variations and defects, are the most
beautifully colored and prized for their

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As for American quarriers, they are currently producing about one hundred and twenty different marbles. These range from black and white through practically every shade of the spectrum, and from coarse to very fine through practically every textural gradation. They come from widely separated localities. In discussing them I will keep the A, B, C and D flavor by taking the major marble-producing States in alphabetical order.

Arizona has several decorative marbles being quarried near Batesville, known as Ozark Famosa, Ozark Fleur, Ozark Rouge and Saint Claire. Colorado offers a very attractive travertine marble which varies from a cream color to pink and rose, and bears the appropriate name of Colorosa.

In Georgia the Long Swamp Valley in the northern section contains a belt of marble many miles in length. Its depth has never been fully determined, though it is known that the belt extends at least from one hundred to two hundred feet beneath the floors of the present quarries. The richness of this enormous deposit is beyond conception. Millions upon millions of cubic feet can be quarried from Pickens County alone.

Georgia marbles are "sparkling" crystalline. Most of them have a white or light gray background, but some, such as Mezzotint and Creole, have such a heavy black clouding that it becomes their distinguishing characteristic. Georgia also produces Etowah Pink, a large grained marble ranging from old rose to deep pink with greenish-gray and greenish-black veining. These marbles are produced in large quantities and are used extensively for structural, utility and decorative purposes, both interior and exterior.

Maryland has a Verde Antique Serpentine which ranks high as a beautiful green marble. It comes in both light and dark shades with interlocking veins of lighter color, and is widely used for decorative trim, base and floors.

Minnesota quarries large quantities of Mankato Buff, Gray, Cream and Pink and also several types of Kasota Buff and Pink-Buff—materials used extensively for exterior building facing and for interior wainscoting and trim.

Missouri claims quite a list of all-purpose marbles. Its main production centers near Carthage, where Ozark Gray Veined is quarried, and at Phe- nix, in Green County, where Napoleon Gray is produced. At Marlo, a very interesting range of monotone and decorative marbles is currently being quarried under the trade names of Adorado, Eldorado, Gradorado, Honduras, Eldorado, and Sheldorado. Recently, the Sainte Genevieve Golden Vein and Rose quarries have been reopened.

Tennessee ranks high among the States for both quantity and quality of its marbles. Their ground tone varies from light warm gray and varieties of pink and brownish-pink to a dark chocolate. Tennessee also produces a black marble, a reddish-green and a buff. In size of crystals, its marbles occupy a medium position, never too coarse to disqualify them for interior or exterior use. They share with marbles from Vermont one interesting aspect. In many cases the traces of the marine animals whose remains were the raw material of which they were made have not been wholly destroyed and can be
recognized easily on close examination of the marble.

There are no less than five large quarrying companies operating in Tennessee today, producing marbles with these well known trade names: Bond Pink, Bond, Dark Cedar, Edward Pink, Craig Pink, Acme Pink, Champion Pink, Phantasia Vert, Ross Pink, Imperial Black, et cetera. The recurrence of that word “pink” indicated a distinguishing characteristic. All grades and varieties of Tennessee marbles have more or less pinkish hue. Sometimes this is hardly perceptible, almost lost in the darker shadings. But always it is there. And often it is the outstanding characteristic.

Vermont, our pioneer marble State, has been supplying marble to the world for over a century. The best known deposit is probably the Rutland vein. Quarrying there is definitely mining, even in the ordinary meaning of the term, for the opening is narrow at the top and broadens widely below, following the outlines of the vein into the earth. Quarrying there began in 1844 and has continued ever since. In recent years from 600,000 cubic feet on up to considerably greater quantities have been removed annually, yet the supply still seems to be unlimited.

Vermont has many grades of white marble—that is, marbles whose background is white, though there may be much veining and clouding. Good examples are Light Cloud, Best Light Cloud and Standard White. This State also produces a wide range of richly colored marbles suitable for highly decorative work. Jasper, Pavanazzo, Striped Brocadillo and Westland Green Veined Cream are but a few of the many. Vermont black marble, known as Radio Black, has long enjoyed a good market. And to the list might be added a very fine variety of Verde Antique, which, while classed as a marble, is in fact not a crystalline limestone but a rock constituted primarily of serpentine.

If you think back quickly, over the A, B, C and D's I have been discussing, you will be impressed by the scope, variety and richness of American marbles. These put with the hundred and more richly colored marbles regularly imported into the United States from different parts of the world, and you have a remarkable palette that permits quality and color in permanent building construction, and in decorative effects as well, to satisfy the skill and the imagination of any architectural designer.

The frozen moment of eternity that is MARBLE!—created through long aeons of prehistoric time and geological changes, has been recognized in every age as a master material for man's use—and it is being increasingly recognized today.

Here, in the United States, the production and processing of marble is not a major industry but it is an active and progressive industry. There is no such thing as a marble trust, but the industry is well organized to deal with its own peculiar problems.

There is the National Association of Marble Producers, whose membership consists of the basic producers or quarriers, organized to deal with the problems of quarry operations. There is the National Association of Marble Dealers, organized to deal with the difficulties of marble processing, labor contracts, apprenticeship agreements, et cetera.

And there is the Marble Institute of America, with headquarters in Mount Vernon, New York, an organization which includes, for the most part, the membership of the other two associations, with the addition of marble contractors, importers, and wholesalers and the operators of finishing plants. The Institute was formed in 1944 to promote the use of marble and to establish and maintain the highest standards for the presentation of marble and the quality of workmanship involved.

The Marble Institute of America—representative of the entire industry in all its aspects, drawing data from all its members and both domestic and foreign producing centers,—has accumulated a vast store of information. It is thus in a position to give authentic, unbiased advice and information in regard to all commercially available marbles of the world, to architects, engineers, builders and others interested in marble—a service heartily supported by the entire membership of 114 individuals and firms.
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This picture shows plastering of St. James Catholic Church, Woodward and Pearson, done by Munro Aird. Donaldson & Meier were the Architects, and J. A. Utley, the General Contractor.

PLASTERING CRAFT

Some building products are considered by many to be just necessary evils. Little do they consider why they are used, what started their use, and whether there are any suitable substitutes. In view of this inventive age, and the progress that has been made, it seems strange that there has never been a substitute that will adequately fill the place of lath and plaster. Rock lath of course is an improvement over the old wooden lath, in that it is more quickly applied, and is more fire resistant. But plaster is the same old reliable material that has been in use since early times. Just how long before its historical mention in history and in the Bible it was used is hard to determine. But even in those days, beautiful works of art were no exception, and it is in such public buildings where an architect can use his skill, depending upon the flexibility of lath and plaster to follow through in curves and contours of interiors. Churches, theatres, memorial buildings and the like have combined art with plastering craft to bring lasting aesthetic beauty to the public. More and more are private buildings following this example. Banks realize the pleasure derived by customers from beautiful surroundings. Other business concerns also realize this, especially in lobbies, meeting rooms, and the like.

It wasn't the plastering contractor who designed the beautiful interiors of cathedrals, abbeys, churches, theatres, etc., but it has been the result of architectural designing and supervision. Now that acoustic plaster has been added to make further advances in the art and craft of plastering, there can be no excuse for not developing all the inexpensive beauty that can come from the combination of architectural designing and plastering craftsmanship.

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FLINT BRANCH OFFICE
3821 Lapeer Road, Flint, Michigan
FLINT 3-8247
A Reporter About Town

Chick Fisher Makes Fred Zeder Happy

By JOHN M. CARLISLE

CHARLES T. FISHER, JR. and Fred M. Zeder were at the Grand Hotel on Mackinac Island for the organization meeting of the Mackinac Bridge Authority. Said Chick to Fred, "The meeting is in the Pontiac room." ... As vice-chairman of Chrysler, Zeder is always an autocratic competitor ... "Why in THAT room?" he growled ... Chick disappeared with Ernie Harris. They found a hotel sign painter with the heart of a conspirator ... Zeder smiled as he walked into the meeting. The new sign read, "Plymouth Room, formerly the Pontiac Room."

The Detroit Branch Office of Bryant Heater Division, managed by J. H. (Haris) Swallow, has now been in operation for over nine (9) months. The office carries a complete stock of parts for all Bryant heating and water heating equipment, plus a full line of advertising and sales promotional materials.

Swallow and his two very able assistants, Tim Murphy and Henry Bunge, are located at 617 Central Detroit Warehouse Building, 1627 West Fort Street, Detroit 16, Michigan, and may be reached by phone at Woodward 3-0182.

Swallow's experience in the gas heating industry dates back to his days with the Michigan Consolidated Gas Co. He joined Bryant in 1945 as the company's St. Louis Branch Manager and in 1948 assumed the duties of Southern District Sales Manager. In returning to Detroit to establish the Bryant Branch Office, Swallow brings with him added gas and oil heating experience and a desire to serve the industry.
For successful heating...  
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Your single source of supply for everything in gas heating equipment!

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LARGEST MANUFACTURERS
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MACKINAC ISLAND

By Carl J. Rudine, A.I.A.

If you have never been to Mackinac (pronounced Mack-inaw) Island, there is a rare treat in store for you. Lying in the strait that separates Lakes Michigan and Huron, its beauty, its quaintness, its healthful climate and historic background attract thousands of visitors annually. Once the rendezvous of the fur traders, and then the fur-trading center, it is today a popular resort for fun-loving, peace-seeking summer vacationists. Appropriately named by the A.R.A., "Michigan's most historic spot," courageous explorers, valiant missionary priests, frontiersmen, soldiers and fur traders dominate the pages of the past.

The flags of three nations have flown over the Mackinac country. The French occupied the territory beginning with the reign of Champlain and extending to 1670, when the Northwest fell into the hands of the British. In the meantime, Fort Mackinac was moved by the British from its old site where Mackinac City is now, to Mackinac Island.

The task was begun in the winter of 1780 and the Fort was ready for occupancy in 1781. The British regiments lasted until 1796, when they surrendered to the United States. The British again gained control of Fort Mackinac during the War of 1812, but it was returned to the U. S. by the treaty of Peace in 1815. The British was abandoned until 1833, when the government of the United States abandoned Fort and transferred the buildings and grounds to the State of Michigan. It is now managed by the Mackinac Island State Park Commission.

The island is three miles long by two miles wide, most of which is covered with a dense growth of pines, spruce, cedar, white birch, maple, oak, beech, and hemlock. Much of its rugged shoreline rises abruptly to high cliffs. There is a lovely nine-mile boulevard drive around the island, and well-kept roads wind their way throughout the interior. Numerous trails, cut and tread upon by the Indians of long ago and now softly carpeted with pine needles, are hidden in the woods, spring of cool sparkling water, resting places and overlooking view points on rocky crests, expand of Lake Huron.

About the first thing you will do when you get off the boat will be to go on "the drive." Don't miss it! This will be well to note that, following Ber. automobiles, Mackinac alone is the one place where passengers automobiles are permitted.) You will pass Mackinac Park and the Fort along the lake shore to St. Ann's Church, oldest of the records are considered authentic sources of history, among the most valuable in the Northwest, because much of the material dates back to the seventeenth century. The carriage will then take you up to Mission Hill, where you can get a good view of the ancient village below. You will visit outstanding points of interest, including Arch Rock and Sugar Loaf, natural rock formations; then pass Skull Cave to Pte. Lookout and Fort Holmes, highest peak on the island.

You will see other interesting places and will finally emerge from the treelined roadways, into the Annex, a colony of beautiful summer homes owned by prominent people from all parts of America, who were attracted to Mackinac by its charm, restful atmosphere, cool air and health-giving qualities. Your return to town will be by way of the Grand Hotel, largest hotel of its kind and noted for its "longest poker in the world." This hotel maintains a high standard of service and entertainment of all kinds.

Main Street is lined with a variety of shops, and the curio stores specialize in Indian-made novelties. Within walking distance of the town are the Archer House, the Fort Museum and St. MacKin's Dwelling. Another landmark you will see is the Biddle House, former home of Edward Biddle and so said no one knows the exact year of its construction. The Old Mission Church was built by the Presbyterian mission under the direction of Rev. William M. Ferry in 1830, is also open to the public.

Bicycling and horseback riding are also very popular. There are three rent-a-bike stands and two riding stables. You may bask in the sun at the Grand Hotel's unique pool or on the sand beach. Tennis, badminton and shuffleboard courts are available for your pleasure. Two nice laid out golf courses lure the golfer, one is in the vicinity of town in conjunction with the Grand, and the other is situated on the battlefield of 1814, where Major Hunter Holmes lost his life in the battle of Mackinac Island. You can stroll on the board walk or ride around in rolling chairs. Speed boats operate around-the-island trips and there is daily boat service to the Lea Cheneau Islands, offering scenic and fishing cruises.

Mackinac is a haven for hay fever sufferers, and its pollen-free air gives them immediate relief. The Un-c-choo Club is their organization. Each year newcomers arrive and old ones return to camera fanatics. There is plenty of photographic material on "the Island" at all times, but TAKE A TIP, black and white photographs simply cannot capture the complete beauty of Mackinac, so come prepared to shoot color. The color enthusiast and artist will find their heart's delight in this vacationer's paradise, from the blooming of a procession of lilacs early in June until after the first frosts have tinted the woods with a magnificent array of autumnal hues.

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A rugged single return mechanical driven stoker. Coal is pushed into the return by a heavy plunger and burned at a low rate per square foot on a large active grate area. Side cleaning—ash is discharged at each side and removed at the convenience of the operator through doors provided in stoker front.

Motor driven—automatically controlled from steam pressure or thermostat.

A great coal saver—thousands installed. Many prominent greenhouse customers.

Write for catalog—no obligation.

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Mackinac Island Buildings Recorded in Library of Congress

By Warren Rindge, Member Committee on Architecture, Historical Society of Michigan

June 1, 1951

The people of the State of Michigan, and in particular the Architects, should be gratified to know that in one of the finest repositories which the nation affords, there are filed complete records of many of the State’s historic and architecturally distinguished buildings. As the decades pass and numbers of the old structures are removed by natural means or mutilated by misdirected ideas of “improvement,” the value of the records becomes increasingly evident.

The Historic American Buildings Survey mission of Mackinac Island undertook a restoration of the old buildings and copies of the HABS drawings from Washington formed the basis for planning the work. They were invaluable in identifying the original portions to be restored and in dictating the parts to be wrecked as well as giving the final appearance of the work. In 1942 it was not possible to complete the restoration. The Clerk’s Quarters still carries its overhanging third story which had been saddled onto the poor old building to give added hotel rooms. The interior is still cluttered with flimsy partitions and the rain filters down through the leaky roof. It is hoped that before long, the old building can be repaired, the original roof restored in its proper position and the two central chimneys together with the exterior stairway which served the four upper apartments re-constructed. When this is done, the measured drawings of 1936 will again prove their value. More important Mackinac Island and the State of Michigan will possess the only surviving physical record of the once dominant northwestern fur trade. It will be of great interest to the people of the State.

The Historic American Buildings Survey was held at Williamsburg. The late Branch Gamber was Regional Officer for Michigan and, accompanied by the writer, stopped over at the Survey Office in Washington on the return trip from the convention. He argued for inclusion of the northern territory in the current program and was successful in having the Island added. In June a survey party from Grand Rapids District headed by Charles Norton spent several weeks at Mackinac. The notable buildings were measured and later recorded by means of drawings and photographs and deposited in the Library of Congress. Those included from Fort Mackinac were the Officer’s Stone Quarters, the Wood Quarters, the Guard House, the Ramparts with the three Blockhouses, the Post Headquarters and the Post Hospital.

In the village, the fine old Mission Church was measured as well as the entire group of the American Fur Company buildings. The latter included the Agency House with its fine stairway, interior doors, mantels and front entrance, the two buildings comprising the Warehouse and the Clerk’s Quarters. At the time of the measuring program, the various portions were connected by miscellaneous structures built during the period when the group was used as a hotel. A few years later in 1942 the Park and Harbor Com-
Entertainment on this enchanting and beautiful island are many. One may rest or play, but for those who wish to participate in the island's activities we can offer you these many forms of recreation.

**Carriages**

The drive through the Mackinac State Park includes most of the historic and scenic points of the Island. It should be included in every convention entertainment program. Price $2.00 per person.

**Cycling**

A large number of modern bicycles are kept on hand in front of the hotel at all times. Charge is 50c per hour. Absence of automobiles makes cycling most enjoyable on the Island.

**Golf**

Hotel course adjoins the hotel. Charge is $2.25 daily per person. The Country Club course nearby may also be used by convention guests at similar charges. Caddies and caddy carts available.

**Beach Parties**

An attractive beach is situated in front of the hotel with camp fire equipment, benches and chairs. No charge.

**Swimming Pool**

The huge outdoor swimming pool is situated on the hotel grounds along the shore. Private dressing rooms, showers, towels and use of the pool is 75c per person, plus 15c Federal Admission Tax. If desired, guests may dress for bathing in their rooms and with robe and slippers take the elevators to the ground floor and use that exit to the pool.

**Saddle Horses**

An excellent stable of saddle horses. $2.00 per hour. Forty miles of bridle paths on an island only three miles in diameter. No automobiles to spoil the pleasure of this sport.

**Fishing**

Fishing boats for deep sea trolling in the Straits. Guides, boats and tackle available at Les Cheneaux Islands. Special terms for convention parties.

**Tennis**

Courts are on the hotel grounds. 50c an hour.

**Tea Service**

Afternoon tea is served daily without charge in the parlors and on the porch.

**Hiking**

Innumerable paths and trails lead from the hotel to private estates and the Mackinac Island Park. The Social Director directs and conducts hiking parties.

**Park**

The first National Park in the United States is now maintained by the State of Michigan. Virgin forests, military buildings, scenic wonders, historic landmarks, beautiful drives and trails. No charge.

**Yacht Pier**

Mackinac is a rendezvous for yachts on the Lakes. They may be viewed at the yacht pier and harbor.

**Croquet**

Croquet court and equipment gratis, located on hotel grounds. No charge.

**Dancing**

No charge for dancing. In Terrace Room nightly excepting Sundays.

**Boardwalk**

The boardwalk extends along the shore from the village past the hotel. Most delightful for those walking to the village.

**Bridge Parties**

Provided especially for the entertainment of ladies attending conventions. Tally, cards, bridge tea service, and music are all furnished without charge. Our Social Director can assist in these functions.

**Shuffleboard**

Courts on the hotel grounds.

**Boats**

A beautiful trip around the Island by boat may be arranged and is most appropriate for entertainment.

**Steamer Excursion**

The trip to the Les Cheneaux Islands by steamer is very interesting, and is often included on the program of entertainment for the ladies. Leave in the morning at 10:00 o'clock and back at Mackinac at 4:00 o'clock in the afternoon. Round trip price $1.90 per person.

**Shops and Curio Stores**

The ladies always enjoy an afternoon inspecting the interesting shops.
COMPLETE WASTE DISPOSAL
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**CLASSIFICATION** (Check One)

- Apartment
- Church
- Factory
- Hospital
- Office Building

**DESCRIPTION** (Check appropriate ones under each heading)

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**Type of Windows**

- Steel Joists and Slab
- Precast Units
- Wood Frame
- Any Other

**Type of Heating**

- Steel Joists and Slab or Precast Units
- Wood Frame
- Any Other

**Descriptive Remarks**

- Location
- Cubage
- Square Footage
- Usable Area
- Ground Area

**BID CONTRACT OR FINAL COST DATA**

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**TOTAL COST $**

**REMARKS**

Special Features, Comments, etc.

**SUBMITTED BY**

Name of Office

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**A.I.A - A.G.C. JOINT STATE COMMITTEE**

(Western Michigan and Saginaw Valley Chapters)

The Contractors are giving excellent support to this committee. George Combs, Secretary of the Michigan Chapter A.G.C., is serving as Secretary.

A resume of the committee's discussion:

1. The first project will be an investigation of specification organization to the point that uniformity would be helpful in the preparation of specifications in the Architect's offices, compilation of bids, and execution of the work.
2. During the period of the emergency, the committee will attempt to clarify the local interpretations of various orders affecting the construction industries. The A.G.C. office receives copies of pertinent orders and Combs volunteered to pass along to architects, as well as contractors, any pertinent information he might have: (address, George Combs, Michigan Chapter of A.G.C., Cedar St., Lansing, Michigan). Any attempt to clarify government orders is a big task, but if it should help to have advice as to what other offices are doing in respect to a particular detail, it may be better to get an unofficial "estimate" than to attempt an "official" opinion from the government agency.
3. In general, the committee will discuss Architect-Contractor relations as a local level of the national Joint Committee. Reports of the national committee were reviewed. The local items discussed were reviewed. The local items discussed seemed to be mainly initiated by the Contractors. Among them were:
   A. The Contractors objected to the practice of requiring certified checks for bid qualifications.
   B. Requested that Owners be requested to extend insurance coverage to include stored materials.
   C. Suggested a clause permitting termination of contract if the building were held up for a considerable time and agreement could not be reached on how the work should be carried out.
   D. Specification of adequate accident prevention.
   E. Objection to inclusion by the architect of unit prices for changes in the scope of the work. (There seemed to be no resistance to asking for the Contractor to fill in their own unit prices.)

The membership of the committee is:

Benjamin Hertel, Carl Haussman, Sr., Co-Chairmen.
Glenn Beach, Robert Babcock, Clarke Harris, Donald Kimball, Architects.
Morse Heineman, Donald Maxwell, Ernest Schillinger, Robert Zimmerman, Contractors.

**ALSO SAGINAW VALLEY CHAPTER**

The organization is rather complex in that it includes both Saginaw Valley and Western Michigan Chapters. For the purposes of economizing travel time, the Saginaw Valley members are scheduled to meet separately with the

(Continued on Page 60)
HONOR AWARDS EXHIBIT

Conference Chairman, Carl Ruding, has just received word from our Regional Director, John N. Richards, that the A.I.A. National Honor Awards Exhibit will be on display at the Grand Hotel, August 2 - 5.

The entries which were shown at the Chicago Convention, include commercial, industrial, hospital and residential buildings.

And so there will be two exhibits. The other is that of Peter Frantz, and includes excellent architectural photographs taken by him on his tour of Europe last summer. It was recently shown at the Saginaw Museum.

WESTERN MICHIGAN CHAPTER REPORTS

The honor awards drawings of the Chapter were displayed at the Art Museum, Grand Rapids during the month of June. Winning displays were from the Warren S. Holmes Co., William A. Stone, Elmer J. Manson & Clark R. Ackley. The exhibit will next be shown in Lansing, having been previously shown in the Kalamazoo, Battle (Continued on Page 61)
Louis Merzinski, 816 W. Bridge St., W., Grand Rapids is a new associate member of the Western Michigan chapter.

As a result of Louis Kingscott's excellent discussion on "Estimating Building Costs" at the May meeting, President Manson appointed William Stone to prepare a building-costs report sheet and collect cost data from the offices of the Western Michigan area. A sample of this form is printed here and all officers are urged to fill in the information and send to William A. Stone, 1507 American National Bank Bldg., Kalamazoo, Michigan.

With building costs fluctuating as they are, this is an effort on the part of the chapter to enable its members to prepare more accurate cost estimates. When Bill Stone has received and tabulated these reports its results will be published for the benefit of all concerned.

Charles V. Opdyke, A.I.A.,
Western Michigan Chapter.

AGINAW VALLEY CHAPTER

There will be no further meetings of the local chapter until September. However, I shall make a few calls later in the month and send something to you before August 15. There would be little to report before July 15. Of course, you will be reporting the meeting of June 12, which you attended. It would be presumptuous for me to duplicate your impressions.

If the deadline is generally the 15th, there will be a lapse of about a month as our meetings are scheduled for the second or third Tuesday of each month. Maybe we can advance them a week. I shall bring this up at the September meeting.

Willard E. Fraser,
Correspondent.

another good reason for specifying Van

The cooks and dietitians of tomorrow attending classes at the W. K. Kellogg Continuing Education Center, Michigan State College, East Lansing, will be familiar with Van equipment. When the Center opens its doors, not only will all food served be prepared on, but all food preparation classes will use Van equipment. Lewis J. Sarvis, Battle Creek, is the architect.

When any project of yours involves food service, use Van's century of experience.

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