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CHEM BRICK MEETS A.S.T.M.
SPECIFICATION FOR S.W. BRICK
ARCHITECTS' SPECS DISCUSSED

By CHARLES V. OPDYKE,
Chm. Public Relations Committee, Western Michigan Chapter, A.I.A.

Architects of the Western Michigan Chapter were on the receiving end of a verbal tongue-lashing at their January meeting in Grand Rapids when Mr. Harry Conrad, president of The Michigan Chapter of the Associated General Contractors of America, criticized architects, specifications and pulled no punches in getting his viewpoints across.

At Mr. Conrad's request, he met with the Western Michigan chapter for the purpose of discussing with the architects the necessity for improving their specifications. In addition, he asked that a joint committee be formed, composed of members of the Western Michigan Chapter and the Michigan Associated General Contractors. This committee would make a study of specifications and Architect-Contractor relations and from their conclusions would make recommendations for improving the specifications and the methods used in their presentation.

Among the numerous faults he found in Architects' specifications he included the laboriously written workmanship clauses, the lack of mention of accident-prevention and working-condition clauses, the misuse of "Miscellaneous Iron & Metal," the specifying of materials under the wrong trade-heading, the improper indexing of trades, and many others too numerous to mention herein.

A good percentage of the Michigan architects are guilty of "slippery" specifications, including the writer of this article, and the mere fact that such action had to be taken by the A.G.C. should be an indication of apparent laxity of some architects, and now is the time for some self-examination. None of us is perfect, neither is there a perfect specification, nor a perfect contractor, for that matter, but there is no reason why we, as professional men, cannot make an effort to improve our specifications, to do it with dignity and accept this criticism as constructive.

In spite of Mr. Conrad's comments, however, there is room for argument on several issues which will in time be settled by this joint committee if they are able to reach some definite decisions.

At the conclusion of this discussion, Elmer Manson, president of the Western Michigan Chapter, A.I.A., stated that the executive committee would appoint a committee to meet jointly with the A.G.C. The meeting was ad

(See OPDYKE, Page 7)

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Convention, March 7-10, 1951

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Tub & Shower 10.00 11.00 11.50

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Meeting of the Detroit Chapter

THE AMERICAN INSTITUTE OF ARCHITECTS
Rackham Memorial Building, 100 Farnsworth Ave., Detroit

WEDNESDAY, FEBRUARY 14, 1951

Board Meeting 4:00 P. M.; Dinner 6:30; Program 8:00

DINNER AND PROGRAM IN JUNIOR ROOM

Subject: "Building Better Buildings at Less Cost"

SPKERS: Walter L. Couse, President, Associated General Contractors of America; William Gillatt, Vice-President, Detroit Steel Products Co.; C. William Palmer, A.I.A., representing the Architectural Profession; Finlay C. Allan, Exec. Sec'ty, Detroit Building Trades Council.

Dinner cost $2.25. Corporate members in good standing pay $1.50, Chapter pays the difference. Two from each student branch chapter free. All others $2.25.
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DETROIT CHAPTER MEETING

Undoubtedly the largest attendance in the Detroit Chapter's history was attained when 237 had dinner and inspected the new Veterans' Memorial Building in Detroit on the evening of January 17.

Cocktails were supplied by the firm of Harley, Ellington and Day, Inc., architects and engineers for the outstanding project, which was the subject of interest for this meeting. The large attendance was certainly a tribute to the project, and the interest shown during the inspection trip was further evidence.

President Morison presented our fellow and distinguished member, Alvin E. Harley, who expressed his appreciation for the fine attendance and the interest shown. He then turned the meeting over to his partner, Malcolm R. Storton, who introduced members of the Commission who were the clients. Mac gave some history of the project, beginning with a Common Council resolution in 1921 and the subsequent voting of a bond issue, which the City was not able to carry out at the time. He also gave some other interesting facts about the building and introduced several on the H. E. & D. staff who were in responsible charge of the different departments. He also presented Marshall Fredericks, who was the sculptor.

Before the tour President Morison called upon Edward J. Brunner, Secretary of the Builders and Traders Exchange, for a report on the latest developments in government building regulations and restrictions.

As guests toured the building, Storton and others of his firm explained many interesting details of the design and planning of the building, and every one expressed considerable pleasure at having such an opportunity.

When you are ready to retire from architectural publishing, I want you to pass on to me the trade secret by which you extract this type of coverage of a building from architect, writer, photographer, etc. It takes very special talent and perseverance, both of which I envy.

Your monthly has the same authentic stamp as the weekly bulletin and I wish it great success.—Mrs. Tally Mc Knee, Editor, The Charette.

A.G.C. ELECTS OFFICERS

The Annual Banquet of the Associated General Contractors of America, Detroit Chapter, Inc., was held the evening of January 17, 1951 at the Detroit Athletic Club.

Walter L. Couse, President of the Associated General Contractors of America, Dan W. Kimball, Past President and H. E. Foreman, Managing Director, were speakers.

The following named Officers and Directors of the Detroit Chapter were elected for the ensuing year:


Ralph A. MacMullan is Secretary Manager and John E. Kinsella is Assistant Secretary.

SAGINAW VALLEY CHAPTER

The first 1951 meeting of the Chapter was held at the home of President James A. Spence the evening of January 8, sixteen members attending the dinner and meeting that followed. Among matters dealt with were the Chapter programs for the year ahead and attendance at the Chicago Convention the second week in May. It became evident that about one-half of the Chapter's membership would attend the Convention. Reports were heard from Chapter committees, and Ralph Knuth was designated the Chapter's representative on APELSCOR.

Peter Frantz showed some of his fine collection of color photography taken on his recent visit to Europe.

SPENCE HEADS MUSEUM SOCIETY

Jim Spence was elected president of the Saginaw Museum Society at its recent Annual Meeting, to succeed Robert B. Frantz. Bob reported that membership has now reached 819, a gain of 264 over the previous year. In 1950 the Museum had 24 separate exhibits, and the staff of three handled more than 1,700 objects of art.

In the first two days of the "Operations Palette" show, more than 1,000 persons visited the museum, to assure an excellent start for the year's attendance.
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MSA BOARD MEETING

The Board of Directors of the Michigan Society of Architects met at the Detroit Athletic Club on the afternoon and evening of January 10. All members were present except Dow and Zimmermann.

President Bauer had prepared an agenda for the meeting disposing of business matters with a minimum of time. He presented his recommended list of committees, published herewith, which was approved.

John O. Blair reported for the auditors who had considered the treasurer's report, and gave a most favorable account of the way Mr. Gabler had conducted the affairs of that office during the past year. The President requested the new treasurer, John O. Blair to prepare a budget for the coming year and to submit it to the next meeting of the Board.

Charles McGrew reported on the brochures or booklets on charges and principles of practice, which is now in its final form. It will be published first in the Convention number of the Bulletin and after reactions have been had from members it will be printed in separate form for additional distribution.

Sol King reported that Convention plans are progressing satisfactorily and that some interesting and constructive features are being planned. Mr. Charles Luckman will be the speaker at the Building Industry Banquet, and another speaker of note will be engaged for another session. Producers and others are reminded that there will be displays of materials and equipment on the Ball Room floor.

MSA COMMITTEES ANNOUNCED

Leo M. Bauer, president of the Michigan Society of Architects has announced the appointment of 1951 committees as follows:

Executive: Bauer and Charles B. McGrew, both of Detroit, Alden B. Dow of Midland, Ralph W. Hammett of Ann Arbor.


Education and Research: Hammett; John O. Blair and Sol King, both of Detroit, and Dow.


Committee on Midsummer Convention at the Grand Hotel on Mackinac Island, August 2-5, 1951: Rudine, Hammett and Spence.

Architects, Professional Engineers and Land Surveyors Committee on Registration (APELSCOR): McGrew and Linn Smith; Carl B. Marr and Blair, alternates.

J. JOHN C. STAHL

John C. Stahl, A.I.A., 74, who had practiced architecture in Detroit for nearly 50 years, died in the East Side General Hospital, Detroit on January 29, from being struck by an automobile a few days before.

Born in Detroit July 14, 1876, Mr. Stahl received his education here in the public schools and through extension courses in architecture and engineering.

He became registered to practice in Michigan in 1915, was a charter member of the Michigan Society of Architects, and served as its president in 1926 and 1927. He became a member of the American Institute of Architects and its Detroit Chapter in 1916. He had been a member of Detroit's No. 1 Rotary Club for 38 years, had a perfect attendance record for 28 years.

In 1912 he formed the partnership of Stahl & Kinsey, which in 1914 became Stahl, Kinsey & Chapman, Inc. In 1916 he began a solo practice which had continued since. His firms had designed a wide variety of structures, including many fine churches.

Mr. and Mrs. Stahl celebrated their 45th wedding anniversary on October 18, 1950. Their family home is at 2611 Cadillac Boulevard in Detroit. Surviving are his wife, Anna M. Stahl; a son, Theodore H. Stahl, Sr.; a daughter, Mrs. Ruth C. Marsh; a brother, Edward L. Stahl, Sr., and three grand children.

H. R. GRAF

Herman R. Graf, A.I.A., died at his home in Jackson, Michigan on January 26, following a heart attack. Mr. Graf was born in Saline, Michigan August 1, 1876, was educated at the University of Michigan and through the International Correspondence School. He became registered to practice architecture in this state in 1916 and was a member of the Michigan Society of Architects since its organization.

During his long practice he had designed many important structures in southern Michigan, including buildings at the Hillsdale College campus, the Jackson County Fairgrounds Grandstand, and an addition to the Nurses' Home at Foote Hospital in Jackson.

He became a member of the Detroit Chapter, A.I.A. in 1943.

EDWIN S. GEORGE

Col. Edwin S. George, Honorary Member of the Detroit Chapter, The American Institute of Architects, died at his winter home in Delray Beach, Fla., on January 25. He was 77 years old.

Col. George, a native of Pennsylvania, was educated in the public schools of Morenci, Michigan, and at Fayette Normal School, Fayette, Ohio. He entered business at the age of 17 with Annis and Miller, Detroit furriers. In 1897 he established his own fur business as the House of George. He later became interested in the automobile business, real estate, and as president of several corporations.

He established the Edwin S. George Foundation, held membership in many clubs and civic organizations. He had traveled extensively and made philanthropic grants to educational, religious and public institutions, including the University of Michigan, Bloomfield Township, Kirk-in-the-Hills, Park College, and School of the Ozarks, Missouri.

He was author of many books on travel, had special interest in architecture, sculpture, engineering, and mechanical design. He was one of the organizers of Detroit's first Symphony Society and he helped underwrite it for several years.

At a special ceremony of the Detroit Chapter of The American Institute of Architects, on November 10, 1949, David H. Williams, Jr., then Chapter president, announced that the Chapter board had unanimously voted to award the Chapter's Honorary Membership to Col. George, "a person of esteemed character who has rendered the profession of architecture signal and valuable service and has conspicuously upheld its aims and purposes."

Presented to Col. George was a bronze plaque bearing the inscription, "Edwin S. George, in recognition of his outstanding interest and continued devotion to the promotion of fine architecture and for his many tangible contributions in this field, is duly enrolled as an Honorary Member of the Detroit Chapter of The American Institute of Architects. David H. Williams, Jr., President; Carl B. Marr, Secretary."

In making the presentation, Mr. Ditchey said, "Colonel George has dedicated himself to the betterment of his fellow man through the beautification of the countryside wherein he lives. We are particularly happy and fortunate to have known him, since he has always identified himself with good architecture."

J. DARBY KENYON

J. Darby Kenyon, 56, an architect who has spent 25 years of his life in Detroit, died at his home, 909 Cherokee Lane, Signal Mountain, Tenn., on January 6.

In recent years Mr. Kenyon had conducted private practice in Signal Mountain. Previously he had been associated with Selman T. Franklin and B. F. Hunt in Chattanooga and the office of Albert Kahn in Detroit. He was a member of Tau Sigma Delta honorary society, Alpha Rho Chi, and Delta Phi Theta fraternities. He was a veteran of World War I, having served with the 148th Air Squadron as Lieutenant. He was a prisoner of war in 1918.

He is survived by his wife and a sister, Dr. Fanny H. Kenyon.
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Civilian Defense. The Architects Participation

Excerpts from National Defense Committee Bulletin No. 1.


The term “civilian defense” as used in this study refers generally to the application of protective construction and not to the building of military establishments. The specific phases of civilian defense such as methods of air attacks and effects of bombs, blackouts or dimouts, control or communication systems, social problems in relation to evacuation or other correlated governmental civilian defense objectives. It is imperative as stated, however, that architects maintain a working knowledge of these problems, keep themselves informed on current reading materials in the field of defense against aerial attack and be advised of all official publications, directives and standards dealing with these matters.

By careful study and planning now, and by a full understanding of what can be done in advance by protective measures, the effects of bomb explosion can be minimized. As terrible as any bomb is, no bombing, even by the atom bomb, will mean the end of our cities, our state, or our country, as some people think. Certainly a bombing will cause devastation, even to the extent of crippling an entire city temporarily, but if the architect is to understand what to do if a bomb should fall he must first know what a bomb does.

The extent of damage to any building will depend upon the size and type of the bomb, the directness of the hit, and the construction of the building. Fragmentation bombs are not the greatest danger, is serious enough to concern the architect. Greater dangers are fire, collapse, and the shattering of glass.

Generally, casualties may be traced directly to the direct action of the bomb itself, i.e., explosions, blast and splinters, falling debris, and collapse of buildings. Indirect results are burns, drowning and asphyxiation, carbon monoxide poisoning, and radiation.

AERIAL ATTACKS

The study does not embrace protective measures against the effects of gas bomb, radiological bacteriological or biological attack. The main concern is with weapons against which protection is discussed for the purposes of this study are:

1) Demolition bombs;
2) Fragmentation bombs;
3) Incendiary bombs;
4) Atom bombs.

(1) Demolition bombs are for the primary purpose of demolishing buildings and other structures. Bombs intended for factories or railroad yards may land in a residential district, even when no civilian bombing is intended. They are used against targets which are easily damaged or destroyed by fragments although demolition bombs are generally used for these purposes.

(2) Fragmentation bombs are used for the purposes of this study are:

FIREPROOF STRUCTURES: Steel skeleton frame structures with steel supported concrete floors, and monolithic concrete buildings, are structurally the safest and best. No additional protective is needed. Practical purposes, beyond removal or protection of glass areas. The use of the top three to five floors should be avoided for use as shelter areas.

(3) Incendiary bombs are used chiefly against easily inflammable targets such as congested dwelling areas, industrial and munition plants, etc.

(4) Atom bombs, exploded in mid-air, about 2,000 feet from ground level, are more destructive than from either a water or ground burst, so we must consider this kind of atomic attack as the most likely to be used.

EFFECTS OF BOMBS ON BUILDINGS

Fireproof Structures: Steel skeleton frame fireproof structures with steel supported concrete floors, and monolithic concrete buildings, are structurally the safest and best. No additional protection is needed. Practically purposes, beyond removal or protection of glass areas. The use of the top three to five floors should be avoided for use as shelter areas.

Wall-Bearing Structures: This type of building offers no dependable protection. Most bombed structures of this type will collapse completely under the effects of a direct or very near hit or need demolishing or require bracing with shores and needles to prevent collapse. Structurally, therefore, not very much can be done beyond bracing and reinforcing to reduce bomb effects.

Wood Frame Structures: While this type of building offers little or no protection against a direct hit, moderate protection can be provided against a near miss, blast and splinters, by selecting a refuge room having maximum lateral protection.

Interiors: In fireproof structures, interior masonry partitions will need very little added protection except removal or protection of all glass. These interior partition walls stop most of the splinters and much of the blast, even when they are themselves partly disintegrated by the explosion. In non-fireproof buildings, interior self-supporting masonry walls, including those enclosing public spaces and halls, may be shattered. Should they collapse, they would probably carry all floors down with them wherever these floors, though of concrete construction, are dependent on the masonry walls for support.

Glass: Glass, being some of the greatest sources of danger, should be removed or replaced with non-shatterable material. Large show windows are a particular danger due to their rigidity and blast resonance. Cross bracing of these glass areas is ineffective. Cellophane or paper covering over any glass area are equally ineffective.

Atom Bomb: Here are some official estimates of how an atomic explosive might damage the area around it.

Within one-half mile—complete devastation.
From one-half to one mile—all buildings except those of concrete and heavy steel frame will be gutted or destroyed.
From one mile to a mile and a half—most old style brick and frame buildings will be seriously damaged. There will be great danger from flying debris. Hundreds of fires will break out, many of them caused by broken gas mains, cisterns and tanks or shorted electric Circuits. All utilities will be destroyed or seriously damaged.

At two miles—damage will almost all be due to blast and secondary fires. Public utilities will be badly damaged. At four miles—there will be some blast damage, especially to frame and wooden structures, and scattered secondary fires. Rubble will block the streets.

Beyond four miles—in some instances blast damage might extend to a distance of 6 miles, depending upon the wind, weather and the terrain. Glass and plaster breakage might occur up to a distance of 8 miles. Utilities might be disrupted from damage in the central blast area.

SURVEY OF BUILDINGS

A primary service of the architects should be in making surveys of buildings, and recording the physical aspects of the building and its facilities for protecting the occupants. All vacant and untenanted buildings should be recorded and after a panel examination by the Architects, certify to the local authorities as to the advisability of demolition.

The Architects’ survey of all buildings, working with the appropriate local agencies of the city, town or village, should include the preparation of plans indicating the type of structures, their vulnerability, and the daytime and nighttime population and occupancy, topographical characteristics, utilities and communication facilities.

The survey of a particular building should include the shelter accommodations required by population and decision as to whether this would be best accomplished inside or outside the building.

ORGANIZATION OF BUILDINGS

All large establishments should have their own defense organizations, and in the case of large factories or plants, their own equipment. Local authorities would probably give these establishments help and assistance, where and if needed on the basis of their regular plant personnel, organization and tenancy. This would be particularly applicable to plants and buildings housing more than fifty persons.

The Architect, however, should be called upon to organize the physical aspects of the building, i.e., improvement of structural weaknesses against bomb "safe" areas, directional signs and instructions, placement of control areas, light exclusion, etc.

Special type buildings and structures, such as railroad stations, churches,

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Page 13

February, 1951, Monthly Bulletin

MICHIGAN SOCIETY OF ARCHITECTS

schools, hospitals, public areas, museums, and baseball parks, require special studies to meet special conditions.

Note: It is the intent of this Committee at a later date to issue more explicit and detailed recommendations in relation to the defense organizations of buildings.

SHELTERS

Shelters, at best, are simply a means of providing a degree of safety, protection against weapons of uncertain character from an unknown source at an unknown time.

The establishment of shelters in buildings is the duty and function of the owner, based upon recommendations, research, experience and recommendations of the Federal, State and Local civilian defense authorities. The architect, as has previously been pointed out, functions in all categories as the technician, ready and able to assist in all phases of the shelter program.

According to Government advice already issued, the Federal Government will develop structural standards of shelter for use by local communities. From studies of all types of shelters, necessary design criteria will be developed and made available in the form of a shelter manual, to consist of three types, depending upon the need:

(a) Maximum strength for key installations.
(b) Moderate strength for population masses in urban centers, factories of strategic importance and for suburban community protection.
(c) Improvised for small group protection in residential areas.

Details plans for practical and inexpensive individual family shelters and for more elaborate community shelters are being prepared. It is expected that the local authorities will make specifications for the use of basements and similar areas as shelters.

A shelter area may be conceived and designed in a number of ways. Upon the Architect, therefore, should fall the good fortune of providing the type of shelter in the type of building, the type of shelter, and the type of community protection afforded by the type of shelter he may adopt or devise. It should, however, be remembered that the protection given should grow in importance according to the number of people assigned to each shelter. The dimensions and plans of a shelter should in fact be governed by the possibilities of a direct hit as well as by the possible number of victims, though greatest stress in the design and selection must, for obvious reasons, including the cost, be placed upon the selection of shelter areas in a building that will afford the greatest degree of protection against other than direct or near bomb hits.

The purpose of the collective shelter is to have those who are obliged to stay in a danger area because of their duties as workers or because of family necessities.

The shelter within a building must be able to resist the effects of explosions, be a protection against incendiary bombs, possibly give some attention against the use of gas and bacteriological warfare, at the same time assuring a reasonable comfort to the occupants of the shelter. Shelters should be divided up into as many small groups as possible either by means of masonry partitions or walls or the creation of separate shelters. If possible they should be designed so that one shelter space or area, the number of people being proportioned further in relation to the amount of ventilation in the shelter.

At least two means of egress from the shelter should be provided and be placed as far from each other as possible. Thought must be given for protection made against radiation and for providing lighting, sanitation, ventilation, dryness, and heating.

The use of deep shelters, such as in a hill, subways and underground tunnels may be encouraged where cost is not a factor. Subways and underground structures should be carefully surveyed before being used for proximity to a concentration of utilities such as water and gas and the danger of rupture as a result of a bomb explosion.

The adoption of basements or cellars for shelters should be discouraged in any type of building unless such spaces are amply reinforced against collapsed debris load, and except as a temporary refuge or when no other safe area is available. Dangers from the use of basements or cellars as refuge areas are of course lessened in large fireproof buildings, but even in such structures basement or cellar shelters must be provided with emergency exit facilities to prevent trapping of occupants. Walls surrounding such shelters should be reinforced and ceilings of shelters similarly treated, shored or braced. It should be remembered that bombs of every type strike the ground at an angle. A bomb striking the ground at an angle near the outer wall of a building will penetrate the structure and may wreck the basement shelter completely. An auxiliary self-contained plant to provide emergency lighting, ventilation, sanitary and artificial lighting for use in emergencies should be supplied in large shelters.

HOUSING

Housing is of great strategic importance and for this reason, housing brought on by permanent new construction, is emergency housing. The main object of architects participation is to plan housing and community facilities of many types which can be quickly and properly planned and constructed.

In general, these structures can be built quickly with a minimum of critical labor and materials, and of sound construction; and lastly to so design the buildings as to permit conversion to permanent peace-time use, or at least towards the objective of re-use after the emergency.

REPAIR OF WAR DAMAGE

First aid repairs which would be necessary to make buildings tenable after bomb damage has occurred, should be a duty of the Architect and should include the making of an inspection and survey of damaged property on all floors, certifying (with engineers) condition of drainage, water, gas and electric services if necessary. Filing of report of damages with Local Authorities.

Meeting contractor on the premises and giving instructions as to First Aid repairs required, supplementing with letter or brief specification if necessary.

Certifying completion of the work, checking accounts and certifying for payment.

EMERGENCY HOUSING: This means housing for wartime needs and wartime use where the intent is temporary emergency use. Prefabricated housing and all other demountable housing construction come under this heading. The erection of large camps which would house evacuees, both adults and children, is emergency housing. The main reason for the establishment of camps and buildings is to provide temporary emergency housing while permanent housing is being constructed.

HOUSING: Housing under this heading should be considered in approaching housing needs, in a war period.

1. Permanent wartime housing.
2. Danger zone housing.
3. Emergency housing.

PERMANENT WARTIME HOUSING: Housing under this heading is designed to provide the purpose of meeting the demand for low cost, low rental housing brought on by permanent new or expanded plant construction, with a view towards its conversion later to peacetime occupancy. These buildings are designed and constructed to be a permanent protection against future destruction. A permanent community which will never become a shanty and will be a well planned architectural development.

DANGER ZONE HOUSING: If, as stated, shelters are not to be provided, then, safe, fireproof buildings should be constructed of the best available materials in all areas regarded by the Federal Authorities as immediate target areas. Public and private agencies and corporations should be persuaded and encouraged to build and build now. While this applies particularly to replacement of slums, the same reasoning and necessity apply to all types of construction in target areas, particularly those to be financed in whole or in part with public funds. The Architect's part in this program is self evident.

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Meeting contractor on the premises and giving instructions as to First Aid repairs required, supplementing with letter or brief specification if necessary.

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ARCHITECTS OF THE MONTH

PROMINENT WORK OF SCHLEY AND WARD, DETROIT

Cyril Edward Schley received his architectural education at Maryland Institute of Arts, and through private instruction.

He acquired his early experience in Eastern architectural offices in and around Baltimore, Md., and Richmond, Va., and later came to Detroit, where he worked in the office of Smith, Hinchman and Grylls, and the office of C. Howard Crane, with whom he became associated as a partner. He became registered in Michigan by examination in 1922, entered private practice in 1924 and continued this practice through 1942. During World War II he served as a Major in the Corps of Engineers, where he supervised extensive industrial installations and coordinated engineering equipment purchases for the Detroit District Office.

Mr. Schley has many affiliations, principally the Detroit Chapter, AIA, Michigan Society of Architects, the Detroit Athletic Club, Oakland Hills Country Club, Society of American Military Engineers, the Reserve Officers Association of the U. S., and the American Legion.

Ray Frederick Ward, upon receiving a degree of B.S. in Architecture from the College of Architecture at the University of Michigan, entered the office of Frederick D. Madison at Royal Oak, as a draftsman. Later he worked in the office of Derrick and Gamber Inc., and in 1934 opened his own office in Pontiac, Michigan for the practice of architecture.

At the beginning of World War II Mr. Ward became a civilian member of the U. S. Corps of Engineers, where he supervised the construction of industrial installations and Air Force facilities for the Federal Government.

Mr. Ward was registered in Michigan by examination in 1929 and is affiliated with the Detroit Chapter AIA, the Michigan Society of Architects, and the Society of American Military Engineers.

At the conclusion of World War II in 1945 Mr. Schley and Mr. Ward formed a partnership for the practice of architecture and located in Detroit, Michigan on James Couzens Highway. The office is of medium size and is devoted almost entirely to industrial, commercial and institutional types of work. Presently the firm is engaged in planning schools for the city of Detroit, Pontiac, and other outlying communities. Each commission is treated individually under the direct supervision of one of the partners.

FRONT ELEVATION OF ST. MICHAEL'S CONVENT PONTIAC, MICHIGAN

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ST. MICHAEL'S CONVENT, Pontiac, Michigan, was built within a limited budget, however, every effort was made to provide a friendly, homelike atmosphere. The building is located on a gently sloping hillside, permitting the economical location of the Kitchen, Refectory and Activity Room in what

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would otherwise be a basement area. Careful attention was given to the location of the living and sleeping quarters, to provide good circulation within the building and eliminate as nearly as possible any feeling of institutionalism.

All materials were carefully selected for permanence and particularly for ease of maintenance.
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TEST TRACK SERVICE GARAGE,
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experimental testing equipment is located in one wing, and office space is provided in the corner of the building illustrated for the office personnel connected with the test track. The office portion is completely air conditioned.

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THE CAPITOL SAVINGS AND LOAN COMPANY BUILDING is located in the business district of Pontiac, Michigan, over a branch of the Clinton River, known as Pontiac Creek. During the greater part of each year Pontiac Creek is a gentle stream, however, it can easily reach flood proportions and,

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corner of the building and across the parking lot at the rear of the property.
The building houses the banking quarters for the Capitol Savings and Loan Company, two stores, and rental office space on the second floor.

Careful consideration was given to the design of the banking portion of the building so as to provide a warm and friendly atmosphere. Near the front of the building a photomural depicting Michigan scenes has been integrated into the interior design of the Banking Room. The entire building, including the rental areas, is air conditioned.

consequently, it was necessary to completely contain the stream at flood stages in a reinforced tunnel fourteen feet wide, extending through one
THE MODERNIZATION OF THE ROLLINS COMPANY STORE, located on downtown Woodward Avenue, Detroit, Michigan, embraced a first-floor expansion equal to the original first-floor area, rearrangements of sales departments on the first floor, complete air conditioning of the first floor, and the rearrangement of the entire basement into a Fur Storage Room. The Fur Storage Department is completely insulated and refrigerated.

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Interior views of the Rollins Store show the careful attention given to store fixtures, furnishings and lighting. It is interesting to note that merchandise displayed in counters is illuminated entirely by overhead lights. Floors are covered with carpeting or rubber tile as required to define departments to withstand the type of traffic to which they are subjected.

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THE MUSIC AND SCIENCE DEPARTMENTS ADDITION to the Pontiac High School, Pontiac, Michigan, has been planned as the last unit of an emergency expansion program and, conditions permitting, may be started late in the year 1951. The addition is rather unusual, as it includes three well-defined, unrelated branches of the High School curricula. The real benefit to the school, aside from the new facilities provided, arises from the fact that the space presently allocated to the Cafeteria, Science and Music Departments in the existing school, may now be more efficiently divided into numerous class rooms, which are badly needed.

One of the interesting features is the subdividing of the Cafeteria into four rooms, thus permitting this area to be used for teaching and study-hall purposes during four class periods each day when the rooms are not otherwise in use as dining rooms.

Extensive study in cooperation with the teaching staff of the Science Department resulted in an arrangement of science laboratories without the usual lecture rooms. While the lack of adjacent lecture rooms may be unusual, the teachers are enthusiastic over the opportunity of teaching in the laboratories.

Another interesting development is the complete isolation of the Music Department, accomplished by locating this department on the top floor and separating it from the rest of the building by soundproof doors, separate ventilation system, and acoustical treatment for isolation as well as absorption of sound.
WARM AIR HEATING— AND WITHOUT A BASEMENT!

By ALICE HOLTIN

Architectural ideas change with the years, dotting the landscape with structures which vary from the tall and compact to the low and rambling. Finding favor right now is the ranch-type home, with all of its facilities grouped on a single floor.

Regardless of the type of architecture, however, old-style comfort is yet very much in demand. On a bitterly cold winter morning, a warm house is a prime necessity and there’s no better way of assuring cold-weather comfort than with warm air heating.

For years it was believed that a basement was necessary if one was to enjoy a central heating system—that is, if there were no basement heat just HAD to be supplied by pot-bellied stoves, space heaters or fireplaces.

Modern furnace design has changed this picture. Today, owners of small homes, particularly basementless homes, may enjoy the luxury of furnace heating in the one-story home.

Specially designed for basementless homes and individual units of apartment buildings is the modern “Superflex Hi-Boy” Furnace, a product of perfection Stove Company. The “Hi-Boy” is a miracle of compactness and heating efficiency, available in both oil and gas models. It occupies less than four square feet of floor space. Thus it is small enough to be installed in an ordinary-size clothes closet, in the corner of a utility room or kitchen, on an enclosed back or side porch, or even in the attic.

When perfection engineers designed the Superflex Hi-Boy, they placed comfort, convenience and safety at the top of the list. The “Hi-Boy” was given a protective air-insulated casing so that the unit could be placed within a few inches of the wall—an ideal space-saver. Also to save space, all controls, burners, air filters, draft diverter and cleanout were made accessible from the front.

The “Hi-Boy” embodies the same fundamental design made famous by other furnaces in the Superflex line. Only in size is it different. Its three-stage fire and two-speed blower are so synchronized with the thermostat that the dwelling temperature is kept at a uniform level. The wall thermostat is set at the desired temperature and the automatic controls take over, circulating heat throughout the house, in large or small quantities as desired.

Where heating requirements do not exceed six Btu’s per hour per “Hi-Boy” Furnace, an installation is adequate to supply the heating needs, in all kinds of weather. Some householders, coveting the compactness and convenience of the “Hi-Boy,” have been known to install two of them in their over-size ranch homes.

During the past two or three years, apartment dwellers too have discovered the advantages of individual “Hi-Boy” units, which give them the degrees of heat which match their own individual needs. In duplexes, rows and apartment houses where each tenant supplies his own heat, residents see the advantages of automatic heat with fingertip control right in their own dwelling instead of down a flight of basement stairs.

Where basements exist, putting the furnace on the main floor also means more below- floors space for recreation, workshop, laundry and storage use.

With the ordinary “Hi-Boy” installation, duct work from the furnace is carried overhead, concealed in the ceiling. Return duct work is carried beneath the floor. Heat is distributed through warm air registers, usually measuring a normal 8-ft. high. Assuming that the home is adequately insulated, five normal room sizes can be comfortably heated in all kinds of weather, with a single Superflex “Hi-Boy” Furnace. However, perfection engineers say that the better built and the better insulated home, the greater the possibilities for heating more space than the specified five-room area.
LUNCHEON MEETING

At the Producers luncheon at the Sheraton on January 24, Mr. Charles Mortenson, Field Director of the P. C. national office, was the speaker. He gave a good report on what has happened so far in Government restrictions and what is likely to happen in the future. He believes there will still be a lot of construction unless we are in an all-out war. The speaker also discussed chapter activities under a state of emergency.

Bill Portland reported on the membership roster, saying that there have been some changes made, and a few more are to come. Tim Gillman of Kentile is to be transferred to Chicago. Earl Betts of American-Standard has received his "Greetings" from the Marines.

Thirty-six attended the luncheon. All were in good standing, except several architects.

PRODUCTS LITERATURE

There is still time for architects to nominate manufacturers' literature for the 1951 Building Products Literature Competition being sponsored by the Producers Council and the American Institute of Architects. Nominations will be accepted until March 15.

Awards will be made on the basis of three classifications:

1. Literature concerned primarily with basic technical information (handbooks, manuals, or any material offering general information on design, specifications, methods of application, where emphasis is upon the problem, rather than on the merits of a particular product).

2. Literature confined to the particular products of a single manufacturer (catalogs, catalog manuals, etc.).

3. Literature of a primarily promotional nature (reminders, announcements, etc.).

Certificates of merit will be awarded in each class. Certificates of exceptional merit may be awarded, at the discretion of the Jury of Awards. Awards will be announced and presented during the Annual Convention of the American Institute of Architects, in May 1951, and the literature receiving awards will be placed on exhibition there.

In addition to announcing the selections, the Jury of Awards will prepare a statement analyzing their reactions to the material submitted, with particular attention to that which receives an award, together with such further comment as they believe will assist the producers of building product literature in making their publications directed to architects more welcome and more effective.

Architects may nominate one or more pieces for the competition by letter reference addressed to the Department of Education and Research, The American Institute of Architects, 1741 New York Avenue, N.W., Washington 6, D. C. Manufacturers or their agencies may enter one or more pieces of their own literature by sending three samples of each entry addressed to the Technical Director, The Producers' Council, Inc., 1001 Fifteenth St., N.W., Washington 5, D. C. A fee of $10.00 should accompany the entry or entries of each manufacturer or organization.

FREDERIC B. STEVENS, INC., STILL FORGES AHEAD

More than half a century ago, when Detroit's population was about a quarter of a million, Frederic B. Stevens, founded the present organization of Frederic B. Stevens, Inc., which today is recognized as one of the nation's leading suppliers of all types of brick and tile.

During this more than half a century, the Stevens Organization, through continuous dealings with the country's leading manufacturers of brick and tile, has learned how to select from outstanding producers, those products which offer the most to contractors and builders.

The roster of manufacturers whose products are distributed by the Stevens Organization, thus becomes one which represents only those concerns which maintain the highest manufacturing standards of the ceramic industry. Products in a wide variety of sizes, shapes and colors are available from various sections of the country—Pennsylvania, Ohio, West Virginia, Illinois and Indiana. It is a natural consequence, therefore, that architects, engineers, contractors and builders have come to realize the many advantages of dealing with Stevens.

A visit to the modern Display Rooms of Frederic B. Stevens, Inc., at 1800 Eighteenth Street is well worthwhile. There, samples of numerous face and building brick, tile, etc., in various shapes and colors are advantageously displayed, helping the buyer in no small way to choose those products best suited for his specific requirements.

Frederic B. Stevens, Inc., has, through the years, played an important part in the building of Greater Detroit—having furnished much of the brick and tile used in various types of buildings.

The staff of the Building Materials Division of this old Detroit firm is always available to architects and builders for explaining and informing them of the many important developments in the industry, and the many and varied uses of brick and tile in modern day construction.

MASTER BUILDERS PRESENT "CAVALCADE OF CONCRETE"

The Master Builders Co. of Cleveland, Ohio, presented its instructive "Cavalcade of Concrete" program at a cocktail party and dinner recently at the Hotel Sheraton, Detroit.

E. H. Fenker, F. W. Henning and Scott L. Hammann of the 40-year-old firm's Detroit office were hosts to about 100 architects and engineers.

Along the wall of the room were illuminated display cases demonstrating the advantages of dispersed concrete over plain concrete; how Pozzolith, a cement dispersion product in concrete, work-ability with extra water; the merits of iron concrete surface in Masterplate, the Embeco, a non-shrink method of grouting, to mention a few.

E. L. McFalls, executive vice president of Master Builders, B. R. Wood, industrial sales manager, and C. A. Lyon, district manager, were at the meeting. Homer Andrews presented the film "Concrete Facts" tracing the search for better cement and concrete from ancient Egypt down to the present day when concrete "has now become of age."

A question-and-answer period followed the program in which Ted Knight, John J. Knight Co. and Jack Winkworth of Winkworth Fuel & Supply Co. among others, spoke of their experiences with some of the products shown.

Among the prominent members of M.S.A. at the dinner we noted Harry M. Denyes, Stanley Bragg, Delphin S. Budzynski, Prof. L. Robert Blakeslee of University of Detroit, Arthur O. A. Schmidt, Stewart S. Kissinger, Earl G. Meyer, Raymond C. Perkins, William H. Odell, J. Ivan Duse and associate member, A.I.A., R. E. Muenter—TGS.
THE CONTRACTOR SPEAKS

From The Pasadena Chapter, A.I.A.

Clift Hoskins, Chairman of the Committee on Architectural Practice presents the following pertinent and timely information:

In seeking to better relations between architects and contractors and also raise the standard of working drawings and specifications, your Committee on Architectural Practice contacted ten local contractors and asked for any suggestions or criticism they could offer.

The Committee's letter was read and discussed at a meeting of the Building Contractors' Association. The following suggestions were gleaned from this meeting and also individual replies:

**BIDDING.** A contractor should be furnished two sets of plans, free of charge. The bidder should be allowed to keep these sets until contract is let or he is definitely out of the competition.

Bidder's list should include only contractors who limit their operations to working for architects and not the "Designer-Builder" who competes with architects.

Addendas are too often received the day before or on the day the General Contract Bid is due, making it practically impossible to contact the Subs involved.

Alternates should be requested only where they are believed to be of special importance to the owner.

The contractor is entitled to assume the architect has investigated all the local ordinances pertaining to the design and construction of the building. On some jobs time and extras would be saved if a plan check was made by the Building Department prior to opening of bids.

Bidders should be limited to contractors of established skill, integrity and responsibility.

Adequate price competition may be obtained from six bidders on larger jobs and four on smaller ones. When 12 or 14 bids are taken on one job it is detrimental to all concerned. (This method used to make bids match an estimated cost is one of the contractors' greatest gripes.)

"Hmmm! Very interesting specifications."

Contractors are entitled to know what the bids of their competitors are, as it is beneficial in figuring other work.

Bids should be delivered at a designated place and time, preferably on a Tuesday, Wednesday, Thursday or Friday afternoon, but not on a day following a legal holiday.

**SPECIFICATIONS.** Allowances which are to be carried by the sub-contractors should be clearly indicated in the sections of the Specifications involved.

The use of the term "or equal" causes uncertainty and misunderstanding. Specify what you want if the owner is prepared to pay non-competitive cost. Otherwise specify two or more equal materials, leaving the choice to the bidder.

Plans can be figured closer if the different trades are sure their work is all specified in one section under the title of the trade. It is always a bit disconcerting to the sheet metal man if a part of his specification is tucked away under Plumbing or Roofing.

**DRAWINGS.** Suggested improvements for better working drawings stressed simplification. Small houses having thirty different sections for the foundation walls, nine different plate heights, all varying only two or three inches, add much to the cost in materials and labor. Window frames can be designed requiring fewer different members.

Door, window, painting and finish schedules bound directly into the working set are very helpful both in figuring plans and avoiding disputes while work is in progress.

Considering the fact that the Committee left itself wide open by asking for criticism and knowing some of our own faults, we feel great restraint was shown by the contractors in holding themselves to the above mild and logical criticisms.

JOSEPH C. WALLICH, of the Wallich Lumber Co., was elected president of the Builders and Traders Exchange. He succeeds W. Wilbur White. Nelson H. Marlow and Carl W. Dambrun were elected vice presidents, and Jack Wettlauffer, treasurer. E. J. Brunner remains as secretary-manager for the 24th year.

GEORGE J. HAAS, A.I.A. (at right) presiding at a recent meeting of the Producers Council in Miami, Fla. Beside the president is Mrs. Haas.

It was during George's administration as president of the Michigan Society of Architects that the idea of the Society's own publication was first advanced. During John Stahl's administration, which followed, it was put into effect.

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Cupid's Drive-In Restaurant, at 12230 E. Warren, Detroit, is a popular place for delicious food, quickly prepared and tastefully served. Gas-fired equipment, including fryers, broiler and griddle, steam table, 2-oven range, bake oven and coffee urn—are used to prepare the foods served in this unusual restaurant. A commercial gas water heater furnishes hot water for kitchen, washroom and dishwashing use.