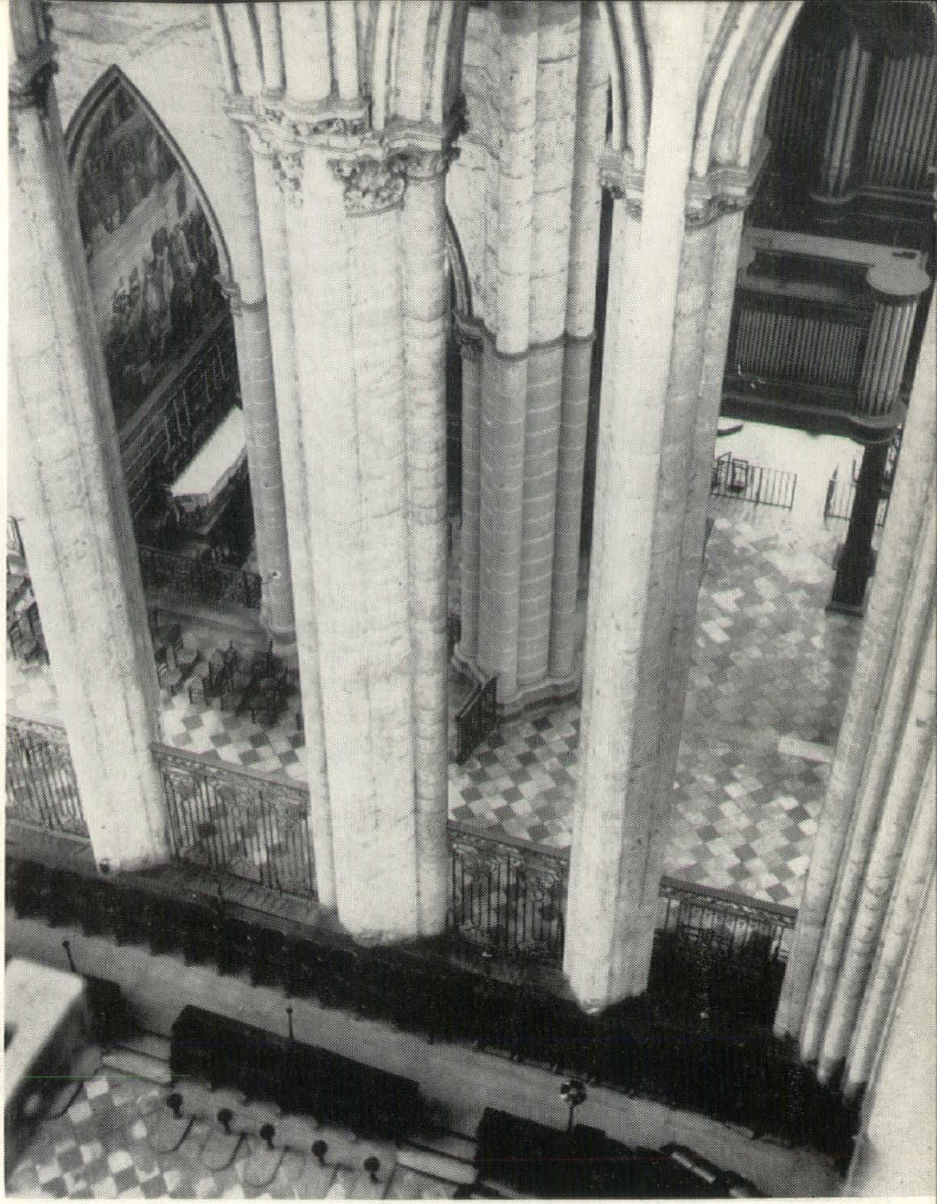


THIS is an unusual view of Beauvais Cathedral looking down on the choir from the triforium gallery, the opposite aisle of which you can see at top picture. Through the arches may be seen the great organ—looking very small in such a vast building. This picture very clearly shows the “musical instrument” which such an interior itself actually is. You can stand within and see all about you the many chambers and the variety of surface which holds, reflects or reinforces the sounds. The high vaults with their lens-like segments which the photograph does not show are high indeed, twice as high again as this triforium gallery.

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NORTHWEST ARCHITECT

MAY 1950

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VOLUME XIV

NUMBER TWO



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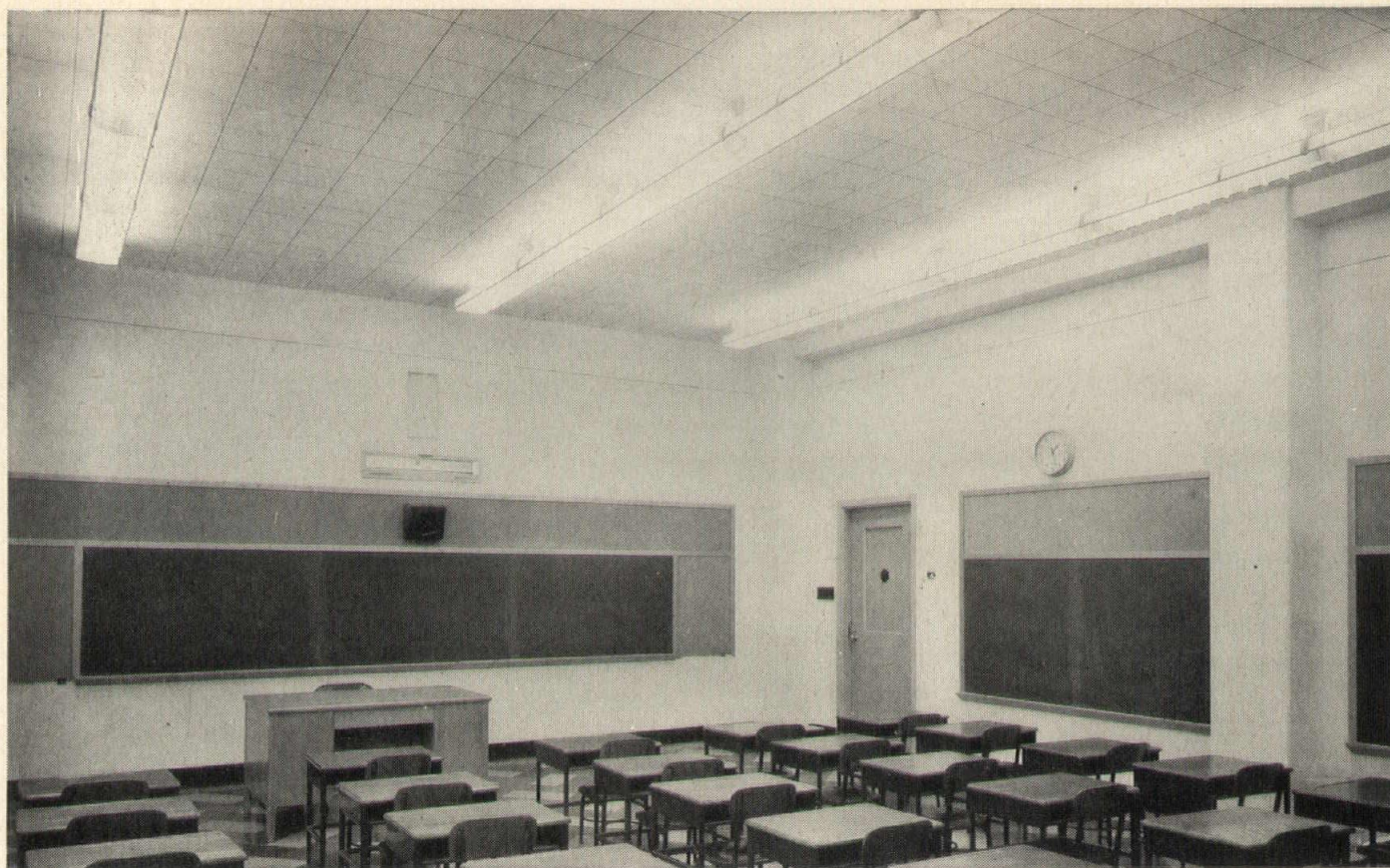
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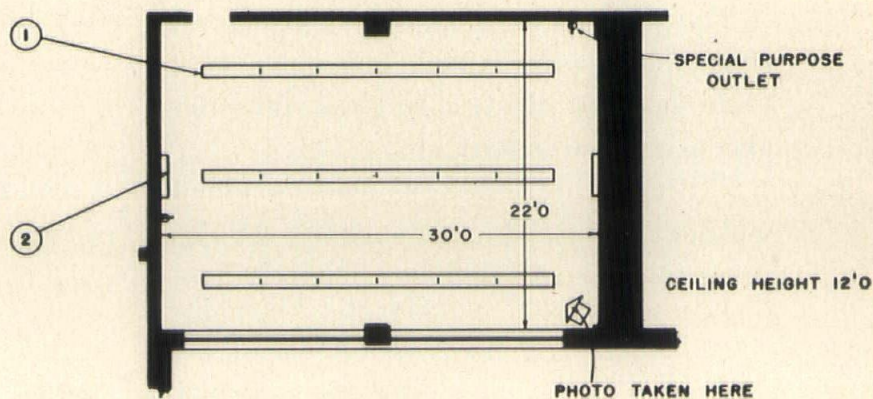
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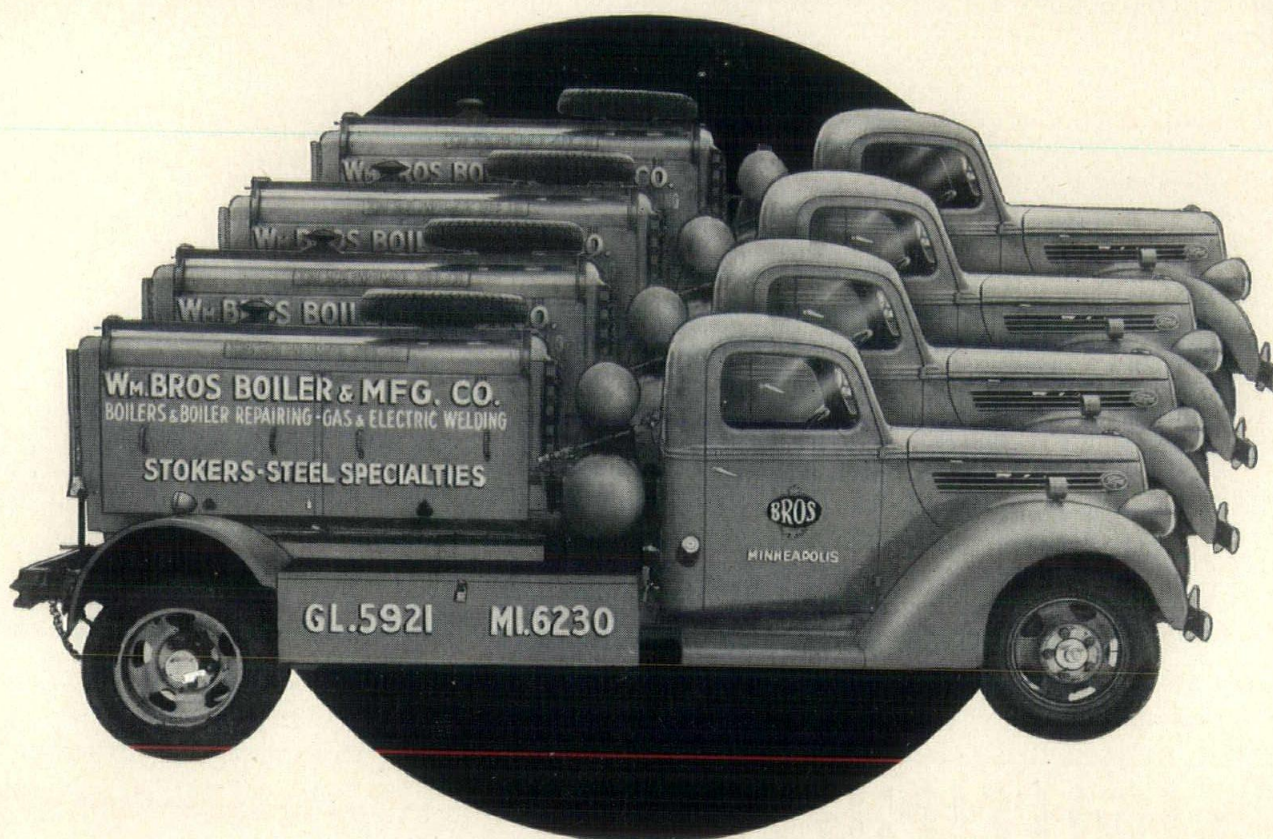
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NORTHWEST ARCHITECT

Official Publication, Minnesota Society of Architects

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NEW WORDS with which to tool up new ideas help people to think. But man liked his Trick Words so much they soon became obstacles. He got his Communication tokens all tangled up with what he desperately needed to say. At times they completely plugged his thought stream.

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SOUND for spiritual satisfaction.

PLACE for personal protection.

H. W. FRIDLUND, A.I.A., Editor
C. J. LORETZ, Business Manager

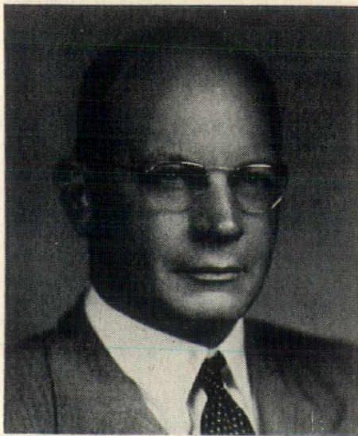
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VOLUME XIV **1950**
NUMBER 2



Chairman Ellerbe

FIRST ARCHITECTS' SEMINAR

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UPPER MIDWEST HOSPITAL CONFERENCE

Minneapolis is the site of a two-day hospital planning seminar sponsored by the Minneapolis and St. Paul Chapters of the American Institute of Architects to be held on May 18 and 19 in conjunction with the Upper Midwest Hospital Conference, an annual event attended by some 2,000 hospital administrators and members of allied specialist groups. By thus combining the two conferences, a unique opportunity for architects to exchange ideas with the people who operate hospitals will present itself.

The committee organizing the seminar is under the co-chairmanship of Roy N. Thorshov, Long and Thorshov, Minneapolis, and Thomas F. Ellerbe, Ellerbe & Co., St. Paul. Other members of the committee include W. H. Tusler, Victor C. Gilbertson, Arnold I. Raug-

Cunningham, executive editor, *Modern Hospital*. Mr. Ellerbe will present the architect's role and James Hamilton, Minneapolis consultant, the consultant's role. Thirty minutes open discussion.

Afternoon Session, May 18—

"Hospital Construction" will be the overall theme with the Upper Midwest Hospital Conference members as the guests of the architects.

"The State's Role in Hospital Programming," Dr. Helen Knutson, Director of the Section of Hospital Facilities in the Minnesota Department of Health.

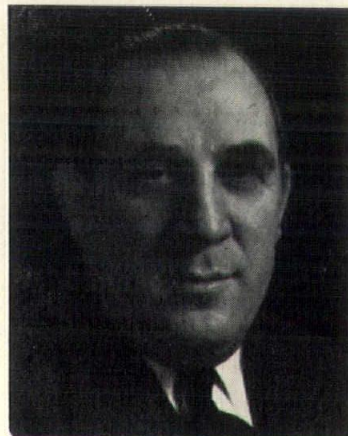
"The Effect of Planning on Operating Costs," Carl Erikson, Schmidt, Garden & Erikson, Chicago.

"The Administrator's Responsibility in a Construction Program," Dr. Willmar M. Allen, President of American College of Hospital Administrators.

A round table discussion will follow the talks. James Stephan, associated with the James Hamilton Hospital Consultants and professor at the University of Minnesota in hospital administration, will moderate the round table and conduct the afternoon session.

Dinner, May 18—

Mr. Cunningham will give a slide-illustrated discus-



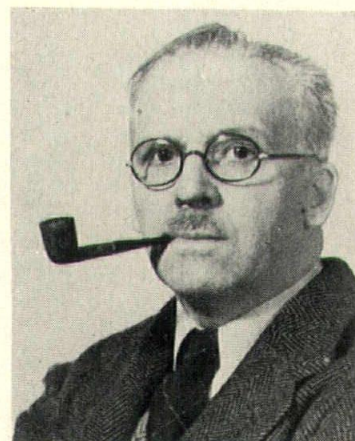
Mr. Hamilton

land and Eugene D. Corwin. Edward H. Noakes, Minneapolis, is executive secretary of the committee.

The morning session on May 18 will hear Mr. Thorshov give a brief welcome to the attending architects and hospital men. Tentative arrangements have also been made for Governor Youngdahl of Minnesota to talk to the group. Then the scheduled addresses will be given, with opportunity for open discussion led by prominent architects and consultants following each presentation. The program follows:

Morning Session, May 18—

"Programming a Hospital," moderated by Robert



Mr. Tusler

sion of "Hospitals of the Future," based on his article in the February issue of the *Architectural Forum*.

Morning Session, May 19—

Mr. Erikson will moderate this session, with open discussion following each presentation.

"The Nursing Unit," Miss Margaret Filson, Assistant Professor and Director of Nursing Service, University of Minnesota. This will be illustrated by a series of Public Health Service slides showing the workings of a nurses work unit.

"Facilities for the Care of the Newborn," Dr. John Adams, pediatrician at University Hospitals and General Hospital, Minneapolis.

"Aseptic Technique," Dr. Carl Walter, teacher of surgery at Harvard and Chief Surgeon, Peter Bent Brigham Hospital, Boston.

Afternoon Session, May 19—

Marshall Shaffer, Chief of the Technical Services Branch, Division of Hospital Facilities, Public Health Service, will act as moderator for this session.

"Operating Room Materials and Planning," Robert Cutler, AIA, Skidmore, Owings and Merrill.

"Fire Safety Design," Glen Rowell, of the Fire Underwriters' Laboratories.

"Hospital Services," T. Joseph Hogan, Chief of Maintenance Division, Medical Services Bureau, Public Health Service, Washington. This discussion will cover the kitchen, laundry and housekeeping storage.

"Functional Relationships of Departments," Mr. Tusler.

Specific invitations to attend the seminars have been extended to all architects in Illinois, Wisconsin, Iowa, Minnesota, North Dakota, South Dakota and Montana and also to the members of the Royal Architectural Institute of Canada in Ontario, Manitoba, Saskatchewan, Alberta and British Columbia. The idea for the seminars was first brought out in talks among members of the firm of Long and Thorshov, was then presented to the Minneapolis Chapter A.I.A., which thought it a good plan and worked out the details in co-operation with the St. Paul Chapter.

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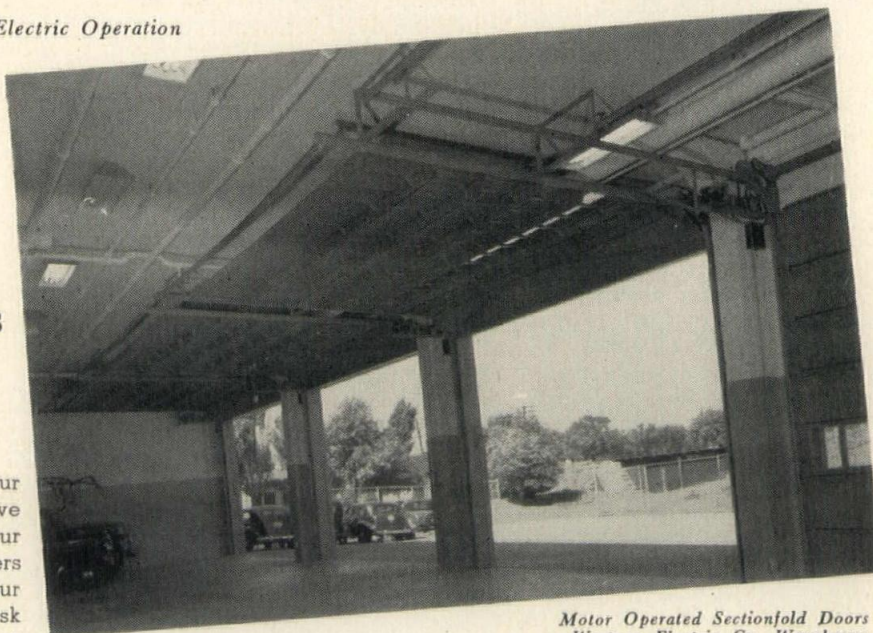
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NOISE AS MUSIC

How Historic Architecture Refurnished the Listening Ear

YOU WILL FIND here no \$5.00 words. This piece is a practical report. It's a "Here's Why!" for LISTENERS. Musicians will doubtless be indignant, but with all the fancy talk they give out about music these days, while many of them talk to the customers, few speak for them,—so I'm going to try!

Someone may ask "what is a FUGUE" see page opposite.

By WILLIAM GRAY PURCELL

THE FIRST TIME I ever heard an organ fugue there seemed something wrong about it as music, seemed like a stunt, too much mathematics, hill and dale paper-chasing. There was just too much repetition. As I began to study violin and came to know more music and musicians I still could not understand how the great composers of classical music with their vast concepts, poetical intention, and fine feeling, could have allowed themselves to become so preoccupied with mere ingenuity, puzzletry. There *must be some missing factor* of which today's concert-artist music reproducers and the church organists were unaware.

Without exactly knowing my direction I began to put together listening experience and various experiments, both musical and architectural. My results were colored, no doubt, by the original feeling that fugues ought to be more beautiful, more satisfying. I knew that professional musicians were very strong for fugues. Perhaps our trouble was that we mere listeners were unable to share in certain physical and emotional rewards which have come to the musician, because he had succeeded, after a lot of practice, in doing a very difficult act of finger juggling. And it seemed to me that this durable drill of counter marching notes was a sort of imposition on the listener's intelligence and good will. And I still think so. One wholesome step in the right direction would be to at least omit all the repeats and re-repeats in the old sheet music scores. Writers and speakers have been compelled to accept readers and audiences of our day, who just will not give their time to hour-long speeches and labored descriptive writing; why not musicians?

When you think of "music" you also think of paper sheets with printed bars and notes with all of the musical instruments to make the sounds. But the sheet music and instruments are only the reproduction tools. We now propose to report a new and special kind of musical instrument—the whole inside of a great cathedral, as a sound chamber. While you read, keep thinking of the *sound* in your ear; what happened to that sound before it reached you makes all the difference.

In Paris one day in 1906 I went out to St. Sulpice, an uninteresting Renaissance church of only technical

appeal, but which I wished to review in connection with my studies of the 13th Century "Gothic" buildings in the Isle de France. I was also drawn there under the mistaken notion that it was this church in which Cesar Frank had been organist. When we entered, an organist was practicing. The vaulted interior ceilings are of hard stone, combined with flat smooth stone walls, hard tile floor, and a series of firm, regular, unribbed hemispherical domes. Such vaults make perfect sound mirrors and lenses. They gather the billows of sound waves and bounce and re-bounce the resulting concentrations from pavement or wall, or roof, again and again.

The resultant sound, as it came to our ears, made it dramatically clear that the fugue being played had become entirely another kind of music as compared with the same notes when played on an organ in a modern acoustically perfected hall. This fugue sound-froth "whipped-full-of-building," had been forceably changed from being a classical "form" and was now an emotionally interesting body of sound, vast and solid, yet fluid, like the ocean or "Old Man River." The original hare and hounds notes were lost in the teeming crowds of sound children and grandchildren, born of the fugue to ten generations in half as many seconds. These troops of notes now all changed and-changing, crowded the forest of piers, cornices, galleries, and hollow chapels of the church like happy angels on a holiday. The counter-marching note soldiers of the fugue, as it left the organ, at once disappeared into the populace of a new-built city of sound.

As we sat there it hit me in a flash—"It was this whole church interior which is the musical 'instrument.' The organ is but the reed, or pipe, or string. The organ—or organ and voice—is the mechanical vibrator within the stone sound chambers of this vast tuba." There were we, actually like mice inside a trumpet. We were actually within the many walled matrix where over-tones come to life.

THE OLD CATHEDRAL INTERIORS are really shaped a good deal like a trumpet (see the picture on the cover) with big "valves" at either side near one end forming

FUGUE---a few words of explanation.

We have to first agree upon what a "fugue" is. My best offer is that it's a formal musical heritage of the old "round-song," which all of you have sung at old fashioned parties, like this:—

SOPRANO	—	<i>Scotland's burning, pour on water</i>	—	<i>Scotland's burning, pour</i>
CONTRALTO	—	<i>Scotland's burning, pour on water</i>	—	<i>Scotland's burning, pou</i>
TENOR	—	<i>Scotland's burning, pour on water</i>	—	<i>Scot</i>
BASE		<i>Scotland's burning, pour on</i>		

By the time four "parts" are all burning Scotland at the same time you have the makings of a fugue. Now play it with an orchestra and keep it going round until the listeners are also burned up, and the fugue has become classical music. Next problem is how to get rid of it! The great German musician Wagner found one answer.

the transept, and, built into each side of the nave, many chapels, like little trumpet valves. One can understand how the early composers must have been faced with a hard problem in these stone interiors. Let one sing or play even four notes, and back comes from every direction 16—256—65576 notes repeating and repeating. Sound travels 1100 feet per second. The first notes would be bouncing back in 1/20 of a second—others striking walls 100—300—600 feet away would be back in 1/10, 1/4, 1/2 second. The building also had acres of sound-bouncing glass windows which the music makers could not change.

To have his sermon understood the priest did the best he could, and not too good at that, by putting a flat panel or a shell over and behind his pulpit. The pulpit in turn was always located, through centuries of trial and error, at that point which is least likely to be the locus of any crossfire of reflected sound. These pulpit voice deflectors were actually still another acoustical "instrument" within an instrument. This pulpit "baldachine" threw speech sounds down on the soft heads of his parishioners. If there were enough of them pressed well enough together, the echoes and reverberations would be softened and delayed so that the people could distinguish the syllables fairly well. But the words of the song which came from the choir at the end of the nave became fused and blended into another musical creation. Voice intonation which at first was just a way of speaking to be understood, soon took on a formal system and procedure. From this "plain song" was born the aria of the opera. All this began long before the appearance of integrated harmonized instrumental music as we know it. Thus it was that the fugue-maker of music had to build his sound pattern against the shower of sound that sprayed him every time he started to play a tune.

All the traditional music, that was composed for cathedral services, has this acknowledgment of reverberation and echo built right into its musical fabric. Difficult acoustics simply compelled composers to harmonize, not against the adjoining notes, but against almost instantaneous memory of a passage as it reaches the listening ear. The satisfying chord which made beautiful for you that lovely contrast note which you last heard, was not the chord the organ made just one half second ago. It was a new chord, built of note-crowds returning from the sound reflecting surfaces of distant wall, pier, or glass.

NOW, PLAYING that old classical cathedral music in modern acoustically sound-damped churches, or in con-

cert halls which have been engineered to meet other demands than instrumental music, produces another musical world entirely. These modern "auditoriums" are so designed that the most minute articulations of singers and speakers can be heard. Singing or playing notes in such halls, having no reverberation, is something like the thin sound of a reed removed from its pipe or tube chamber, or the squeak notes lipped on a mouthpiece removed from the trumpet. Classic music played in modern halls lacks overtones, except those consciously built into the piece by the designer of the music. New auditoriums are not musical instruments. Of course organ pipes and their housing, piano sounding boards, even the mouths and noses of singers, modify the vibrations, build overtones, and color tone qualities. But the character, duration, volume, weight of sound, which is built up in a "sound chamber" which is *five hundred feet long, a hundred and fifty feet high and a hundred feet wide*, the old cathedral interior, with literally thousands of varied "valves," chambers, surfaces, slants, lenses, diffusers, dampers and reinforcers becomes a universe of musical sound which is another world entirely than the singer's mouth, the table size piano, or the small housing of a church organ.

The contemporary aristocracy of church organists, who are so scornful of today's music making with creative sound, who are so sure their finger mathematics and explanatory pedalling are the pure spirit of Bach, would surely give that gentleman a shock could he hear all too much of his music reduced to a sort of type-writer pecking through deletion by scientific acoustics of all architecturally fathered overtones.

Now we find the converse to be true in the music of Scarlatti, 1659-1725. Written for the harpsichord, a plucked string "piano," his notes are assembled and ordered to do his best with a musical noise made up of mixed twang, ting and thump. Specialized as is the intellectually built taste that now enjoys it, such music, however limited, sounds better on the harpsichord for which it was designed than when played on our richly overtone pianos. The modern piano resembles the harpsichord only in certain basic mechanical assemblages and in method of manual operation. But in resulting summation of sounds produced, piano music is totally different. Playing Scarlatti on our piano which moulds, models and rebuilds the sound of its hammered string, puts mayonnaise and whipped cream on the simple early music, which like old bread, tastes best with garlic and dry red wine.

The pressures on music by factors that were not music and the tendencies to think about musical ideas in terms of their labels, rather than dealing with their inherent qualities, represents characteristics of human thinking that affect all the arts in about the same way.

NOW LET'S SEE how peoples' minds work. They work just exactly the same way whether in music or architecture, painting or poetry. We have seen how the building demanded acknowledgment and co-operation from the music composer. Now let's see how academic esthetics—the "music" of appearance—tried to control architecture and failed.

In architecture, a French mathematician by name, Gaspard Monge, invented a method called "Descriptive Geometry," by which the forms of buildings could be much more accurately recorded on paper than had heretofore been possible. As a result the world of "Mechanical drawing," assisted by all the beautiful graphic arts, began to take over and substitute for the aesthetics of the building art. The world result was that by 1900 the three dimensional, out-of-doors Art of Architecture as the Fine-Art-of-Building, had succumbed to all the two dimensional graphic Arts-of-Representation. The architects became wholly preoccupied with imaginary structures which, when built, as they sometimes were, bore resemblance neither to the drawings nor to any valid structural form with cubic space qualities. Indeed an esthetic system which had been deduced from former buildings and implemented by a highly organized hand book of graphic art symbols, soon came to wholly displace the esthetic "values" of actual buildings. It is a revealing fact that in Schools of Architecture, the particular study in the curriculum called "Architecture" was in no sense the study of building as an organism. This "course" consisted of making sorts of water-color set pieces, or glorified "samplers," in which various shards fallen from old classic buildings were tastefully arranged. They appeared to be collections temporarily left on the roadside by some antiquarian while removing them to his museum. No "building" art there, no science, not even archeology, and still the professors naively called this fancy drafting "Architecture"; just the routine name of another course in an inept curriculum.

In music, we discover these same inversions at work. Increased facility in developing signs and symbols to make record of sounds on paper soon preoccupied musicians. They found however that even the best system of reducing sound to writing had reached its limits. There was so much in music—in organized sound—that was simply non-describable by symbols.

THE MUSIC "writers" were unable to develop their paper system to keep pace with the growing imaginations of "composers." The world of new sound struggling for expression became entangled by musical-notation-professors in the meshes of this service-art. The cult of "writing" music was so strong that new melodies, new mixtures and reaches of organized creative noise was forceably limited to what could be actually captured by written notation. Chamber music players of the 1890's didn't know what to play when they read on the early scores "Basso continuo" under the cello part. The early composers expected the competent players to supply their own harmonies as they went along. But this ability was lost, due to constant dependence on written scores. So modern music publishers had experts compose running "through base"

as it was called and their new accompaniments were printed under what the original composer had given for the melody instruments. This old skill was to return again in the jazz bands of today, whose most characteristic effects simply cannot be reduced to notation and none of the followers of the current stream of sound traffic would want them to be.

J. S. Bach, 1685-1750 was still free of the sheet music makers, but he wasn't free of difficult acoustics in the churches where his creations were mostly heard. In passages where his music may seem to many amateur listeners to be over-arithmetic'd, with regimented notes in quick step, as *we hear it* today, such musical riveting was eased into acceptable and useful tones by the old building interior—the "instrument" in which it was played. That is to say, the organ as "mouth piece" reacting against the church interior as I have shown. Not only does Bach's music gratefully accept the welding and reintegrating of the rattle of sound chips struck from the organ flutes and tubas, but the soaring and bursting flights of his sound, reach for the high vaults and far aisles, to fill their empty hollows full of heavenly surf.

Ludwig von Beethoven, 1770-1827, began to compose music more than two generations after J. S. Bach died. At 30 his hearing showed impairment. This grew steadily worse during the next 19 years. At 49 he was totally deaf. He was only 57 when he died.

OUR EXAMINATION of the world of sound is thereby faced with an interesting speculation. Did Beethoven ever really "hear" the music which he "composed"? Did he continue to develop new creative sound after he became deaf? I think not. It seems to me that he only heard in imagination, only *could* have so heard, what *had happened* in sound, and in his own music, *up to that time when his hearing sense became impaired*. This tragedy must have shut him out of the still growing world of musically organizable sound. After that what he imagined-to-hear, in his own composing, were recollections of his musical past experience. Certainly this was a large field.

After that as I see it he didn't create music, he "composed" memories of music with which he was familiar. The basic sound stuff out of which he made his music could thereby necessarily not include the new sound being unlocked by many young musicians even before he died.

This is why I think that a lot of Beethoven's music is still fighting the old "fugue" battle, it is still tinkly, a very brilliant juggling of sound tokens, heavenly in many passages, but paper-chasing none the less. His fugueing is on a grand scale, no doubt, but as a conscious creative effort is tied very much to the musical score and falls short of our concepts of music as multi-dimensional sound.

My view is confirmed by Gustav Strömberg who says in *The Searchers*, page 55. David McKay Co., Philadelphia, 1948:

"The only way we can describe the realities in the external world is by symbols which may be geometrical or mathematical. It is like the symbolic representation of a symphony by an arrangement of signs on a sheet of paper. A man born completely deaf could study the signs and the order in which they occur, but his organic defect would prevent his mind from grasping the es-

(Continued on Page 30)

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A.I.A. President Walker makes some marginal comments (above), flanked by Mr. Thorshov (left) and President Pinault (right). The lower picture shows Mr. Thorshov introducing Mr. Schlossman, at his right.

With a program studded by practical presentations of various types of buildings before seminar sessions—the “here’s what we did, how and what we learned from it” thing which takes building designers directly to the heart of their problems—more than 250 architects from Minnesota, North and South Dakota, Wisconsin and Illinois gathered in Minneapolis for the North Central States Regional Convention.

The attendance was representative of the many well established firms in the region and was liberally salted by architectural students, who obtained many valuable hints on problems they will face when they graduate.

Arrangements for the convention were under direction of W. H. Tusler, Minneapolis, regional director

for the American Institute of Architects. The AIA’s president, Ralph Walker, New York, spoke at the dinner the first day of the two-day gathering. He pointed up the effects the automobile has had on city planning and predicted that in the future architectural design will be done on a neighborhood basis rather than individually because of modern trends toward decentralization and development of the outlying community as part of the city.

The day when the architect was an artful designer, pure and simple, is done, he said. Today the architect must know much of many things besides his own field, like city planning, economics, sociology, traffic, merchandising, et cetera. Training in the architectural schools of the country must change their curricula accordingly. The AIA is studying the colleges of the country in this relationship with a view of working out a new, broader course of study for undergraduate architects.

Registration for the convention in the Nicollet Hotel, Minneapolis, started Friday morning, February 17. Mr. Tusler presided over the first business session that morning, after which the first seminars were held. At the first Brooks Cavin, St. Paul, Minn., presented the plans for the Veterans Service Building in that city and the second seminar heard about the Carleton College Fine Arts Building from John Lindstrom of Magney, Tusler and Setter, Minneapolis.

Roy N. Thorshov, president of the Minneapolis Chapter, presided at the luncheon at which Mr. Walker talked briefly. Norman J. Schlossman of Loeb,



Listeners to the ideas presented by panel speakers are shown in the pictures above.



Snapped at the conference was the casual group in the upper center picture (left to right) Mr. Thorshov, W. E. Bentzinger, Mrs. Bentzinger, Harold Spitznagel, Mrs. Spitznagel and Robert C. Cerny. A student group talking over problems presented is shown in the lower center (left to right)—Mas Matsumoto, Howard Dahlgren, Donald Wexler, Joel

Glotter, George Normandin, Cecil Fowlds and Dave Rowland.

Around the clock with the speakers (starting upper left "11 o'clock" and proceeding clockwise)—Messrs. Cerny, Perkins, Beckstrom, Larson, Armstrong, Bergsted, Merrill, Spitznagel, Schlossman and Brunet.



The Minnesota Society's board (left to right): Donald P. Setter, Minneapolis, President Pinault, St. Cloud, Secretary Otto M. Olsen, Duluth, Treasurer Claude H. Smith, Duluth, Harold Starin, Duluth, Thomas Ellenbe, St. Paul, and Albert O. Larson, Minneapolis.

Schlossman and Bennett, Chicago, presented the Dearborn Homes Housing Project, illustrated by motion pictures of the development.

At the afternoon seminars architects heard about Anoka County School No. 23 from G. Clair Armstrong of Armstrong and Schlicting, Minneapolis, the Edina Morningside High School from James Brunet of Lang and Raugland, Minneapolis, the Central Elementary School in Richfield, Minn., from Robert G. Cerny of Long and Thorshov, Minneapolis, the Blythe Park School of Riverside, Ill., from Lawrence B. Perkins of Perkins and Will, Chicago, and the George Washington Grade School in Moline, Ill., from M. R. Beckstrom, Moline.

At that evening's dinner meeting, P. C. Bettenburg, president of the St. Paul Chapter, presided. Messrs. Walker and Tusler spoke at that dinner.

Final seminars held the morning of the second day

included the Buena Vista College Dormitory in Storm Laka, Iowa, presented by Milton V. Bergsted of Ingemann and Bergstedt, St. Paul, the Louis Weiner Hospital in Marshall, Minn., by Edwin Larson of Ellerbe & Co., St. Paul, the Terrace Plaza Hotel in Cincinnati by E. A. Merrill of Skidmore, Owings and Merrill, Chicago, and the Ottumwa Country Club of Ottumwa, Iowa, by Harold Spitznaged of Sioux Falls, S. D.

At the final luncheon, presided over by President Louis C. Pinault of the Minnesota Society of Architects, the final project presentation was made when Mark N. Hayes presented data on Christ Evangelical Lutheran Church in Minneapolis, Saarinen, Saarinen and Associates, Detroit, in association with Hills, Gilbertson and Hayes, Minneapolis.

Open discussion of pertinent problems in connection with the projects presented was held after each talk and many points in the design and construction of the projects clarified.

A number of exhibits were set up for the study of those who attended the convention and several firms opened hospitality room for the conventioning architects.

May in Washington American Institute of Architects Holds 82nd Annual Convention

Focal point of architectural America was Washington, D. C., on May 10-11-12-13 as the 82nd Annual Convention of the American Institute of Architects was held with a program tailored to fit every professional and recreational taste among the thousands of members attending.

Under co-ordination of Executive Director Purves, committees provided for fast stepping business sessions crammed with important association activities and interesting talks by leaders in the field, tours of important sites in and around the capital city and relaxing entertainment. Those handling registration and housing had planned for some 2,000 members and guests, which made the convention "the greatest in the history of the AIA."

The Washington-Metropolitan Chapter, AIA, was host for the 1950 convention which headquartered in The Mayflower. There all business sessions, various symposia on planning, lighting, etc., presentation of awards and the annual dinner were held. The prize winning 1950 honor award projects were displayed at The Mayflower. The President's Reception, however was scheduled for the Shoreham on May 11. A joint session of the National Capital Park and Planning Commission with the A.I.A. delegates and the U. S. exhibit

in this year's Pan-American Congress were also convention features.

Tours and inspections planned included an inspection of the White House renovation project, which should settle in the minds of many architects some of the pros and cons of this controversial remodeling program, a tour of the Georgetown gardens and many sightseeing tours. Program Chairman Hale Darby also said a special effort was made to fully satisfy the entertainment and educational appetites of the many wives of delegates who attended.

Fee for the convention was \$15 but there was no charge for students and wives of registrants. The annual dinner ticket was not included in the registration, was paid for separately. Prior to the opening of the convention, the Washington-Metropolitan Chapter gave a dinner on May 8 in honor of the AIA board and wives of board members.

Officers and regionals were among the important business to come before the convention sessions, with a proposal for creation of the office of president-elect and establishment of two new regions.

The proposed change in the by-laws to allow for selection of a president-elect would place that officer in line to succeed the current president. To prevent any difficulties which might arise through re-election of the president, thus holding off the president-elect, the term of office would be limited to one year and the outgoing president could not be elected again until two years had gone by. The president-elect would also be first vice president and a member of the board.

The proposed amendment on regions would create

(Continued on Page 34)

Add Regional Pix



The pause that refreshed (upper left) was taken by (left to right) George Townsend, St. Paul, E. A. Jyring, Hibbing, Gordon Comb, St. Paul, Gordon Schlichting, Minneapolis, Clair Armstrong, Minneapolis, Francis Kerr, Minneapolis, and Dick Frahm, Minneapolis.

Upper right was a group discussing fixtures as they influence design—(left to right) Walter Richter, Gene Hurley, Jad Asfeld, Dick Filburn and Ted Richter, all of St. Paul. The same subject occupied the group (center left, left to right) made up of Norman Nagle, Walter Vivert, Walter Richter and a guest.

All smiles was this group of Victor Gilbertson, Minneapolis, Julian Sandstedt, Sohokosh, Wis., E. F. Klin-

ger, Eau Claire, Wis., Armin Knopp, Oshkosh, Hayes Mark, Minneapolis, and Fritz Von Grossman, Milwaukee.

A puff between seminars was enjoyed by these architects—Dick Green and Dick Whiteman, Minneapolis, E. F. Klinger, Eau Claire, Carl Schubert, La Crosse, B. O. Boyum, Winona, and Kenneth Skold, St. Paul.

Students have their say-so's about the discussed buildings—George Klein, Jr., Minneapolis, Dick Filburn, St. Paul, Robert Jackels, Minneapolis, James Hirsch, St. Paul, Frank Mitukowski, St. Paul, Gordon Oswald, Minneapolis, Dick Rafferty, St. Paul, and Bill Shannon, St. Paul.

ANSWERS

TO COMMENTS AND INQUIRIES
ABOUT OUR RECENT ARTICLES ON

AGRICULTURE • ITS EFFECT ON AMERICAN ARCHITECTURE

THE FOLLOWING INFORMATION is a review of material from technical discussions, letters and books by agronomists, nutritionists, medical doctors, general scientists, cooks, mothers, nurses, and people who for various sufficient reasons want to discuss food. I am sure that you, also, can hardly have failed to notice the very large amount of attention given this subject by press and radio. Everybody is talking about deterioration of basic food values. Food advertising is reacting. Food production, processing and purchase should do the reacting.

Any information reported on these pages can be confirmed by a very large amount of exact information easily available. Disinterested, fact backed contra-opinion will be reviewed in following numbers of Northwest Architect when and if space is available.

FOUR MONTHS have been spent assembling the answers to your questions. These are far from being complete answers. But taken together they point out general areas for profitable study. I am not a food expert. There are very few who are, and too, many of the experts have found themselves wrong. I am just a food eater like the rest of you, know of no food article generally eaten which I do not like; haven't yet tried snails, or grasshoppers (biblical "locusts"). My answers will report my own experiences, what my friends tell me, what I read. I also wrote a number of letters to interested parties. The answers were very cordial, very complete, and quite unsatisfactory.

"BUT, BILL, won't such information about what is substituted for "food" just about ruin a lot of producers, manufacturers and distributors?"

NOT the least chance of it. They know that not 1/10 of 1% of the people who read factual data will ever really do anything to help themselves. If those who have a business stake in food are injured they will have already ruined themselves, as you learned in the FAN MAIL report last month on the Valencia orange debacle.

ONLY when good ideas are realized with the kind of decision that proceeds into action, does anyone really "know" something. Knowing is not brain "minding"—not mentalizing. Knowledge is all-of-you, organizing and accomplishing practical work on the material level; where no physics—no meta-physics.

THE MOST surprising reaction from people who read my FOOD piece and approved it, was that the questions they wanted to ask

were fully covered in it. Didn't they really read it carefully? They did! Then why? Well, for one thing the generality of people, who are to lose their health and their lives, have no idea of time sequences. They react like Stan Laurel, the fat funny-man, who said that his tombstone should read—"I hadn' ought to 'a et that." For them cause-and-effect is all past tense.

Another answer is that education is not a function of receiving but of giving out, in acts. When you see, hear, read, you are a filing case. When you *know* something, you are a factory. You only know what you can and *will do*. If what you see, hear, read, stops in your mind, it remains inert—winter seeds on stony ground.

THE MOST frequent question is "What are we going to do? Where can we get things to eat that are food?"

That is really a hard one and is likely to get worse. So I asked a doctor, an old-school type but who thinks as of today. Said he, "I'd eat as many kinds of things from as many different parts of the country as possible." But I am asked for specific, not general advice. Well, I'm just a citizen, an architect, and an eater, three times a day. I'm not in a position to give advice. I can only tell you what has worked so far for me.

- A. Buy a copy of "Let's Cook it Right." Adele Davis. \$3.00. Plenty of practical helps there—available to all.
- B. If you are at all over-weight buy a copy of "Eat and Reduce" by Victor H. Lindlahr, Garden City Pub. Co. \$1.00. You can be starving while carrying twenty pounds of excess fat.

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You can easily grind all your own flour in an old fashioned coffee mill, or eat whole steamed cereals, or rice. Send for "Using Whole Grain in Family Meals," Circular #481, University of Missouri, 3c each. Lee Foundation for Nutritional Research, Milwaukee 3, Wisconsin. Ask them for full list of reprints dated May 6, 1949.

At this point our cocker "Bother" and I got up and went out in the kitchen. "Marie, how much does a box of one of these breakfast flake cereals cost—you know—'wherpies' or 'spackles' or something?" Says Marie, "Are you serious?, we don't eat any of that stuff." Said I, "I'm writing another piece on food." She laughed, "I'll ask Joe in the morning." "Next morning" 15c to 20c a box." This means that the circular #481 above can save you up to \$3.00 per month and a lot better eating with real food values. Just in the matter of getting honest returns, when you buy so-called "breakfast cereals" you are not only paying \$12.00 to \$20.00 per bushel for about \$2.00-a-bushel grain, but a large part of the food value has departed.

MANY CITIES have small grain grinding mills offering a wide line of chemical free flour and cereals. You can get fresh ground peanut butter. The processed kind is robbed of the wholesome oil and often loaded with foodless fillers. Get what you pay for.

I try to avoid anything made by commercial bakeries. Nearly all "bakery goods" are made of chemical flours to which they add further chemicals, fillers, and dope to keep the bread fresh. The advertising is misleading. The taste, or lack of it!, should tell you that. There are exceptions but don't let the words "whole wheat", "butter", "nut", "honey," etc. deceive you. It takes 3 to 5 times as much chemical agene to keep whole wheat bread fresh as it does 'white bread.'

Since writing "Down to Earth" an old friend of mine came to town. His business, highly technical, takes him into commercial bakeries. He OK'd all I had said about flour, said the new substitute for agene is chlorine di-oxide, now in use since August 1, 1949. He couldn't see that there was much assurance of improvement. Flour millers claim "exhaustive three month tests on human beings—no one injured." Well, these tests were made upon normal adult volunteers. What about children under six—old people over 65—nobody *really* knows. But why use *any* chemical? Just

give us plain wheat flour, date the package. Remember that whale of a build-up in 1940, for "dated coffee." Where has that idea gone and why?

My friend also said that the laboratory technician in one of the bakery laboratories where he had called, showed him two dozen beautiful, perfect, sanitary loaves from the daily test run. Said he, "there they are—just not worth eating—terrible"—picking up a loaf of bread from his desk, "here is a real loaf of bread, such as you can buy in Europe, or could in the past. It has a good crisp crust, excellent food values made from clean flour, with no baking dope." "But can we sell it?"—"We cannot!" "The public, at great advertising expense, has been taught to buy bread by certain eye and feel criteria, and that junk is now all they will buy".

That bread bakery runs a fleet of nearly a hundred beautiful, white enameled, streamlined trucks, delivering to thoughtless people what their own chemist, with two growing children, believed to be poor bread. The women could make all this bread themselves but they are too busy reading advertisements about the push button life and being bored by all the "entertainment" they can buy.

I LOVE ORANGES; eat them often for dessert with a little extra juice—no sugar of course, a little honey, or maple sugar.

*M*any of my friends confirm our family experience that orange juice can be a dangerous food. Small quantities after a meal, 4 or 5 ozs., may be accepted by the stomach, but *never on an empty stomach*—the acid is too strong for stomach lining; just ruinous for children, especially the current sour crop of oranges. Mothers always sweeten it up with a lot of white sugar to get children to drink it. Their normal appetites just can't survive it. My typist said her boys, six and eight, "just would not eat their breakfasts." She was in despair. I said "orange juice!!?" "Certainly, I do manage a good big glass of that." "I'm sure there is your trouble." She thought I was just a nut, "But," said she "I'm at the point to try anything."

Third day later she said—"It's a miracle, they are ravenous—eat anything I put on table." It *was* that glass of orange juice! Knocked out their stomachs for hours. *Eat* oranges! Don't drink orange juice. That's our experience and it's ordinary horse sense. Don't fall for the advertising drive on your gadget complex, to sell "push-button-quick" electric juicers. Don't sell your health to the machine age. What's the hurry, anyway!

"But you say 'no sugar' and substitutes are so costly." Not at all. White sugar costs 8c a pound, honey here 35c. But honey is just twice as sweet as sugar; that cuts it to 17½c. But everyone eats two, three, four times too much sugar—and wastes a lot of it one way or another. Rightly used honey will cost half your sugar cost and you can further reduce sugar cost with molasses—again not "brand" kind—get the natural stuff by the gallon. If you start buying units of food value and then feed units-of-food value instead of quarts and pounds of *things* to eat, you will really start saving money and maintain good health.

A CORRESPONDENT says, "Before condemning the white flour sold today why didn't you inform yourself on the remarkable record made by enriched flour for the National Health Standards of Newfoundland?"

*T*o write out here a documented reply to this enquiry would take space which is not available to me. But any person really interested

can easily confirm my original report by sending to The Nutrition Foundation, Inc., Chrysler Building, New York 17, and asking for copies (free) of Report on Newfoundland Health Survey and Recent Nutrition Surveys in Newfoundland. Both dated April 4, 1949.

No doubt many people will read those well briefed pages of typing. The statements *made* are factual and not open to question. Reading those papers will leave in the reader's mind a clear impression that "enriched" and chemically "agenized" flour was indeed a godsend to suffering Newfoundland, a sort of modern scientific miracle. This is the impression that the flour millers desire to leave in the reader's mind. My technical advisor upon reading them said only, "What else did they eat?" This you can learn in another report.

Now let us look at another side of this propaganda picture. "Medical Resurvey of Nutrition in Newfoundland, 1948, Canadian Medical Association Journal, April 1949"; 23 page reprint is available. You will find in this official report that the Canadian Medical Commission takes a rather dim view of the agenized, artificial flour. Indeed you will find in their minds at least a question, as to whether reinforced flour really had any considerable effect.

Almost certainly very few people will ever see this report. Who indeed think enough of their health to plow through these 25 pages printed in small type, filled with medical terms and unpleasant color photographs. But those who can do so will be astonished to see how the impression left by this complete and sober report, compared with the two "interested" manufacturers hand-outs, brings out in bold contrast the way in which misinformation can be effectively broadcast not by stating what is not true, but by the omission of essential facts. The collective and critical fact omitted from the condensed flour manufacturers report is, that probably *never in the history of any nation has the quantity, quality and character of its food been so completely changed* in so short a time as occurred with the arrival of the American Army in Newfoundland. This was at the beginning of the four-year period during which synthetically reinforced and bleached flour began to be obligatory. In this sudden food prosperity for a starved people, how large a good factor was the so-called "enrichment"—and how large a bad factor was the nitrogen-trichloride in that flour?

In appraising the remarkably improved health of the population of Newfoundland during the period of World War II, there are two basic considerations:—

A. Can the human body make use of the synthetic vitamins with which denatured commercial flour is

(Continued on Page 32)

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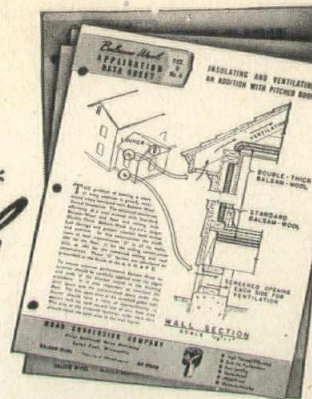
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Mr. Willis,
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Plans for Minnesota Society of Architects

June Convention Shape Up

Early plans for the convention of the Minnesota Society of Architects, to be held June 23 and 24 in Duluth, Minn., are shaping up and promise an outstandingly worthwhile session for those who attend, according to M. N. Willis, Duluth architect in charge.

All members of the Minneapolis, St. Paul, Duluth and Minnesota Chapters are to receive special letter

announcements and invitations to attend, Mr. Willis said, and a special effort will be made to obtain attendance of students in architecture and associate members of the chapters. Similarly, the sessions will be open to other persons interested in the progress of architecture in the state and whose activities touch on this important field.

Convention site is the Hotel Duluth and rooms can be obtained there for those from out of town.

Speakers will include many important in today's architecture and there will be a series of seminars on vital problems, Mr. Willis said. Exhibits will also be set up showing new developments in the field, materials, services, et cetera. Theo. R. Hidding, president of the Minneapolis Chapter of Producers' Council, Inc., is in charge of exhibits, reservations for rooms, space rates and floor layout for the exhibits.

To provide interesting activities for the ladies attending the convention, a committee under the guidance of Mrs. A. O. Larson, Minneapolis, and Mrs. Otto Olsen, Duluth, is arranging for entertainment of the wives of visiting architects.

"We hope to have a large attendance of ladies all through the convention," Mr. Willis said, "and we are extending a special and a very cordial invitation to all of them to attend with their husbands."

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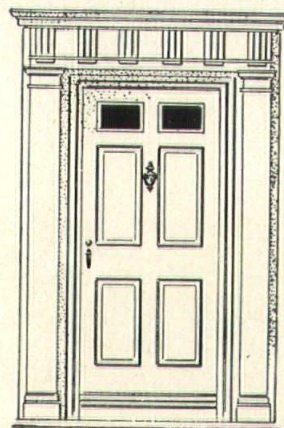
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JOHN G. RAUMA WINS TWIN CITY PRIZE PROBLEM

The Twin City Section of the Illuminating Engineering Society recently sponsored a prize contest for the students in the School of Architecture at the University of Minnesota.

The problem was the design of a meeting room in a town hall. The students were to incorporate in this interior a well designed, well balanced and versatile scheme of lighting. The challenge in this design came not in making an elaborate interior but designing it in keeping with the activities in a small town.

The program was given in conjunction with a course in lighting and wiring which was conducted over a five-week period prior to the contest. In addition to this, two members of the Twin City Section were invited to the school to give criticisms to the students before the problem was submitted. Three members of the section sat in on the judging and offered suggestions as to the merits of the various problems.

There was a total of forty students participating



Winners and designs (left to right)—Robert T. Jackels, Lewis G. Abels, James B. Home, Loren A. Duerr, Richard J. Rafferty, Robert I. Dunn, Walter K. Viorett and John G. Rauma.

and the winners were:

John G. Rauma, first prize (\$45 and a student membership)

Loren A. Duerr, second prize (\$20 and a student membership)

Lewis G. Abels, third prize (\$20 and a student membership)

Robert T. Jackels, a student membership

Robert I. Dunn, a student membership

James B. Horne, a student membership

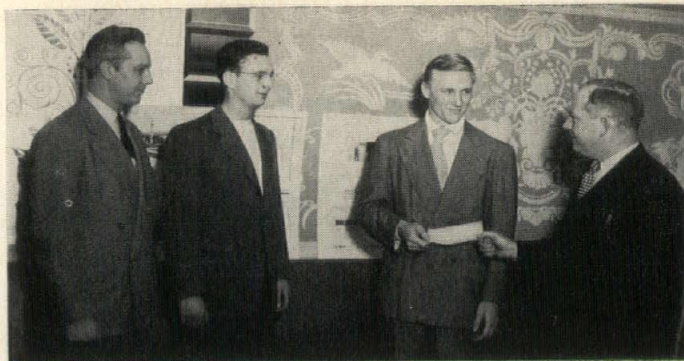
Richard J. Rafferty, a student membership

The winning students and the faculty were invited by the I. E. S. to a dinner following this contest and the presentations were made and the faculty complimented on a good job well done.

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Robert Hamilton (right) presents a winner's check to Lewis G. Abels as Loren A. Duerr (far left) and Loren A. Duerr (far right) look on.

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Men

In Search of an Education

President Walker Outlines Needs for Training Improvements in Speech at Regional Conference

The need for teachers in our architectural schools who are men of the world of architecture, who have practiced and done so successfully in solving building problems and who know all that relates to and influences the field of architecture is a crying one today, Ralph Walker, president of AIA, told those who attended the regional conference in Minneapolis.

Mr. Walker spoke at the dinner meeting of the first day and outlined the work being done by the association toward solution of this need for constantly improved backgrounding of the architects who must carry on the work of tomorrow.

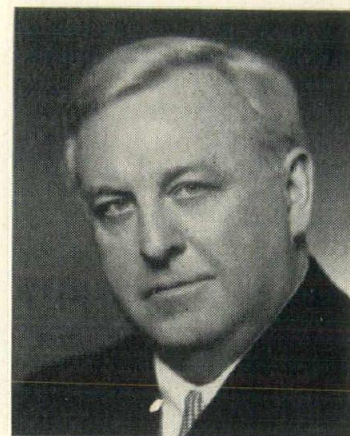
"The American Institute of Architects is interested in the education of the architect and, as you know, it has started a survey as to his needs; his preparation for professional life; his relation to the society in which he lives and works," Mr. Walker said.

"One thing which interests me is the large number of architectural schools with their real lack of diversity in teaching as to *what architecture is*; the real lack of disparity of belief in the way the education of an architect should be accomplished. . . .

"In architecture, as often happens in all the arts, *the teacher knows little but how to draw* and so we find neophyte teaching neophyte something that should have come from 'papa' and 'mama'—but without the spiritual competence to express even the callowness which is theirs—and which in truth might even have some charm. So finally the result is that which might be expected: no deep quality of cultural meaning but only the smart and the seemingly simple. . . .

"I have found in many interviews that the average young student of today is impatient to practice, thinking that he may do so with a few ideas called 'design.' He, however, is immature in responsibility and in that necessary quality of trusteeship—as well as in the practical experience of an increasingly difficult profession. The teacher also seems insufficient in experience and unable to build a firm foundation and steer this desire into channels of future self-education and *the absolutely necessary patience in acquiring a solid background of experience*—so that the young architect will be thor-

Mr. Walker
President
A.I.A.



oughly prepared before offering his services to the betterment of his community. . . .

"Shall we take a moment or two and examine what the young architect now finds as the justification of his impatience? There has developed an architecture, built upon the factory and the industrial world's needs in structure and in profit-making economics. It has finally achieved an impersonality and negative aesthetic—the primary virtue of which is in its withdrawal into nakedness rather than in the rich clothing modern resources would permit—especially in America. A negative factory architecture seen everywhere and without meaning to local climatic conditions or cultural background; one copied continually without analysis and seemingly without mature criticism on the part of the teacher who again and again has admitted to me his inability to control the situation. The teacher, too, if he builds, follows the present trend because of the fear that he will not be thought 'modern' . . .

"You can go from a midwestern university in the United States to the university in Cairo, Egypt, and see the same solutions based on the same few 'accepted' motifs: actually the same paucity of engineering motifs and a similar lament on the part of the teacher concerning his lack of authority and the almost 'Koranic' influence of the architectural magazine. Or, again, the teacher goes out so thoroughly trained in the present ideology—always taking the proper preliminary steps but always pointing to the same results.

"The same phenomenon happens in the city planning courses. If you are trained in Liverpool you will endeavor and strain to fit all planning to English ideas, no matter how different the locality, or life lived there . . .

"The same lack of philosophy, like an industrial de-

signer's 'Mother Hubbard,' blankets the local necessity and the same motif, unadulterated, is used in Boston, Rio, Cairo, Texas, Fairbanks, Stockholm, Peking, Marseilles. Wherever you go you find the same pattern so that finally you try to find some logical reason for this universal aspect of modern architecture, and you ask: one, are living, climatic, and social conditions so alike all over the world (here the answer is obviously no); two, is there some universal cultural force which makes all solutions alike and therefore there is a universal agreement among teachers that there is such a desirable influence (again this is, obviously, not so for I have found nowhere teachers who are much in actual agreement); or three, the students have found another source which they think more important than local conditions or the opinions of their teachers. . . . No new materials are necessary—no new techniques—only a new purpose and this is where the true teacher enters because it is his job to indicate the basic need and from the immediate surroundings develop the purpose."

Summarizing the teacher today's architecture needs, President Walker said:

"We will need in increasing numbers teachers who are philosophers and who have given serious thought to their own creative personalities, who seek a rich life for mankind and who resent poverty of invention in cultural satisfaction. We will need teachers who believe that humanity's needs are greater and more beneficial as guides than the maunderings of the 'painter into architecture' philosophy and who realize that inspiration is better than the number of graduates and whose pupils are guided into ideals of competence and service to humanity.

"We will especially need teachers who resent the clichés of fashion no matter how smart, no matter how intellectually satisfying for the moment and who have built themselves; and who are willing to criticize, without fear, their own mistakes. . . .

"We need more ripened practitioners who will devote the richness of their experience to the training of youth. No other profession leaves so much of the teaching in the hands of those who have not built a practice of their own. We will need teachers who teach fundamentals. . . . To these ends they must question the universal solution—as well as present monetary economics. We will need therefore teachers who can conduct their own surveys without prejudice and who can come upon a new solution, evaluating it against past experience and who are not influenced by the fashionable.

Teachers Need Critical Approach

"We will need teachers who believe in our profession and its possibilities, who are modest and sincere and whose pupils do not talk of frustration before they practice. We will need teachers who lead their pupils to continually question their own results so as to improve their techniques. *We will need, therefore, teachers who will lead their pupils critically to the actual—asking them to distrust the picture, regardless of the signature or the endorsement, unless they have tested it by complete analysis.*

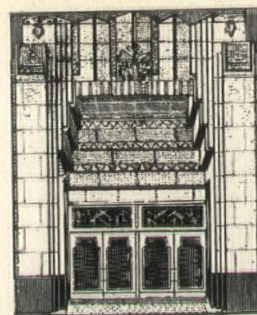
"We will need teachers whose own self discipline, whose own known curiosity, whose own balanced judgments are examples of what the student must attain as the disciplines necessary to practice a difficult and engrossing profession.

"And we also need schools which will consciously de-

(Continued on Page 34)

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BUILDING TONE STRONG IN NORTHWEST REGION

Contract awards and building permit issuances would indicate that the upswing of building activity, and its associated architectural demands, is continuing in this region and will remain strong during 1950.

Early months' awards in the region, as announced by the Ninth Federal Reserve District, were definitely higher than the same months in 1949, with February being especially outstanding. In that one month 82

cities reported permits for \$9,568,810 in 1950 compared with \$6,338,460, a 50 per cent rise.

Adding materially to the early rise in values were a number of big projects—a \$1,250,000 warehouse in Eau Claire, Wis., an \$867,500 extraction plant and a \$373,000 power plant in Mankato, Minn., a \$631,125 civic center in Butte, Mont., and a \$322,977 elementary school in Richfield, Minn.

With this early trend in evidence, it is interesting to note that 1949 contract awards were up 31 per cent over the preceding year, according to data compiled by the F. W. Dodge Corporation, for the states of Minnesota, North and South Dakota. Total building and engineering project value for these states for the year was \$392,873,000.

Government agencies led all gains for the year with the astounding increase of 51 per cent, with private awards increasing 16 per cent above those of 1948. In the breakdown there appeared a wide variance from losses to great gains. The government figures showed an 89 per cent increase in non-residential awards, 39 per cent drop in public housing contracts and a 46 per cent increase in engineering awards. On the other hand private awards showed non-residential volume off 6 per cent, residential up 19 per cent and engineering up 102 per cent.

COMMERCE DEPARTMENT GOOD INFORMATION SOURCE

Many specialized publications are obtainable from government sources and the practicing or student architect who is not familiar with what he can obtain from them is missing a bet. Among the departments which have something to offer, one of the most aggressive is the Department of Commerce, with handily located offices in several cities of the Northwest.

One of the publications is that on "Construction and Construction Materials," a monthly report on the industry which has frequent special features on subjects like fluorescent lighting which go into detailed analysis of the subject covered.

To obtain information from the department, the architect contact one of these offices:

Illinois and Iowa—Department of Commerce Field Office, 332 S. Michigan Ave., Chicago 4, Ill.

Wisconsin—Department of Com-

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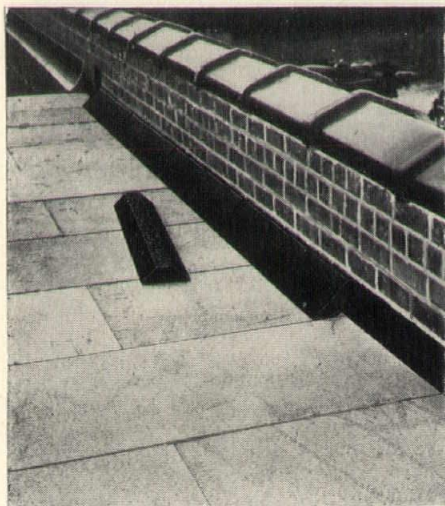
merce Field Office, 517 E. Wisconsin Ave., Milwaukee 1, Wis.

Minnesota, North and South Dakota — Department of Commerce Field Office, 401 Second Ave. So., Minneapolis 1, Minn.

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Asphalt coated on all sides, a new Celotex cant strip for use in roofing provides efficient protection of corners and edges at a low cost.

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asphalt providing a good bond all around. It reduces moisture absorption and the large angle assures the maximum protection against cracking of the felt as it would at a sharp angle.

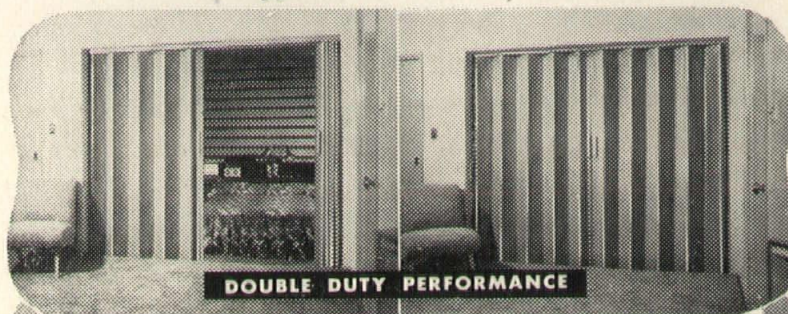
The cant strips are packaged 32 to the carton, run in 40- or 47-inch strips. The maker is The Celotex Corporation, Chicago 3, Ill., where complete details and prices can be obtained.

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REVISED SAFETY CODE APPLIED IN NATIONAL HOSPITAL SURVEY

Safety and fire protection of hospitals and sanitariums, especially with respect to the application of nationally approved standard safety codes, have been studied intensively following disastrous hospital fires in the past year. Some of the results of these studies are now available in the new tenth edition of the Building Exits Code, principal revisions of which deal with conditions for safety in hospitals.

This safety code, developed under the guidance of

the National Fire Protection Association, has just been announced as an American Standards Association publication, available for \$1.00 from the association at its offices, 70 E. 45th St., New York 17, N. Y.

Based on this code to a large extent, as well as on other applicable safety codes, a nationwide survey of hospitals has been initiated. A written report is to be made on every hospital, sanitarium, nursing home and similar institution in the United States. These reports are in the form of questionnaires with 133 major questions to be answered, many being a combination of several questions under one head.

The survey is being conducted under the guidance of the National Board of Fire Underwriters, where all reports are being consolidated, the American Hospital Association and Association of Casualty and Surety Companies, with 50 other co-operating organizations. From one and a half to two years will be required to complete the survey and prepare a report. This report will be used as a basis for recommendations aimed at increased assurance of hospital safety and adequate protection of life if fires break out.

Present evidence indicates that the application and proper maintenance of nationally approved standards for fire protection in hospitals and related institutions have become greater problems than the development and maintenance of up-to-date codes. The Building Exits Code offers the best known practical provisions against fire and fire casualties in the construction and arrangement of new buildings for hospitals.

In spite of the availability of this information, in some existing buildings used for hospitals, sanitariums, nursing homes and homes for the aged, conditions little short of appalling are being reported by building inspectors. Even the fundamentals of life safety from fire have been found lacking. Exit doors have been found locked. Corridors are found too narrow or restricted to permit rapid removal of patients. Inadequate exits and doors opening against exit travel are still being found.

The code, on the other hand, is under constant surveillance by representatives of national organizations and governmental agencies and its provisions are based on latest experience subject to majority

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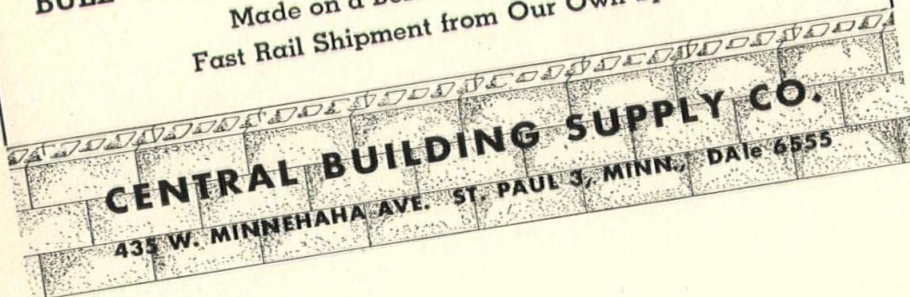
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agreement in the responsible committee. The present code is the tenth in 22 years.

Hospitals are, of course, only one phase of its coverage. It also applies to schools, stores, factories, hotels, apartment houses, office buildings and places of public assembly. In the new edition jails and penal institutions have been reclassified separate from hospitals and sanitariums for the first time.

ELECTRIC RADIANT HEATING PANEL OFFERED BY GENERAL HEATER COMPANY

An electric radiant heating panel which can be used in walls to supply even temperatures without consuming valuable space in the structure is being introduced in the United States and Canada by the General Radiant Heater Co., Inc., New York.

The panel heating was developed during the war for military installations and three types of panels will be available for those desiring to use them in this country. First introduced is a portable heater screen, mounted on legs, which can be moved into any area where heat is desired. Also now being produced are a medium temperature and a high temperature wall panel and a low temperature panel is being planned.

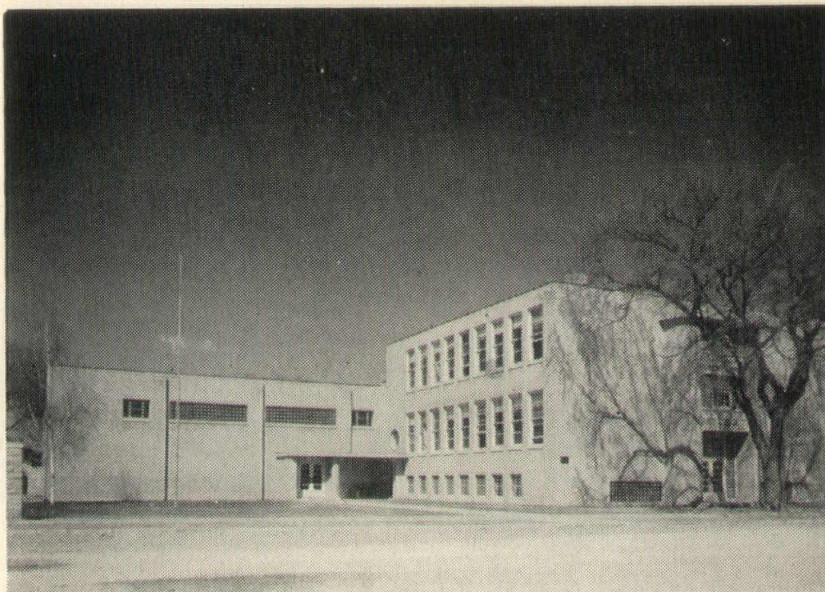
The heat is supplied from wire imbedded in the fireproof panel and the panel wiring is connected with the house current. Action is started by the flip of a wall switch, as with lights.

Makers report the economies of this type of heating installation are elimination of need for chimneys and unit heating equipment, radiators, pipelines and fuel storage tanks. Elimination of radiators improves wall space appearance and utility and lack of convection currents lessens depositing of dust and dirt in the room.

This type of heat is installed on the liner *Queen Mary*.

Information of details, together with prices, shipping, etc., can be had from the company at 101 Park Ave., New York 17, N. Y.

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VERMICULITE MAKERS TAKE ON UNDERWRITERS FOR RE-EXAMINATION

All members of Vermiculite Institute have subscribed to Underwriters Laboratories' re-examination service for vermiculite plaster aggregate, E. R. Murphy, executive secretary of the Institute, announced. This means that the material is examined by Underwriters at regular intervals for screen analysis, density, and absence of impurities, in order to insure continuous quality.

Vermiculite is the only lightweight plaster aggregate now on the market that carries the U/L mark on every bag manufactured by members of its institute: assur-

Louis C. Pinault, Minnesota Society President, St. Cloud, gives a vermiculite panel the blowtorch test for (left to right) Wilbur Tusler, Minneapolis, Phil Bettenburg, St. Paul, and Ray N. Thorshov, Minneapolis

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ance to the architect, contractor and owner that the material meets the high standard of the aggregate that secured official 4-hour fire ratings for protecting steel columns and various types of floor and roof assemblies, Mr. Murphy said.

Underwriters' Laboratories, a non-profit organization, has an interesting history. It was founded in 1894 as the official testing station of the National Board of Fire Underwriters. One of the major reasons was the new fire hazard introduced by the first large-scale use of electricity at the Columbian Exposition in Chicago in 1893. Insurance interests authorized William H. Merrill, a young engineer, to respond to each fire alarm from the fair grounds and if the fire was of an electrical nature, to locate the defective device and investigate its performance and construction. The insurance industry was also sponsoring an investigation of automatic sprinklers in the Chicago area by William C. Robinson. Merrill and Robinson joined forces to consolidate their laboratory equipment. From this small beginning, the work has been enormously expanded and today, Underwriters' approval has become the cachet of safe performance of materials, devices and constructions to protect life and property from fire, accident and crime.

New uses of vermiculite were demonstrated at a recent dinner given for architects by the Western Mineral Products Co. L. J. Venard, Western Mineral president, H. W. Steiff, sales manager, and C. A. Pratt, engineer, spoke to the designers. Construction sections showing vermiculite plaster fireproofing, acoustical plastic, etc., were displayed at the gathering.

CONSTANT TEMPERATURE MAINTENANCE VITAL IN FIXTURES, INC., OPERATIONS

Storage and fabrication under controlled temperatures is one of the vital operating factors carefully watched by Fixtures, Inc., South St. Paul, Minn., makers of wooden fixtures for churches, schools, restaurants, offices, stores and other buildings, to assure the highest quality products for its customers, according to Walter W. Richter, president.

The plant at Fleming Field, where the company has taken over an air plane hangar for use of its workmen, is modern in every detail from the 20- by 40-foot storage rooms where fine lumbers and panels are stored under strictly controlled temperature and moisture conditions to the 20- by 25- foot finishing room where the paint and other finishes are put on the woods under ideal operating conditions.

The hangar and a connecting building also house the main 85- by 150-foot shop equipped with the latest wood-working machinery for shaping, fitting and finishing and a 30- by 50-foot drafting room where designs are kept always up to the latest needs of customers served and where special problems are solved on the boards before being worked up in the plant.

Fixtures, Inc., Mr. Richter pointed out, is equipped to handle any custom wood-working assignment, commercial, industrial or residential, and has 30 full-time craftsmen at the service of customers. Displays are maintained at the company's offices at 403 Robert St., St. Paul. Originally the plant was at this same site but growth of the business forced the seeking of larger



Typical installation of a fine interior by Fixtures, Inc., is shown above. At right is Walter Richter, Fixtures president.



quarters and the new plant at Fleming Field resulted.

Officers of the firm, in addition to Mr. Richter, are Irene Asfeld, secretary, and F. C. D. McFall, treasurer.

(Continued on next Page)

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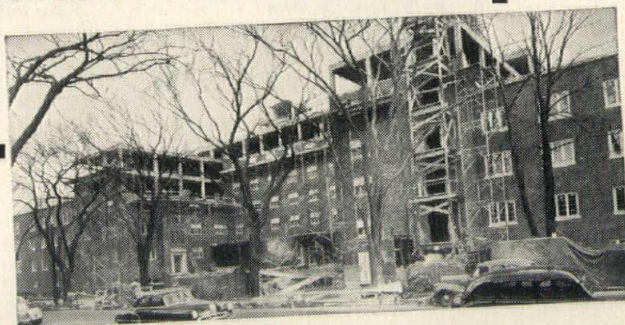
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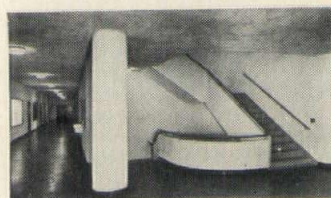


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Among recent projects which used wood fabrications from the Fixtures, Inc., plant are St. Peter's Lutheran Church, St. Paul, all pews, lectern, pulpit, tables and other furnishings, The Emporium, St. Paul, store fixtures, Immaculate Heart of Mary, St. Paul, altar furniture, and special work for the Veterans Hospital, Sioux Falls, S. D., and for the state of Minnesota.

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NOISE AS MUSIC

(Continued from Page 10)

sence of a musical symphony (as music!). If he were a mathematician, he might find interesting rules in the sequences, but with all his knowledge, he would be more ignorant about *music* than a small child with a sense of hearing."

The new world of musical sound that was about to appear and make music free of intellectual paper and printing press letters, was so different to the self contained sound world of Beethoven that as Mr. Shroemberg says he would have no experience by which he could imagine it.

Some very interesting sidelights on this problem can be found in a conversation between Wagner and Rossini in Paris, as reported in *Book of Great Conversations*, page 362, by Louis Blancoffi. publ. by Simon and Schuster, N. Y. 1948. In most libraries, and very good reading indeed.

The pianist and composer, Bela Bartok, just now much discussed after a life of hardship and obscurity, was keenly aware of the necessity of divorcing sound from musical-literary entanglements in order to get rid of "historical" conventions which did not deal with music as sound, but with the "business" of music—social, economic, professional. As early as 1890 he spent two years in the Balkans with a phonograph, recording thousands of age-old songs and dance music. These were to become the basis of his life work as a composer. This is why Bartok, first of all music makers of our day, deals with sound he is creating *as sound*, and only then does he resort to written notes on a paper score simply as an aid to memory. Even his phonograph record advertising now refers to the importance of hearing his music "as he played it." It can't be captured on a score. In the usual procedures of today, orchestra conductors are obliged to spade up the rigid sheet music *scores*, searching for such potential sound effects as can be discovered or imagined. Whatever they come to decide should be done with the score by way of "reinterpretation" will of course surely be a long, long way from what the original music maker was trying to say.

I heard a serious musician play a Chopin Concerto last week. The sounds and rhythms, which she developed from the well known notes sounded more like boogie-woogie. It sounded like a Picasso picture looks. It was *very* interesting laboratory. Was it "music"? It was on its way to being music.

All this shows how in our Western civilization the old "round song"—like "Three blind mice, three blind mice, see how they run," etc. etc., was the starting point for all these sequences and new directions in music. This "fugue" experimenting had reached very far indeed. By trial and error and by reasoned experiment, the *science* of instrumental harmony was also born of the fugue. The *art* of harmony was born of Welsh part song chords. Thus was pointed out the way toward the great creative art of organic sound. Handel, Hayden, Mozart, Bach, Beethoven were a continuity of great figures, real giants on the way—but still "on the way." Music is still expanding that first "barber shop" harmony of the Welsh Eisteddvods and unscrambling cathedral interiors filled with an ocean surf of sound.

How did Architecture rebuild music? We have looked at the mechanics, the engineering—now let's look at it whole. We have seen a picture of sound in action and buildings shaping and sorting the instantaneous and almost unbelievable fabrics of music—like frost flowers racing over the winter window panes. Just how did

these circumstances actually bring about practical changes in what musicians wanted to compose and what people were willing to listen to? For you cannot have music without an interested audience.

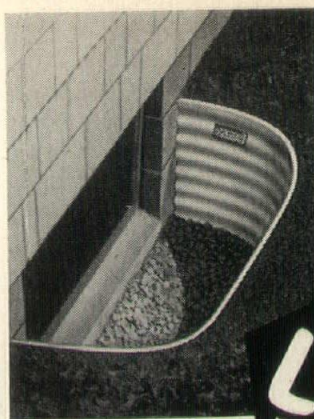
LIKE ALL created things, music also grew from a seed which held it all. First the single note was heard, then the cry, the bird-song or wolf-howl. From this the simple melody—melody given substance by being mixed into the fugue, or accompanied by drum or by chorded sound. But when reverberation and echoes in nature's amphitheaters, in the forest, in the hollow halls, brought "body-of-sound" to the ear, the urge was strong to take this sound experience into the music art.

Up to this point the conscious "design" of sounds had been a sort of one dimensional stream of art in *time*, rather than art in *space*. The patterns tended to be mathematical, rather than geometrical. Relations, proportions, formulas, tended more and more to take precedence over emotional content.

The Arabians who made their music outdoors had a 17-note scale and got all tangled up with the mathematics of time sequence and pitch relations. From this it never escaped. The harmonic relations of sounds they never discovered. The Celts of Wales and the Gauls of France, on the other hand, kept their music very simple. The echoes and reverberations of the rock-walled glens and vast church interiors brought to their ears the concept of sound mass, of *four-dimensional music*—that is, *sound mass moving in time*. These primitive Western music composers were thus constantly pressed to discover how to organize and control complex integrations of agreeable noises. It was the Welsh who for us discovered the beauty of chords. From all this came the vast cosmos of sound which we know today and which, as yet, is only partially explored.

We also have to take into account that the Cossack and Welsh singers lived a very primitive life in which musicians were obliged to remember songs which never had and never could be brought to book. Bela Bartok found old bards who could remember thousands of different songs. These peasants would sing around their hearth fires long sagas, night after night, without repeating themselves. Such music carried living traditions. Song and poetry passed from mouth to ear on the basis of how they "sounded" and how they felt in the chests and deep throats of the singers themselves.

But it was not until the American negro began to resent his social chains in the protests of jazz, that the full circle was come by and music swung wholly free of the note writers and readers. Thus it has also come about in our day, that chorus and glee club singers, singers with bands, vaudeville musicians, and dancers, learned how to get free from the entangling caligraphy of written notes. Today's advertising ditties on the air occasionally produce well organized sound in fine invention of necessity-shaped music. Except for the over-aggressive pressures of current



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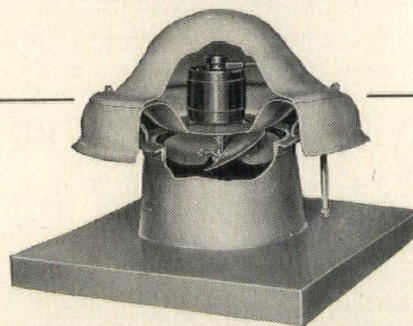
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Now for one last look at what happened after Beethoven? From 1725 say, to 1850, music had become more and more caught in sheet music. Then for Wagner first in our day, written notes, bars, staff lines, symbols, really disappear. This master's music, in spite of all its over burden of mythy mythology and instrumental vocalisms, really gets off the ground.

UNTIL THE TIME OF WAGNER, music was full of self-conscious tunelets, key modulations, trills, repeats, variations — every sort of *mechanical device to get three dimensional sound* that would equal the great moving noises of nature. There is increasingly less of that classical musical arithmetic as one follows the development of western music.

Wagner walked directly away from all of it, out of the "literary" world of written music, into the world of actual *sound*. He brought back a pure music idea wholly free of both the music recording and music making tools. He made the tools serve the sounds he

wanted; he didn't limit his sounds to what could be captured by musical notation. And he did much to break free, to lift music above the musical instruments of his day. He was obliged to deal with what he had because science and invention had not caught up to musical imagination in the production of new sound and noise making machines.

Wagner heard the far flung sounds of the cathedral and the Rhine cliffs but he was not content to have his music shaped by accident. He decided to "build-in" his own reverberations. He did this just at the time when architects began to construct music halls with sound-neutral interiors. In these the master-made music would not be warped by unaccounted-for sound reflectors, but be heard by the listener just as the "composer" had planned it.

And that was how Architecture rebuilt Music. The Building both demanded and then served a music for the ear, that was intimately and practically related to the building's forms for use. Even more important, this new Music, sculptured by Architecture, came to have an undreamed of beauty; it furnished the souls of living men with new ideas in sound by which they could better enjoy the world.

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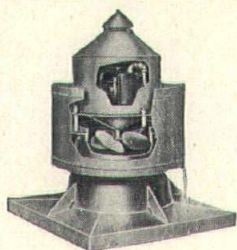
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FOOD ANSWERS

(Continued from Page 19)

supposed to be, in part, reinforced — or, as advertised, "enriched," and:—

B. As soon as the Newfoundland diet was greatly increased by war trade conditions and the greater variety available, which also supplied better basic food values, there may then have been (with two exceptions) *enough natural vitamins* in the new food to provide the required food factors right out of the more ample diet. No matter what the chemically treated flour may or may not have done for (or to) the people.

One example will suffice. In the American Nutrition Foundation reports flour manufacturers lay considerable stress on the help given by condensed orange juice for children badly in need of vitamin C. But nothing is said of the fact that 80% of the vitamin C is lost within 30 minutes of an orange being juiced, and the rest in subsequent processing! If synthetic C was added there is no mention of it. (See current advertisements for canned orange juice and read all the small type: Just *how much orange juice* is in that can—and how much what-else!!) How is the juice reduced 50%—so that you can later add water, without losing its *natural vitamin C*? This advertisements do not say.

Well, read the reports, don't take my word for it. You can also appraise at "face" value the factor of professional responsibility to the unknown distant consumer, versus responsibility to the well known and neighborly manufacturers. At least some of these specialists also belong to an Association which supplies those enthusiastic "experts" who help tell the public that you can smoke more and more and inhale continuously of "Gusto" cigarettes and "it won't hurt you a bit." But without the need of any advice from an alleged expert, do you know any smoker who will not say flat out that he "knows he smokes too much," is "sure it is bad for him," "feels rotten when he doesn't hold back some" and "wishes he could stop"? By the way, does your twelve-year-old daughter smoke? She will soon. One of the "big three" are making an all-out drive to get her as a regular customer. Seventh and Eighth Grade always likes to be like Freshman High.

ANOTHER writes:—"If all the land is more or less worn out and much of it cannot be restored, where can land be found to feed the people?"

The lawns around all our suburban and village dwellings are undepleted soil. They would look much better and be more fun as vegetable gardens. This would amount to three million acres—an area about equal to the state of Connecticut.

This arrangement ought to also reduce heart disease among business men, caused by sitting five days a week in office, club, automobile and at home—and then flailing around a golf course Saturday and Sunday. The heart is a muscle and the work you ask it to do regularly, every day, is beneficial. Working in garden six days a week is the best of all around muscle conditioners. Yes, you have to find some similar work for winter—not in a gymnasium!

Again the land on both sides of all railroad tracks—except within corporate town and city limits, and in rough or mountain terrain, is undepleted. It would be easily farmed, and with a little cooperation would make more hauling business for the railroads. This strip land could be serviced with work trains and even irrigated with tank cars or with ditch troughs between the rails. The total area would equal the area of Massachusetts.

This system of roadside crops for the use of all, with nut and fruit trees bordering all roads was initiated by one of the small Rhineland Kings in 1750, and is now common practice in Europe. The total production is no small factor in the total food economy of each European province.

WHY do you complain about the winter butter being colored yellow? Color is a definite factor in food palatability."

Let us first assume, as true, what the butter lobby has said all these years about the "almost criminal" proposal to color margarine. Would it not, then, be equally sinful to color winter butter? But let us assume that coloring *all* edible fats is right and proper. Then how are we going to tell, in the absence of enforceable food laws, what is wholesome and what not, especially as, paradoxically enough, animal fat margarine is *naturally* butter color and *winter* butter is *naturally not* butter color. Indeed summer commercial butter is also not natural "butter color," because artificial coloring of butter has conditioned "the trade" to demand conformity to a curious harsh un-buttery pigmentation. Thus the butter fathered laws have heretofore compelled the meat packers to *remove* the color from the fat oils before making margarine, so that artificial color must be added, to make margarine the very *color it was all the time* and to make butter a color that it was *not*, hardly any of the time. The whole business just becomes ridiculous.

But it is not so ridiculous when at one of our largest State Universities, the regents, under control of the butter interests discharged the head of their Agricultural College because he insisted upon telling the truth as his laboratories found it. Some findings on butter versus margarine were rather too favorable to the latter. This might be called the butter curtain. The actual food value in these two products *as they now reach the eater* is another story. Incidentally, when you put a bit of butter in the frying pan, does it sparkle and sizzle? You are paying 80c per lb. for water. Unwatered butter melts silently.

ARCHITECT

ARCHITECTURE is the Art with which Northwest Architect is concerned. Does the considerable space recently given to the analysis of food contribute useful material for the all around student of planning?

I'll stake my 1900 reputation for calling the turn in matters of art, on the opinion that if the deterioration of food in field, processing, and kitchen, is not the number one factor pressing on all building projects, it soon will be. To the alert owner and architect it better be.

I know half a dozen young couples each with two or more children who ten years ago cast their vote for country life, in Minnesota, Idaho, California, etc. They have been happy and successful. If I can convince others of the wisdom of this course I will be well repaid for my studies. Suppose that like the mass religious

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hysteria at Wheaton College last month, enough young people should suddenly turn against cities and streamline existence; you don't need me to tell you what that would do to domestic commercial architecture, real estate values, and distribution machinery. This is the most discussed topic today. See your papers and magazines. All that remains is for people to put their conclusions into action. Architects prepare yourselves, as both professional and family men, for what is ahead.

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EDUCATION-WALKER

(Continued from Page 23)

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"Our ugly cities—and they are ugly—our regimented housing projects, our increasingly standardized concepts of architecture in which structure and materials are the masters rather than the servants, our need for a new way of life lifted from the sordidness of the machine aesthetic into a gracious way of living, cries aloud for new teachers, in practice and in school, wherever one man influences another. Long ago, there was a teacher given to wisdom and he thought his duty 'to give unto them beauty for ashes, the oil of joy for mourning, the garment of praise for the spirit of heaviness.'"

"With all due respect to the many devoted men who are at present teaching—many of whom I know and admire—and who are doing their best, we need teachers and we must try to set up the means for their development!

"I take it to be the job of the Architectural Education Survey Commission of the AIA, now working, to come forward with suggestions as to how we may accomplish this, for I firmly believe it is our job, i.e., that of the AIA, to see that our educational ideals are furthered by the best teachers among us."

A.I.A. CONVENTION

(Continued from Page 14)

two new directorships, the directors to have jurisdiction over the Northwest, including Washington, Oregon, Montana and Idaho, and over Texas, as a region by itself. Other changes would transfer Arizona to the Western Mountain District and Virginia to the Middle Atlantic District.

Winners of special honors from the association have been announced and recipients of the honorary memberships and medal awards had their honors presented during the convention. F. Stuart Fitzgerald, manager of the Construction and Civic Development Department of the Chamber of Commerce of the United States, and Miss Harlean James, executive secretary of the American Planning and Civic Association, were named for the honorary memberships in the AIA for the contributions to planning and civic development.

The Fine Arts Medal was awarded to Edward Steichen, director of photography for the Museum of Modern Art, New York, this being the first award to a photographer following addition of this field to those eligible. Mr. Steichen is widely known for his direction of the photography of the World War II picture, "Fighting Lady."

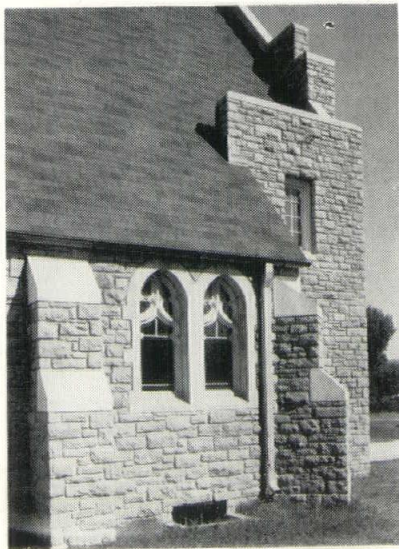
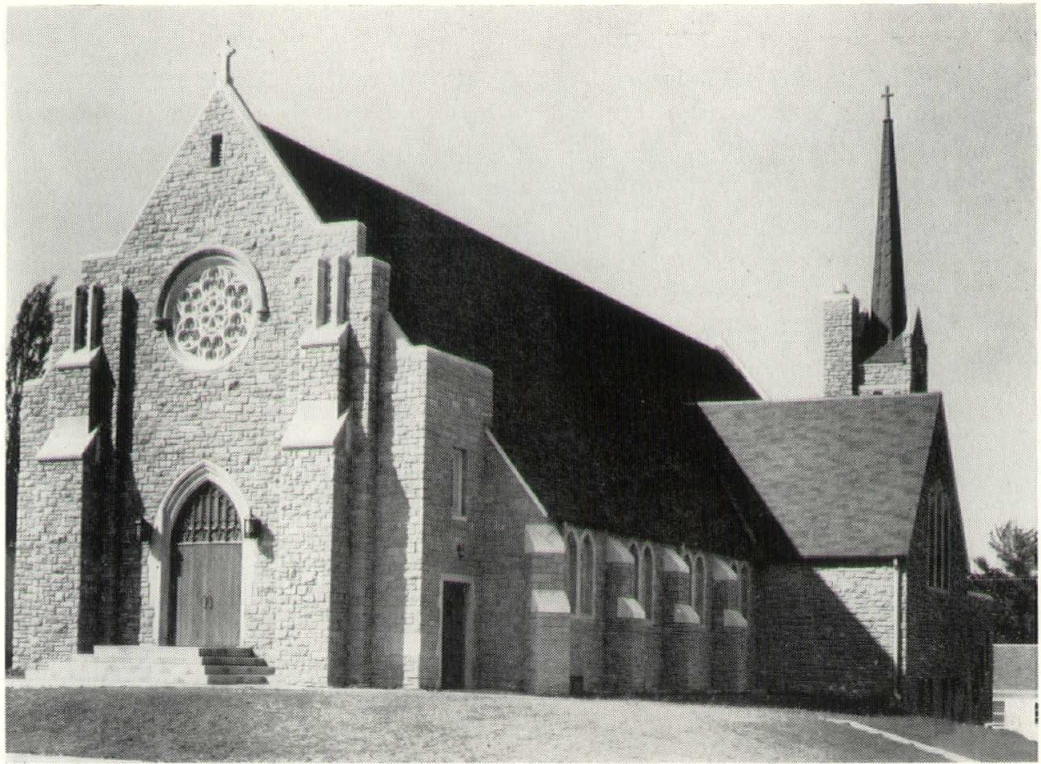
The Craftsmanship Medal, given to commend excellence in the industrial arts related to architecture, went to Joseph Gardiner Reynolds, Jr., Boston designer of stained glass windows, whose firm has done some of the largest and most famous windows installed in recent years. His work appears both in the United States and abroad.

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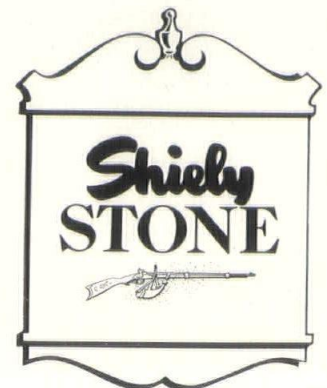
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