Master Roofs Cover the Great Midwest

Master Roofs... wherever you look!

For over 30 years, Nelson's Master Roofs have been pleasing homeowners in the Midwest... gracing their homes with a colorful beauty and architectural charm.

Behind this eye-appeal so satisfying to homeowners and architects alike is a manufacturing process that has made the B. F. Nelson Co. the greatest name in Midwest roofing.

Master Roofs are two-way tested for durability and protection... in the factory and in actual use. As a result, Master Roofs are made to easily withstand the soaring temperatures and wintry blasts of this vigorous climate... truly made "best for the weather's worst."

THE B. F. NELSON MFG. CO.
MINNEAPOLIS, MINNESOTA

Serving the Great Midwest for 86 Years
NEW, MODERN MIRACLE
TRANSLUCENT
GLASS FIBER PANEL

ALSYNITE is an amazing new translucent structural glass that solves hundreds of building and designing problems. ALSYNITE adds a distinctive charm to patios, skylights, greenhouses, windows, partitions, sun and wind shelters, awnings, shower stalls, cupboard doors, movable screens.

New and different beauty and charm—at low cost.

- TRANSLUCENT
  Privacy with maximum light . . . diffused, shadowless, glareless.

- WEATHERPROOF
  Impervious to all weather conditions. Excellent insulating qualities—almost twice that of glass.

- PERMANENT-SHATTERPROOF
  Will not crack, craze, warp, sag, buckle, rot, or mildew. Resists mild acids and salt water.

- COLORFUL
  Seven beautiful translucent colors—soft, pleasing pastel tones that create harmonious interiors.

- LIGHT IN WEIGHT-STRONG
  Weighs but 8 ounces per sq. ft. Great impact and load strength.

- EASY TO USE
  Cut, saw, drill, nail, screw or bolt with ordinary tools, or lop with translucent adhesive.

- ECONOMICAL
  ALSYNITE daylighting saves 30% to 80% in cost to you. No special framing or labor. Requires but lightest of structural supports. Maintenance free.
HOW TO INSTALL

To Cut!
Cuts easily with any metal cutting hand or power saw, shears or abrasive power tool.

To Drill and Punch!
Ordinary high speed drill, brace and bit or sharp punch may be used. For best results, back ALSYNITE with board when drilling or punching.

To Secure!
You can nail, screw or bolt ALSYNITE in place, and it can be installed in the same manner as corrugated metal. Lead headed nails or neoprene washers should be used for weather tightness. Before bolts or screws are used, first drill or punch hole slightly smaller in diameter than the bolt or screw. Fasteners of rust-proof metals should be used. ALSYNITE'S own translucent adhesive secures ALSYNITE to itself or wood, metal, concrete and other materials.

Accessories!
Corrugated contour moldings of metal, wood, rubber and asphalt are available for ALSYNITE installations.

SUGGESTED CONSTRUCTION DETAILS

**Corrugated Sheet Sizes**
- 26", 27½", 34", 40" widths x 8', 10', 12' lengths. Available in 1½", 2¼", 4½" and 2.67" x ½" deep corrugations.
- Other patterns and sizes of corrugated and flat ALSYNITE made on special order.
- ALSYNITE is also available in opaque and transparent panels.

**Colors**—Opal, Aqua, Lite Green, Leaf Green, Maize, Rose, Moonglow • Special colors made on order.

**Flat Sheet Sizes**
- 26" and 34" widths x 4' and 8' lengths.

**HOW TO INSTALL**

**for ROOFS**

**For WALLS**

**DETAIL AT UPPER EDGE**

**FLASHING ARRANGEMENTS AT UPPER EDGE**

**DETAIL AT LOWER EDGE**

**DETAIL THROUGH PURLINS**

**DETAIL THROUGH RAFTERS**

**DETAILED THROUGH WALL WHERE ALSYNITE IS APPLIED TO INSIDE OF FRAMING**

**DETAILED THROUGH WALL WHERE ALSYNITE IS APPLIED TO OUTSIDE OF FRAMING**

**ACCESSORIES**

Corrugated contour moldings of metal, wood, rubber and asphalt are available for ALSYNITE installations.
SWEDEN

PEOPLE 7,000,000—SQUARE MILES 170,000
The Population of New York City
In an Area the Size of California

SWEDEN IS A MONARCHY on a base of political, economic and cultural democracy. Practically all of Sweden's industry and trade is privately owned. The exceptions are tobacco, railroads, beverage alcohol, most hospitals and about one-third of electric power.

SWEDISH SOCIAL WELFARE is not very different from the way the American citizen is now taken care of and helped by his government. Even the most conservative Swede would not think of giving up the State and National provisions for social welfare; nor would we.

SWEDEN IS REALLY MORE THAN "THE MIDDLE WAY."
This term too strongly suggests what is only average. Sweden is better characterized as "a growth point", a live PROCESS, by all the people, to achieve the best for themselves. The high living standards are due in part to a century and a half of peace. Professional standards are equal to any; superior to most. W.G.P.
University of North Dakota Field House & Gymnasium, Grand Forks, N. Dak.

Dance studio floor constructed of Connor "LAYTITE" Continuous Strip flooring, second & better grade 25/32"x2\(\frac{1}{4}\)"x9" flat grain maple... set in mastic over corkboard. This type of floor is exceptionally versatile and can be used in edge or flat grain in a variety of thicknesses and face widths. May be installed below, on or above grade using a # 1034 cushion mastic for waterproofing and added resiliency and set in "LAYTITE" 600 cold mastic.

ARCHITECTS:
Wells & Denbrook, Grand Forks, N. D.

GENERAL CONTRACTOR:
Johnson & Gillanders, Grand Forks, N. D.

FLOORING CONTRACTOR:
W. A. Gerrard Co., Minneapolis, Minn.

Specified "Laytite" regular strip flooring on gymnasium wall (18' high x 93' long) greatly increased resiliency of playing surface. Also used on walls of three hand ball courts—not illustrated.


W. A. GERRARD CO.
Flooring Contractors & Engineers
3253 So. Bryant Ave. Minneapolis 8, Minn.
Do you need stacks, breechings or special steel fabrication?

- If you need special equipment ... something unusual ... call Bros, Minneapolis. Bros can build it!

Or, if you need only standard equipment, but want it to be of fine design—efficient and economical ... call Bros, Minneapolis. Bros can supply it!

And, if your special equipment or standard installations break down ... and you want fast, reliable service ... call Bros, Minneapolis. Bros can repair it!

Here's why we can make these statements:

Bros has the engineering skill ... men fully trained in the principles of boilers and stokers and special steel fabrication ... experienced in meeting the diverse demands of large and small plants.

Bros has the experience ... 66 years in providing industry with a wide variety of reputable, job-proven products give Bros the invaluable manufacturing "know how."

Bros has plant facilities (unmatched west of Chicago) which permit the handling of any type of steel plate work from \( \frac{1}{8} \)th inch to 1\( \frac{1}{2} \) inch ... and production in large quantities.

Bros has repair and installation men ... boiler makers and certified welders of outstanding ability.

All of this special "Brosability" for both your special and standard repair and installation jobs is available by simply calling Bros, Minneapolis.
"TO ENVISAGE DEMOCRACY as a mechanical, political system, merely To place faith in it as such,—or in any abstraction is To foster an hallucination, —To join in the Dance of Death; —To confuse the hand of Esau with the voice of Jacob.

THE LIFTING OF THE EYELIDS OF THE WORLD IS WHAT DEMOCRACY MEANS.

Louis H. Sullivan in "The Autobiography of an Id"

THE WORD EMPIRICISM became fashionable a few years ago to describe the latest development in Swedish architecture. Empiricism may be a misleading description. Architecturally "empiricism" by itself has no more specific meaning than the word "modern." Regardless of the name, what is happening in Sweden is important: the sincere desire among architects to build so that we, the men, women and children who use land and buildings will become free and happy and will understand the great and creative beauty of life.

In architecture as in most other respects Denmark, Finland, Norway and Sweden are so closely related that they should be regarded as one unit. What is to the credit of one is usually to the credit of the group.

Swedish architecture has long been eclectic. Culture, styles and forms were usually borrowed from Southern Europe, especially so for the buildings of the government and the upper classes. But a native, functional architecture was always maintained as the basic structure of all buildings. This regional building, natural for climate, landscape and available materials had its root in the strong, stubborn and individually-minded peasantry, which always has been the moral and physical center of the nation, electing kings but also dethroning them. In their buildings these free-born men of the country were usually able to steer clear of direct foreign influences. The charm and architectural beauty of their farm houses, the naturalness and complete integration with the landscape are exciting. The wood joinery of their log structures was so perfect that the buildings still stand after three or four centuries of continuous service.

The Swedish people have been self-governing in a democracy similar to that of today since their first organized state was formed around the year 600 A.D. No slaves; one man—one vote of equal value in the lawmaking body.

The travels of the Vikings and the trade connections they initiated brought the first foreign influence to Scandinavian architecture. Danes and Norwegians went West to England, France, Spain or Sicily, or out over the Atlantic to Iceland and North America. Swedish Vikings went East across the Baltic and down through Russia on her rivers to Constantinople and even to Greece, where they established a trading station at the port of Athens. History and legend are mixed as to when and how contact with the East began, but it is true that one group of early Swedish churches from about the year 1000 A.D. show decidedly Byzantine forms.

Many medieval Swedish buildings, whether influenced from East or West, have the quality of a piece of sculptured jewelry. Nothing can be added, nothing subtracted without disturbing the architectural balance. Exteriors and interiors are rough hewn and sometimes sculptured with an exquisite sense for textural values. The decoration, whether in sculpture or painting, is usually extensive and naively simple. Thus the common man satisfied his inner demand for enrichment of his environments.

In our days cultures all over the world are fused together—sometimes painfully—because of our technical advancement and the diminishing of space and time. Scandinavia is no longer an out-of-the-way place. As a result Swedish modern architecture is very progressive. It combines excellent craftsmanship with high-
level building techniques. The design is clean and simple, solutions honest and architecturally straightforward. Shortcuts from stage or advertising art are not being used. The valuable portions of these arts ought to be utilized, however.

The new empiricism may well have the same origin as the truly functional building art of old Sweden. It is good only if the true function of the society of today is the governing factor. Otherwise it is a step backwards.

Significant for modern Swedish architecture is its close connection with the people. Architectural progress is to a large extent synonymous with social progress. The wonderful social welfare program is of great importance in all fields of modern life. The far advanced City-planning could only have been developed through a voluntary co-operation for the social welfare. People and architecture are growing together from within in a peaceful, democratic way. Extremes of modes and styles are rare. This is not to say that the architecture always is good, only that its foundation is excellent.

Swedish social welfare, the greatest good to the greatest number, has always been of importance, seldom however going too far in any direction.

Every citizen is given equal rights. Rich or poor, he is provided with free disability insurance, sufficient old age pension in the form of salary, which is taxable like any other income. Part expenses are allowed when a baby is born. The inexpensive and excellent hospitalization is by no means inferior to that of the United States. Housewives with low income get a two weeks paid vacation. Medicine is an intermixed private and civic enterprise. The doctor if he works in the city-owned hospital usually has his private practice on the side. His income is high. An average Swedish citizen, even the most conservative one, would not think of changing the fundamentals of social welfare, for which he is taxed as an average only about $25.00 per year. Education and other benefits are included in this amount.

Contrary to American belief almost all of Sweden's industry and trade are privately owned. In a few cases joint state and private ownership, with private management is practiced. The powerful food co-operative, "Konsumentföreningen" or "KF" as well as the rather few housing co-operatives actually behave as private enterprises. Co-operatives have no connections with the government and have been started, managed and brought into their present position only by use of the same business methods being used by any private enterprise. Generally they have raised quality all along the line and lowered prices with private firms following suit. When "KF" in a most dramatic and strategic move started the manufacture of electric lamp bulbs, breaking an international trust, prices were cut in half still permitting a profit to private business.

In judging Swedish architecture one must take the climate into account. Stockholm is located as far north as Anchorage in Alaska. However, because of the Gulf Stream outside the Norwegian coast, winters are fairly mild, summers lovely. The long and dark winters force people together because of both psychological and practical reasons. The summer is a continuous exuberant feast. This is the reason why an astonishingly large per cent of people live in apartment buildings but dream of the midsummer-countryside and their own house. But it is also a matter of habit. Due to modern science the one-family house is no more a technical problem. It is actually available to everybody. If city authorities, as in Stockholm, would cease to wish, childishly, for a metropolis and would build super-highways, instead of makeshift mole-subways, city evolution would change considerably and people would reach their dreamed-of goal faster.

Swedish art and architecture, from about 1890 to 1920, can best be described as national romanticism. The leading men of building were Boberg, Clasen, Westman, Wahlin and Ostberg. Boberg and Ostberg as young men of 25 went to the Chicago Columbian Exhibition in 1893. Later when Boberg built the Stockholm exhibition of 1897 he was largely influenced by Louis Sullivan and the Transport Building of the Chicago Fair. Even the ornamentation is similar.

The best known building of this period is the Stockholm City Hall, completed in 1922 after two decades of building, tearing down and re-building. Every detail was specially made by the best craftsmen and artists available. The now famous Swedish handicraft solved the complicated problems of the interior design. Ragnar Ostberg was the architect. Although the architectural language of the city hall would not be accepted today, the building is excellent.

During the 1920's there was a short classical intermezzo before the sudden break-through of the functionalism, which came with the Stockholm exhibition in 1930, its character and objectives largely established by E. G. Asplund. This opened a quest for better dwellings, apartments with air and sun. The former massive buildings with apartments facing in only one direction were replaced by thin "lamella" or "point" buildings—

(Continued on Page 37)
Optimism for the future of a great profession was expressed by architects at the annual convention of the Minnesota Society of Architects as they discussed and heard discussed the major problems of today's practice. They chose Rheinhold Melander of Duluth as their 1952-53 president and selected his home city for the 1953 convention.

Other officers chosen are Donald Haarstick of St. Paul as vice-president, Winston A. Close of Minneapolis as secretary and C. H. Smith of Duluth as treasurer. E.

AIA chapter heads talk—T. J. Shefchik, president, Duluth, George Townsend, president, St. Paul, Clair Armstrong, president, Minneapolis. Richard Cone of St. Paul, 1951-52 president, and B. J. Hein of Albert Lea are holdover directors, joined by newly elected directors, E. D. Corwin of St. Paul, Oscar Lang of Minneapolis and Louis Pinault, former president, St. Cloud.

The St. Paul convention was crammed with speeches, round-table discussions and displays of materials and equipment so conventioners spent well filled days threshing out their personal and office problems. In this connection the “Bull Session” was an innovation well received. The lighter side of convention procedure was also well attended to with room receptions and more formal parties.

Speakers were drawn from all parts of the country. Norman Fletcher of Architects' Collaborative, Cambridge, Mass., talked on the Harvard Graduate Center and took part in a round-table. From across the country and plains from his bailiwick the dinner speaker was drawn, Harold Spitznagel, Sioux Falls, S. D., whose talk on “Architecture as Practiced in the Provinces,” is reprinted elsewhere in this issue.

Awards of Merit for Excellence in Architecture were made to the following by the Society:

Ellerbe & Co., for the Medical Sciences Building.

Haarstick, Lundgren & Associates for the addition to the Chelsea Heights School.

(Continued on Page 33)
Residence of Architect
GROVER W. DIMOND, JR.
2123 Pinchurst Avenue  •  St. Paul, Minnesota

Pella Casements . . .

Solar AIR-FLO®
Only the finest
ARCHITECTURAL QUALITY Redwood
Bears this mark

Insist On The

Trademark For
“QUALITY
REDWOOD”

THE SETTING WINDOW HAS ALL THE WANTED FEATURES

1. Made of Redwood for Paint Holding and No Rotting.
2. Sash Swings in with a Touch of the Finger for Easy Cleaning.
3. Delivered on job in Protective Cartons or Crates.
5. Redwood Combination Storms and Screens Attached at the Factory and Picture Windows Come Glazed with Thermopane.

IMMEDIATE DELIVERY OUT OF STOCK OF SINGLES, MULLIONS, TRIPLES AND PICTURE WINDOWS—NO WAITING

Canton Redwood Yard, Inc.
WHOLESALE DISTRIBUTORS
7848 PORTLAND AVE. SO., MINNEAPOLIS, MINN.
Phone: ROckwell 9-3221
CELOCRETE
LIGHTWEIGHT — NAILABLE
HIGH INSULATION VALUE
Excellent Stucco and Plaster Bonds
Plain • Lintel • Header • Jamb
Corner • Sill • Bull Nose • Brick

CONCRETE BLOCKS
Stocked in all above styles as well as standard blocks
All Units Produced on Besser Supervibrapac
STEAM CURED YEAR AROUND
Fast Rail Shipment from Our Own Spur

CENTRAL BUILDING SUPPLY CO.
435 W. Minnehaha Ave. St. Paul 3, Minn. DAle 6555
Here are scenes from every kind of activity which the Minnesota Society convention had to offer. Shown in our pictures (left to right in each) are:

1—Award winners. University of Minnesota, Standing: Martin Hutchinsou, Prof. Roy Jones. Thos. Ellerbe (St. Paul AIA) and David Nordahl. Seated: Eugene Feerks, Clark Wold, Lyle House, Harlen McClure, instructor, and Donald Drews.


3—Mrs. O. R. Van Krevelen, Mr. and Mrs. C. F. Erickson and Mrs. Earl L. Berg, all of St. Paul, and Louis Finnelt of St. Cloud.

4—Louis Lundgren, St. Paul AIA, General chairman of convention.

5—James Horne of E. D. Corwin of St. Paul; Art Hayland of Herbert B. Crommett, St. Paul and Wallace Steele, University of Minnesota.

6—Mrs. Lawrence Hokvik, Circle Pines, Mrs. E. W. Buenges, Rochester, Mrs. Fred T. Traynor, St. Cloud, Mrs. H. A. Elarth, Winnipeg, and Mrs. Ray Corwin, Mahtomedi.


9—Mrs. W. R. Shannon, Jr., Franklin D. Clark, Mrs. George Darrell, Mrs. J. D. Voigt, and Mrs. Farrell Johnson; (standing): Mrs. Lyle J. House, Mrs. Frank Clark, Farrell Johnson and W. B. Berget.

10—Mr. and Mrs. J. R. Corwin, St. Paul; Mr. and Mrs. W. T. Mosman, St. Paul; Eugene E. Hickey, Minneapolis AIA, R. V. McCann, Minneapolis; and W. M. Storland and Wm. B. Berget, both of Haurstick, Lundgren & Associates, St. Paul.

11—(Seated): Mrs. W. R. Shannon, Jr., Franklin D. Clark, Mrs. George Darrell, Mrs. J. D. Voigt, and Mrs. Farrell Johnson; (standing): Mrs. Lyle J. House, Mrs. Frank Clark, Farrell Johnson and W. B. Berget.

12—W. M. Ingemann, St. Paul AIA, Gene Green, Edward Baker and Ken Skold, Minneapolis architects, with two hostesses.


14—W. H. Tuster, Minneapolis AIA, and T. F. Ellerbe, St. Paul AIA.


17—J. R. Corwin of Ellerbe & Co., St. Paul; Carl H. Buetow, St. Paul; Ralph B. Shimer of R. V. McCann, Minneapolis; and W. M. Storland and Mrs. B. Berget, both of Haurstick, Lundgren & Associates, St. Paul.

18—G. B. Sorensen of Raddock Plywood Corp., Minneapolis; Victor Gilbertson. G. M. Comb, Minneapolis AIA, and John Lindstrom, Minneapolis AIA.

19—Mrs. and Mr. J. R. Corwin, St. Paul; Mr. and Mrs. W. T. Mosman, St. Paul.

20—Eugene E. Hickey, Minneapolis AIA, Allan H. Meincke, St. Paul AIA; J. F. Braggman, Rochester AIA, and George F. Klein, Jr., Minneapolis AIA.

21—Norman K. Fugelson, Albert Lea AIA, Fred V. Traynor, St. Cloud AIA, H. W. Fridlund, Minneapolis AIA and editor of Northwest Architect, and Carl H. Buetow, St. Paul AIA.
L. A. BARRON NAMED FOR LIAISON WORK OF VERMICULITE INSTITUTE

Liaison work between the Vermiculite Institute and allied industries will be in the hands of the newly named head of the institute's technical service department, L. A. Barron, according to E. R. Murphy, managing director.

Mr. Barron has been with the institute three years, is a graduate from the Illinois Institute of Technology in architecture and mechanical engineering. He is a registered professional engineer in Illinois. He had construction experience prior to joining the institute staff. His former duties will be taken over by a new member of the staff, James Spence.
The new $1,400,000 office building of Northern Natural Gas Company in Omaha, is the latest addition to that city's beautiful growing Civic Center. John Latenser & Sons, A.I.A., architect-engineers of Omaha, designed this model in contemporary design to be the headquarters for Northern Natural. The organization supplies Texas gas to Omaha's metropolitan area and, in fact, to most of the midwest.

At present the new building contains about 55,000 square feet of office area but, since the long-term needs of the firm were the primary consideration, the structure was so designed that a wing can be added on either end as the need for more space arises.

This is steel frame and cellular steel floor construction, fireproofed with vermiculate plaster, 7/8-inch thick on suspended ceilings and 1 1/2-inch thick on columns, applied over 3 1/4 diamond mesh metal lath. More than 600 tons of steel were used and the fireproofing alone involved about 20,000 yards of plaster.

"We used vermiculite for fireproofing this building, not only because it saved many tons of steel, but because it enabled us to eliminate one series of columns, making two spans of 27 feet each," Frank Latenser, architect, said. "Had we used heavier aggregates for fireproofing, we would have had to use three spans of 18 feet each between columns. We also got a much more open floor area by eliminating one series of columns."

Exterior walls are buff colored brick trimmed with polished red granite. Fluted stainless steel panels in the center of the front facade add further architectural interest. The lightweight, insulated roof deck is vermiculite concrete covered with a built-up roof of pitch-and-gravel.

There are more than 500 windows, all double-glazed with tinted glass set in aluminum sash. This is said to be the only completely double-glazed commercial building in Omaha. Window sizes on the first floor are 4 by 8 feet, elsewhere 4 by 6 feet. Additional illumination is supplied by over 1,100 fluorescent troffers that provide 50 foot-candles at desk top level. Concrete floors are finished in rubber tile.

An unusual feature of the building is the extensive use of movable partitions to permit future rearrangement of office space. The structure is acoustically treated and air conditioned throughout. Mixed return and fresh air is cooled and delivered through individual adjustable air diffusers spaced from 6 to 10 feet apart. The system delivers six air changes an hour. To avoid detracting from the beauty of the building, a 30-foot water cooling tower, which cools water used in the turbine condenser, was placed on top a separate 40-car garage in the rear, where maintenance and storage of company automobiles are handled.

There are three 14-passenger Westinghouse elevators, which can be set for automatic operation during other

(Continued on Page 18)
For ARCHITECTS • ENGINEERS
DESIGNERS • CONTRACTORS • DEALERS

The five standard mixes in the table below have been fully approved by the Perlite Institute and its Technical Committee for Concrete. Architects desiring a certain "K" factor, can determine from the chart what wet density, as poured, will develop the desired insulation value. The contractor can determine exactly how much cement, perlite, gallons of water and air entraining agent must be purchased for each cubic yard of placed concrete. The designer may know in advance what the weight of the dry concrete will be and what its compressive strength will be.

Frankly speaking, Johnston Perlite Light-weight concrete does not compete in the same field with sand and gravel concrete, where a designer may be accustomed to specifying a compressive strength of 2000 to 4000 PSI for concrete used as footings, retaining walls, columns, bridges, etc. On the other hand, where lightweight, fire resisting, insulating concrete is desired, such as in roof and floor fill—radiant sub-floor slabs—fireproofing—curtain walls—partition or wall masonry units—roof decks on short spans between steel joists, then Johnston Perlite Lightweight concrete has the quick drying characteristics, lightweight, and high insulating values which are obviously desirable.

TYPICAL MIX DESIGNS

<table>
<thead>
<tr>
<th>Density (Lbs. cu. ft. Oven Dry)</th>
<th>Compressive Strength (psi at 28 days)</th>
<th>Thermal Conductivity &quot;k&quot;</th>
<th>Cement (Sacks)</th>
<th>Perlite (cu. ft.)</th>
<th>Water (Gal. per Sack Cement)</th>
<th>Air Entraining Agent (Pints)</th>
<th>* Wet Density as Poured (Lbs. cu. ft.)</th>
<th>* Wet Density as Poured (Lbs. cu. ft.)</th>
<th>* Wet Density as Poured (Lbs. cu. ft.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>35</td>
<td>490</td>
<td>.93</td>
<td>1</td>
<td>4</td>
<td>9</td>
<td>1</td>
<td>49</td>
<td>6.50</td>
<td>26</td>
</tr>
<tr>
<td>29</td>
<td>280</td>
<td>.77</td>
<td>1</td>
<td>5</td>
<td>11</td>
<td>1 1/2</td>
<td>42 1/2</td>
<td>5.20</td>
<td>26</td>
</tr>
<tr>
<td>26</td>
<td>220</td>
<td>.70</td>
<td>1</td>
<td>6</td>
<td>13</td>
<td>1 3/4</td>
<td>40</td>
<td>4.33</td>
<td>26</td>
</tr>
<tr>
<td>23 1/2</td>
<td>160</td>
<td>.65</td>
<td>1</td>
<td>7</td>
<td>15</td>
<td>1 3/4</td>
<td>38</td>
<td>3.70</td>
<td>26</td>
</tr>
<tr>
<td>21 1/2</td>
<td>125</td>
<td>.62</td>
<td>1</td>
<td>8</td>
<td>17</td>
<td>2</td>
<td>37</td>
<td>3.25</td>
<td>26</td>
</tr>
</tbody>
</table>

*Based on average aggregate density of 8.0/cu. ft. Strength data based on ASTM Type I Portland cement.
For higher early strength, use ASTM Type III Portland cement.

Other desired properties of strength, insulation and density may be obtained by varying proportion of cement, air entrainment, or addition of supplementary aggregates.

For best results, use the following mixing procedure:
1. Put required amount of water and Johnston Air Entraining Agent in mixer.
2. Add Portland Cement and mix to uniform slurry—usually about 1 1/2 minutes.
3. Add perlite aggregate and mix until desired workability is obtained—usually about 2 minutes.

We'll be glad to provide information on transit mixed perlite concrete.

FOR MORE INFORMATION ON JOHNSTON PERLITE LIGHTWEIGHT AGGREGATE FOR PLASTER OR CONCRETE CALL GL. 7939
Producers’ Council Adds to Convention Interest


Producers Council Program Committee was Willis Bloomquist, Robert Olsen, chairman, and Andy Albert.

PRODUCERS’ COUNCIL ADDS TWO CERAMIC COMPANIES

Two manufacturers of ceramic tiles, well known in the Northwest, have become members recently of the Producers’ Council, Inc., Minnesota chapter. They are the Sparta Ceramic Company of East Sparta, Ohio, represented in this area by Rollin Child of Hopkins, and the Mosaic Tile Company of Zanesville, Ohio, represented by Leonard W. Allen of Minneapolis.

The Sparta company makes glazed and unglazed ceramic mosaic tiles and the Mosaic company makes ceramic floor tile and glazed clay facing tile.

KIMBLE & AMERICAN STRUCTURAL GLASS COMPANIES MERGE

Kimble Glass Company is the new name for the merged activities of the former Kimble Glass Division of Owens-Illinois and American Structural Products Co., an O-I subsidiary. The newly created company, formed for more efficient service from the two companies which had been operating mutually for several years, is a subsidiary of O-I. There was no announced change in personnel.

Adding greatly to the showing of the latest materials and equipment of interest to architects were the companies whose exhibits are shown on the opposite page. In each picture, identifications are made from left to right. Shown are:

1—G. H. Buetow, St. Paul architect, Willis Bloomquist of Pella Products Co., Minneapolis, Frank W. Jackson, St. Cloud, architect.
2—Rollin B. Child with Bruce B. Church, Minneapolis, architect.
5—Jor Wright, H. Upham Baker, Duil Longtin of Celotex Corp., and Douglas Dunsehede, president of Insulation Sales Co., Minneapolis.
8—Dale Engstran with W. A. Close and Mrs. W. A. Close, Minneapolis, architects.
9—Grover Diamond, Jr., and Max O. Buetow, St. Paul, architects, with F. E. Homuth of Zonolite.

AN ARCHITECT REMODELS

Interim, economy housing which fortunately was designed as “one large envelope of space” provided the basic home which Architect Grover W. Dimond, Jr., has remodeled into an outstanding self-contained unit.

As shown on page 9 and described by Mr. Dimond, the program for remodeling was to provide sufficient additional enclosed space on a small lot and then reassign space in the existing structure, whose interior walls were non-load bearing. The plan became one of adding the sleeping and private living rooms in the addition and providing enlarged general living facilities in the original house. In this change it was possible to re-use all of the existing work, including the kitchen which was merely transplanted to provide an enlarged family cooking and eating center.

In considering the site plan, the owner realized that he was losing some play space for his children but decided to pave and fence the area that remained so as to provide a space conducive to more concentrated play for both children and adults. It is this outdoor paved area that is used for family living, from tricycle riding to square dancing. In winter it becomes a family and neighborhood ice skating rink and is flood-lighted. Control of the house and play space is from the kitchen.

ROCHE HEADS CONSULTING ENGINEERS

T. E. Roche is new president of the Minnesota Association of Consulting Engineers. He is a consulting electrical engineer with headquarters in Minneapolis.

Borge Nielsen, in charge of the Magney, Tusler & Setter electrical department, was elected vice-president at the group’s annual convention in Minneapolis and T. A. Hammond, head of the electrical department of Ralph D. Thomas & Associates, was chosen secretary-treasurer.

Board members include Richard Evans, Minneap-
Convention Exhibits
ATTENTION ARCHITECTS!
You'll want to know these essential facts about . . .

CRAWFORD MARVEL-LIFT DOORS

NOW DIPPED in New Wood Preservative

GENERAL SPECIFICATIONS
Upward acting doors shall be Crawford Marvel-Lift Doors, as manufactured by the Crawford Door Company, 401 St. Jean Avenue, Detroit 14, Michigan, and of the size and design as shown on the plans.

WOOD:
Wood sections shall have stiles and rails of vertical grain Douglas Fir, hardwood dowelled and steel pinned, water-proofed glued. Rails to extend full width of door. Panels to be of three (3) ply laminated fir 3/4" exterior plywood manufactured by the hot plate process with phenolic resin glue.

HARDWARE
Hardware shall include safety torsion springs on a continuous shaft across full width of door, rustproofed aircraft type cable (chain not permitted), rollers having a minimum of ten (10) ball bearings 3/4" diameter with both inner and outer races of hardened steel (use of roller shaft as inner race will not be permitted), bottom corner brackets mortised under bottom of door and of sufficient height to be secured across both rail and stile. Doors over 12'6" wide shall be additionally reinforced with suitable horizontal trusses to prevent sagging when open. Doors over 16'0" wide shall have suitable support to prevent sagging when closed.

GUARANTEE:
Doors shall be guaranteed against faulty or defective material or workmanship under normal operation for a period of one (1) year.

Send for free booklet "Crawford 60 second Door Selector."

This booklet will aid you quickly in selecting and specifying all types of doors.

— DISTRIBUTED BY —
RAYMER HARDWARE CO.
180 East 6th Street  Telephone Ga. 4807  St. Paul, Minn.

UNIVERSITY HONORS WALTER WHEELER

The University of Minnesota's Outstanding Achievement Award went this year to a member of the building industry—Walter H. Wheeler, inventor of the Smooth Ceilings System of beamless flat slab construction. The award is made only to former U of M students who have attained eminence in their chosen fields of work.

Mr. Wheeler, who has won international recognition for his work in reinforced concrete, graduated from Minnesota in 1906. Among the many structures he has designed is the famous Fort Snelling-Mendota Bridge, the largest multiple rib arch reinforced concrete bridge in the world.

His Smooth Ceiling System has been used in industrial, school, hospital, office, garage and similar buildings from coast to coast and abroad.

NORTHERN GAS COMPANY

(Continued from Page 14)

than office hours. These are supplemented by a small lift at each end of the building for inter-office communication. One connects with the stationery department, the other with the record center, both on the ground floor. Passenger elevators are equipped with pads for handling freight. The heating system is hot water with fin tube radiation concealed under window bases. Each 4-foot module (one window width) has individually adjustable louvers to control the amount of radiation.

The site is ideal for an office building—out of the congested downtown area but not far from the heart of the city and with ample parking space. In the rear of the building is executive and customer parking for 60 cars, which is supplemented by an adjacent employe lot that accommodates 150 cars. A drive leading from the street to the front entrance can be used for passenger unloading. Directly across the street is the handsome Joslyn Memorial Art Museum.

General contractors were Parsons Construction Company of Omaha.

— DISTRIBUTED BY —
RAYMER HARDWARE CO.
180 East 6th Street  Telephone Ga. 4807  St. Paul, Minn.
THE MINNEAPOLIS STAR TRIBUNE BUILDING shown above is one of the many fine examples of use of ornamental metals and artistic workmanship.

APPEARANCE has influence

Gentlemen:

CROWN IRON WORKS has always been proud of their ability to keep pace with modern building development. To assure our many customers and friends of the finest in metal products and architectural metals CROWN has secured the distribution rights to several nationally known products which will be in addition to its regular line of fabricated architectural metals.
CROWN HAS EXPANDED

CROWN IRON WORKS COMPANY has expanded its facilities to include nationally known products in order to give the needed service and a wide variety of architectural products. CROWN’S selection of standard architectural products has followed the same rule which has always meant quality workmanship to its many customers.

Stock Items

KAWNER
Special or Standard Aluminum entrances are available along with expert engineering advice.

WELDWOOD and STAY-STRATE DOORS
The modern solid core door that CAN'T WARP! The Weldwood "Sta-Strate" Door's engineered construction successfully and permanently combines this "warp-free" core with the world's finest wood veneers.

Weldwood Kaylo partition panels . . . the most versatile sub-dividing partitions ever developed. They provide the perfect answer for nearly every type of room partitioning, including practical fire-resistant sub-dividing partitions in Fireproof Buildings.

DOR-O-MATIC
A CONCEALED DOOR CONTROL with advanced design and construction to produce more positive and more complete door control, longer service life under all service conditions, complete adaptability to modern design.

HOLLOW METAL DOORS and FRAMES
VMP all metal doors are designed for permanent beauty. Single swing or double-acting doors satisfy all of the requirements of construction, operation, durability, maintenance and low cost for apartments, homes, schools, office buildings, hospitals, laboratories, hotels, etc. They will provide years of service, free from trouble and maintenance. Factory baked-on enamel finishes are available if desired.

STEEL SASH
The line is so complete and so flexible that buildings of any size or type (residential, apartment, institutional or industrial) may be equipped. All types and sizes, including those of doors, are recommended by the METAL WINDOW INSTITUTE.

PAGE FENCES
When you put up a fence, you like to feel that you've chosen a good one — made of quality materials and erected expertly by trained workmen — so that it will give long, dependable protection-service. Important, too, that it is made by a company that has had long experience in its manufacture.

Fabricated to Specification

ORNAMENTAL METALS
CROWN'S ornamental metals is a by-word in ornamental metal fabrications. Our installations are nationwide and invite the closest inspection.

STRUCTURAL STEEL
Since 1878 CROWN has been a leading producer of structural steel in the Northwest. We assist in design and have complete facilities for detailing and fabrication. Crown invites and will promptly answer all inquiries.

MISCELLANEOUS IRON
Our fabricating engineering facilities are extensive. No job is too big or too small for us to give you prompt and efficient service.

CROWN IRON WORKS COMPANY
1229 TYLER STREET N.E.
MEMBER

MINNEAPOLIS, MINNESOTA
Lighting for Seeing

NORTH AMERICAN OFFICE OF NORTHWESTERN NATIONAL BANK OF MINNEAPOLIS

ARCHITECT: A. MOORMAN & CO.
CONSULTING ENGINEERS: GAUSMAN & MOORE
ELECTRICAL CONTRACTOR: BATZLI ELECTRIC CO.
FIXTURES: LITE CONTROL LOUVERED TROFFERS, PITTSBURGH—MOE BROS. & ATLAS DOWNLITES

A COMBINATION FUNCTIONAL LIGHTING INSTALLATION, UTILIZING SLIMLINE FLUSH TROFFERS OVER THE OFFICE AREAS WITH INCANDESCENT DOWNLIGHTS OVER TELLERS' WINDOWS AND CUSTOMER COUNTERS, WILL MAINTAIN 40 TO 50 FOOT CANDLES IN THESE IMPORTANT WORK AREAS. THE COLD CATHODE COVE PROVIDES FUNCTIONAL AND ARTISTIC TREATMENT WITH SUFFICIENT ILLUMINATION FOR THE CUSTOMER LOBBY AREA. QUALITY AND LOW BRIGHTNESS CONTRASTS PREVAIL THROUGHOUT.

Information compiled by Lighting Service Section
NORTHERN STATES POWER COMPANY
For factual lighting information, technical data on light sources, fixtures, relative costs, etc.
Call Lighting Section—MA 6251
Voice from the Grass Roots

City Architects Hear How Their Problems Are Solved in Small Community Practice

Mr. Toastmaster, member of the American Institute of Architects, ladies and gentlemen. Last week I attended a political rally at which the chairman made the statement that the more important the speaker the shorter the introduction. Mr. Cone's gracious introductory remarks which I can assure you are as fallacious as they are flattering, provide you with the opportunity to flee before it is too late... 

Because many of the architects present have more draftsmen than I have thumbtacks, I feel not unlike a blacksmith addressing the U. S. Steel Corporation.

The practice of architecture in the "provinces" is not entirely the green pasture that the urban architect visualizes. Difficulties are lessened only by the reduced volume of your practice and taxwise by the lowered income resulting therefrom. Being less bedeviled by the multitudinous worries of the larger practice, the "farmer architect" is probably in a better position to view the passing architectural scene than the city fellow who stands amidst it. Tonight, because you are more or less a captive audience, I would like to review a few of my impressions which are not in complete harmony with the work of some of our more celebrated practitioners. By such a remark, I would not want you to conclude that I am in any way out of sympathy with contemporary design for, on the contrary, I am of the opinion that to work on any other premise is unthinkable. In our office, we do work which would be probably criticised by the more rabid hair-shirt designer as having an alien if not stench-like quality about it while the more archaeologically inclined practitioner would be equally sure that we were far off to the left.

Wake Up, You're Dead!

Last winter in New York I visited the studio of a lighting fixture designer who was, in a sort of circumscribed way, a Bird Watcher. Against a large north window he had built a relatively simple wire cage some 5'-0" in length and 2'-0" in height and depth. Between the cage and the window he had suspended a piece of translucent white fiberglass material which provided a striking luminous background for
some brilliant colored finches, about a dozen in number. It was indeed a most successful decorative accessory and it was extremely interesting to see the brilliant flashes of color as the birds flew across in front of the translucent background like jet propelled abstractions. My friend who accompanied me on this visit and who was obviously much better informed than I was, mentioned the fact that it was regrettable that he did not have a Gemutlich as it was probably the most colorful member of the entire finch family. The designer, of German extraction, promptly disagreed with him and set out to correct this error. He quickly opened the drawer in his drafting table and fumbled through the usual assortment of scales, instruments, art gum crumbs, discarded notes and other typical drafting drawer rubbish. After some searching and with a gleam in his eye he pulled out the extremely brilliant hued finch to which my friend had referred, with the remark, "Isn't it beautiful, it's too bad he died last October." At the risk of preaching a Sunday morning sermon on Saturday night, I could not help but think of all too many architects who insist on digging up long dead traditional forms which have no more vitality and relation to today's problems than did the dead finch.

The Non-Conformist Hysteria

The traditional group, however, is today rapidly being outnumbered by a horde of designers whose prime objective is to create a non-conforming building which may be repulsively ornate or frightfully sterile. The latter examples may have unlimited photogenic qualities and consequently a choice morsel for the beleved magazine editor in search of an eye stopper, all too many times completely disregarding not only the purpose for which the building is being constructed but also the factor of maintenance which becomes an increasingly annoying problem to the client.

It is no doubt presumptuous on my part, who at best can be rated at no more than a farmer practitioner, to criticise the work of some of our leaders in the field of architecture whose work is admittedly stimulating and recognized internationally. In all sincerity I cannot view with enthusiasm the work of those designers who because of improved techniques are able to completely expose the interior of a building, leaving the occupants therein at the mercy of the extremes of heat and cold, dirt and grime and with their home life reduced to the privacy of a department store window. The fact that this can be done is no reason why it should be carried to extremes as it has been for the past five or ten years. In many of these designs, the interiors are as stark, barren and sterile as an operating room and few are the people that could call such surroundings a home.

For that person who is fortunate enough to have not only a fine view but privacy on the south exposure of his home, the glass area should be limited only by the budget and the ability of the mechanical engineer to cope with the heat loss. The misuse of the so-called picture window became so obvious that it was finally necessary for the manufacturer, in his advertising, to warn the prospective purchasers that he should think twice before cutting a great gaping hole in his dwelling. From my own experience, I doubt if most owners of so-called picture windows would be tempted to frame the same view and hang it on a wall of their home. As a friend of mine, perhaps I should say an observing friend of

(Continued on Page 24)
You get 3½ times more clamping force and less stress concentration than with hot driven rivets when you use Pacal High Tensile Bolts. High quality, heat-treated steel allows more than 70,000 psi tension. This means greater friction between plates for greater load capacities. Field construction and shop assembly on all types of structural work is simplified. Just fit-up joint with bolt, then tighten... no heating devices, no noise. Extremely valuable for structures such as railroad bridges where maintenance due to vibration is greatly reduced.

SIZES IN STOCK
for IMMEDIATE SHIPMENT

<table>
<thead>
<tr>
<th>Size</th>
<th>Size</th>
<th>Size</th>
<th>Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>5/8 x 1 1/2</td>
<td>3/4 x 1 1/2</td>
<td>3/4 x 4</td>
<td>7/8 x 1 1/4</td>
</tr>
<tr>
<td>3/4 x 1 7/8</td>
<td>3/4 x 1 7/8</td>
<td>3/4 x 4 1/4</td>
<td>7/8 x 2</td>
</tr>
<tr>
<td>3/4 x 2</td>
<td>3/4 x 2</td>
<td>3/4 x 4 1/2</td>
<td>7/8 x 2 1/4</td>
</tr>
<tr>
<td>5/8 x 2 1/4</td>
<td>3/4 x 2 1/4</td>
<td>3/4 x 4 3/4</td>
<td>7/8 x 2 1/2</td>
</tr>
<tr>
<td>3/4 x 2 1/2</td>
<td>3/4 x 2 1/2</td>
<td>3/4 x 5</td>
<td>7/8 x 2 3/4</td>
</tr>
<tr>
<td>5/8 x 2 3/4</td>
<td>3/4 x 2 3/4</td>
<td>3/4 x 5 1/4</td>
<td>7/8 x 3</td>
</tr>
<tr>
<td>3/4 x 3</td>
<td>3/4 x 3</td>
<td>3/4 x 5 1/4</td>
<td>7/8 x 3 1/4</td>
</tr>
<tr>
<td>3/4 x 3 1/2</td>
<td>3/4 x 3 1/2</td>
<td>3/4 x 5 3/4</td>
<td>7/8 x 3 1/2</td>
</tr>
<tr>
<td>3/4 x 3 3/4</td>
<td>3/4 x 3 3/4</td>
<td>3/4 x 6</td>
<td></td>
</tr>
<tr>
<td>5/8&quot; carburized washer</td>
<td>3/4&quot; carburized washer</td>
<td>7/8&quot; carburized washer</td>
<td></td>
</tr>
</tbody>
</table>

SPECIAL SIZES MADE TO ORDER

Write Dept. SM-72 for BULLETIN 600

PAPER-CALMENSON & COMPANY
mine, wrote ine, “What a monstrosity most of them are in respect to what you see from the inside looking out—sometimes it isn’t so bad from the outside looking in.”

There are innumerable examples where within the same building and with an identical type of activity therein, the glass area on the north and south sides of the building are the same, despite the fact that on the south the quality of light and the winter heat gain are entirely unrelated to that of the north. To have large areas of glass on the east or west, except in rare instances such as classrooms, where some direct sunlight is desirable during certain periods of the day, is hardly justified as there are few satisfactory methods of controlling the light and heat source on the exterior of the glass area and at least in the case of heat this is mandatory.

In the case of one well-known designer whose name you would instantly recognize he has designed a relatively large building housing widely divergent activities with a fenestration which differs from the rigid format of the Georgian house only to the extent of the increased glass area which is uninterrupted from one steel column to the next. When a series of toilets were inescapably located in the center of the building, the designer coped with this problem by marching right on by with the large glass area setting a marble wall back 3’ from the exterior wall of the building to serve as a screen. This type of design does not to me fall under the heading of meritorious work.

Businessmen Also Know How

That at least some of our clients are aware of this type of architectural nonsense is best evidenced by a letter which I received some two weeks ago from G. M. Foster, chairman of the board of John Morrell & Company, well-known meat packers, and a graduate mechanical engineer. With his permission I will quote from this letter.

“I am reaching the point where I have time on my hands to think about things other than my own business and, as I have free stenographic service, I am apt to be butting in with some of my views. What’s on my mind at present is the design of the south face of a recent building—all of that glass (!) with no protection to stop the heat outside the rooms. As you know, for a long time I have been swinging more and more to the view that it is difficult to make any real use of outside light in work space, either doctors, clerical or factory. Its principal value is psychological. I read the architectural magazines and see large buildings with enormous window areas, for example the United Nations Building in New York. I can’t understand it. Is there some new glass or some treatment that I don’t know about? Some day I want to take a look at that United Nations Building. All I can say that will sum up my experience is that outside light is a liability and if you will look at our office you will see a good deal of confirmation of it.

“Going around the points of a compass, of course north light is the best but it isn’t any better than good artificial illumination. It’s okay if nobody has to face a window. South light is next best, provided you use the sunshade screens or adjustable exterior louvers. For the horizontal light you get facing east or west, I don’t know any remedy, other than to shut it out. All of these points occurred to me when I saw the design for the building previously referred to but I thought there must be something about it I don’t understand. However,
I have decided I do understand it and that the whole thing was a mistake. "Venetian blinds, of course, shut out the light but they stop the heat inside the rooms and they get as hot as the furnace. Operating awnings on the south don't fit in with a modern building, are costly, maintenance is high and they are a nuisance. I don't know what the remedy is for the horizontal light coming in from the east and the west, other than to use the venetian blinds and stand the heat. Some of it can be cut out by awnings."

To me, this was a most interesting letter as it reflects the conclusions of a technically trained man who during his lifetime had controlled the expenditure of millions of dollars worth of buildings for his own use. I am rather of the opinion that as time goes on the average client will be much less tolerant of some of our present day expensive and often ill-advised experimentations. . . .

To me some of the prime requirements of good design are as follows:

First, that A CLEAR STATEMENT OF THE PROBLEM be obtained. In the case of even the most able and well-informed clients this is often a difficult accomplishment. Next, that the building be thoroughly studied from the standpoint of SPACIAL RELATIONSHIPS AND CIRCULATION. Needless to say the relationship of the building to the site from a topographical standpoint is imperative. Next, that the plan be so conceived that THE MASS OF THE BUILDING OR THE RELATIONSHIP BETWEEN THE MASSES OF THE BUILDING BE HARMONIOUS. In this connection, I recall that one time while working for a Chicago firm the plans were entirely handled by one individual and then the preliminary layouts were turned over to the designer who would futilely attempt to contrive elevations which would be applauded by the client. Obviously, such a course is unthinkable today.

Consider Every Factor

Next, A CAREFULLY STUDIED ARRANGEMENT OF THE VOIDS AND SOLIDS UTILIZING THE FENESTRATION AS UNITS OF AN ABSTRACT COMPOSITION. This may well call for a complete restudy of the plans but never at the sacrifice of utility. Once the form and the voids and solids are properly related there remains the extremely important matter of THE SELECTION OF THE TYPE AND TEXTURE OF THE EXTERIOR MATERIAL. Perhaps I should not qualify this statement by the use of the work exterior. It is assumed that in this case the exterior finish is a skill and not the structure itself. Lastly, because of the fact that it will probably accomplish more for the client per dollar invested, THE DETERMINATION OF THE COLOR RELATIONSHIPS is worthy of a great deal more study than is usually allocated to this feature of the design.

In a recent letter to the New York Times, William Lescaze stated one of the better definitions of good contemporary architecture. He defined it as, A CONTEMPORARY EXPRESSION OF HUMAN NEEDS IN TERMS OF CONTEMPORARY KNOWLEDGE. In closing I just want to remark about Walter Gropius' forthcoming article in the magazine Building in which, to me at least, he has confused the present day architectural problem dictated in a large measure by economic necessity with those days when the building was constructed and not assembled as is the problem today by a group of men motivated largely by religious fervor. He is definitely of the opinion that the present day architect must take a greater part in the design of off-site fabricated materials and that unless we have a union between the contractor and the architect the future of the architect is indeed bleak. I do not question Mr. Gropius' prescription for the IDEAL practice of architecture but to the practitioner in the smaller communities extensive participation in the fabrication of the units which form the building is, if for no other reason than a restricted budget, largely impossible. Mr. Gropius states that by the inclusion of article No. 7 which prohibits the practice of architecture and construction by

---

**ROMANY TILES ARE DEAR TILES**

**IN SCHOOL CORRIDORS**

There is an ever-growing demand for ROMANY, the real clay tile, for wainscoting and fully facing the walls of school corridors. The hard glaze finish makes this tile practically indestructible and exceptionally easy to keep clean. Many attractive non-fading colors. Wherever wall protection and decoration is deserving of the very best—write the name ROMANY in your tile specification. For full color samples of real tiles:

Ask for Sample Chart No. 6

---

Rollin B. Child
Sales Representative
45 15th Ave. No.2 Hopkins, Minn.
Phone Ho. 8379

ARCHITECT
one firm we have, "Cast away the baby with the wash." He is of the opinion that unless this rule is deleted from the regulations of the Institute he would for one prefer to be dropped from the rolls of the Institute. To paraphrase Mr. Gropius' conclusion, I believe that he would "Have us abandon the ship because we do not approve of the shape of the anchor."

Mr. Gropius feels that as he sees his graduates embark on the sea of architecture they will be hopelessly swallowed up. On the contrary in our small office at least, I try to assign a project to each of the boys insofar as they are able to cope with it. This is certainly not the least expensive way to produce work but it does instill in the employe a great sense of responsibility and pride of accomplishment.

I know that they respect me for it for just last week as I was walking through the drafting room I heard one of the boys remark to the other, "There goes the old master now." There are some people who have suggested that I purchase a hearing aid.

PROTEIN HELPS KEEP AIR ENTRAINED CONCRETE STRONG

Air entrained concrete of over 25 per cent air content without undue loss of strength is possible through use of Cemtein, a protein activator developed by Henry D. Van Hoven, Jr., chemist of the Van Hoven Co., St. Paul.

The protein creates and distributes millions of tiny air cells throughout the concrete mass, Mr. Van Hoven said. The concrete can be used in roofs, floors and walls. Cemtein gives positive control of the quantity and quality of the bubbles used in lightening the concrete, thus improving strength of the material.

HOW-TO-DO FILE READIED BY FLEXICORE

A file sized folder detailing in pictures and short descriptions erection procedure for Flexicore floor and roof slabs has been prepared by The Flexicore Co., Inc., 1932 E. Monument Ave., Dayton 1, Ohio, and can be obtained for the asking.

The folder shows delivery, handling, laying, solving special problems and finishing procedures. Also available is an interesting file sheet showing utilization of this slab form in a barn, which has many suggestions for use of architects and builders of other buildings.

PROTEIN HELPS KEEP AIR ENTRAINED CONCRETE STRONG

Air entrained concrete of over 25 per cent air content without undue loss of strength is possible through use of Cemtein, a protein activator developed by Henry D. Van Hoven, Jr., chemist of the Van Hoven Co., St. Paul.

The protein creates and distributes millions of tiny air cells throughout the concrete mass, Mr. Van Hoven said. The concrete can be used in roofs, floors and walls. Cemtein gives positive control of the quantity and quality of the bubbles used in lightening the concrete, thus improving strength of the material.

HOW-TO-DO FILE READIED BY FLEXICORE

A file sized folder detailing in pictures and short descriptions erection procedure for Flexicore floor and roof slabs has been prepared by The Flexicore Co., Inc., 1932 E. Monument Ave., Dayton 1, Ohio, and can be obtained for the asking.

The folder shows delivery, handling, laying, solving special problems and finishing procedures. Also available is an interesting file sheet showing utilization of this slab form in a barn, which has many suggestions for use of architects and builders of other buildings.

See Page 32 for an important change now being made in "Northwest Architect."
Drew Fine Arts Building, Hamline University.
Architect—Herbert B. Crommett.
Contractor—Geo. J. Grant Construction Co.

FRED MURNANE

"WE REALLY KEPT OUR COST DOWN ON THIS JOB..."

...we framed it up with Stran-Steel! It was fast to put up, and it was exceptionally economical. Since completion in 1948 it has gone through two of the most violent wind and rain storms we've ever had. It has stood up perfectly. It's hard to find a crack. I'm awfully well pleased and so is Hamline. We also can recommend the services of Steel Structures, Inc., engineers—they knew what they were doing and certainly cooperated to make a smooth job of it."

FRED MURNANE
Geo. J. Grant Construction Co.

Stran-Steel consists of pre-fabricated steel joists, studs and plates pre-cut to exact lengths and factory-punched for pipes, wiring conduits, and screws. With conventional materials it is necessary to hold up construction at various stages so plumbers, and electricians can get their pipe and conduit in. With Stran-Steel the entire building can be framed and closed in without delay. Plumbers, electricians and other tradesmen may then start and complete their work without costly interruptions.

FOR MORE INFORMATION CALL

STEEL STRUCTURES, INC.
821 NINTH AVENUE S. E.
MINNEAPOLIS 14, MINNESOTA

Architect

Fillmore 2786

Stran-Steel is erected speedily with carpentry tools and methods. Collateral materials are nailed to the steel joists and studs—the special nailing groove deforms and clenches the nail in a grip of steel that holds more securely than a nail in wood.

Stran-Steel has proven advantages for stores, shops, office buildings, factory buildings, and other structures.
NEW STOCKHOLM IS GROWING: A "POINT" APARTMENT BUILDING WITH PENTHOUSE AND STUDIOS ON THE TOP FLOOR: THE POINT DESIGNATION MEANS A TALL BUILDING WITH ONE SINGLE STAIRWAY AND ELEVATOR CORE. Attractive, multiple terrace houses provide features for good city living ordinarily not thought possible. Sun-heat and private gardens for each family: in a sunny but cold climate like Minnesota's, this arrangement would be excellent. Note in section and detail photographs how garden soil is held in a watertight concrete box, which provides the yard for one apartment while also serving as the insulated roof for the living room below. Both the "Point" building and the terraced apartments were designed by Sven Backstrom and Leif Reinius, S.A.R., architects; C. G. Rosenberg, photographer.
The four pictures on this page show some interiors of the "M.E.A." department store in Stockholm, Sweden. Architects were Sune Lindström, S.A.R., and his associates Lars Malm, S.A.R., and R.W. Schimke. The design is imaginative, distinguished and equals the best of store design in the United States. The M.E.A. store shows an artistic restraint and refinement that is striking. In this respect the design is typical of the best of Sweden's architecture. Though the forms have an international character, local Swedish qualities are easily traceable, especially in the handling of texture and in the careful detailing. Artistic elegance both in architecture, display and advertising attracts customers. A too loud or self-praising advertising by architectural pattern would rather repel than attract Swedish people. Modern materials and techniques are used throughout the "M.E.A." Tempered all glass doors give a feeling of spaciousness and luxuriousness to the entrance way. Some of the floor materials are Swedish limestone or marble, pleasant and rich in color. Limestone is also used for the display table in the sports department. Wall finishes are natural and "warm," the lighting layout and fixtures give a variation of beautiful effects with a pattern, that continuously changes, leading the customer on from department to department. Note how the light shines star-like through the small point perforations of the acoustic ceiling. Porcelain enamel panels were used on some parts of the exteriors of the building. Continuous and organic variation is characteristic of the "M.E.A." interiors, it is a pleasure to go shopping. Sune Sundahl, photographer.
The Minneapolis chapters of the American Institute of Architects and the Producers’ Council had their annual golf get-together recently. Shown in our pictures are some of the competitors (left to right in each instance). . . . 1—Ben Meltzer and Larry Ochs of A. C. Ochs Brick & Tile Co., Larry Reak of National Fireproofing Corp’n and Vern Larson of Kimble Glass Co. . . . 2—Arnold Hartwig of A.I.A., Willis Bloomquist of Pella Products, John Sahlman, Minneapolis engineer, and Louis Rehor of Pella. . . . 3—Clair Armstrong of A.I.A., chapter president and winner of the tournament, Richard Pass of Armstrong Cork Co., William Rabe of Ceco Steel Products and Vic Gilbertson of A.I.A. . . . 4—Austin Lange and Cap Sauter of A.I.A., H. C. Hamilton of Chamberlain Co., and Arnold Raugland of A.I.A.

DALE McENARY MADE AIA FELLOW

Dale R. McEnary of Minneapolis has been made a fellow of the American Institute of Architects, becoming one of the few so honored in Minnesota.

Mr. McEnary has been active in all levels of AIA work from his local chapter through the state to the national organization. He is well known for his work on ethics and fees, his work on this committee of the state society leading to publication early this year of the well-known “Circular of Information on Architectural Practice, Including Code of Ethics, Services and Recommended Minimum Fees for Minnesota Architects.” Originally published in the NORTHWEST ARCHITECT, the material is available in reprinted form.

He has served on the state board of registration for the past nine years, being first appointed in 1943. Nationally he has served his fellow architects as a member of the AIA committees on membership, fees and re-vamping of the code of ethics. A former president of the Minneapolis AIA Chapter and a director of that group for many years, he is well known throughout the profession. At the state level he has been primarily a committee worker of note.

Appointment of Mr. McEnary makes him one of two practicing Minnesota AIA fellows, the other being Edwin H. Lundie of St. Paul. Three other fellows live in Minneapolis Chapters—

A.I.A. and Producers Council
Golfers Go To It!

Enduring Beauty

Artistic Face Brick
...every texture and color
Glazed and Unglazed Facing Tile
Paving - Floor Brick
Quarry Tile
Glass Block
Waterproofing

Serving the architectural profession and construction industry of the Northwest since 1890.

TWIN CITY BRICK COMPANY
Minneapolis, Minn. • St. Paul, Minn.
Manufacturers Face Brick
Building Materials Distributors

30
BUILD GOOD WILL WHEN YOU PLAN A HOME!

Tell your clients about the

Economy and

Modern Efficiency of

LIGNITE

Never Out-Dated—Always Available and
With the Convenience of Automatic Stokers

TRUAX-TRAER COAL CO.
MINOT, NO. DAKOTA

Producers of The Champion Lignites Velva, Custer, Kincaid and Dakota Star

The services of our Combustion Engineers are available at no obligation

Academy Brand

HEAVY DUTY
Molded Rubber

Have All Essential Properties For Stairway Service

Particularly applicable in schools, hospitals, factories, office buildings, dormitories, barracks, hotels and churches.

Produced in 5 beautiful marbleized colors... plain black for industrial uses. Quiet, safe, resilient, and economical.

Square and Curved Nosed Treads 1/4" Thick

12½" x 36"

12½" x 48"

12½" x 62"

MATCHING LANDING TILE 26" x 26"

Can be applied to wood, concrete, metal, tile or composition with Academy Gray Waterproof Cement

Solve Your Stairway Surfacing Problem. Specify Academy

ACADEMY RUBBER COMPANY
3031 12th Street N.W.
Canton 8, Ohio

E. R. FLINT & CO.
1000 No. Milwaukee St.
Milwaukee 2, Wis.

M. B. JACKSON
1722 Summit Avenue
St. Paul 5, Minn.

ARCHITECT 31
Northwest Architect has experienced an exceedingly healthy growth in the past several years, expanding its service to the architects and their associates in Minnesota and the Northwest. Crammed with information both on the practical and ethical aspects of the profession, its record of being published continuously, without interruption, six times a year for more than 15 years, speaks for itself. During these years its importance has grown as it presented leaders of the profession, reports of architectural trends, controversial opinions vital to architecture's growth and all else of importance in the field. You are undoubtedly well aware of its growth in size and variety of contents during this period.

As a consequence of this growing service given by the publication, a change in readership requirements has become necessary and the magazine is now going on a subscription basis. For details, please see the envelope inserted under the covers.

Minnesota—Roy C. Jones, head of the university's school of architecture, Robert Jones, also of the university's architectural staff, and Leon Arnall, former staff member.

A native Minneapolitan, Mr. McEnary is a graduate of MIT in architecture, class of 1914. His first job was with Charles S. Frost of Chicago, for whom he worked on the Railroads Building in St. Paul, originally occupied by the First National Bank. Following its completion, he was returned to the Chicago office, where he worked on drafting plans for the St. Paul Union Station, later going to St. Paul to be architect's supervisor on construction of the main portions of the structure.

He became a member of AIA in 1936. As an architect practicing for himself, he considers several of the many structures to his credit as particularly outstanding. They are the Farmers & Mechanics Bank Building in Minneapolis, the Rand House at Lake Minnetonka, now the head office building for the Cargill industries, and the revamping of the Hodgson Building.

LIQUID CARBONIC GIVES PAULLE-MIDWAY NORTHWEST DISTRIBUTORSHIP

The L. Paulle-Midway Fixture and Showcase Company of St. Paul has been named exclusive distributor for the Northwest for products of the Liquid Carbonic
Company's soda fountain and food service. States covered are Minnesota, North Dakota, Montana and western Wisconsin. Paulie-Midway is creating a service department for these lines.

**OCHS BRICK NAMES BISHOP MANAGER**

Ollie Bishop, long experienced in the field of brick and tile making, has been named plant manager for the A. C. Ochs Brick & Tile Company, Springfield, Minn. He will headquarter in Springfield. Mr. Bishop, a native of Kentucky and graduate of the University of Kentucky, was first employed by the Big Run Coal & Clay Co., and is a former general manager of the Hebron Brick Co., Hebron, N. D.

**MINNESOTA CONVENTION**

(Continued from Page 8)

Macy, Tusher & Setter for the Alexander Ramsey School and a Secondary Laboratory School.

Thorshov & Cerny for the A. S. Alova Co., Central Elementary School in Richfield, the Elk River Generating Plant and the St. Louis Park Medical Center.

The convention received reports in detail on the work of various officers and committees, acting on them for final acceptance and, in some instances, for continuation of work.
ARTSTONE

Our improved processes produce a superior stone with exposed aggregate surface finish in color tones for Facing Slabs, Ashlar, and Architectural Trim Stone.

ALSO WINDOW TRACERY

All available in a wide range of surface finishes and colors for interior and exterior work.

AMERICAN ARTSTONE COMPANY
CONCRETE SPECIALISTS
MAIN OFFICE AND FACTORY
NEW ULM, MINNESOTA
TWIN CITY OFFICE, 1304 FOSHAY TOWER, MINNEAPOLIS, MINN.

This is the mural sponsored for General Hospital by the Auxiliary of the Minneapolis Chapter, A.I.A. Located in the pediatrics department of the hospital, the mural has the theme “Old MacDonald’s Farm.” It was painted by Janice Smith Loring, Minneapolis artist and daughter of the late Clyde Smith, well-known architect. Shown admiring the mural are Mrs. Marjorie Borrman (left), staff nurse, and Mrs. Emelie Magdanz, teaching supervisor in pediatrics.

MAGNEY, TUSLER & SETTER
ADDS THREE PARTNERS

Three members have been added to the partnership of Magney, Tusler and Setter, Minneapolis architects and engineers, according to an announcement made by G. R. Magney, senior member of the firm. Stowell D. Leach, John Lindstrom and John R. Magney are the new partners. All are residents of Minneapolis and the change was made effective as of August 1.

The firm name will not be changed. Messrs. Leach, Lindstrom and Magney have previously been associated in the firm, all entering Magney, Tusler and Setter in 1945.

Mr. Leach, a graduate of the University of Minnesota in 1929, has been serving since 1945 as the firm’s associate in charge of design for remodeling and alteration projects, as well as plant analyses. Mr. Lindstrom, who has headed the firm’s design department, was graduated from the University of Minnesota in 1940 and received his master’s degree in architecture from MIT in 1941. He is vice president of the Minne-
"Smooth Ceilings" System
The All Flat Slab Construction for
Industrial—Commercial—Schools
Colleges—Offices—Hospitals
Apartments
Other Types of Buildings

has been used throughout the United States, Canada and abroad in hundreds of buildings because of its economy and practical advantages

Invented by

WALTER H. WHEELER
E.M., M.A.S.C.E.
Consulting Structural Engineer
892 Metropolitan Bldg., Mpls. 1, Minn.

THE ALL-PURPOSE INSULATION
PALCO INSULATION WOOL
Made From Durable Redwood Bark
FOR HOUSE INSULATION
FOR COLD STORAGE INSULATION

• CORKBOARD & FLOOR TILE
• NATIONAL MINERAL WOOL
• BUTCHER BOY
• COLD STORAGE DOORS
• REYNOLDS METALLATION
• MORRISON ROLY-DOOR
• REYNOLDS ALUMINUM WINDOWS

INSULATION ENGINEERS, INC.
2120 Lyndale So., Minneapolis
Kenwood 0480

Performance Is What Counts!
ANEMOSTAT Air Diffusers
ELIMINATE DRAFTS
SMOOTH QUIET DESIGN

"Look For Them in Places of Distinction"
You'll always have happy, satisfied clients when you specify Anemostat Air Diffusers.

Give them comfort and architectural beauty combined. Anemostats harmonize with acoustic tile ceilings and give the performance only Anemostat is capable of giving.

TYPE "E"
If you have not received your ANEMOSTAT AIR DIFFUSER selection Manual #40-1952 and Ceiling Architecture Volume #1-1951—write or call

THERMAL COMPANY, INC.
2526 UNIVERSITY AVE. • NESTOR 1364 • ST. PAUL 4. MINNESOTA
For 55 YEARS
weather proofing has been
Chamberlin’s only business.
No finer references than our
3 Million Satisfied Customers
(Coast to Coast)

- Metal Weatherstrip
- Aluminum and Steel Combination Windows
- Security Screens
- Calking
- Rock-wool Insulation

There’s No Substitute for Quality

Chamberlin Company of America
2400 Hennepin Ave.
Minneapolis 5, Minnesota

TWIN CITY TESTING and
ENGINEERING LABORATORY

Constructional Materials; Piling and Lumber; Foundation Soil Investigations Including Diamond Core Drilling; Metallurgical and Mechanical Engineering; X-ray and Radiography; Welder Qualification; Analytical Chemistry (coal, metal, petroleum, water). Process and Product Development.

ST. PAUL, MINNESOTA
2440 Franklin Ave. Nestor 4074
27th Ave. W. & Superior, Duluth, Minn.

apolis chapter of the American Institute of Architects.

Mr. Magney was graduated from the University of Minnesota in 1937 and did postgraduate work in architecture at Harvard University. During the war he was an officer in the U. S. Navy.

All three are members of the American Institute of Architects and the Minnesota Society of Architects.

RECORD CHURCH INSULATION COMPLETED IN ST. PAUL

E. N. Saunders (right) inspects the huge job for completeness. The picture below shows the masked workman blowing the insulation into place.

Considered the biggest church insulation job in Minnesota, the St. Paul Cathedral recently had 48,000
square feet of sprayed-on insulation mat placed by the Isco Corporation of St. Paul, working with the church's consulting engineers, Bettenberg, Townsend & Stolte.

The mat was sprayed by a special gun operating from walkways and scaffolding in the huge dome according to E. N. Saunders, Isco vice-president. The mixture of fibre and binding materials was blended in the gun, to which the materials were fed by hoses which had to be raised from 150 to 275 feet in the air, creating a special weight problem.

In addition to saving considerable fuel, the project will control condensation and consequent seepage in the upper areas of the church. The suspended ceilings create large air pockets where the conflict of warm, moist and cold air caused much condensation.

SWEDISH EMPIRICISM
(Continued from Page 7)

that is, every apartment with windows towards two opposite directions.

Thus the Swedish architects made themselves intellectual social workers instead of artists, their main task to build dwellings instead of monuments. Here we find both the characteristic Swedish romanticism at that particular time not regarded as desirable and the old emphasis on good craftsmanship. Functionalism became clearly defined as fighting for all human needs of our time. Its password was “accept the new reality.” Architecturally Swedish functionalism had the same character as other simultaneous movements all over the civilized world.

During the first stage of this international style, mechanization was assumed to be the main salvation while spiritual human needs such as beauty, individuality, personal activity,
City plan for the suburb of Kallerstad in the industrial city of Linköping, Östergötland, Sweden. Architects: Kell Astrom, Ake Åhström, Lars Bryde, S.A.R.

Kallerstad is a development for 10,000 inhabitants. It is situated on a plain close to the city center. All motorized traffic is peri­feric. Walk-ways and driveways are separated. Three story apartment buildings in square shaped blocks form the main portion. The design is due to the desire to obtain protection from prevailing winds. About 25% of the population live in row-houses or individual homes. The community center including shops, schools and recreation areas has a central location.

Physical as well as psychological comfort, were to some extent forgotten. Due to the business depression of the 1930's very little was built, although Sweden's economy was much less disturbed than that of the United States.

1940. War came with isolation, the country an island of peace in the European war madness. With it came restrictions and other building difficulties caused by lack of men and materials. A reaction appeared, favored by the necessity of using traditional building methods. The earlier forgotten human needs were pushed to the center of thinking. Mechanization was deliberately abandoned because the machine had become a symbol of war. People, in escape, turned their minds to the happy times before the wars, to the rural-city idyll with cherries and apple trees in bloom and well-kept white-plastered houses with red gable-end roofs.

This tendency still prevails. Some leading architects even go farther on the path of reaction trying out methods and forms which seem to belong to the past. Architectural discussion has been oscillating from the opposites of intellectual classicism to spontaneous organic warmth, the latter always being chosen. The result is a harsh cosiness combined with practicality. Both craftsmanship and the solving of the human problems are excellent. A slow but steady development is natural for an architecture depending on the complete integration of the forces acting on its growth.

This is one side of the new empiricism, the noticeable and unprogressive one. It may lead backwards with minds sound asleep to escapism instead of acceptance of the new reality.

The other side of empiricism is city-planning, the development of which seems to promise a fresh growth also for the architecture of individual buildings. However, the revolutionary new tendencies and possibilities, which have come through men's technical progress must be understood. Cars, airplanes, rockets, TV, atomic energy, and what will come,
Model of a Swedish city center to be built in the city of Malmö near Gothenburg. The church and the four-story apartment buildings on both sides of the center are now completed. Main buildings are the City Hall, shown in detail on the model, and the "Folkets Hus" or "Peoples Building," which is located close to the main street in the foreground. The small building behind the city hall is an existing telephone building. The city hall and the "Folkets Hus" form a plaza, which is treated as a part of an extensive park to be built around and on the near side of the church. The City Hall will house administrative offices of the city and will also serve civic purposes. Folkets Hus contains a movie theatre, auditorium, city library, restaurant and offices for the trade unions. The building is managed by the trade unions and was designed by their architectural office. The banks of the Malmö river, which runs along this side of the main street, will be landscaped to accord with the design of the civic center park.

City-planning of the area and the design of the city hall were done by S.R.A. Architects Ake Ahlström and Gösta Edberg who is the author of the article about Swedish architecture presented in this issue of Northwest Architect.

The apartment buildings seen in the model are typical "lamella" buildings with every apartment facing in two directions. "Lamella" describes a long building combining several equal units each around one stairwell with two apartments at each floor. Sune Sundahl, photographer.

are rapidly changing the old-fashioned fundamentals of our life and of city growth. The simple meaning is that the traditional city pattern is much outdated. A completely decentralized city seems to be the inevitable solution. It is an enormous waste to try to conserve cities artificially by building skyscrapers, under­ground railways or multi-story parking garages all of which will become obstacles for a coming generation with needs much different from ours. What is dying and passed has to go. Man loves freedom—not beehives.

City planning is necessary in a democracy. The first modern Swedish building law regulating city planning and how to build in decency was passed in 1874. Subsequent regulations, all for the benefit of the greatest number of people, have come since then. Together they give the city planner a wide control of all factors involved in city growth. The architect is the advisor of society. The building, rather than the room, is the basic unit for his work.

Lately a master plan for the entire nation has been under discussion. Every city or larger community or any area expected to acquire a dense or special population, can by law be required to have a master plan made before any building may proceed. Such a plan, which always is locally made, lays out main highways and streets, areas for housing, public buildings, industry, agriculture and recreation. Also it sets building heights, density of population and other factors of exploitation of land. A rugged commercialism is not permitted for such universally important items as land and buildings, though
Minneapolis Blue Printing Co.

Agents for Keuffel & Esser Co. of New York

* Architects and Engineers Supplies

Blue Prints and Photostats

* Main 5444

523 Second Ave. South Minneapolis 2

ownership is private. In a certain measure such items are as important as the water we drink and the air we breathe.

As the conscientious and far-sighted owner does not permit the decay of his property, nor needs to sell his own, so low-class or irresponsible housing projects are not allowed. Real estate brokers and builders are not permitted to shape the living pattern for his fellow citizen on the basis of profits alone. Some of the tracts in the U. S. are inherent slums and would be illegal in Sweden. Slums in the American or English meaning of the word do not exist there.

Actual planning is done in a very broad way with self-sufficient satellite cities adjoining an expanding mother-city. Nevertheless planning is not carried far enough—the new reality is not fully accepted. Usually the satellite city is equipped with a community center for education, shopping and recreation and naturally with parks and playgrounds. Appearance and walkable areas are completely separate and adjacent landscape is left natural. The Swedish sensitivity and affection for landscape and gardens have something of the same quality that has made Chinese landscape architects famous.

Apartment buildings, row-houses and private residences form the units. The areas of the rooms in these dwellings are often kept to a minimum. They are always equipped with all the modern facilities. Exteriors are similar to the exteriors of 100 years ago. What was simple and practical then is still so. The fashionable style of the modern—flush surfaces, glass, steel and concrete, cantilevers—is not regarded as practicable because of the climate. Also the cost of plate glass is prohibitively high. Study is devoted however to the finding of the valueable qualities of this architectural style.

Swedish architecture is somewhat naked and stark, like a winter tree. Economic demands do not help to make it richer. Lately painters and sculptors have been employed for the decoration of buildings and for the color schemes of whole developments. This is only a makeshift solution for creating architectural beauty. Instead of changing and enriching the architectural language itself, surface decoration is applied.

The search for a human, democratic architecture goes on. Many architects realize that the building of the present—it may be called the new empiricism—has failed to carry out the promises of the pre-war years. On the other hand, the slow natural growth, a voluntary co-operation in all fields, has always been the Swedish way.

Young architects look either towards International style, as used in France, Brazil or the U. S., or towards organic architecture. Lately considerable attention has been given to the Spanish and Italian concrete shell constructions with their exciting possibilities for plastic design. In all cases, however, the predominant factor is the living Swedish tradition which is the sign of health.

Because of the far advanced city planning Sweden is a country with great architectural possibilities. Despite this, architecture is today seemingly standing still or even retreating. In many cases the layman—he may be rich or poor, highly educated or not—who governs state or city has not sufficient knowledge or understanding to grasp the difficult techniques of social engineering and progressive architectural thinking. He involuntarily becomes a too rigid boss for the architect, who finally may cease to fight the compromises because of his personal pecuniary difficulties. Swedish politicians are convinced that alone is insufficient to solve the complex problems of fast growing populations and changing culture. There is seldom any difference in this respect if the owner is a private person or company.

The result is a middleway architecture. Many architects regret it, but believe in it anyway as the best that is possible. In some cases, the needs of the people and the practice of true democratic government are not being underetermined. It is a slow but very practical solution. Because of its steady evolution and ever growing change it becomes more progressive than just a middleway.

The architect has found it necessary to be an educator. Recently architecture has been written about in the daily papers and discussed over the radio as a problem important for everybody. Some architects are struggling hard to satisfy both
their own demands and those of the laymen—sometimes breaking their necks, sometimes creating art.

Such a quiet and unassuming architecture may not be very far-sighted; sometimes it may even be wasted since many great ideas are not carried out to the limit of their possibilities. But usually peaceful and steady proceedings give the best results towards the end as recent world history has shown.

THE TEAM-WORK CHARACTERISTIC FOR SWEDISH LIFE, IN WHICH FREE INDIVIDUALS VOLUNTARILY PARTICIPATE, IS BOUND TO REACH A HIGH LEVEL OF CULTURE. IF SWEDEN IS ALLOWED TO CONTINUE HER 150 YEARS OF DEVELOPMENT IN PEACE.

GOSTA EDBERG

GOSTA EDBERG who writes our leading story this month; "1952 and Swedish Empiricism," on page 6 is a Swedish architect and a member of the S.A.R., the Swedish Architects' Association.

He was born in 1918 in Stockholm and was raised there. According to Swedish custom the family spent the summers in the country—in his case on one of the many lovely islands which form the famous Stockholm archipelago.

After 12 years of general education Mr. Edberg entered the School of Architecture of the Stockholm Institute of Technology, which is one of the two architectural schools in Sweden. Both are state universities with a four-year course and the requirement of one year of practical experience in building.

Mr. Edberg graduated in 1946. Later he traveled in Europe. In Stockholm he worked in the well-known office of Sven Backström & Leif Reinius, S.A.R.

As an artist Mr. Edberg is represented with pencil drawings in the National Museum of Sweden and in private collections.

The United States, due to its technical development has, of late, been one of the favorite traveling goals for Swedish architects. With his wife Ingeborg Björkvall—an artist and painter—Mr. Edberg came to the U. S. in 1948. Studying the architecture of the U. S. he crossed...
EFFICIENT POSITIVE BLOWER
WHEEL EXHAUSTER

AirPlexer
"BW-HI STATIC" VENTILATORS

NEW STREAMLINED DESIGN
FOR EFFICIENT LOW COST VENTILATION

Maximum height largest unit 23"
Blends perfectly with modern architecture
* Sturdily constructed—heavy rolled pickle iron—14
gauge. Painted neutral gray.
Free air capacity rating according to N.A.F.M.

C. L. AMMERMAN CO.
104 No. 2nd St.
Minneapolis 1, Minn.

Free literature and engineering service available

HAYDITE
LIGHT WEIGHT
Building Blocks
NOW AVAILABLE

Marshall Concrete Products, Inc.
2610 Marshall N.E., Minneapolis, Minn.

the country several times and also visited Mexico and the
Mayan land of Yucatan.

Mr. Edberg has been working in architects' offices
in California and Pennsylvania. At the present he is
employed by the firm of Welton Becket and Associates,
A.I.A. Los Angeles.

In Sweden the selecting of architects for public
buildings is frequently done through competition. Mr.
Edberg has been awarded prizes in many of these con-
tests. In collaboration with another young architect
Ake Ahlström he won the contest for the design of the
City Hall of Mölnadal. The present scheme for the
building was designed during his visit to Sweden in
1950. The project is now waiting for a state building
permit. Due to the war and the resultant housing
shortage, building restrictions in Sweden are still severe.

ADVERTISERS

Academy Rubber Co. ........................................ 31
Acme Stone Company ....................................... 38
American Art Stone ........................................... 34
Ammerman Co., C. L ........................................... 42
Babcock Co. .................................................. 42
Bros. Boiler Co. .................................................. 5
Canton Lumber Sales ......................................... 10
Carnes Stamp Works ......................................... 40
Central Building Supply Co. .............................. 11
Chamberlain of America ..................................... 36
Child, Rollin B. ............................................... 25
Crown Iron Works ........................................... 38

Dunsworth & Associates .................................... 32
Gardner Hardware Co. ...................................... 41
Gerrard Co., W. A. ........................................... 4
Gorgen Co., The ................................................ 37
Hall Co., W. L ................................................. 41
Hauenstein & Burmeister ................................... 39
Helme Ventilation Co. ....................................... 39
Insulation Engineers ......................................... 35
Johnston Mig, Co. ............................................ 15
Lewis, Geo. R .................................................. 32
Mankato Stone Co. ........................................... 26
Marshall Concrete Products ................................ 42
Mason City Brick & Tile Co. ............................... 33
Minneapolis Blue Printing .................................. 40
Minnesota Fence Works ..................................... 33
Molin Concrete Products ................................... 34
Morse Co., F. J .................................................. 40
Neal Slate Co., W. E ......................................... 24
Nelson Co., B. F. ............................................... Cover II
Northern States Power Co. ................................. 19
Ochs Brick Co., A. C ......................................... 38
Olson & Sons Concrete ...................................... 32
Olson Mig, Co., C. W ......................................... 40
Overhead Door of Minnesota ............................... 36
Paper Calmenson Co. ........................................ 22
Pella Products ................................................. 21
Raymer Hardware Co. ....................................... 18
Rich McFarlane Cut Stone .................................. 32
Roberts-Hamilton Co. ....................................... Cover II
Rogers, H. A., & Electric Blue Print. ...................... 26
Rydell, A. T ..................................................... 39
St. Paul Structural Steel Co. ............................... 26
Shiley Co., L. .................................................. 37
Smooth Ceilings System ..................................... 35
Stanton, R. E ................................................... 32
Steel Structures .............................................. Insert: between pages 2-3
Structural Clay Products Co. .............................. 20
Thermal Co., Inc. ............................................. 35
Truax-Truet Coal Co. ....................................... 31
Twin City Brick Co. .......................................... 30
Twin City Testing ............................................. 36
Twin City Tile & Marble ..................................... 41
Villaume Box & Lumber ..................................... 24
Western Mineral Products .................................. Cover IV

KASOTA STONE & MARBLE
Trademark "Man-sota"

The Babcock Company
"1852-1952"
Kasota, Minn.

TELEPHONES
MANKATO 34223 • ST. PETER 723
Formerly Breen Stone & Marble Co.
Units to carry out your design ideas are on excellent display in our showrooms. Come in and study them. We shall be at your disposal to answer questions and help solve special problems.

Kohler — W. A. Case — Briggs
Weil McLain Boilers & Radiation
Berger Cabinets
A. O. Smith & Hoffman
Hot Water Heaters

Roberts-Hamilton Company

Wholesale Distributors
PLUMBING, HEATING AND KITCHEN SUPPLIES
Park Avenue and Third Street
Minneapolis 15, Minnesota
no gimmicks — no gadgets — no guesswork

concerning lightweight aggregate when you have these valuable booklets packed with...

FACTS FOR ARCHITECTS!

ZONOLITE PLASTER AGGREGATE
When used in plaster, building weights are reduced and fire safety increased. This illustrated booklet contains information on mixing, thickness, weight, gradation, insulation value, fireproofing, etc.

ZONOLITE ROOF DECKS
This attractive 12 page booklet has detailed information on Zonolite’s general properties, roof decks and roof insulation. Complete specifications are included.

ZONOLITE FINISH AGGREGATE
A fine-sized vermiculite that provides a hard finish coat with a pleasing tan cast. Literature lists outstanding advantages together with information on proportions, mixing and application.

ZONOLITE CONCRETE ROOFS
Zonolite Insulating Concrete is made by mixing a specially graded vermiculite aggregate with Portland Cement. This booklet contains complete specifications together with detailed illustrations of typical floor construction.

ZONOLITE ACOUSTICAL PLASTIC
For new work . . . or right on existing surfaces, Zonolite Acoustical Plastic fills a long felt need. Contains complete information on sound absorption, mixing, application, etc.

Request booklets by Code Number from WESTERN MINERAL PRODUCTS CO.
1720 Madison St. N.E. Minneapolis 13, Minn.
Plants at Minneapolis, Omaha, Milwaukee, Denver