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# ARCHITECT

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> July August 1956

Volume XX Number Four

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# Minneapolis and St. Paul Architects Develop Plans for Improving Cities' Loops' Attractions

Definite planning steps have been taken by interested architects and others in Minneapolis and St. Paul to revamp the loop areas of those two cities to make them more attractive to shoppers who have been enticed from the center of the city by the attractions of the suburban shopping centers. The plans are independent of each other but both were brought to public announcement stage in the past month or so.

The Minneapolis firm of Larson & McLaren did the designs for redevelopment of Nicollet Avenue between Fifth and Ninth Streets. An architects' committee of Grover W. Dimond, Jr., chairman, Brooks Cavin and Louis Lundgren planned the revision of St. Paul's blocks between Fifth and Sixth streets from Market to Sibley. It is interesting to note the Minneapolis proposal



The plaza as it would appear at Eighth Street, looking west. Note escalators.

revises an avenue between buildings, the St. Paul proposal clears blocks for a rebuilding. Our readers will be interested in these two different approaches to a basically similar problem.

#### THE MINNEAPOLIS PLAZA

There is a definiteness about start of the discussions on the Nicollet redevelopment which indicates this may take shape or at least spur on the cause of the loop in its battle to regain trade lost to the suburban stores. Leslie G. Park, president of Baker Properties, Inc., a major property owner in the loop of Minneapolis, presented the Nicollet Plaza suggestions to the development committee of the Downtown Council. The board of the Downtown Council now has the plan under consideration and further action will be decided upon later.

The architects, Larson and McLarin, have been active in the building picture of the city's loop for some 35 years and are familiar with its needs. Features of their suggested plaza are shown in our illustrations and Mr. Larson has supplied notes on the plan, developed from ideas of Mr. Park, who talked it over with many of the merchants concerned.

The Nicollet Plaza would be a roofed-over shopping area, heated in winter and conditioned in summer to provide a free-from-the-elements shopping area of great attractiveness to the shopper. Shoppers would be free to wander the length of the plaza's second floor level while vehicular traffic was carried beneath them. There would be no sidewalks on the ground level traffic area. Elimination of the sidewalks would add traffic space for more car lanes. The traffic lanes beneath the plaza proper would be equipped with high intensity illumination of such quality as to eliminate any feeling of its being a tunnel, Mr. Larson said.

The plaza, which would be enlivened by plantings of plants and shrubs which will grow under such conditions, at strategic axis points, would have sidewalk cafes, browsing counters outside the plaza fronts of the stores in the adjoining blocks, playground areas where



children could be left in the care of attendants while parents shopped and small specialty shops whose entire selling space would be right on the plaza. Adjacent and presently operating parking ramps would develop connections with the plaza so shoppers could park with ease and go directly and comfortably to the shopping area.

The plaza could be developed beyond the shopping stage, its planners suggest. It could be the scene of

Three area views on the plaza itself. Top is a "sidewalk" restaurant, with nearby areas planted to small trees and shrubs. Center is a general view, with special store selling area in foreground. Bottom is a playground area where mothers could leave their children while they shopped.



The vehicular traffic level is shown above, including the sections.

civic affairs, song fests, special style shows, flower shows and events connected with visiting celebrities.

In the 100 years' history of Minneapolis as a city its loop merely grew, like traditional Topsy, based on original thinking concerned with a shopping area for a community of some thousands of residents instead of the hundreds of thousands.

"The Nicollet Plaza will provide for the next 100 years for a city having an integrated population of from 2,000,000 to 3,000,000," Mr. Larson was quoted as saying. "Statistics indicate Minneapolis has 137 per-

fect shopping days in a year, insofar as weather is concerned. The Nicollet Plaza would provide ideal shopping conditions every day of the year."

Every effort would be expended to make the plaza as attractive as possible to shoppers. All the modern conveniences would be made a part of the structure. At each street intersection with the plaza's thoroughfare four escalators would carry pedestrians from street level to the plaza shopping areas. At these intersections the plaza would be open to the streets and would be 14 feet above them.



This plan shows distribution of service facilities as well as plaza location.

Similar complete planning would go into the street below. In addition to making it as bright and glareless as possible, fumes from vehicles would be taken off by ventilating shafts in each block and exhausted above the plaza's roof. Addition of the extra width would help solve the present very serious traffic problems of the loop. Bus traffic which jams Hennepin Avenue could be rerouted onto the faster traveling Nicollet Avenue and absence of pedestrians would help speed it there. All-weather loading and unloading would also help hasten traffic under the plaza. Cross traffic on the side streets would also move more rapidly with removal of the obscuring pedestrian flow.

The proposed revamping includes a possible extension of the plaza to Third Street, thus further tying in the plaza with the major loop areas, Mr. Larson pointed out. This would increase the values of property between Third and Fifth Streets and would also provide access to a number of good sites for parking ramps, sites which are scarce on Upper Nicollet.

An important psychological aspect of such a plaza would be that in easing the getting to and from the shopping areas, as well as providing a delightful area in which to shop and walk from store to store, the shoppers' nerves would be less frazzled and they would be easier to serve, more amenable to suggestive selling. "Happy" shoppers would spend more time and thus more money in the loop stores. This fact has been well proved by the easier parking, more relaxing surroundings of the suburban shopping centers.

Cost of the project compared with cost of completely remodeling and refacing the stores along Nicollet would be to its credit, supporters of the plan said. The project's cost was estimated at about \$1,000,000 per block. Cost of the major and entire building remodeling under individual plans would be "prohibitive." Facades of buildings facing on the plaza would be remodeled to WHY?

If you wonder why this action on behalf of the big cities' loops is of so much concern consider the following data cited by Mr. Larson. During the past 10 years the gross retail volume of the Minneapolis loop area in dollars has gone up 15 per cent but unit sales have not gone up at all. The increase was caused by the depreciation of the dollar's value. The lagging behind of the loop area is a very definite thing. Suburban retail dollar volume for this same period has shown increases of as much as 50 per cent and even the less active centers have appreciably topped the loop's figure. Merchants and others interested in getting that part of the city back into the running for business are taking active steps to increase its appeal. One suggested method is through the redevelopment discussed here.

keep in character with the project's theme at the owners' expense. Cost of the plaza itself would be assessed against the benefited property by the city. This would require special empowering legislation but this would not be difficult, sponsors believe.

Mr. Park was quoted by a Minneapolis newspaper to the effect that financial success and popular acceptance of the Baker Arcade, which his firm planned, with its stores, offices and parking facilities, is but a small version of the Nicollet Plaza.

#### THE ST. PAUL MALL

Speaking for the architects in presentation of the plan for redevelopment of the St. Paul area, Brooks Cavin said:

"Downtown St. Paul today falls far short of a midtwentieth century appearance. Property values are se-



The St. Paul mall in model form with buildings at left removed to show details. Note the open feeling of the development. riously threatened by enticement of easy shopping in suburban shopping centers. The people who work and shop in the downtown area are harrassed by the noise and inconvenience of city traffic. Merchants and property owners should be worried about what the shopper thinks of the downtown area.

"This picture can be changed so people would rather come downtown to shop, in fact, come from miles around to spend their money there and like it! The change must be so bold and far-reaching that it will capture the imagination of businessmen and the buying public. The new downtown can be attractive, convenient, even exciting. There are four factors which give the basis of hope for the success of this ideal:

"1. St. Paul is a major center of finance, transportation, government, professional offices and industrial concerns.

"2. The physical relationship of St. Paul to the capitol grounds, the river front and the concentration of major shops and offices in an area of a few blocks provides a framework for replanning to make the most of St. Paul's special features.

"3. The fact that so little new construction has been undertaken in the downtown area makes possible a bold construction project without being blocked by buildings of value too great to destroy.

"4. A significant group of downtown businessmen has organized and dedicated itself to revitalizing the downtown area.

"At present there are two areas of greenery in the downtown district, one in front of the library and the other one block from the railroad station. If these two parks were to be connected by a shoppers' mall people could walk at will from store to store or bank or office without encountering cars or trucks or traffic lights. All of these blocks between Fifth and Sixth Streets could be cleared, except for about eight office buildings, at a cost of less than \$20,000,000.

"This cleared land, including the vacated street areas, would then be rebuilt with new shops, outdoor areas, amusement facilities and continuous air-conditioned walkways. The blocks between Cedar and Wabasha Streets could be developed as an attractive mall linking the heart of the city with the capitol grounds five blocks away. The two blocks between Fifth and Seventh Streets and Cedar and Wabasha Streets could be developed as a radio and television center overlooking a plaza for outdoor events such as ice skating, dance festivals, band concerts and so forth.



Plan above shows location and extent of mall's features.



Festive air is created on mall during the summer months, as shown in this architect's drawing.

"Underneath this plaza there would be parking for approximately 2,000 cars, accessible from the lower level of Cedar Street. Escalators would carry people from the lower level up to the plaza, with buses discharging passengers on Cedar Street beneath the plaza. Slow moving, electric, fair-type buses would give shoppers a free ride to any point along the shoppers' mall.

"If such a long range program is adopted, the first step could be undertaken immediately by selecting one block as a trial project and excluding all traffic from it. This block could then be developed with canopies, outdoor seating and exhibition areas, a sidewalk cafe and concession stands for popcorn, novelties, tourist information, etc. This trial project would not require a large outlay of money but would test the reaction of the shopping public, the merchants facing on this promenade and the driving public. All these factors would be important in deciding how extensively the idea should be developed."

Commenting on the proposal, Dave Loecks, director of the St. Paul Planning Board and the executive committee of Downtown St. Paul, Inc., to which the plan was submitted, said:

"Mr. Cavin stressed the point that this is just an illustrative idea and should not be considered by either organization as a definite plan. . . The ideas of the architects, as outlined, show what downtown St. Paul could look like if our community should decide to pursue the objective of a comprehensive replanning and redevelopment of the central area.

"Mr. Cavin has made it clear that much more research concerning the future needs of downtown St. Paul must be undertaken before a detailed and final plan for the central area could be developed. Just as so many worthwhile accomplishments are the results of developing what was originally a 'dream', this proposal could well be the seed which, with cultivation, will be the modern St. Paul of tomorrow. Members of the group who heard the presentation said they would put them before their respective organizations for thought and study."

#### CONCRETE CONFERENCE SCHEDULED FOR NOVEMBER AT U OF M

The Sixth Annual Concrete Conference will be held on November 26 and 27 in the Center for Continuation Study at the University of Minnesota. General chairman directing arrangements for the event is Lyell C. Halverson, vice-president of Madsen Construction Co., Minneapolis.

This annual event has been of great help in the past years in bringing architects and others in the building industry up to date on latest developments in this fundamental construction material. Attendance has run high and proposed agendum items for this sixth conference indicate that another worthwhile event is being built up.

#### SPITZNAGEL GETS HONORARY LL.D.

Harold Spitznagel, well known architect of Sioux Falls, S. D., who has been referred to as one of the leaders of "grassroots" building and community planning, received an honorary LLD degree from Augustana College, Sioux Falls, on June 4.

#### **OUR MONOGRAPH SERIES**

has been temporarily interrupted this month to include this feature. It will probably be resumed. in the next issue with the presentation of work and background of another of the area's architectural firms.

ARCHITECT

- 300 Present
- Listen at Panels
- View Exhibits
- Hear Experts
- Elect Gilbertson at

# MINNESOTA CONVENTION

A MERICAN Institute of Architects' officials and experts in the field of curtain wall construction, interior decorating and acoustics highlighted the 22nd annual convention of the Minnesota Society of Architects, June 7-8, in the Nicollet Hotel, Minneapolis, Minn., which elected Victor Gilbertson of Minneapolis president to succeed Glynne W. Shifflet, also of Minneapolis.

More than 300 members of the Society, representing AIA chapters in Duluth, St. Paul and Minneapolis and outstate members, attended the two-day convention in which John N. Richards, first vice-president of the AIA, Bryant Hadley, AIA regional director, Marvin V.



Mr. Gilbertson 1956-1957 President

Brooks, architectural consultant for the Reynolds Metal company, Ben Rose of Ben Rose Textile and Wallpaper Co., Chicago, Jack Brickel of Herman Miller Furniture company and Robert B. Newman, associate professor of architecture at Massachusetts Institute of Technology, participated.

Mr. Brooks, Reynolds Metal architectural consultant, in the Thursday (June 7) morning seminar on curtain wall construction pointed to the use of aluminum as the basic structural material used in the method and listed various applications of aluminum in the construction field.

Mr. Richards, national institute official and senior partner in the firm of Bellman, Billett and Richards of Toledo, Ohio, said at the Thursday (June 7) luncheon, "an architect's honesty of purpose must be above suspicion.

"He acts as professional advisor to his client and his advice must be unprejudiced! He is charged with the exercise of judicial functions as between client and contractor, and must act with entire impartiality; he has moral responsibilities to his professional associates and subordinates; he is engaged in a profession which carries with it grave responsibility to the public.

"These duties and responsibilities," he continued, "cannot be properly discharged unless his motives, conduct and ability are such as to command respect and confidence."

Mr. Richards told the 30 delegates that, "no matter how proficient their professional efforts, they must still emphasize the role of good public relations in their communities!"

During lulls in the program members had an opportunity to visit the 60 exhibit booths set up in the hotel.



#### The New MSA Officers and Directors

Members of the MSA's board of directors are, front row, Ralph Keyes, executive director; Edwin Krafft of McEnary and Krafft, Minneapolis; Victor Gilbertson of Hills, Gilbertson and Hayes, Minneapolis, president; Grover Bimond, Jr., of Grover Dimond and Associates, St. Paul; and Glynne Shifflet, former president. . . back row, Fred Traynor of Traynor

Many national firms including General Electric Supply Company, Andersen Corporation, Libbey-Owens-Ford Glass Company, Cold Spring Granite Company and others participated and explained new building materials and methods.

Mr. Rose, Chicago design expert, and Mr. Brickel, Herman Miller Furniture, led the Thursday (June 7) afternoon seminar on furniture and fabrics in interior decorating. A Minneapolis chapter member, Malcolm Forsythe of the Dayton Company acted as moderator.

"The newest phase in business decorating is color psychology," Mr. Rose said. "Color combinations to ease tension and stimulate work are being used by many national firms now in their 'interior' decorating of offices and factories," Mr. Rose continued. "Reds and yellows are used by manufacturing firms to point up danger spots in factory areas.

"Machinery is color-co-ordinated to increase efficiency of the operator," he pointed out. "This enables an operator to follow a machinery color sequence in the production of a product."

Mr. Brickel in his discussion emphasized the position the furniture dealer plays in the decorating field.

"Lately," he said, "they have found businessmen do not desire to purchase 'just a desk' but a complete office. It used to be that a businessman would call upon the furniture dealer to supply him simply with a number of desks, chairs and files. Now the tendency is to have the dealer come into the office, and, working with the decorator, completely equip the office in proper furniture design."

Robert B. Newman of Bolt, Beranek and Newman, guest speaker for the Friday (June 8) morning seminar, claimed "acoustics aren't something you paste into a building after it is built! Acoustical planning before construction will save much trouble and eliminate 'surand Hermanson, St. Cloud, secretary; Brooks Cavin, St. Paul chapter president; Otto Olsen, Duluth; R. V. McCann, Minneapolis chapter president; and Arthur C. Lucas, Jr., Duluth, a vice-president. Allan Meinecke, Ellerbe and Company, was not present at the meeting.

prises' in sound transmission when the building is ready for occupancy."

He cited as an example a problem encountered by a southern college which found after completing a \$2,000,000 classroom building that classes could be held only in every other room. Designers of the building had allowed the partitions to extend only up to the sound absorbing material, a substance similar to fiber glass, on the ceiling. Because this material absorbs sound it also provided an excellent medium for sound transmission, thus, words spoken in an adjoining classroom were plainly heard in the next room.

"Today's building technology," Mr. Newman pointed out, "is leading to lightweight construction and thus flexibility, with a result of greater sound transmission. With proper acoustical planning, designers are able to cope with the sound transmission problem and eliminate costly building modification."

At the afternoon business session following Mr. Newman's seminar, delegates discussed fee structure and public relations activities. The group also completed revision of the articles of incorporation and by-laws to reflect the operation of the central office in aiding the executive secretary to carry on administrative duties and the election of officers from membership at large instead of from the board of directors.

Results of the annual election for the Society were announced at the end of the business meeting.

Victor Gilbertson of Hills, Gilbertson and Hayes, Minneapolis, was elected president. Other officers elected include Arthur C. Lucas, Jr., of Arthur Lucas, Duluth, vice-president; Fred Traynor of Traynor and Hermanson, St. Cloud, Minn., secretary; and Allan Meinecke of Ellerbe and Company, St. Paul, treasurer.

Retiring state officers are Glynne W. Shifflet of Shifflet, Backstrom and Associates, Minneapolis, presi-

#### THE CONVENTION SCENE

Here and there at the state convention as our photographer pictured were the people shown on the opposite page. We identify them in the numbered pictures left to right:

1—President Vic Gilbertson of the Minnesota Society with Queen of the Lakes Judy Penny and Aquatennial Commodore Wells J. Wright . . . 2—Otto Olson, Harold Hanson and Frank Clark . . . 3—President Harold Hanson of Duluth chapter, AIA, Immediate Past President Glynne Shifflet of Minnesota Society, President R. V. McCann of Minneapolis chapter, AIA First Vicepresident John W. Richards and AIA Regional Director Bryant Hadley . . . 4—R. V. McCann, Bryant Hadley, Dale McEnary and Milton Leadholm at a panel session. . .

5—John Johnson, Rolf Irgens, Bruce Hamilton, George Klein, Jr., and Milt Dahlen . . . 6—Edwin Krafft and George Darrell at a panel discussion . . . 7—Checking architectural exhibits are John N. Richards, Bryant Hadley, Harold Hanson, R. V. McCann,

dent; R. V. McCann, Minneapolis, vice-president; and Frank D. Clark of St. Paul, secretary. Mr. Lucas, former treasurer, was elected vice-president for the coming year.

Executive director of the MSA is Ralph T. Keyes. The convention committee was headed by J. Milton Leadholm, Brandhorst and Leadholm, Minneapolis. Eugene Hickey of Larson and McLaren, Minneapolis, headed up the seminar committee.

#### MANKATO STONE STARTS EDUCATION FUND AT U OF M

A fund to give financial aid to deserving architectural students at the University of Minnesota has been set up by the Mankato Stone Company of Mankato, it was announced recently by Professor Ralph Rapson, head 11—Mrs. J. W. Dawson, Mrs. E. R. Cone and Reinhold A. Melander . . . 12—Jack Brickel, Newton Griffith, Ben Rose and Eugene Hickey . . . 13—Auxiliary ladies, Mrs. Malcolm C. Forsythe, Mrs. Austin H. Lange, Mrs. Glynne Shifflet and Mrs. Frank Mikutowski . . . 14—Al Wegleitner, Frank Clark and Horace Matson register with Delores Sigel . . . 15—Larry Johnson, Roy Thorshov and Cec Tammen . . . 16—John Newhouse, Con Aas and Ray Reuth . . .

17—Harry Whiteley and Nels Nelson . . . 18—An acoustical problem brought together Arthur C. Lucas, Jr., Glynne Shifflet, Robert B. Newman and Bryant Hadley . . . 19—Ralph Keyes, Francis K. Kerr, J. Milton Leadholm and Delores Sigel . . . 20—Milton Leadholm and R. V. McCann . . . 21—Al Fischer and Sid Stolte . . . *(More pictures on page 51, etseq.)* 

of the School of Architecture.

Money from the fund, to be known as the Mankato Stone Company Education Fund, will be available beginning with the academic year of 1956-57. In addition to grants to students, the fund may be used to establish benefits for the School of Architecture as decided by the faculty and to stimulate the development of the students' knowledge and skill in the use of Mankato stone.

In presenting the initial deposit of \$300, T. P. Coughlan, president of the Mankato Stone Company, said:

"Impressed by the promise shown in work done by students at the university and earnest in our desire to perpetuate good architecture we are happy to establish the Mankato Stone Company Education Fund to assist both the School of Architecture and students of proved ability in architecture to attain their goal of providing well-trained, superior architects to serve the public."

#### IS FREEWAY REALLY A "FACILITY?"

In our last issue we ran the charts showing the route of the proposed freeway between the Twin Cities, making no comment but asking our readers who had anything to say about the proposal to let us know. Apparently most everyone—and everyone indeed in the areas concerned, architects or otherwise—is perfectly content with the gash across the cities for our mail did not give our postman flat feet! However, one of our favorite thinkers along lines architectural had something to say, something in the terse style of his former Northwest Architect column, "You Said It." So here is what W. G. Purcell, whose home is in Pasadena, thinks about what is proposed between his former twin home towns:

The Proposed Minneapolis-St. Paul Freeway System Is it really a "facility"? Los Angeles city engineer for streets and highways says—"One more 'free-way' and traffic will come to a complete stop."

It is now plain, here, that so-called "freeways" do not solve traffic congestion—they increase it! Even worse, traffic timing goes off beat. A single minor accident, at 5:15 p.m. in the San Fernando Pass area, crashed two dozen cars in one pile-up and blocked traffic for two hours. Bumper to bumper, cars could not escape to cross streets (there are few in the pass) and police could not reach the crash point. Cars were backed up solid for ten miles.

Better have a look (and a smell of the resulting smog) out here, before you spend all that money to create a multiple civic disaster.

WILLIAM G. PURCELL

Northwest



ARCHITECT



# Minnesota Alumni Center

An undergraduate thesis submitted by Louis M. Angelikis, Jr., to the School of Architecture, University of Minnesota.

Many leading universities such as the University of Chicago, Columbia University, Harvard, Michigan, Ohio State and California universities all have alumni houses on their campuses. Their typical comments concerning the success of these houses is, "Our alumni house presents itself to our alumni as their campus rendezvous and headquarters. It has provided identity to our alumni association for students, faculty, alumni and the public. More alumni visit the campus and we feel our alumni house has made them better university citizens. Better office facilities have increased the efficiency of the alumni office staff. Alumni interest has reached the highest point in history. Most important of all, every alumnus knows the alumni house is his 'home on the campus' and that its door is open to him at any and all times."

The financing of such a house at the University of

Minnesota could be accomplished by a fund-raising campaign among the thousands of Minnesota alumni throughout the country. The University of California alumni association collected \$375,000, with which it paid for the recently completed house and furnishings.

## THE NEED FOR AN ALUMNI HOUSE ON THE UNIVERSITY OF MINNESOTA CAMPUS

The philosophy and purpose behind an alumni association is to interpret the institution to the community and to interpret the community to the institution, to give advice to the university concerning curricula, both professional and cultural, as studied by the alumni as students and applied to the outside world as graduates, to raise money through endowments to the institution, scholarship and loan funds, and to encourage such gifts as rare library, art, museum and scientific collections. In order to accomplish these purposes the alumni must have their interest excited by their active alumni association. The university, recognizing the benefits derived from a strong and active alumni group, has requested an alumni house in its ten-year program.

The construction of an alumni house on the campus would provide a natural meeting place for all alumni as individuals or groups returning to the campus for visits, reunions, commencements, athletic contests, alumni clubs, committees and other groups. It would provide greatly needed expansion space for the Alumni Association and Greater University Fund offices, which are now located in the Student Union. The Union space problem would also be aided by the removal of these functions. A lounge in the Alumni House would provide additional space not only for alumni groups but other campus groups as well to hold meetings, teas, coffee hours and other such gatherings.

#### DEPARTMENTS AND THEIR FUNCTIONS

- 1. Office Management
  - a. Personnel
    - Alumni Secretary—should have office easily accessible to public. Two secretaries
  - b. Functions University budget Alumni budget

- Advertising Business management Personnel Administrative division codes General correspondence General files
- 2. Field Work

a. Personnel Field service director—should be easily accessible to public One secretary

- b. Functions State clubs District organization Outstate clubs Regional program Scholarship funds
- 3. Membership
  - a. One clerk—located close to alumni secretary b. Renewal plan
    - New membership plan Special drives
- 4. Publications
  - a. Personnel Editor—private of
    - Editor—private office and layout room easily accessible to public One clerk

<sup>(</sup>Continued on Page 37)



Site Plan



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EXCLUSIVE G-E POW-ER PRE-RINSE eliminates hand rinsing. Cycle includes 2 power prerinses, detergent wash, another power rinse, 2 final power rinses, drying period.



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The new, low-cost waste air gap method of installation provides maximum sanitation and eliminates need for prior roughing-in. Permits using one drain for sink bowl and dishwasher and eliminates need for expensive plumbing alteration in existing homes. The drain may be extended out either side of the cabinet through the convenient knockout provided on the right and left.

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#### **First Floor Plan**

- b. Functions Alumni magazine Special publications Folders and brochures News releases
- 5. Records-adjacent to mailing department and membership department

a.. Personnel

- Supervisor Nine clerks
- b. Functions
  - Master records
  - College 'records
  - Class records
  - Geographic records
  - Co-ordinate with records and membership Steno pool
- 6. Mailing-related to records and membership departments
  - a. Personnel
    - Four clerks
  - b. Functions Membership mailings Magazine mailings G. U. F. mailings
    - Alumni mailings Special mailings

- 7. Greater University Fund
  - a. Personnel
    - Director Assistant director Six clerks
  - b. Function Fund raising Bookkeeping
- Accounting 8. Board of Directors
- Twenty-one members, meet in boardroom
- 9. Standing Committees
  - Investment
  - Honors
  - Scholarships Legislation
  - Legislatio
  - Regents
- 10. Miscellaneous representatives and committees meet at various times during the year

#### SPACES PROVIDED

- Lobby, reception and exhibition area—3900 square feet
- Lounge, meeting and assembly area—2600 square feet
- 3. General office and files area, 16 workers-1000 square feet



Modern Lighting

# RECEPTION ROOM

Installation at GOODIN COMPANY, 615 North Third Street, Minneapolis, Minnesota

ARCHITECTS: R. V. McCann CONSULTING ENGINEER: T. E. Roche ELECTRICAL CONTRACTOR: Langford Electric Corporation FIXTURES: F. W. Wakefield Brass Company

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38



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#### **Elevations and Section**

- 4. Private offices for the following.
  - (1) Alumni secretary-240 square feet
  - (2) Field representative-130 square feet
  - (3) Publication editor, 1 clerk and layout space 240 square feet

(4) Greater University Fund director—130 square feet

- (5) Asst. G. U. F. director-130 square feet
- (6) Office superintendent-130 square feet
- (7) Senior secretary—130 square feet
- 5. Steno pool, 4 girls-250 square feet
- 6. Mail room, 4 clerks-360 square feet
- Utility core serving public areas Rest rooms Folding chair storage (200 chairs) Coat checking (200 coats) Serving kitchen Total—500 square feet
- Office area utility core Rest rooms Janitor's closet Coat hanging space Supply storage Small hydraulic freight elevator Total—350 square feet
- 9. Lower level lobby-600 square feet

ARCHITECT

- 10. Loading area-350 square feet
- 11. Mechanical and storage-350 square feet
- 12. Garage, capacity 54 cars-22,000 square feet

#### SITE

An alumni house should be located in a prominent part of the campus because of its close relationship with the public, be convenient to parking facilities to accommodate at least fifty visitors and \*be close to the social center of the campus because of its function as a meeting place. The university tentatively desires to locate such a house in an addition to the Student Union. However, I disagree with such a location since I believe it would lose its individual identity in such a situation.

I have chosen a site on the northwest corner of the Union grounds, 150 feet x 300 feet, which is prominently located in the social and public center of the campus. The alumni house will be served by a parking lot across the street, the Union garage and its own parking facilities. This site seems to best serve the purpose of being convenient to the students, the Union facilities and the public.

#### DESIGN ANALYSIS

The location of the Alumni Center on the Student Union Plaza is convenient to visitors and students alike. The major portion of on-campus parking lots are located within easy walking distance of the building and



Northwest



#### a convenient transition from automobile to parking to Plaza to Mall connects the center to the entire campus. Visitors can park their cars, receive information and orientation in the main lobby and proceed from there to other buildings. Since it is situated in the social center of the campus and will be used for student functions as well as alumni, students will become familiar with the services of the Alumni Center. This, it is hoped, will encourage more graduates to participate in alumni activities.

The building participates in the scheme of the plaza but is separated from it by a sunken garden and terrace which surround the building to give it identity. The symmetrical schemes of the mall and plaza indicated a large central lobby for the Alumni Center, connecting the plaza to the building and through the building to the terrace on the west.

The plan is divided in thirds, one-third devoted to office area with its own service functions, one-third to the lobby area with its information, waiting, exhibition and decorative functions and one-third to a lounge which will be used for meetings, coffee hours, assemblies, etc., with its own service functions.

The function of the building dictated a monumental character as well as an easily identifiable prominence because of its liaison purposes between university and public. This seemed to be resolved design-wise very conveniently by placing the building on a platform by extending the Union garage. This device gives the building an added horizontalness along with a strong **Elevations and Section** 

horizontal of trees to balance the verticalness and bulk of the other buildings on the plaza. The wall of the base has been modulated to give the building a richness from a distance and rich materials such as bronze, travertine and marble have been used in the detailing of the glass box above to give it elegance when the viewer is approaching the entrance. After entering the building across a sunken garden the floor surfacing changes in a skylit courtyard opposite the entrance where more planting occurs against a background of a large mosaic tile mural. Beyond this is the outdoor terrace with a view of the Minneapolis skyline and the Mississippi River.

#### EUROPEAN VISITORS GET COPIES OF ARCHITECT

During the recent convention of the Minnesota Association of Consulting Engineers a group of touring European engineers was in Minneapolis, where they saw copies of the NORTHWEST ARCHITECT. A special feature on partnership and corporate setups in the practice of architecture was of special value and the group purchased a dozen extra copies to take home with them.

A number of recent issues of the expanding NORTH-WEST ARCHITECT have had features of particular interest and requests for extra copies have come to the magazine's office from many states.

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## Minnesotans Win Top Honors In House Design

Three members of AIA firms in Minnesota won top prizes in an international small house design competition sponsored by the Morton Arboretum of Lisle, Illinois, this spring.

John O. Cotton, an employe of Ben Gingold & Associates, Minneapolis, and Charles S. Sax of Hibbing, a draftsman at Jyring and Whiteman in Duluth, won first prizes, each receiving \$500. Arthur C. Lucas, Jr., of Arthur Lucas in Duluth won a second prize of \$100. The grand prize of \$1,000 went to Gardner Ertman of Cambridge, Massachusetts.

Among honorable mention awards in the competition three Minnesotans were listed—Duane V. Johnson of Grand Marais, Thomas Larson of St. Paul and K. M. Lockhart of Minneapolis.

The contest was for the design of two- and threebedroom homes. Houses designed by the winners will be built on the arboretum grounds in Lisle to provide settings for landscape exhibits and quarters for families of staff members. Although there were entries from a dozen foreign countries, only one received an award.

"In reviewing the several hundred completed entries submitted in the competition, the jury was impressed with the effort made by the designers to comply with the terms of the problem, particularly to the establishment of an attractive, practical and livable relationship between interior and exterior," Gordon Scott, Arboretum official, said.

"Within the limiting confines of area and cost, we felt that a remarkable degree of success was reached by the prize-winning group. On larger schemes, such integration is far easier, but the winning designs invariably demonstrated that, with study and ingenuity, it can be reached also in smaller undertakings. . . ."

Speaking of the design by Mr. Cotton, he said:

"This design is again an outstanding example of fine interrelation of indoor and outdoor areas. The jury particularly liked the planning of the kitchen and dining areas, both opening onto attractive exterior terraces. The bedrooms and living space are similarly well disposed in this respect and the living room itself opens most fully to the principal garden area. The designer also developed an interesting vista from the entrance through the house to the garden at the rear. All in all, this design represents a sound and agreeable solution to the problem of the Competition."

On the Sax design:

"The jury awarded a first prize to this design be-

(Story Continued on Page 49)



Perspective of Ertman's grand prize winner



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Morton Awards (Continued)



This won for Sax



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45

# the Northwest Builds with



COAST TO COAST STORES—Warehouse, St. Louis Park, Minn.—Architect: A. Epstein & Sons, Inc.— Contractor: D'Arcy Leck Construction Co.— Erector: American Bridge Co., Structural, Reinforcing and Joists.



STANDARD

STANDARD OIL CO. (Indiana)—Office Building, Golden Valley, Minn.—Contractor: Naugle-Lect, Inc. —Erector: Holman Erection Co., Reinforcing Steel





STATE FARM INSURANCE CO.—Roseville, Minn.— Architect: Ellerbe & Co.—Contractor: E. M. Ganley Co., Inc.—Erector: Midwest Erectors, Inc., Structural and Joists.









CENTRA

FARMERS UNION CENTRAL EXCHANGE—So. St. Paul, Minn.—Architect: Ellerbe & Co.—Contractor: Graus Construction Co.—Erector: N. H. Sandberg Erection Co., Structural Steel.



COMO PARK JUNIOR HIGH SCHOOL— St. Paul, Minn.—Architect: Haarstick, Lundgren & Assoc.—Contractor: Hagstrom Construction Co.—Erector: Midwest Erectors, Inc., Structural.

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The Asphalt-paved Turner Turnpike (Oklahoma City to Tulsa, 88 miles) is a typical interesting example of engineering and financial success. Here's a 28,800 pound-axle load structure engineered for maximum durability and smooth, safe riding. Its cost was low . . . only \$431,818 per mile. It was laid fast . . . 29 months from the time sod was broken. Its safety record is enviable, about 1/2 the national fatality average. Its revenues are way up . . . \$1,546,319.94 over operating expenses and bond interest from the opening. May, 1953 to November 30, 1955.

**People like this Turnpike . . . wanted more like it** and Oklahoma highway authorities responded quickly to its success. By June of 1955 work was under way on the 88.5 miles northeast expansion. Modern, heavy-duty asphalt construction like this has proved ideal for turnpikes and primary roads. People like driving on asphalt "ribbons of velvet smoothness." Taxpayers like its low costs—they get about 2 miles for the price of one. You'll like its design versatality, its speed and ease of construction, its rugged durability. Often local aggregate can be used.

Modern highway design calls for Asphalt pavements; it's rugged, durable, smooth, safe and economical.

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#### ART IN EUROPEAN ARCHITECTURE

#### by Paul Damaz

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#### 430 Park Ave., New York 22

For those who fight the good fight for a reunion of the arts with architecture this is a summer issued book of much interest. Paul Damaz is the American correspondent for the French periodical "L'Architecture d'Aujourd'hui" and so has a great fund of experience and information at his disposal in doing a book like this. The book collects what its author considers the best examples of the new integration of the arts and architecture in the European field.

For those to whom this would be a recommendation it is interesting to know that Le Corbusier thought enough of the Damaz effort to write the introduction to the volume. To those who don't see eye to eye with Le Corbusier, it might be otherwise.

The volume is readable and there is much of value and interest to all readers. Some will find it a gold mine, others something to delve into, all of some worth. Damaz traces the divorce of the arts from a wandering architecture in the past and the first faltering, then stronger, steps toward bringing all art activities which reasonably belong with architecture back into the building activity.

Lots of post-World War II materials are included in the book.

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#### AMONG THE EXHIBITS

Our cameraman found the AIA members and others shown on the page opposite among the outstanding exhibits at the convention. We identify in the numbered pictures left to right:

1-Mesdames J. W. Dawson, E. R. Cone and L. Hovik with Orville Bjorklund and Loren Lee . . . 2-Louis Pinault and Wally Neal . . . 3-Joe Bass, Ed Barber and unidentified gentleman . . . 4-Don Haarstick, Doc Vander Hayden, Gary Cook and Louis Bersback . . . 5-Ted Van Dromolen, Jack Forciea, A. E. Nelson and G. L. Green . . . 6-E. H. Lundie, Robert Cerny, Bob Howe and Ben Gardner . . . 7-Rollin B. Child, Harold Hanson and Norman Fugel-SO . . .

8-Glenn Cording, Harold Andrews, Harold Maloney, L. A. Bourbon and Hal DeLay . . . 9-Howard Ellingwood, Roy Boehlke, Louis Pinault and Hans Larson . . . 10-Conrad Aas, Bob Olsen and Milton Dahlen . . . 11-Jim Nerhaugen, Alf Lee and John Bush . . . 12-Bill Meyer, Arlene Turnblom and Claude Smith . . . 13-Don Hoagland, E. R. Cone, Dave Paulson, Rolf Irgens and Ray Beck . . . 14-Art Bjerken and Henry Bogucki . . .

15-Cec Tammen, Willard Carlson, H. F. and W. J. Olson . . . 16-Jim Horan, James Millward, Charles Dykins and Joe Hartman . . . 17-Gene Flynn, Holland Phillips and Orrin Field . . . 18-Bill Potts, Fred Voepel and Arthur Lucas, Jr. . . 19-Jack Bissell, F. B. Hill and Thomas B. Kent . . . 20-E. H Smith, Red Homuth and M E. Woyke . . . 21-T. P. Coughlan, Austin Lange, R. G. Cerny and Ralph Rapson . . .



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8—Pat Martin, Al Benzick and Mr. and Mrs. Ray Thibodeau . . . 9—Dock Rethmeier and Ray Griffith . . . 10—R. C. Jacobsen, Bill McManus and Fred Traynor . . . 11—Gerald A. Mortensen, Jerry Fischer, E. R. Cones and C. Y. Bissell . . . 12—Sheldon J. Bernstein and Harley Johnson . . . 13—L. H. Stansfield, W. T. Wick, and Ben Meltzer . . . 14—Bert Power, Mrs. and W. A. Close and Myron Kehne . . .

15—Edward Enger and J. T. Purdum . . . 16— Charles Cooper, Bob Hanson and Robert Foye . . . 17—Francis K. Kerr and Paul Buck . . . 18—George Mastny, Glen Cording, Art Lucas, Jr., Harold Anderson, Gerry Peplin, Don Johnson and Stan Feldman . . . 19—Dwight Gustafson, Red Grube and F. R. Meisch . . . 20—These were not identified . . . 21—A. L. Larned, Jr., and Clarence Barr . . . 22—A. L. Presenza, Don Pates and Bent Paulson . . . 23—Gene Flynn, Henry Bogucki and Ralph Keyes . . .

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Editor's Note—In an answer and expansion of our series of articles on care of hardwood floors by W. A. Gerrard the following letter and material has been sent us from The Pacific Lumber Company, redwood specialists, by that company's utilization director, John Reno. We print the letter in part and the material sent without comment, feeling that this can be valuable additional information for the guidance of our readers.

## Soil Covers in Control of Moisture in Building Floors

of an article 'Who Knows A Good

Vapor Barrier?' and of an extem-

#### Gentlemen:

"On page 70 of your March-April, 1956, issue of NORTHWEST ARCHI-TECT there appears an article entitled 'Care and Maintenance of Hardwood Floors' by W. A. Gerrard.

"In reading the article one gets the impression that Mr. Gerrard believes full reliance should be placed on ventilation of crawl spaces. Because we had nothing better than ventilation for protection against dampness this method has been used for a great many years. However, no matter how well the specification might be written, it has been common experience that ventilation generally does not serve the purpose satisfactorily.

"Because of this another method was developed and this second method has proved to be very effective. This second method is the use of soil covers. I think the first installation was in public housing in Washington, D. C., about a dozen years ago and these original installations are still giving good service. The method is described in the Forest Products Laboratory Release No. 2010 entitled 'Condensation and Decay Prevention Under Basementless Houses.' . . . The soil cover method would be just as effective under schools and churches.

". . . We are enclosing reprints

poraneous talk made before the annual meeting of the Waterproof Paper Manufacturers Association on January 19, 1956. . . ." Very truly yours, The Pacific Lumber Company John Reno

#### Who Knows a Good Vapor Barrier?\*

Do you know a good vapor barrier when you see one or when you buy one?

If so, you are a better man than most of us. Many retail lumber dealers sell "vapor barriers" and "breathing papers" but are unfamiliar with their properties and often don't know which is which. Even some of the manufacturers' salesmen are not as fully informed as they should be.

The Forest Products Laboratory of the United States Department of Agriculture, Madison, Wis., has made many tests of vapor barriers and knows which are good and which are not so good. However, a law which appears to have been written to hinder rather than encourage government help to the general public prevents the FPL from releasing their findings in a form which will assist builders and home buyers.

All the FPL can report is that various types of materials properly made have certain values, without giving the trade names of any of them. This does not do the average buyer much good, since some products within a given type may be good and others bad.

This article suggests a method to enable the buyer to be reasonably sure of getting a good vapor barrier when he pays for one.

First, who needs a vapor barrier and why?

Some experts say that all houses built north of the  $35^{\circ}$  isotherm, which is roughly north of a line extending along the Ohio River and through the northern tip of Texas and on west where it goes up the coastline to Canada, should have a vapor barrier on the warm side of all exterior walls.

My own experience leads me to recommend that a vapor barrier be applied on the exterior walls and on the ceilings of all houses in areas where it gets cold enough in the winter to make necessary the use of insulation in floors of unheated attics and in side walls, whether or not north of this line. If it is cold enough

<sup>\*</sup>Originally printed in the May, 1955, issue of PF—the Magazine of Prefabrication.

for insulation, there is the risk of condensation, and vapor barriers can be used to help prevent this condensation.

The proper application of vapor barriers can help prevent damp walls, condensation in attics and walls, paint blistering and peeling on siding and a musty smell in the house.

The vapor barrier helps prevent these troubles by stopping movement of the invisible water vapor, or the humidity as it is called, through the ceilings and walls of the house. It keeps the vapor inside the house. A suggested method for exhausting the unwanted vapor from the house is detailed in an article "Getting Humidity Out of the Home" (PF, Dec., 1953).

Vapor barriers take the form of treated papers, foils, films and coatings of various types. Technical Bulletin No. 11 of the Housing and Home Finance Agency lists some vapor barriers now on the market.

No commercial vapor barrier is 100 per cent resistant to vapor transmission.

Authorities have developed a figure of one grain of water vapor per hour per square foot of wall area per inch of mercury pressure differential, as the maximum amount of vapor movement permissible through a material to be classed as a suitable vapor barrier for home building.

This amount of movement has been given the name of one perm. Let us accept this figure for the moment and state that some manufacturers claim this degree of efficiency for their products but offer no proof of their claims. In fact, tests have proved them to be in error.

Let us leave vapor barriers for a moment and talk about sheathing or building papers which are often used between the exterior wall siding and the wall sheathing. The primary purpose of this sheathing paper is to prevent wind infiltration and to keep out wind-blown dust and dirt.

The sheathing paper should be waterproof but permeable to water vapor; that is, it should permit the vapor to go through it very readily and easily. Technical Bulletin No. 11 of HHFA, previously mentioned,

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lists some sheathing papers and states that they should permit the movement of at least five grains of water vapor per hour per square foot of area per inch of mercury pressure differential.

These two figures of five grains for sheathing papers and one grain for vapor barriers is where we get the recommended ratio of 5 to 1 for the two papers. Teesdale of FPL,\* who is probably the nation's leading authority on the subject, recommends a ratio of 7 to 1. These ratios are intended to show that the vapor barrier should have several times the vapor transmission resistance of the sheathing paper.

There is a danger in speaking in terms of ratios only. If the vapor barrier is extremely efficient and has a value of say 1/10 grains, a ratio of 5 to 1 would result in the sheathing paper permitting only 5/10 or  $\frac{1}{2}$ grain to pass through it in the given length of time. This would mean the sheathing paper was extremely efficient in stopping movement of vapor through it.

This would be bad because any rain water that blows in under the siding is supposed to escape in various ways before it can soak into the siding to cause harm. One way this rain water escapes is through evaporation, part of which should move through the sheathing paper as water vapor and dissipate itself in the stud space.

If the sheathing paper permits only  $\frac{1}{2}$  grain through it in the stated time, is it not doing its part to remove the blown-in rain water. Therefore, the ratio method of evaluating the two papers is not effective unless we put a minimum value of say 5 grains per hour per square foot per inch of mercury pressure on the sheathing paper.

Some manufacturers have sold the same products for use as both a vapor barrier and a sheathing paper. This should not be done as a good vapor barrier would make a poor sheathing paper and vice versa.

Now let's get back to the proposed method of making sure that products sold as vapor barriers really are

ARCHITECT

vapor barriers; that is, they will permit the passage of no more than one grain of water vapor per hour per square foot per inch of mercury pressure differential.

My suggestion is a simple one.

The buyer should accept those products that bear the stamp:

"This vapor barrier permits the passage of not more than one perm of water vapor using the accepted dry test method."

Practically all manufacturers want to furnish a satisfactory product and will so stamp their goods only if sure they will pass any tests to which they may be put.

Likewise, the buyer should accept sheathing papers that bear the stamp:

"This sheathing paper permits the passage of at least 5 perms of water vapor using the accepted dry test method."

If you think that an occasional manufacturer does not make mistakes and that these precautions are not necessary, read the following.

Investigations of HHFA as recorded in Housing Research Paper No. 16, give these data on the wall constructions tested:

"1. Insulation board lath used in Wall 65 had an asphalt coating on the back which was supposed to be a vapor barrier but which tests showed to have an average permeance of 10.0 perms and therefore not considered a barrier."

In other words, the manufacturer was selling the product as a vapor barrier which it certainly was not. The builder who purchases this lath does so in good faith, thinking he is giving his customer good protection against vapor troubles.

"2. In Wall 69, an asphalt-saturated paper, attached to and integral with 35%" mineral-wool batts, was used. It was supposed to be a vapor barrier but tests showed it to have an average permeance of 9.0 perms and therefore is not considered a barrier."

This is another case of a product not being what it is supposed to be.

These are just two instances in which the buyers bought so-called vapor barriers and did not receive what they specified.

Of course most manufacturers of

vapor barriers and sheathing papers are ethical and, at the same time, are technically informed to the extent that they manufacture products that meet the requirements for which they are sold. However, there are enough exceptions so that requiring the manufacturer to label his product as to its permeance to moisture vapor would probably go a long way toward assuring the purchaser that he is receiving that which he seeks to buy, whether it be vapor barriers or breathing sheathing papers. . .

#### Remarks to the Waterproof Paper Manufacturers

Mr. President and gentlemen;

All of you are undoubtedly familiar with soil covers — that is, waterproof paper and vapor barriers which are put on the ground under crawl spaces in order to keep it dry under there in order that the wood framing does not begin to decay.

Now, in doing some work on that subject a while back the question came up as to whether or not termites eat through this paper and, if so, do they destroy its usefulness in any instances as a soil cover to prevent that dampness?

In an effort to find out whether or not termites do any damage of this type I investigated among a lot of experts on the subject among whom are various friends of mine in the Forest Products Laboratory and elsewhere and I found that none of them knew of any instances in which termites had eaten through the paper to any extent let alone to an extent that would destroy its usefulness. As a matter of fact, none of them could recall that they had ever seen termites eat through this type of paper.

They further stated that even if the termites did penetrate the paper, they would not impair the usefulness of it to any great extent. Well, that answered the question and so I let it drop for a few days. However, you know how when you get into bed at night various things begin to run through your mind. Well, one night this happened to me and all of a sudden something hit me. I remembered in talking to one of the experts that the reason that he gave for not encountering this problem was because the paper on the ground

<sup>\*</sup>Laurence V. Teesdale, engineer, U.S. Forest Products Laboratory. His work has been concentrated recently on cold weather condensation problems, insulation and the use of moisture barriers in modern house construction.

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quickly waterlogged the moisture condition of the ground, thus making it too wet for termites. I am sure that all of you know that termites need a certain amount of water. I don't know how many of you know that you can have too much water for termites.

One man illustrated this to me in connection with a job that he had been on in Texas, a brick house with a crawl space. Six weeks after occupancy government workers were called in to inspect the crawl space and they found termites had built up in that time a cone of twenty inches in length and that they had built it up right in the center of the crawl space and they were about to get into the woodwork of the house, the joists, etc.

There was already condensation on the joists and it looked as though decay was going to occur pretty soon and therefore he went in and put a soil cover on the ground in order to protect against dampness. Of course, just as a matter of operation, when he put on the paper he, at the same time destroyed the termite cones, put the paper on and thought no more about it.

Well, several months later he went back to see whether the moisture in the woodwork had been brought down and found that it had been and when he went back still six months later he found that it again had been brought down further.

Out of curiosity he asked the homeowner if he had any trouble with termites during the interval and he found that the occupants had none, that the termites had not reappeared.

Well, I wrote him a letter right away and I said that it seemed to me that he had hit upon a revolutionary new idea for termite control without knowing it. He came right back and said that he thought there might be some good prospects but that this was entirely out of his line. Well, since then I have gone to work on a lot of my good friends, experts in the field, and most of them think that we might have something. . . .

I don't know how many of you are familiar with termites but I made a house-to-house survey in Florida a while back and I found that even in cement block houses with concrete slab floors that they poison the ground under it. I do not want to swear to this but I also understand that they have to have some kind of bond before FHA will finance the house that they have termite-proofed. Of course they do that by soil poisoning. . . .

Now, there are two questions that came up during my investigation and the first was will this paper that we put down have durability against termites? In other words, we will have to make some tests to determine whether termites will eat through paper. Thus far we have no tests but we do have experiences which indicate that termites do not eat through paper.

It was then brought up that in some of the dry states that we do not build up a moisture under the paper too quickly, that it may take six weeks or longer. However, the big thing that we have to know is whether we have a paper which will withstand these termites or can we develop a paper which will withstand these termites for this short period or a little longer period that is necessary for the moisture to build up. Even in the dry southwest it will build up in time and in not too long a time. . . .

The Building Research Advisory Board is now doing work for FHA. This is a Committee on Decay and Termite Protection and its findings are going to be adopted by the FHA for protection against termites in homes. I have already started to work on BRAB to consider this paper item and not to cast it lightly aside, but to dig into it.

Further, I have written many other people with regard to this.

You understand, of course, that you are going to have opposition from the pest control people, the soil poisoners and so forth. They are going to oppose you. However, if you agree with me that this is a fine new possible market for you then I think that maybe you will do something about it. In most houses that is all that you would need, this paper, if it does the job. Of course, in some houses you may also need termite shields but then that is still a better proposition than soil poisoning. . . . A discussion then followed Mr. Reno's remarks:

Q—I believe that I missed a point. The paper does the job because the moisture is held under the paper and this creates excessive moisture which is bad for the termites?

MR. RENO: That is right. The moisture is held under the paper and it is held under the paper to such a good extent that this has been a life saver as far as decay is concerned with regard to crawl space houses. I was in Washington during the war and was privileged to work on those public housing projects where they were all going to pieces because of decay and that is when this paper on the ground idea developed. Some of that paper is still in there now and has been for over a period of ten years and it is still doing the job of keeping the moisture down in the crawl space so that there is no danger of decay at all. Therefore, it does do a good job of keeping the moisture in the ground.

Q—Then the failure of the paper was due to the fact that there was not enough moisture in the ground or not enough moisture built up in the ground under the paper?

MR. RENO: There have been no failures but then somebody has questioned as to whether there will be failures before the moisture has a chance to become built up, say, in the dry southwest. We have had no failures. As a matter of fact, you can go right to FHA now and just on the basis of this correspondence which I have given you ask approval. So far there have not been any failures of which anyone knows. Of course, if they take the negative approach then it will be up to you to prove that you have a paper that you can put over a termite-infested area, something which will prevent termites from coming through the paper until sufficient moisture has been built up.

Q—In the soil covering field I think this group is aware of the fact that plastics have made pretty good inroads into the market. In your experience and study have you come across any studies that the plastics people have made on this subject as to how their material will hold up?

MR. RENO: That is a very lead-



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ing question from Mr. Anderson ... I have already told him that I have a letter from one of the plastics people saying that their product will not hold up against termites. I gave him the name of that company and I think that in all fairness to that company I should again take up the subject with them for possibly the man who answered my letter did not know what he was talking about.

Q—Are there problems of mold of the paper in that area?

MR. RENO: There are problems of mold and mold has developed in the papers in Washington and in other places. These papers have been taken up and tested in the laboratory and, although full of mold, the paper is still good. It is good to the extent that moisture does not go through it. This, in spite of the fact that some of the paper has been handled quite roughly after it had become moldy. It has fungus on it and yet, thus far, the papers have held up well.

#### NESBITT REDESIGNS ITS LINE OF LITTLE GIANT UNIT HEATERS



The new Little Giant Unit Heater made by John J. Nesbitt, Inc., features wrap-around, rectangular heating elements specifically designed for maximum performance with steam or hot water in either vertical or horizontal applications. Male pipe connections on opposite sides of the unit permit close-to-the-ceiling installations. The motor can be removed through the fan outlet from below the unit without disturbing the installation.

Thirty-four models of the Nesbitt Little Giant are offered with capacities ranging from 34,000 to 684,-000 BTU per hour. A wide variety of air deflector attachments are available (adjustable vane, cone deflector, anemostat and horizontal or vertical louvre) to give this unit even more versatility for all types of commercial or industrial applications. Like other Nesbitt Unit Heaters the new Little Giant is rated for sound and capacity in accordance with the Industrial Unit Heater Association's most recent test codes.

A new 20-page catalog completely describes this new unit heater and gives construction details, heating capacities, application data, piping and wiring diagrams, mounting heights, coverage data and sound ratings. Request Publication No. 402 from the company at State Road and Rhawn Street, Philadelphia 36, Pa.

#### BENDABLE TUBING USEFUL IN VARIETY OF SITUATIONS

A unique line of bendable tubing having unusual installation advantages, known in Europe and elsewhere as Plica, is now being made and sold in the United States by The Flexaust Company under exclusive rights acquired from Switzerland.



In Switzerland and other countries Plica has been used extensively during the past ten years as electrical conduit. It has proved ideal for burying in concrete, ceilings and floors. As it can be cut with a hacksaw or knife, bent by hand to stay bent and fits all standard connectors, installation times are substantially reduced.

Plica tubing has a three-ply wall and can be made in almost any desired combination of ferrous and non-ferrous metals, fiber, paper and other materials. The tubing is made by fully automatic machines in continuous lengths. It has high wall strength, watertightness and sharp bending radii.

Plica tubing made of copper, brass, aluminum, steel, asbestos, fiber, paper and combinations of these materials is used for lubricating, coolant and other non-corrosive liquid lines, hot and cold air ducts, mechanical protection and insulation of pipes, flexible shaft casing and for a wide variety of other uses.

The size range of Plica tubing is 3/8" through 2" i.d. Descriptive Bulletin 61 gives further details and prices and is available on request to T. G. May, sales manager, The Flexaust Company, 100 Park Avenue, New York 17, New York.





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## Chapter, Club and other news...

#### J. M. FENELON NAMED TO MINNESOTA SOCIETY DIRECTORSHIP

James M. Fenelon of Fargo, N. D., was picked at a meeting of the Minnesota Society of Architects' executive board on August 7 to succeed Ralph T. Keyes as executive director of the society. Mr. Keyes was the group's first director and resigned recently to accept another position.

Mr. Fenelon for four years has been the North Dakota representative for the National Foundation for



Mr. Fenelon

Infantile Paralysis. An attorney, he is a member of the North Dakota Bar Association, legal fraternities and other organizations, including veterans' groups. He is trained in and has had generous experience in public relations, organizational work and related contact work.

A high school graduate from Devils Lake, his law degree is from the University of North Dakota. During the war he served with the army, spent 22 months overseas. He is married and has four daughters. Hobbies include football, basketball, fishing, bowling, hunting, golf and chess.

Mr. Keyes became the society's first executive director in April, 1955. He is leaving to accept a similar position with a Minnesota organization of county governments.

#### R. E. HOWARD BECOMES DULUTH BUILDERS EXCHANGE MANAGER

New manager of the Duluth Builders' Exchange is Roy E. Howard, previously assistant manager. He succeeded Gene Lambert, who was elected mayor of the Head of the Lakes' city.

Mr. Howard has been active in labor relations work and during his tenancy of the assistant managership

ARCHITECT

proved his value to his employing group, officials who made the appointment announced. He was given full rein to reorganize the Duluth board's staff where he deemed it necessary, making recommendations to the board proper in this and related work.

#### HUSTAD AND MAGNEY BECOME FIRM ASSOCIATES

Magney, Tusler & Setter, Minneapolis architects and engineers, have elevated two staff members to be associates of the firm, Donald E. Hustad, who was also appointed head of the firm's design department, and Robert G. Magney. The announcement was made by W. H. Tusler, senior partner in the firm.

Mr. Hustad is a graduate of the University of Minnesota School of Architecture and has been engaged in



Messrs. Hustad and Magney

the practice of architecture for the past 10 years. He joined Magney, Tusler and Setter three-and-one-half years ago. His design assignments have included the new church school for Mount Olivet Lutheran Church in south Minneapolis, the new \$4,000,000 St. Barnabas Hospital to be constructed in Minneapolis and the Hopkins warehouse of Super Valu Stores, Inc. In the Upper Midwest area Mr. Hustad has been responsible for the design of the research-experimental laboratory of The Trane Company in La Crosse, Wis., new community hospitals slated for construction in Ely and Grand Marais, Minn., and the \$2,500,000 addition and remodeling at the Evangelical Deaconess Hospital in Milwaukee, Wis., completed last year.

Mr. Magney also graduated from the University of Minnesota School of Architecture, and has been with the firm for the past six years. He is the son of Doctor



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266 Walnut Street - St. Paul 2, Minn. CApital 4-9496 or CApital 4-9497 F. H. Magney, well-known Duluth physician and surgeon. His uncle, G. R. Magney, now retired, was one of the founders of the firm. A cousin, John R. Magnev. is a firm principal and another cousin, Charles F. Magney, is an associate. Mr. Magney has worked on the design of some of the most extensive construction projects in the Twin Cities area. These include the 1500student Alexander Ramsey Junior High School in suburban Ramsey County, Peik Hall, the \$1,500,000 College of Education structure on the Minneapolis campus of the University of Minnesota, the north central home office building of the Prudential Insurance Co. in Minneapolis, the addition to the Merchants Refrigerating Co. warehouse in Hopkins, Minn., and several new central exchange buildings for Northwestern Bell Telephone Co.

#### MACE ELECTS BORGE NIELSEN OF MINNEAPOLIS PRESIDENT

Borge Nielsen of Minneapolis has been elected president of the Minnesota Association of Consulting Engineers in the group's annual election. Mr. Nielsen, part-



Mr. Nielsen

ner in the firm of Nielsen and Bruch, Minneapolis, succeeds Al Sanford as head of the group.

William D. Schoell of Schoell and Madson, civil engineers and surveyors whose office is in the Texa-Tonka Shopping Center, was named vice-president. New secretary is John T. Baker of J. T. Baker and Associates, St. Paul. Robert L. Michaud of Richard W. Evans, Minneapolis, is new treasurer.

Willis A. Jacus, William Strum and L. D. Freedland are new members of the board of governors.

#### GERHARDT PETERSON WINS TUB ENCLOSURE

Gerhardt Peterson of Cone and Peterson, St. Paul architects, won a tub enclosure at the recent convention of the Minnesota Society, the prize being given by Kesko Products Company and Bartley Sales Co. Registrations for the prize were made at the two companies' booth.

Say "I saw it in Northwest Architect"

#### MINN-DAK PRODUCERS' COUNCIL ELECTS BISSELL PRESIDENT

John Bissell of Bartley Sales Co., Minneapolis, representative for Overly Manufacturing Co., was elected president of the Minnesota-Dakotas Chapter of the Producers' Council to succeed Joe Jester of Minneapolis Honeywell. Mr. Bissell will serve for the 1956-57 term.

**President Bissell** 





V-P Hustad



Secretary Mulcahy



Treasurer Benson

Others named at the recent annual meeting of the Council were John Hustad of The Hustad Co., representing Sanymetal Products, vice presidents; B. J. Mulcahy, Jr., of the Halsay W. Taylor Co., secretary; and Sixten Benson of U. S. Plywood Corporation, treasurer.

President Bissell is in the engineering sales field and

ARCHITECT

has been with Bartley since 1953. He formerly was with Pittsburgh Plate Glass Co., for 10 years. A graduate of Williams College, he is married and has four children. He lives in Hopkins.

#### SMILEY MAKES THREE ASSOCIATES

S. C. Smiley & Associates, Inc., Minneapolis architectural firm, recently announced the appointments of Mas Matsumoto, Leonard S. Parker and Arnold W. Hartwig as associates in the firm.



Messrs. Matsumoto, Parker and Hartwig

Mr. Matsumoto has been with the firm since 1949 and has been chief draftsman since 1952. He is a graduate of the University of Minnesota School of Architecture, a member of the American Institute of Architects and a registered architect in Minnesota.

Mr. Parker, a graduate of the University of Minnesota School of Architecture, also earned a degree as master of architecture at Massachusetts Institute of Technology. He has done architectural design work in Minneapolis for two years and was with the firm of Eero Saarinen and Associates, Bloomfield Hills, Michigan, where he was senior designer for the past five years. He is a registered architect in the State of Michigan.

Mr. Hartwig joined the firm in 1955. He attended the University of Minnesota School of Architects from 1936 to 1941 and the Minneapolis School of Art in



67

# See you at the Polls!

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Vote as you please, of course—but vote. Vote for the party and the candidates you honestly believe will represent you best.

But also vote because you believe in this democracy of ours and you want to keep it the way it is—a country where you can have your say and nobody else can say it for you.

Everybody you know will be there.

We'll see you at the polls.



#### NORTHWEST

1940. For the past twenty years he has been associated with various architectural firms in Minneapolis as draftsman, job captain and chief draftsman. He is a member of the American Institute of Architects.

#### **AL ARRIGONI ELECTED TERRAZZO PRESIDENT**

Alfred A. Arrigoni of St. Paul was named 1956-57 president of the National Terrazzo and Mosaic Association at the group's convention held in Minneapolis, June 18 through 21. He succeeded A. L. Alexander of Memphis, Tenn.

Mr. Arrigoni is president of the American Terrazzo



Mr. Arrigoni

Co., Inc., and Arrigoni Bros., Inc., and is a director of the St. Paul Builders' Exchange. He is active in community activities.

The new national president started with American Terrazzo in 1939 as a helper and has worked in every phase of the business. He served through the war to 1946 with the Army Engineers and after his release from the army was elected president of the companies. American Terrazzo has been in existence 28 years and Arrigoni Bros. for 15 years. Both are owned and operated by the seven Arrigoni brothers, Alfred, Mike, Louis, Charles, Del, Julio and Joseph.

#### NEW REGISTRANTS ANNOUNCED **BY BOARD**

The following architects have been registered with the Minneapolis Board of Registration for Architects, Engineers and Land Surveyors since January:

John C. Anderson, James J. Bofferding, Edward F. Baker, Robert L. Dunn, Eugene L. Freerks, Thomas B. Hendrix, Wallace B. Kenneth, Wilder C. King and Jack A. Myers, all of Minneapolis; Daniel W. Fourre, James B. Horne, Rolf N. Irgens, O. Reuben Johnson, Richard J. Rafferty and Robert A. Wilson, all of St. Paul; Sewell J. Mathre of Northfield; and C. Everett Thorsen of Duluth.

The NORTHWEST ARCHITECT and the Minnesota Society of Architects welcomes these new registrants to their roles as architects of Minnesota.

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#### RAIN FAILS TO DAUNT TWIN CITY BUILDERS' EXCHANGES' GOLFERS

Despite rain squalls during morning play the annual golf set-to sponsored by the Minneapolis and St. Paul Builders' Exchanges was voted a success when it took over Midland Hills Country Club on June 25.

Low gross winners in the play were Fritz Rohkohl, first, Bob Tickle, second, and Bill Dale, third. Low nets were Russ Gunther, Joe Conroy and E. E. Sparrow (drawn from ten tied). Highest score on any hole was that of Austin Lange. Nearest to pin No. 3 was Tom Ostien and No. 6 Walter Peterson. Low net foursome was that of John Lanes, T. B. Bissell, Cos Egan and Fred Watson. Thirty-seven players tied for blind bogey, resulting in the drawing of names for the prizes.

Definite idea of what went on and the fun had is derived from our pictures, which we identify in the numbered montage, left to right:

1—John Bush and Al Benzick . . . 2—Bob Jackel, George Rafferty, Wally Neal and Vern Loberg . . . 3—Howard Mason, Ed Hubbard, Joe Larson, M. A. Johnston and Russ Gunther . . . 4—Ed Young, George Townsend, Holger Mortensson, Austin Lange and Jack Homme . . . 5—Gordon Goock, Harold Gorman, Phil Hutchinson and Gerry Rauenhorst . . . 6—Irv Dahlstrom, Glen Burnett, Bob Clemens, Norb Soukup and Earl Brink . . .

7—George Townsend . . . 8—Chuck Hastings, John Baker, Ed Wiiliainen and Bruce Ashenfelter . . . 9— John Busch, Ray Thibodeau and Tom Ostein . . . 10—Ed Schroeder, Walter Buckholz, Roger Buckholz and Roy Bertelsen . . . 11—George Griesgraber, Ray Jastrow, Myron Cartwright and Julius Nelson . . . 12— Bob Hewitt, John Maher, Bob Anderson, Gordy Matson and Jack Borgman . . . 13—George Beckman, T. H. Thor, Don Katz, Ray Persgard and O. T. Otterkill . . .

14—Carl Fogelberg, Gene Lentsch, Vern Byer and Bob Geisenhayner . . . 15—Don Jorde, Sam Carpenter and Dent White . . . 16—Gene Gallagher, Rog Adamson, Mat Jones and Al LaHue . . . 17—Denton White, Bill Dale and Jerry Mundell . . . 18—Frank Scheiber, Roy Bertelsen and Tom Baldwin . . . 19—Ken Walters and Will Hamilton . . . 20—Tom Rockford, Wally Anderson, Joe Sussman, Gil Beatty and Earl Sack . . . 21—Dale Moll, Gordie Matson, Harold Anderson and Norm Henning . . . 22—Ron Lunnis, Roy Shelgren and W. E. Neal . . .

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#### MORE BUILDERS' GOLF

This second montage of builders' exchange golfers is also identified left to right in the numbered pictures:

1—Aaron Carlson, W. Johnson and Clair Armstrong ... 2—Lyle Eastling, Bill Meyer, Paul Carlson, Wayne Brock, Walter Buckholz, Ray Thibodeau, Mag Olson and Roy Bertelsen . . . 3—Bill Meyer, John McFarlane, Ray Thibodeau, S. M. Olson and Roy Bertelsen ... 4—Mag Olson, president of the Minneapolis Builders Exchange, Ed Siems, Ray Thibodeau, St. Paul exchange secretary, Bill Meyer, Minneapolis secretary, and Paul Carlson, Minneapolis director ...

5—Leo Christiansen, Finn Litsheim, Don Christianson and Ed Siems . . . 6—Wayne Brock, Bud Thorvilson, Al Benzick and Al Magnuson . . . 7—Fred Rickmeyer, Swede Nelson and unidentified gentleman . . . 8—George Townsend, Dick Hunt, Earl Schier and Ed Young . . . 9—Jack Bissell and Fred Watson . . . 10—Bill Meyer, Walter Buckholz and H. A. Lundeen . . .

11—Ray Horwath, Heine Olson and Bruce Parker ... 12—Jim Stack, Sherm Klickner, Jack Lamb and Jack Hughes ... 13—Harley Turner, Don Nygren, Bob Gish and Leo Bren ... 14—Al Benzick, Swede Holm, Tom LaNasa and Vern Byer ... 15—Bob Jackels, Dick and George Rafferty and unidentified gentleman ... 16—Tom Klein, John Larson and Don Lecher ... 17—Stan Beckstrom, Henry Lutgen and Cliff Hanson ... 18—Jim Perkins, Roy Wilds, Rog Borgencdale and Chuck Bjorklund ... 19—Ed O'Donnell, Vern Stelmack, John Baker and Clem Sparrow ...

#### NIELSEN AND BRUCH, CONSULTING ENGINEERS, APPOINT ASSOCIATES

Nielsen and Bruch, Minneapolis consulting engineering firm, have announced the appointment of Donald C. Campbell and H. Jack Hanson as associates of the



Messrs. Hanson and Campbell

firm. Mr. Campbell, with the firm since it was established, is chief draftsman in charge of the mechanical engineering department. Mr. Hanson, on the staff since the firm was established, is chief draftsman in charge of the electrical engineering department.


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#### LAYNE-MINNESOTA NAMES CONTRACT ENGINEER

Frank P. Bruce has been named contract engineer of Layne-Minnesota Company, water development company, Minneapolis, it was recently announced by Lee Rogers, president.

Mr. Bruce is a veteran in the water business, having worked as sanitary engineer with the Minneapolis Wa-



Mr. Bruce

ter Department and with the Minneapolis-St. Paul Sanitary District on tunnel construction, with the Metropolitan Drainage Commission on the report and investigation of the pollution problems of the Twin Cities and the C. M. St. P. & P. Railroad Company on construction.

A registered engineer, he attended the University of Minnesota. He is a charter member of the Minnesota Society of Professional Engineers and a life member of the Minneapolis Engineer's Club.

#### AIA BOARD BACKS MODULAR BUILDING COUNCIL

Previously announced plans for formation of a Modular Building Council with nationwide membership were reinforced by a recent supporting action of the board of directors of the American Institute of Architects. Function of the Modular Building Council will be to bring together those people most interested in improvement of dimensioning techniques in building. Its immediate goal will be to provide for development of a wider range of modular-size building materials.

Aims and functions of the Modular Building Council were outlined at the latest meeting of the AIA directors and the board took formal action in support of the new organization. It voted to authorize the Joint AIA-Producers' Council Committee to co-operate in the establishment of the Modular Building Council, which is expected to hold its initial meeting this fall.

By opening membership to individual architects, contractors and product-designers, the Modular Building Council will make possible wider participation in the current effort to speed the acceptance of modular measure. It is also anticipated that additional funds obtained through the increased number of subscribers will provide for a technical staff needed to renew work with American Standards Association A62 committees in developing a broader range of modular-size building materials.

#### PRIVATE HOMES BOOSTED TO HOUSE AGED

A strong recommendation for the expansion of private home building for housing older persons was approved by delegates of the Federal-State Conference on Aging, meeting in the National Housing Center as a special committee on housing and living arrangements for elderly people.

The conference was sponsored by the Council of State Governments and the Federal Council on Aging, the latter an interdepartmental government group created by the president to explore housing programs and needs of oldsters.

In their recommendations to the conference at large, the delegates proposed that the various states take appropriate steps to encourage the production of small, suitably designed houses built by private industry and utilizing for that purpose, wherever necessary, the liberalized provisions for Federal Housing Administration mortgage insurance contained in pending congressional legislation.

"It was recognized by the delegates that private housing, both single-family and group units, plays an extremely important role in any well-rounded program of housing for the aging," said Mrs. Irene Thrasher of Newton, Mass., a member of the Massachusetts legislature, who was discussion group leader. "We feel that the need for adequate housing for older persons presents a real opportunity to both private firms and non-profit organizations.

"A fact that should be stressed is that we ought not to be building homes for older people as such but welldesigned, more flexible homes which would include special features, such as hand rails and a minimum of stairs. Such houses would have features that would be both essential for the aging and also useful and practical for younger people just starting their families. They would be, in effect, small homes that would be attractive and salable to any small family seeking a modest-sized home."

Other recommendations by the group included:

1. Statewide meetings, to be called by the various governors, of representatives of public, private and voluntary organizations to study the housing problems and needs of the aging in their own states. Only 14 states now have active formal organizations for dealing with problems of older persons.

2. That governors include housing in the program of any state organization created for assisting older people.

3. That social security legislation be amended to permit recipients of public assistance to receive old age assistance if living in tax-supported boarding houses, such as county homes.

4. Encouragement of services in each community which would enable older people to stay as long as possible in their own homes. The delegates stated that older persons prefer their homes to institutions and that, if such services as homemaking, visiting nurses, and friendly visitors were provided and expanded, this desire could be met more widely.

5. Participation by private and non-profit groups in building housing for the aging. This would include church groups, citizen organizations and housing associations.



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6. Small homes and apartments for older people in and facing retirement who are now living in large homes bought when their incomes were substantially greater and their children lived at home.

7. A two-year extension of the Hill-Burton Act, as recommended by the president, because several states have not yet had the chance to avail themselves of the special provisions for nursing homes and rehabilitation and treatment centers.

8. Comprehensive planning by communities considering projects for older people, to include integration of such community services as recreation, nursing care and hospital facilities with the projects.

9. Broad efforts to make available to the aging the residence and settlement requirements of the various states, so that they will not lose assistance and other rights.

#### FIRE RESEARCH SECTION FORMED BY PORTLAND CEMENT ASSOCIATION

The Portland Cement Association has announced formation of a fire research section in the research department of the association's research and development division, which will be housed in one of two new buildings planned for construction at the organization's Research and Development Laboratories in Skokie, Illinois.

Clifford C. Carlson, formerly manager of the products and applications section, development department of the association, is currently engaged in planning of the Fire Research Center. Together with a Structural Development Laboratory, the building is part of a \$1.8 million construction program aimed at providing facilities for the Association's expanded research program on concrete structures and the fire resistance of concrete. Completion of the buildings is scheduled for 1957.

Carlson holds a Master of Science degree in Mechanical Engineering from the University of Minnesota. He joined the Research and Development Division of the Portland Cement Association in 1935, and in 1940, was a joint winner of the American Concrete Institute Wason Medal for his work on the rain resistance of concrete and masonry walls. In 1946 he was appointed Manager of the Structural Development Section, and in 1952 Manager of the Products and Applications Section of the Development Department. He has been closely associated with the Association's fire testing program at Underwriters Laboratories, Inc., in Chicago, since its start.

Replacing Carlson as Manager of the Products and Applications Section will be Joseph J. Shideler, who for the past 3 years has served as Development Engineer in the section. A graduate in electrical engineering from the University of Denver, Shideler worked briefly with the Western Electric Co., and the U. S. Public Roads Administration before joining the laboratories of the U. S. Bureau of Reclamation in Denver. In 1944 and 1945 he was an airways engineer with the Civil Aeronautics Administration, installing airport facilities in Alaska. He returned to the Bureau of Reclamation Laboratories at the end of World War II, in charge of a laboratory section responsible for a variety of laboratory tests and research on concrete and its field applications.

Since joining the Portland Cement Association in 1953, Shideler has been concerned primarily with development projects involving concrete masonry and lightweight aggregate concrete for structural applications.

#### NEW HOUSING FEATURES STUDIED BY FEDERAL MATERIALS PEOPLE

The most comprehensive study ever undertaken of the physical characteristics of new housing is now being conducted by the Bureau of Labor Statistics, reported the U. S. Department of Labor. The study, a sample survey, is sponsored by Producers' Council. It will cover from 40,000 to 45,000 homes which were started during the first quarter of 1956. The information will be obtained by the BLS's field staff from personal interviews with home builders. The sampling will be carried on in areas requiring building permits as well as those which do not.

While the BLS has conducted similar sample surveys for many years, none has ever been undertaken on such a large scale and never has such complete information been sought on the type of homes being built and the materials and equipment being used. When this data is compiled it will benefit the home building industry in many ways. Latest trends in housing will be established and manufacturers' markets and future production needs will be better defined.

Speaking on the value of the survey, Producers' Council President William Gillett said, "The rapid growth of the home building industry since the end of World War II has made such a survey of housing characteristics absolutely necessary. The results will alter the thinking of many manufacturers and builders. It is another important step towards keeping our people the best housed in the world."

The survey will provide information on the style and type of houses that builders are constructing, the number of square feet of floor space, the number of bedrooms and bathrooms, the number with basements or utility rooms, how the houses are being heated, what types of kitchen equipment and other equipment are being provided, construction cost and what type of building materials are being used in construction. Results will be tabulated before the year's end.



## PRODUCTS and SERVICES

Cross Section of What's NEW

#### MARVIN ADDS CASEMENT TO PRESENT LINES

Marvin Millwork, a small but expanding millwork manufacturer located at Warroad, on the Lake of



the Woods in northern Minnesota, recently announced the addition of a casement unit to its lines. The casement completes a line of window units which includes doublehung removable units, picture window units, glider window units, the Winterseal Aluminum Jalousie Prime Window Unit and the multiple use awning-hopper-casement window.

Shown here is the ARB removable weatherstripped double-hung unit with "Win-Gard" aluminum self-storing combination storm sash and screen installed. Marvin's has been offering this complete package to the trade for some time and report the practice is very acceptable.

"Factory set-up of the prime unit plus the same expert installation of the "Win-Gard" combination storm sash and screen insures a quality controlled package which affords a minimum of on-the-job labor," the company said. "While Marvin Millwork professes to still be a relatively small millwork manufacturer, it has in recent months secured the services of an architect and does have detail and specification literature available on its major window units. Inquiries for this material from the readers of NORTHWEST ARCHITECT will be promptly acknowledged."

#### "SCOTCH" TAPE'S ROLE IN CONSTRUCTION DETAILED

A new four-page manual describing uses for "Scotch" brand pressure sensitive tapes in the construction industry has been made available by Minnesota Mining and Manufacturing Co., Dept. L6-123, St. Paul, Minn.

The manual traces for quick reading how tapes are applied in sealing operations, used as masking material to save cleanup time and provide answers to special construction problems.

Thirteen specific examples of tape uses, illustrated with on-the-scene photographs, show how tapes can be employed to seal joints in concrete forms and cartons used in void construction and also to splice concrete curing blanket sections.

Other uses shown include applying masking aprons and coverings with "Scotch" brand masking tape, protecting stainless steel in curtain wall construction with a tape mask and laying plastic tape on floors for marking traffic lanes in final stages of warehouse and industrial construction.

The manual is obtainable free on request from the 3M company or its salesmen.

#### NEW MASONRY CLEANER DEVELOPED

Crete-Prep, a new non-alkaline cement and masonry cleaner in liquid form, is being manufactured by Kieffer Products Company, 2603 Hennepin Ave., Minneapolis 8, Minnesota.

Crete-Pep is a non-alkaline for-



mula of chemical compounds with remarkable cleaning power, according to its makers, yet is harmless to skin and fabrics. It removes grease, oil, rust stains, plaster leavings, mortar stains, alkaline salts, form oils, soil and weathering.

"Crete-Prep dries three times faster than water and cleans more evenly than acid chemicals," the report said. "The product has been developed for the cleaning of masonry, removal of excess mortar on new masonry construction and as a paint preparative for concrete surfaces. Crete-Prep also cleans stone, stucco, porcelain, ceramic tile and brick surfaces.

"Crete-Prep is noncorrosive, practically without fumes and can be stored easily. It is recommended in place of strong acid solution or alkaline powders and is distributed nationally through leading paint, hardware and building material distributors."

#### KALISTRON WALL COVERING BRIGHTENED

A completely restyled color line has been developed by United States Plywood Corporation for its Kalistron, the durable vinyl wall covering material. The new line represents a shift of emphasis from subdued "antique" tones to warmer, more striking colors. Kalistron, used widely by institutions in areas of heavy traffic, is made by fusing colored lacquer to the underside of a clear vinyl sheet. This sheet protects the color from stains, scratches and other abrasive wear. A suede-like flocking on the back facilitates easy installation.

A highlight of the new selection is "Shadowlines," the first figured Kalistron pattern ever made generally available. "Shadowlines" combines a warm, light color with a random tracing of fine lines. It is available in cloud white, sea green, champagne, Dutch blue, desert mauve and lime.

Twenty of the thirty-five colors in the Kalistron line are entirely new. These include flame, pastel green, tile, white grape, black, charcoal, olive, brick, maize, cocoa, blue spruce, citron, sunset orange, Riviera blue, chocolate and ivory.

All Kalistron colors and patterns are available in two embossed textures, Textured Weave and leatherlike Spanish Crush Grain. These subtle textures eliminate any "plastic look" from the material.

A calendered sheeting, Kalistron is ten times as resistant to wear as battleship linoleum. Since it is also fire resistant and easy to maintain, it is frequently specified for restaurants, hotels, schools, offices, hospitals and other institutions.



#### "PANORAMA" SLIDING GLASS DOORWALL ANNOUNCED BY MODERN SPECIALTIES

The "Panorama," a top quality, all-aluminum sliding glass doorwall designed specifically for the volume builder, has recently been announced by Modern Specialties, Inc., Gardena, Cal., an affiliate company of Steelbilt, Inc.

"Mass produced at low cost, the

ARCHITECT

"Panorama' offers exceptional styling in a lustrous satin finish that harmonizes with every type of home design," the announcement said. "Incorporating new conceptions in doorwall design, the 'Panorama' has overcome the weatherproofing problems usually encountered in low cost sliding glass doorwalls. Top and bottom rails and center interlocking stiles have been engineered with Twin-Seal Silicoated Mohair Pile Weatherstrip and the closing stiles have been recessed into an aluminum jamb channel fitted with double vinyl extruded shapes that cushion and weather-seal the sliding doors as they close. Wind, cold, rain and dirt are completely locked out."

Available in the most popular variety of sliding arrangements in a wide range of sizes, the "Panorama" offers an "opportunity to architects and builders of tract and custom homes to make a truly high quality, all-aluminum sliding glass doorwall a part of every new or remodelled home at amazing low cost."

#### Be active in your chapter!



#### USE THAT ENVELOPE!

Inserted in the binding of this issue is an envelope of importance to many of our readers. To continue receiving the Northwest Architect and its outstanding features, please remove and use the envelope right now.



PLASTIC DRINKING FOUN-TAIN ANNOUNCED BY HAWS A new multiple, wall-mounted drinking fountain has been introduced by Haws Drinking Faucet Company, Berkeley, Cal. "Of reinforced fiberglass plastic, this new model is extremely light in weight, yet has unbelievably high strength properties," the company said. "Because of this light weight installation is greatly simplified, no heavy



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VANDER HEYDEN, Inc. Milwaukee, Wisc. wall mounting brackets are necessary.

"This three-bubbler, wall-mounted drinking facility includes all of the Haws sanitation features. Three angle stream fountain heads are raised and shielded to prevent direct mouth contact and are vandal proof mounted to the receptor. Valves have automatic stream control and are self-closing. All exposed fixtures are polished chrome plated brass.

"With its attractive lines and choice of colors, Cerulean, Pistachio, Coral Accent, Yellow Mist, Grey Satin and white, this new fountain should prove a great asset to modern design."



#### VERMICULITE ALSO BUILDS A FIRE

The popularity of outdoor charcoal broiling has initiated a new use for vermiculite, according to makers of that familiar construction material. We pass on their information to any broiler enthusiasts among our readers.

• A layer of porous material over the bottom of the brazier is needed to get the fire started and to protect the bottom of the burner against the intense heat of the coal.

Brazier manufacturers have heretofore recommended pea gravel but charcoal cookery fans say that a bed of vermiculite about two inches thick serves both purposes much better. The material is a natural insulator and keeps the bottom of the burner cool.

A vast number of tiny air cells in the vermiculite granules make the



fire start faster and burn more evenly than when pea gravel is used as a base. Meat can be cooked in less time, too, because the shiny surfaces of the granules reflect the heat upward.

Cooking finished, vermiculite raked over the coals smothers the fire promptly. Feather-light vermiculite is also convenient to handle and transport, they pointed out.

#### CIRCULA'TOR PIPING SIM-PLIFIED BY WORTHINGTON

A three-valve manifold cluster, designed by Worthing Corporation for use with its induction circulators, completely eliminates intricate layout of the piping connections to the unit normally prepared by the piping contractor. This cluster also pro-

vides exact means of getting proper fit of all piping parts involved in the water feed to the units.

Exclusive design of the valve cluster permits full adaptability to left or right hand connections of the coil simply by rotating the two main connections 180 degrees. These clusters combine inlet and outlet stop valves and the bypass valve all in one casting for installation on Worthington induction circulators used in high pressure induction systems.

This combination enables the piping contractor to purchase complete valve and piping assembly, ready to assemble to coil ends. The assembly is complete with flare nuts to mate on coil ends. The three-valve manifold connections are available with flare ends or O.D.S. The clusters are also available for use with pneumatic control valves, manual control valves and self operating type automatic control valves.

Worthington introduced its induc-

ARCHITECT

tion circulator several months ago. Used in the high pressure induction systems now so prevalent in multi-story buildings, the induction circulator is a room air conditioning unit operating on the high pressure air induction principle and with a central system, for climate conditioning of perimeter and inner areas.

#### GAS FIELD-TESTS AIR CON-DITIONING UNITS

The gas industry is searching for the best all-around air conditioning system possible and gas companies in half the 48 states are field testing revolutionary new gas air conditioning units in sections of the nation where the severest climatic conditions prevail.

One such unit, according to the researchers, will run for five full cooling seasons (10,000 hours) without major overhauling and more than 2,000 hours without servicing. Best of all, operating costs (including gas, electricity and water) are half the cost of systems of the past.

Prototype models of the 150 units



already produced and being field tested include a gas heat pump, improved absorption type equipment and a gas air conditioning system powered by a gas engine. "In addition to evaluating the different methods now available, the gas industry is sponsoring the most intensive research program ever conducted on air conditioning," industry spokesmen said. "Experiments are being conducted by outstanding research organizations. Many homes and industries have been enjoying all-year gas air conditioning for many years. The American public, it is predicted, will find that gas is the finest yearround air conditioning fuel on the market from the standpoint of comfort, economy and efficiency."

#### FABROW KEEPS WEATHER OUT

Outdoor temperatures "really stay on the outside of extended window wall expanses with the new Fabrow rubber insulated ventilating sash," it has been reported by Fabrow Manufacturing, Inc., Toledo, Ohio.

## NOW AVAILABLE TO YOU . COST DATA OF MASONRY WALLS MASONRY WALL COST This study which will ESTIMATING DATA assist you in arriving at average costs for various types of masonry walls can be an inval-

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Structural Clay Products Institute, Region 6

uable aid. These costs are available for any area or vicinity. Write or call now. An engineer will be glad to visit with you and explain this up-to-date and accurate study.

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"Fabrow has achieved the tightest weather seal ever with a new sash which combines the natural insulating qualities of its own beautiful wood with the plus-storm-strength of one-piece Neoprene insulation. Insulating glass completes the combination for triple storm protection," the company said. "We now have the only windowall frame we know of with a built-in, one-piece molded rubber insulation that covers every ventilating sash."

Both Fabrow's "Standard" and its "A" series sizes take Libbey-Owens-Ford and Pittsburgh Plate insulating glass.

#### AJAX ADDS NEW CABINET HARDWARE

A new line of tulip design drawer knobs and complimentary back



plates has been announced by Ajax Hardware Sales Company, Los Angeles, Calif.

According to the manufacturer, this No. 431 Tulip Knob is available for the first time made of solid die cast zamak metal, thus reducing the cost of this item to reach the moderate priced market.

The No. 431 knob and No. 043 diamond (or square) back plate are available in polished chrome or brass, dull chrome or brass, dull bronze and dull black US standard finishes.

All items are unconditionally guaranteed, it is reported. Complete catalog information is available from the manufacturer.

#### IMPROVED TRANSPARENT LAYOUT TAPE ANNOUNCED

Labelon Tape Co. has announced a new type pressure-sensitive, transparent layout tape providing several important advantages. In the new tape, symbols are printed on



the top of the lower of two layers so the printing is completely protected from contact at all times. It cannot be scratched or marred while the tape is being unwound from the roll, during application or removal or while in use. Printing remains permanently clear and sharp, protected both above and below by layers of tough, transparent acetate.

Since the tape is of two-ply construction, it is stronger and stands rougher handling, its makers reported. There is no chance of breakage while tape is being stripped from the roll. The top layer eliminates any possibility of cracking of the printed symbols and, by forming an air-tight seal over the printing, makes for longer life in the roll.

"Inasmuch as there is no printing on the adhesive side, there is greater adhesive area and the new Labelon Transparent Layout Tape has outstanding adhesive quality," the announcement said. "No backing strip is required and the tape is ready for use immediately upon being stripped from the roll.

"A recently produced booklet entitled 'Layout Tapes for Industrial Planning,' discussing the advantages of using pressure sensitive layout tape and giving a detailed description of the correct procedures, will be mailed on request. A complete price list is included, covering the more than 80 symbols now available. Address the Labelon Tape Co., Inc., 450 Atlantic Ave., Rochester 9, N. Y."

#### ONAN DEVELOPS SPECIAL ENGINE VENTILATOR

D. W. Onan & Sons, Inc., Minneapolis, has announced the recent development of a new, unusual system of positive, controlled ventilation for its line of air-cooled engine driven equipment.

Called Vacu-Flo, this unique cooling system is an optional feature on all Onan electric plants in sizes



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Interior drapes architects can specify. Perfectly designed to blend with your plan—to complement functional, modern architecture. Sharpe Vertical Drapes of fabrics allow limitless control of light and air . . . the on/y practical drape for modern "window wall" buildings. Ideal for office buildings, hospitals, motels, or schools. A growing complement to practical, modern architecture—created for approval of discriminating clients on recommendation of leading architects.

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ranging from 500 to 5,000 watts. Onan "CW" models, in  $7\frac{1}{2}$  and 10KW sizes, have Vacu-Flo system as a standard "built-in" feature.

The Vacu-Flo cooling system is unusual in that it operates exactly in



reverse of the conventional cooling methods. A large centrifugal blower, mounted on the front end of the engine crankshaft, pulls cooling air to and over whatever component is directly connected to the engine, as for example, a generator, used to make a complete engine-driven electric generating set. This cooling air continues its travels over the engine cooling fins, thereby removing the engine heat.

This heated air is expelled by the blower through an outlet duct which



can be directed in any direction. The duct opening on the air housing can be extended to reach the outside of the building.

The compartment housing the engine-generator combination need be only slightly larger than the unit itself. Thus a designer is saved many installation problems, and in fact, can plan on actual "buried" installations. This also makes soundproofing more feasible and less expensive . . . and makes it certain that by the complete and positive ventilation of the compartment or room all poisonous or explosive gases are completely removed.

Thus Vacu-Flo cooling makes more safe installations of this type of engine-driven equipment in basements, garages or boiler rooms where people are working and is ideal for below deck installations aboard marine craft.

In extremely cold weather, engine running temperatures can be maintained by using thermostatically controlled automatic shutters in the air outlet scroll.

#### HYDRANT ASSURES CONSTANT FLOW

The introduction of a new frostproof yard hydrant to their Monitor line has been announced by Baker Manufacturing Company, Evansville, Wis. The patented plunger assembly consists of regular cup leathers and a standard seat washer which permits a constant flow of water at any desired setting. The plunger arrangement prohibits' escape of water through the drain hole while in use and automatically drains after each closing to prevent



NORTHWEST

freezing. The simple central movement of the lever cam controls any flow set between zero and maximum flow

Illustrated literature with details. specifications and cutaways, is available.

#### ASPHALT LINER USED FOR POOLS, DITCHES AND PONDS

"Hydromat" Asphalt Liners, specifically developed to provide a practical method of controlling erosion and water-seepage in irrigation

feet long, is easy to handle and can be stored inside or out." For complete information write the company.

#### AUTOMATION'S RESULT

Experts predict that through automation our living standards will be doubled by 1975. The increase in use of automatic machines has taken great strides during the past several years. Some of the hesitant in this development are recalling the "Technological Unemployment" scare of the '30's.



ditches, canals, reservoirs, storage ponds, pools, etc., have been placed in production by W. R. Meadows, Inc., 7 Kimball St., Elgin, Ill.

"Hydromat" Asphalt Liner is a flexible material with an asphalt and fibre core sealed under heat and pressure, between two liners of asphalt saturated kraft to which is bonded an independent weather coating. "Hydromat" has a vapor permeance of only .0066 perms, is resistant to temperature changes, rodents and soil chemicals and will not rot or decay.

"The liner is quickly and easily installed by untrained labor without the use of special tools or equipment," its makers said. "It is extremely flexible and will expand and contract with soil movements without rupturing or breaking bond.

"The use of 'Hydromat' allows you to install a waterproof monolithic liner that is ideal for irrigation projects, soil conservation programs, industrial reservoirs and storage ponds, municipal projects, residential swimming pools and military installations. 'Hydromat,' available in sheets 4 feet wide and up to 15



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## Minn. Mining & Mfg. Co. a Morse's 'One-Coat' User



Pictured is an aerial view of the Minnesota Mining & Manufacturing Co. tape plant at Hutchinson, Minn.—one of more than 20 plants located throughout the world. In addition to "SCOTCH" Brand Tapes, 3M's widely diversified products include abrasives, adhesives, roofing granules, printing accessories, ribbons and chemicals. Miller & Miller, Hutchinson, were general contractors for the plant.

The Minnesota Mining & Mfg. Co. cleaned and sealed the cement floors of its Hutchinson, Minn. plant with Morse's "One-Coat" to eliminate concrete chipping and dusting to provide a non-slippery floor surface. More than just a concrete sealer, hardener and dustproofer, "One-Coat" protects against severe wear, harsh cleansing solutions and corroding chemicals . . . is an ideal neutralizer and primer for paints, tile and waxing . . . restores old blackened floors to original newness. "One-Coat" requires no mixing, no diluting, no multiple applications. Write for complete information.

F. J. MORSE CO., INC. Rossmor Bldg., St. Paul, Minn. CA 4-1995 Member-St. Paul and Minneapolis Builders Exchanges



#### NEW FAUCET HAS ONLY ONE MOVING PART

One handle which operates just one moving part is the heart of a new lavatory faucet by Delta, a division of Masco Screw Products Co., Dearborn, Mich. Operation of the



single handle controls volume of flow and temperature, the makers pointed out.

"In Delta faucets you have a precision ground, specially hardened ball operating in a ball socket joint," the company said. "The faucet is precision engineered, offers positive water temperature control, gives smooth, effortless operation, has a jewel-like finish of mirror depth chrome, is competitive with any quality fixture and offers troublefree service."

The faucet is available in four models and detailed information can be had from the company at 12825 Ford Road in Dearborn.

#### THIN TROFFER INTRODUCED BY LPI

A troffer requiring "less than onehalf the depth of ordinary troffers" is the outstanding feature of a new line of three "Thin-Lite Troffers" introduced by Lighting Products, Inc., Highland Park, Ill. Actually



the fixtures require only 27% inches above the ceiling line. They are designed to save space for air-conditioning ducts, piping, etc. The LPI Thin-Lite Troffer series offers three types of shielding and diffusing media. The one-piece polystyrene louver panel has cells that are  $\frac{5}{8}$ " x  $\frac{5}{8}$ " x 9/16" and the shielding is 42 degrees x 42 degrees. The second medium utilizes the Corning No. 70 low brightness flat glass lens. The third is a formed acrylic diffuser,  $\frac{1}{8}$ " thick, which has outstanding dimensional, and color stability. The diffusers are framed and hinged, and are removable from the fixture without the use of tools, for easy servicing.

The Thin-Lite Troffers have an unusually clean-cut appearance since there are no exposed hinges, latches, screws or bolt heads to mar the appearance from below.

All three models of these luminaires are 48" in length and each is equipped with two 430 M.A. rapidstart four-foot lamps.

Colorful literature containing illustrations of and detailed information on the new Thin-Lite Troffer is available and can be obtained by writing the company.

#### NEW LINE OF ALUMINUM SAFETY TREADS MADE BY WOOSTER

A completely new line of aluminum safety treads is being introduced by Wooster Products, Inc., of Wooster, Ohio. This new tread,



trade name Super-Grit, features an improved design for better appearance, longer life and more safety.

Since all abrasive metal safety treads depend primarly upon diamond-hard grains of aluminum oxide for their anti-slip qualities, new Super-Grit Treads contain 65% more abrasive grains than any other tread on the market.

The new Super-Grit comes in two widths, 3 inches and 4 inches, and

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Academy Rubber Locker Trays

extend the life of lockers by preventing rusted bottom seams, cushioning against

impact of hard objects, ending chipped and scaling bottoms. . . . Standard sizes are molded to fit standard locker sizes. . . Just press them into place. No installation equipment needed.

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Molded of durable rubber compound with snug fitting lip, beveled front for door, Academy Locker Trays seal out damaging moisture from sweaty apparel—rubbers, towels, socks, slickers, etc.—getting into bottom seams to start rust and destruction of locker. Protects clothing from rust stains. Tray easily removed for cleaning. They save their slight first cost many times over in locker installations. Write for prices, sizes and colors available.

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three nosing styles. Nosing depths range from  $\frac{1}{4}$  inch to  $1\frac{3}{4}$  inches.

Another Super-Grit feature is Time-Saver anchors. Time-Saver anchors are made of the same noncorrosive heat-treated aluminum as the base of the treads and the rivets which hold anchors to treads. With Time-Saver anchors there is no danger of the treads and anchors being insecurely fastened. When the treads arrive in the field, the anchors are easily bent down to a 45-degree angle and are ready for installation, eliminating 90% of the time spent in attaching conventional anchors.

Super-Grit treads can be curved and mitred in lengths up to 12 feet.

#### FIBERGLAS PANELS MAKE SHATTERPROOF SKYLIGHTS AND SIDELIGHTS

Makers of Filon Fibers say it is an ideal material "for industrial and commercial use." It is a translucent building material that is strong yet light in weight eliminating the need for costly framework, a material impervious to weather, acids, fumes, corrosion and needs no expensive painting or maintenance, a material that can easily be worked, cut, sawed, nailed or drilled.

Filon building panels are made from a combination of polyester resins reinforced with Fiberglas and Nylon. It is made in standard corrugations to nest with corrugated metals or asbestos. Flat sheets are available in various widths and lengths as well as in continuous rolls to offer great flexibility of design for any type of installation.

"Industrial engineers and architects have found that Filon shatterproof plastic panels eliminate the costly problem of replacements due to breakage. Once installed, they require virtually no attention," its makers reported.

"Industrial plants that have utilized Filon for sidelighting or skylighting report their employes comment favorably on the soft light effect that eliminates harsh sun glare."

Fire retardant plastic panels, newly developed by Filon Plastics Corp., have been tested and favorably classified by Underwriters Laboratories. Each panel carries the U.L. label showing flame spread rating 40 to



75, the best rating thus far announced for this type panel.

Filon panels add a safety factor in industrial installations, the company said, removing the danger of flying splinters of glass in case of explosions or sudden impact. These panels are most successful as sliding doors. When inclement weather makes it necessary to close the doors it is done without any appreciable loss of light in the interior of the shops.

Filon panels, flat or corrugated, form effective covering for loading docks. In offices, partitions made of Filon panels create privacy and serve to divide large areas without loss of light. In addition, their extreme light weight makes them very easy to move at will.

Shatterproof translucent panels in a gymnasium eliminated the need for expensive wire guards and wiredglass windows while providing an excellent source of diffused light that does away with blinding sun glare. One entire wall was built with Filon panels.

Flat Filon panes are available for glazing in metal or wood sash. Information and detailed drawings showing how to use Filon translucent building panels for industrial and commercial improvements are available by writing Filon Plastics Corporation, Industrial Dept., 2051 E. Maple Avenue, El Segundo, California.

#### ZEGERS ANNOUNCES "TAK-OUT" WINDOW EQUIPMENT

Zegers, Inc., Chicago, has announced development of new window equipment for double-hung wood windows that makes them removable, yet provides completely efficient weatherstripping.

Called "Tak-out," the equipment



for one side of the window is a specially designed aluminum jamb runway with attached spring balances. The runway is backed by a thick layer of TK-35, a new, resilient material. TK-35 maintains a constant pressure against the window and jamb, keeping the window tight fitting and weatherproof, yet is easily compressed for window removal. TK-35 is impervious to all weather exposures and retains its resilient qualities for the window's lifetime.

An aluminum jamb runway on the other side of the window, plus horizontal aluminum weatherstrips for head, sill and check rail give the window permanent dirt, draft and weather protection. Zegers, Incorporated, also manufactures Duraseal, Simflex and Dura-glide equipment for wood windows.

For further information, write Zegers, Inc., 8090 South Chicago Avenue, Chicago 17, Illinois.

#### SILENT-VENT AXIAL ROOF VENTILATOR INTRODUCED BY DETROIT



Silent-Vent, a new industrial roof ventilator that combines greater operating efficiency with "neither seen nor heard" qualities, was introduced recently by the Detroit Blower Co., Chicago fan equipment manufacturers.

"New hollow, die-formed airfoil fan blades improve exhaust efficiency

ARCHITECT

and still allow lowest possible wheel tip speeds. This means less noise and considerably less power consumption to operate the ventilators," the company pointed out.

"But the real secret of silent ventilating is in the head. Exhaust air leaving the axial wheel spins upward where it is caught by special guide vanes, which are an integral part of the head, and spun out into the atmosphere. This process, combined with the low wheel tip speed, reduces noise level and turbulence to a minimum."

An innovation in Detroit's rugged fan construction lowers the motor into the square-cut mounting base providing a much lower silhouette.



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LAMINATED

folding doors



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Stremel Bros. Mfg. Co	69
Structural Clay Products Institute	82
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Twin City Brick Co Twin City Testing & Engineering	54
Twin City Brick Co     Twin City Testing & Engineering     Twin City Tile & Marble	54 69 40
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Twin City Brick Co.     Twin City Testing & Engineering.     Twin City Tile & Marble.     Unit Structures     U. S. Motors Corporation.     Venice Art & Marble Co.     Villaume Box Co.     Western Mineral Products.	54 69 40 64 13 74 62 4
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### BUNGALOW SIDING

This outstanding home, above, illustrates the use of 3/4x10 Clear Heart Vertical Grain Palco Redwood Bungalow Siding stained natural combined with a buff colored brick. Note the continuation of the wall to form an enclosed patio area for this corner location.

The church, lower right, shows the use of  $\frac{3}{4}$ x10 Reawood siding painted white with 1x8 Redwood V-Joint finished with a natural stain.  $\frac{3}{4}$ x10 was also used on the large duplex shown above right.



#### PALCO REDWOOD BUNGALOW SIDINGS

- 1. Available in 3/8 x 8, 5/8 x 10, 3/4 x 10, 3/4 x 12.
- 2. Come in long lengths (up to 20 foot).
- 3. Bundled one length to the bundle.
- 4. 100% vertical grain to lay flat and hold paint 6 to 8 years (longer than any other siding material).
- 5. May be left natural (no finish) or stained. Clear Heart Redwood will not rot.





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