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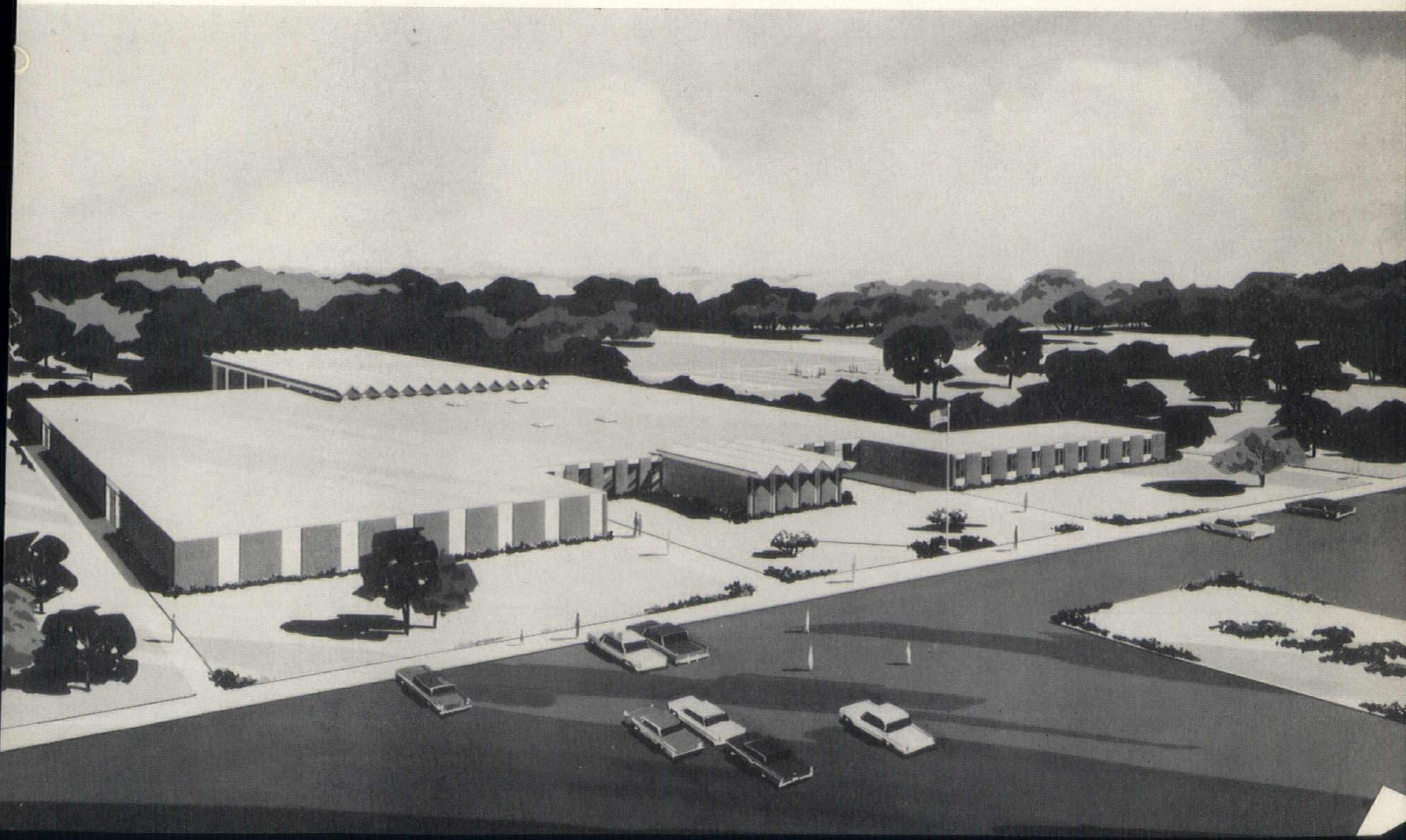
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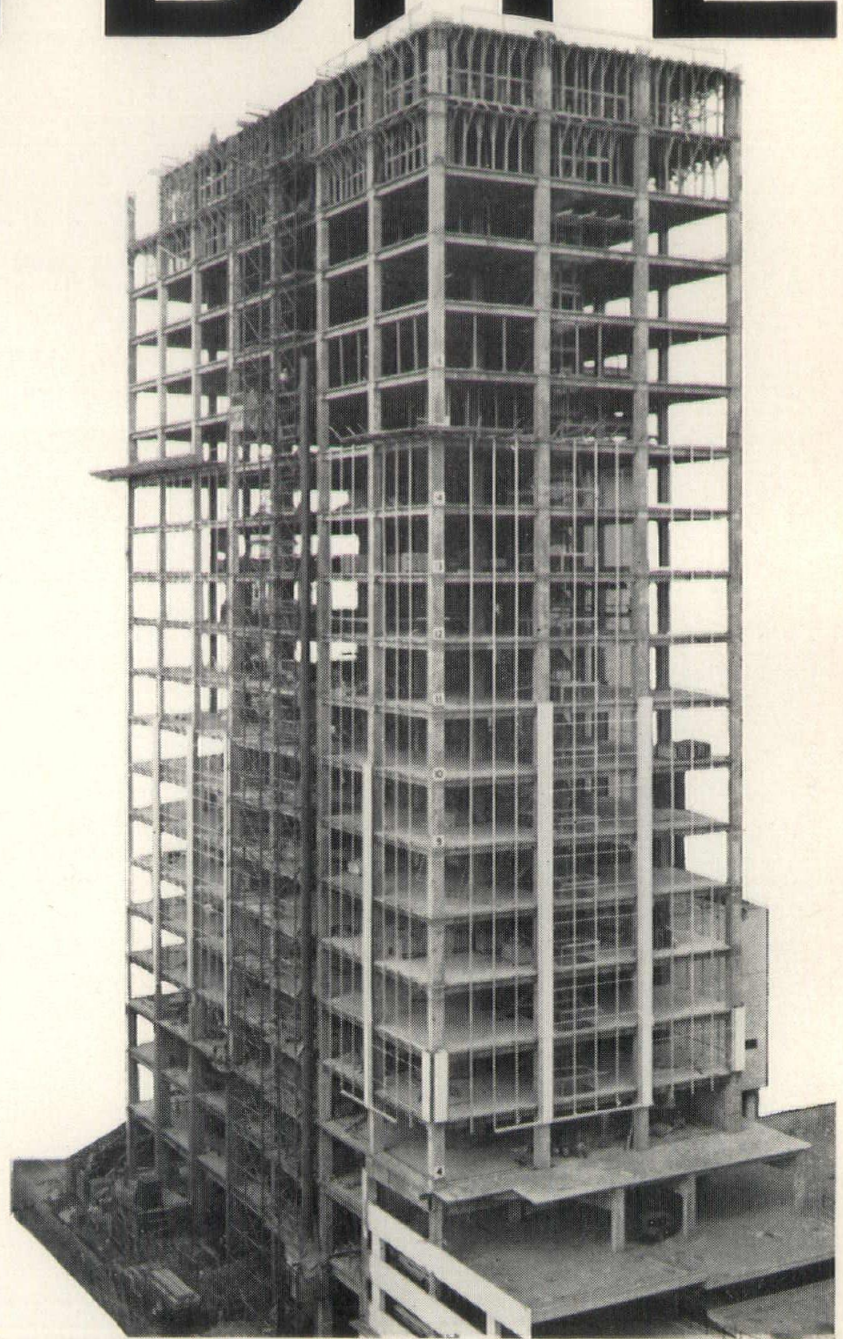
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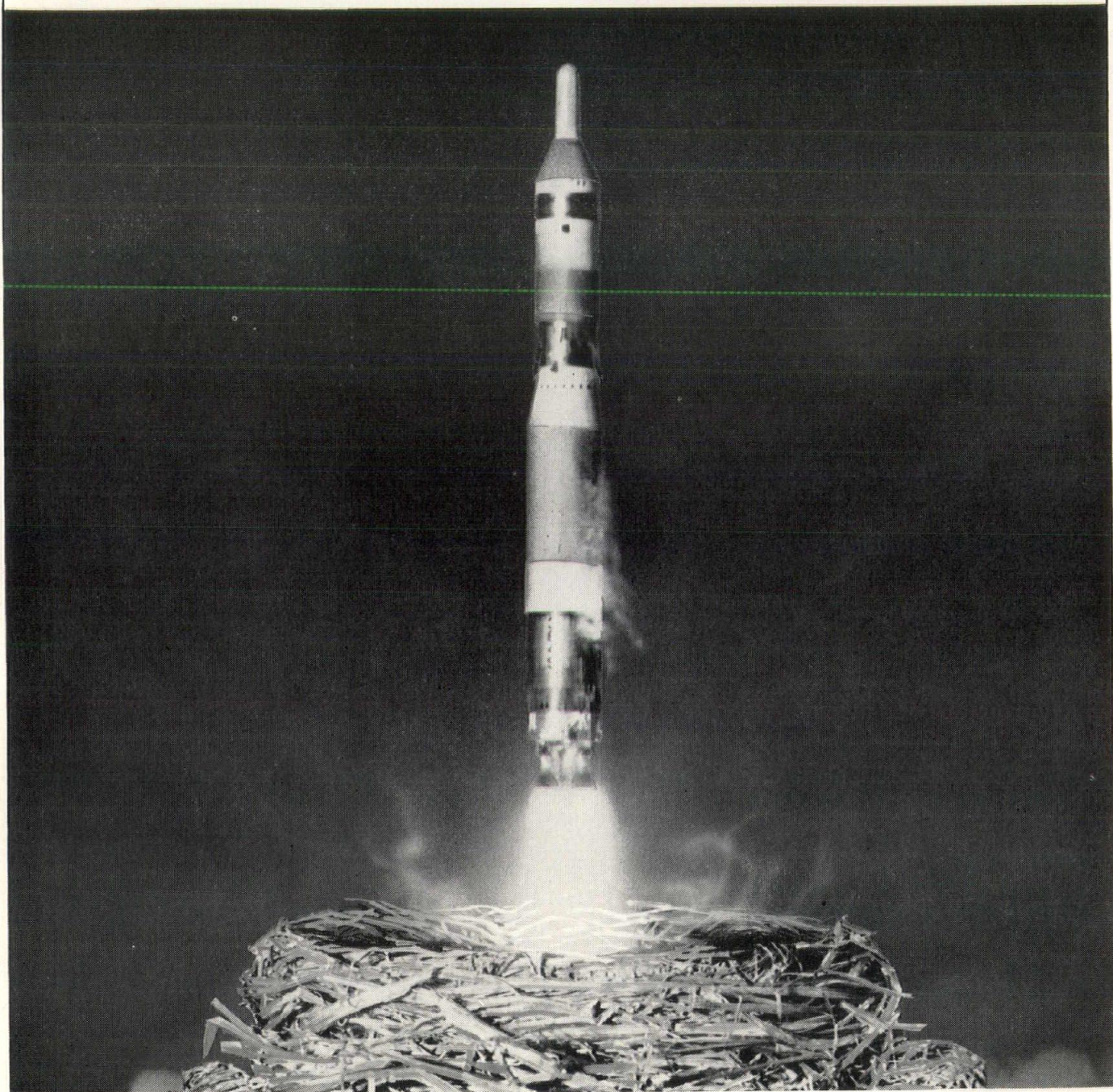
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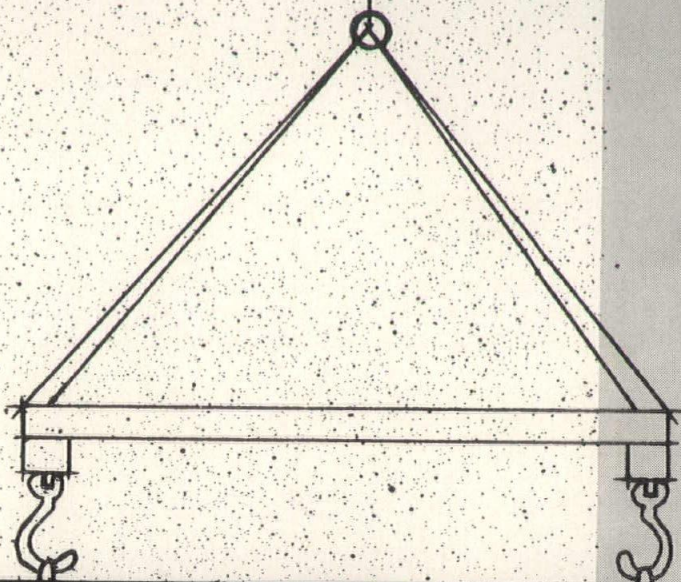
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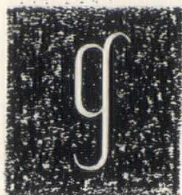


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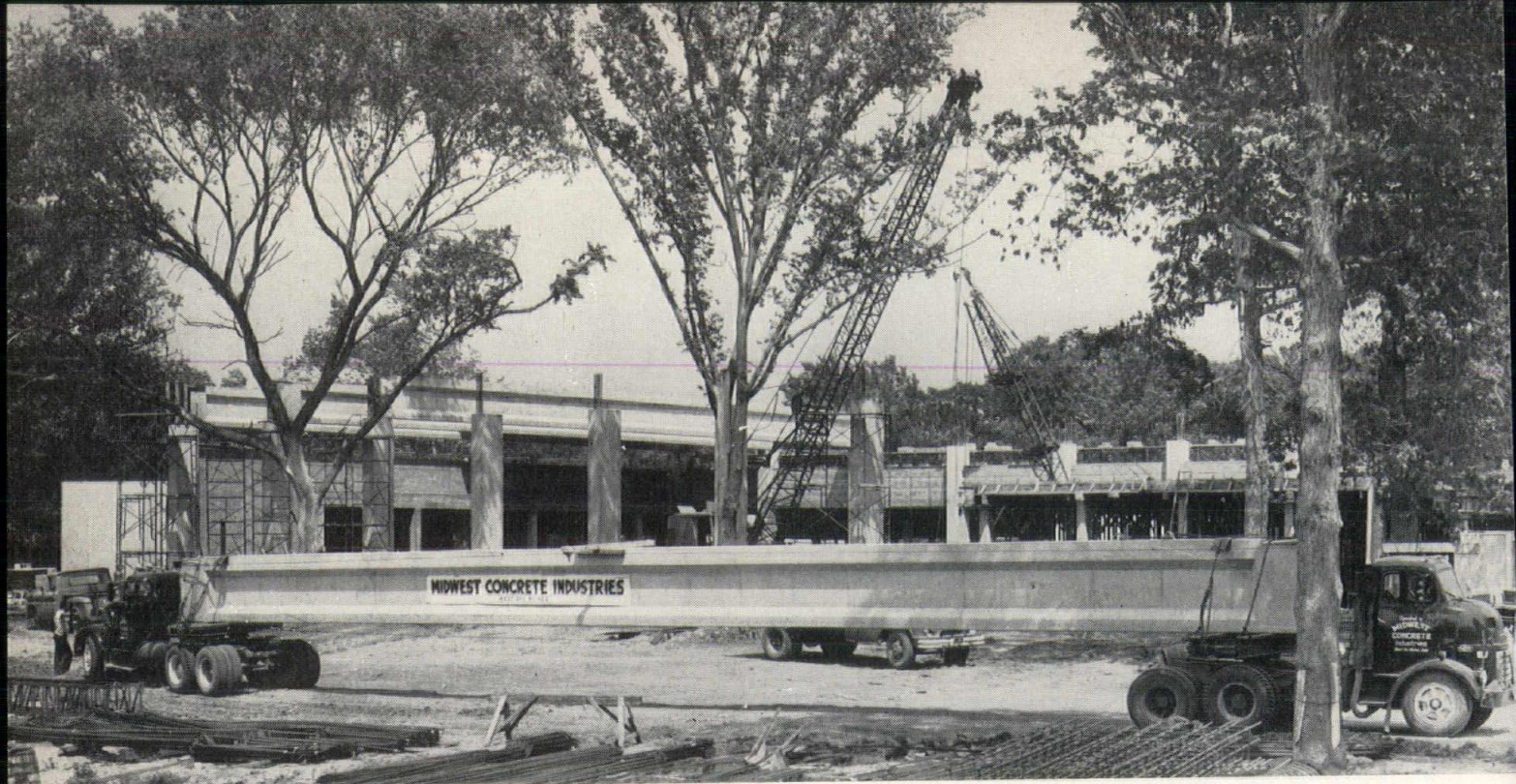
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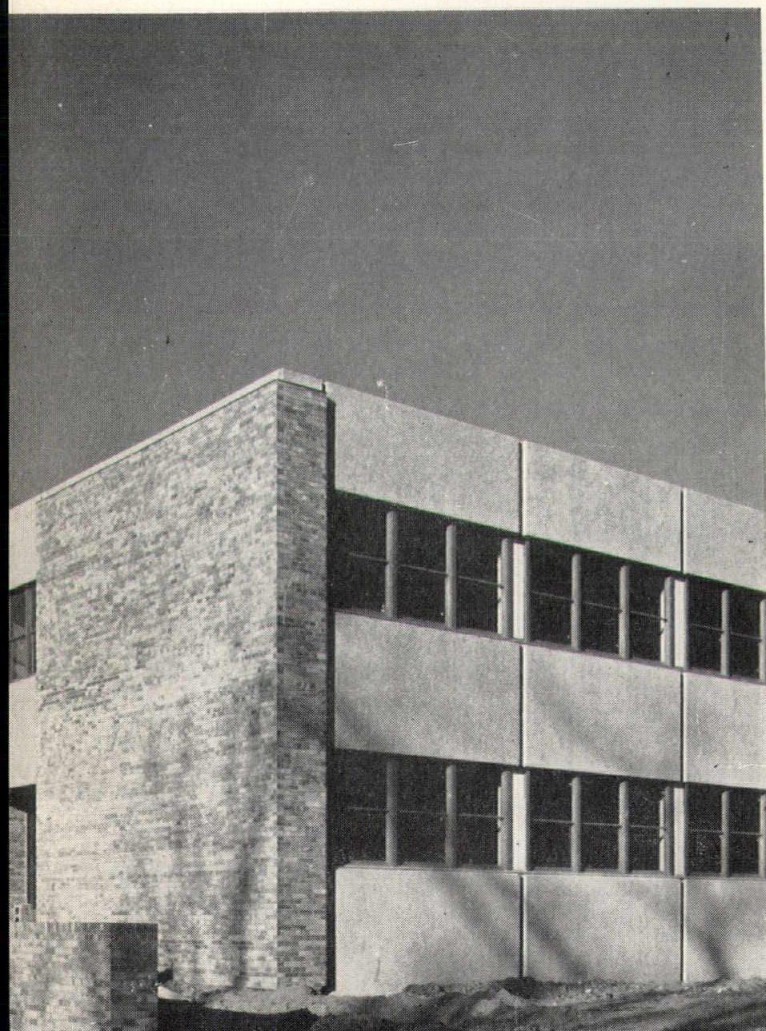
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Above: One of seven 90-foot prestressed girders for the gymnasium roof being delivered with two truck tractors. Each girder weighed 28 tons. Prestressed monowing double tee slabs spanned between the girders.

Left: Exposed rose quartz spandrel panels used over most of the exterior walls.



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## THE COVER

*La Salle High School, windowless, completely air-conditioned school to be built in Cedar Rapids. Leo C. Peiffer, Architect, and Associates, Cedar Rapids. See page 15.*

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## a "first" - - and a forerunner

THIS ISSUE of the *Iowa Architect* is devoted to a report of the "Iowa Schools in the Sixties" conference held last fall in Des Moines, the first meeting of its kind in the state.

Sponsored by the Master Builders of Iowa, in conjunction with the Iowa Association of School Boards and the Iowa Chapter, A.I.A., the meeting attracted an attendance of 450.

Invitations had been issued to school board members, superintendents, architects, builders and others directly concerned with school building programs.

"I think this is the largest group which has been assembled in the first meeting of this kind anywhere that I know of," reported Dr. Frederick Hill, Minneapolis, one of the speakers.

"It so happens that I am a member of the board of a couple of national institutions or agencies that are trying to bring together education, architecture and industry to the end that the schools may be more effective instruments, and I know I have shared platforms with a number of your speakers today in a number of places where this kind of theme has predominated.

"You are to be complimented. I believe this conference will be a forerunner of many others like it, not only here in Iowa but, I hope, in many other places like it in the surrounding area.

"We do have much to learn of each other and conferences such as this do provide the catalytic action by which we can be of tremendous significance to the future of children."

Dr. Hill, nationally recognized as an authority of school plant planning, is vice-president of the Association of School Business Officials. He is assistant superintendent in charge of business affairs for the Minneapolis schools.

The *Iowa Architect* feels that commendation is due the Master Builders of Iowa for initiative in planning the conference, and that all who attended came in contact with a wealth of useful and stimulating information and opinion.

A booklet being published by the Master Builders contains three to four times as much material from the speeches as is presented in this magazine. It abstracts those portions of the talks which will be most useful to persons contemplating a building project, and is condensed from the verbatim transcript, a manuscript of 190 pages and 70,000 words.

Filmed interviews with four of the speakers at the conference were made for the Master Builders, and are available without charge. Appearing in the 16 mm. sound film are Dr. Harold Gores, Dr. Archibald Shaw, Dr. John H. Harris, and Arch Grimes. Prints may be borrowed from the MBI office, 912 Walnut, Des Moines 9.



# "being visionary within the possible"

"I THINK the greatest task of the board of education is to provide the stuff which dreams are made of," said Dr. Frederick Hill, Minneapolis, at the *Iowa Schools in the Sixties* conference.

"You know Archie Shaw (see page 11) couldn't have built the Heathcoate school if he hadn't had a board of education that had faith enough in him and in his dreams of this new kind of school to let him build it. I couldn't have built some of the wonderful things that I have had the pleasure of building if I hadn't had an opportunity to visit Heathcoate, Blythe Park, and a lot of other wonderful places and to swipe all the good ideas I found.

"Schools can't become great unless great architects are hired and unless great educational dreams and aspirations are listened to.

"I think it is a rare combination of fortuitous circumstances when a dreaming educator, a visionary architect and a courageous school board will join together to explore new paths to educational expression. Any community is the richer when somebody is willing to do this.

"We'll never know what the right shape for a classroom will be, and whether windows have to be floor height or ceiling height or no windows, or whether we should use folded plate roofs, plastic or non-plastic, or heat pumps or air conditioning, or carpets on the floor, if we don't try them and evaluate their results.

"How can we find out unless courageous school boards will permit new types of construction and the gathering of authentic answers?

"I've got some interesting portables up in Minneapolis. The barber across the street from them thinks they are the most awful things that were ever built because they're made out of plastic, aluminum and wood, and they don't look like any schoolhouse you ever did see.

"But the kids walk into these air conditioned, car-

peted, plastic, windowed, light-controlled environments and they come out with stars in their eyes.

"And then the question is, how would you ever build them if a prudent school board didn't courageously set the climate?

"So send your people out. Let them pick the brains of the best there is. Encourage them to learn, to visit, to research. (You know, research is when you swipe 25 good ideas. It is plagiarism if you only swipe one.) Go and look for yourself. Blessed are they that put stars in the eyes of the children."

Dr. Hill, who is assistant superintendent of Minneapolis schools, in charge of business affairs, spoke on the responsibility of school board members with regard to school construction.

"The first and most basic task of the board of education," he said, "is to define the curriculum. When we determine why we have schools, and who is to be taught, and what they are to teach, and how and by what experience they are to teach it, well, then you

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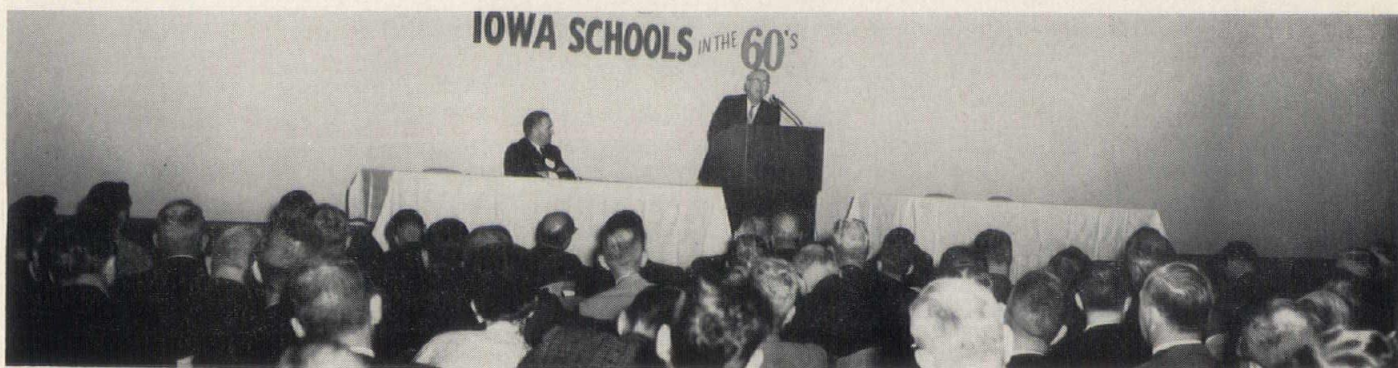
## the 4,000-hour school

THE BOX-LIKE institutional-type school—whose surfaces are designed for the janitor and whose test is its indestructability and its antisepsis—is disappearing, said Dr. Harold Gores, president of Educational Facilities Laboratory, Inc., New York City, at the schools conference.

"All of a sudden we are beginning to regard the school as something that ought to perform rather than something that ought to maintain cheaply, although it doesn't necessarily follow that if it performs well it will maintain more expensively," he noted.

"Education is fluid," he commented, "but fluids take the shape of their container, and we have never con-

ON THE ROSTRUM: DR. HAROLD GORES, NEW YORK CITY; AT LEFT, GENERAL CHAIRMAN ARTHUR TEMPLETON, DES MOINES.







TALKING with Dr. Archibald Shaw, right, speaker at the Schools in the Sixties Conference are, from left, Roger Olesen, Waterloo, then president of the Master Builders of Iowa; Doug Robison, Davenport, now president of the Iowa Chapter A.I.A.; Mrs. L. W. Swanson, member of the Mason City school board. The MBI sponsored the conference in conjunction with the Iowa Association of School Boards and the Iowa Chapter A.I.A.

structed schools in the past where it had a chance to be a fluid process."

Educational Facilities Laboratory was established five years ago by the Ford Foundation to conduct experimentation and research in school design and construction.

A trend today is toward "variant groups, variant size spaces," Dr. Gores said.

He cited the example of a monsignor who has the money to create a new college in New York, who came to Dr. Gores and said, "Would it be possible for us to create a great space, open, with no interior partitions except as, when and where we wanted them, which will alter from hour to hour?"

"I want a building that will be the academic nerve center of the college. I think it should be more than 50 percent library type space. It is our habit in the morning to teach in groups, so I would like some group spaces. These open up, especially in the evenings, so they become culdesacs around this great library type center and in the evening this college of 350 young men will be studying together.

"I want the young man here to look across this space and get the sweep of this institution, and this may be where we will get our academic drive, the sense that is given to this individual that he is part of this great college body."

"Terrific concept!" commented Dr. Gores.

There is a change away from specialized space, Dr. Gores continued. Even gymnasiums are becoming adaptable. "There has been many a cinder block wall put up when all you needed was to obstruct vision, or get acoustic privacy." And the walls don't give much acoustic privacy, at that.

"We have just underwritten a study of a substantial number of schools, as to the internal acoustic condition. One of the first things they noticed was that schools are like a sieve, even if the wall is four, five, or six inches thick. The typical partition between class-

rooms is about 22 decibels in sound attenuation. That isn't very much.

"There is continuing attention, therefore, to getting unobstructed space, out of which you can then cut the kind of space you want."

Dr. Gores described an auditorium in Boulder City, Nevada, which "within one minute, by the pressure of a key in a switch, will divide itself into three acoustically separate spaces for teaching. The estimate of the superintendent there is that this divisible auditorium cut five classrooms off the building.

"Now this is sheer economy, even though it cost more to have a divisible auditorium to start with."

Among the characteristics of "schools to come," Dr. Gores noted: *Spaces* which will be clustered, according to their use, rather than strung down a corridor like a train;

*Roofs* which make the architectural statement for a building, an outgrowth of the trend toward airconditioning for year-round use, and consequent compactness and reduced glass area;

*School systems* which divide the grades four-four-four, with a "middle school" which is the expansion link between waves of primary enrollment and the high school;

*Vended* food service, as in Holland, Mich. "The children like the food better."

*The 4,000-hour school*, running year-round, used as a community center and harboring some governmental functions.

*More portable* or satellite classrooms—"we can deploy teachers and books, send them out wherever children erupt in a district. We need to be able to send out space. We need high-quality space that can be re-located—not academic trailer camps. There is a place for the architect in this, to get space that you can link and mold, and have it transportable."

## frown upon mediocrity

THE SPACE AGE is no longer a fantasy but a reality, and the child in school today must learn not only the past and the present, but the future, Dr. John Harris said in the keynote address.

Dr. Harris is superintendent of Des Moines schools, which serve 43,000 children.

Among the problems of the educator is the prediction that 10 per cent of the school children today will make careers in jobs that have not yet been invented, he said.

"You have a similar responsibility," he told the audience. "It is not an easy task to house the problem of today in a (building) that will be a functional house for tomorrow."

This nation is great, and prosperous, "certainly because of our natural resources, but mostly because of the results of our great experiment, free public education for the masses," Dr. Harris declared.

"When the history of civilization is written, it will not be written about what we accomplished, but how we did it, and by so many people."

Continued on page 23



# economy? a cartoon!

"If YOU want to save money, shut down your schools. You save the most money, don't you? If you are going to build and you want to save money, don't build!"

These challenging comments, at the Schools in the Sixties conference, came from Dr. Archibald Shaw, editor of Overview magazine.

"When we think about economy, think about the cartoonist," suggested Dr. Shaw. "The perfect cartoonist who, with about eight strokes, tells the whole story."

"Think about bringing to bear all of the resources on a given problem in such a way as to achieve the maximum effect with the minimum use of resources."

"Not how much money did you save, but how wisely and prudently did you muster your resources to accomplish the purposes of education."

"Crystal gazing" about the schools of tomorrow, Dr. Shaw observed:

"Anybody who builds a school in Iowa in 1963 without providing a temperature control for cooling as well as heating can be just as sure as can be that a board of education within five or eight years is going to say, 'How could anybody have been so stupid?'"

("I am awfully impatient with the argument that you can do it cheaper," he put in. "This is not the crucial test, and I am not going to design my whole educational program and the whole building so that somebody can cool it more cheaply.")

"I am sure the schools of tomorrow are going to be energy centered. You are not going to say, 'where do we put a baseboard plug?' We are going to have energy available at almost any point."

"I have a hunch we are going to have a lot more finished-as-built. We are not going to set up a structure, put plaster on it, wait for it to dry, then paint it, and so on. We are going to have the material put up, finished as built. Maybe a little prototype of this is the so-called glazed tile."

"Unless the American economy changes pretty radically, we are going to have not repairable but replaceable elements. On our car nowadays, when we get a dent in the fender they don't try to straighten it, they put on a new fender."

"We are going to go more and more to materials we can build rather than materials we can mine, which means more and more plastics, because these are replaceable. I am very sure our materials are going to be progressively lighter, more easily transportable. There is going to be very little sawing and hammering and nailing and cutting on the site. These materials are going to come to us in panels or other larger elements than customarily we have now."

"In arrangement, we are going to have a permanent core to every school building. This is the community's center. It is going to be the repository of information which can be retrieved and stored, either directly physically in the form of books, or electronically. Around this core are going to be all sorts of spaces, and I wouldn't be surprised to see disposable spaces, like the paper suits they have been promising us for so many years. Temporary classroom and laboratory—temporary in the sense that we put it down and we know it is not going to last for the ages."

"One of the things that prevents most of us from getting a good school is because we don't have enough contact to know what good schools are, what kind of things there are available, Dr. Shaw said. Builders need to "extend their expertness" in handling various types of materials; architects need to contribute more from their



COMMENTING on exposed aggregate panel which is part of interior decoration of Meredith Junior High School, Des Moines, is Robert Ramsey, Des Moines. Dougher-Frevert-Ramsey designed the school, which incorporates three "little schools" of 250 pupils each, with joint central facilities. A tour of the Meredith building concluded the schools conference. With Ramsey are Arthur Oakland, Randall school board, and Robert Young, right, Stanhope, South Hamilton Community School board.

"acquaintanceship with all the kinds of soap on the shelves."

## flexibility: practical vision

"THE KEY WORD in education today is flexibility," Dr. Guy Wagner, curriculum specialist from the State College of Iowa, Cedar Falls, said at the schools conference.

"This applies particularly to a flexible curriculum, for without it we will run each child through the same experiences regardless of his needs. "To fit this everchanging flexible curriculum, we need, above all, flexible buildings, for a building built today will not fit the program of tomorrow unless it has built into it the possibilities for changing without making a major investment."

He went on, "A strong current trend is team teaching, where several teachers of the same subject work together with a large number of students."

"One good example of practical vision in school plant planning is the Marie Creighton Junior High School in Jefferson County, Colo."

He quoted an article in ARCHITECTURAL RECORD: "The scheme incorporates an arrangement of classrooms which, by the use of transparent partitions, will be suitable for instruction to groups of 30, 60 or 90. The arrangement will provide for the traditional program now in use, and experimentation in new ones."

"The three classrooms of 30 students each are set in somewhat of a triangular form with two classrooms in the broad area at the top, and one classroom near the peak at the bottom. Between the two top classrooms are small workrooms of triangular shape for small groups, and in front of the classrooms at the bottom is a semi-circular area called a demonstration area. This makes it possible for the partition to be removed and all 90 students to be facing the demonstration area."

"On either side of the classroom at the bottom is a rectangular room for storage and preparation of materials. The partitions between the three classrooms are walls of glass with pull curtains for separation, crossed





PANEL which concluded the conference sessions in Veterans Auditorium included Ray Bergquist, Dubuque, left; Marvin Nodland, superintendent of Sioux City schools; Dr. L. A. Van Dyke, professor of education, State University of Iowa, Iowa City; Dr. Stanton Leggett, New York City, educational consultant who moderated the panel discussion.

in the desired degree of acoustical privacy."

Turning to other trends, Dr. Wagner discussed the "mobility" of subject matter: reading, spelling and other communications subjects are now taught in high school as well as lower grades, while foreign languages and sciences—once largely high school subjects—are beginning in the early elementary years.

Continued on page 20

## not by codes alone . . .

"THE ARCHITECTURE of a child's home and his school are great and important conditioners in his development," declared Arch Grimes, building consultant for the State Department of Public Instruction, Des Moines.

"The architecture can be stimulating, make a child happy, make him at ease, or it can be depressing to his mind and spirit and drive him out of school.

"We should always be striving to determine the qualities which make a school building a suitable place for teaching and learning. Too often we are more concerned with meeting building and safety codes and the result is a building which is cold and uninteresting and uninspiring.

"Architects and school planners should be concerned with the nervous reaction and mental health factors of every school space that is planned. (We have some good literature coming to us from England on this subject.)

"Any list of facilities which should be included in a good school building is bound to run up against school board reaction, 'Too costly,' 'Can't afford it,' 'We have got to cut somewhere,' Grimes commented.

"Let me say here that the schools in Iowa are not all buildings that can house modern educational programs. I am sorry to say that most of these inadequacies have been created under the banner of so-called economy.

"There should be some way that planning groups could be converted to the text that real economy is not a matter of cost per square foot, or cost per classroom, or cost per child. The cheapest school building erected today may be the most expensive over the years, to

say nothing of what it does to the children that dwell therein".

Looking back over 11 years and \$227 million in school buildings in Iowa, Grimes singled out these faults: "Our classrooms are not flexible . . . they are too small . . . not enough storage space . . . the teacher should define the kind of storage in a room . . . we do not pay enough attention to flow of traffic . . . we still have some new buildings without mechanical ventilation—nothing tends more to the comfort and well-being of a child than ventilation."

## a beautiful failure

A BUILDING which "looks beautiful from a physical sense" can be a total failure if the school board cuts short the preliminary study phase, Ray Bergquist, A.I.A., told the schools conference.

Bergquist, a past president of the Iowa Chapter, A.I.A., and a partner in *Durrant & Bergquist*, Dubuque, appeared on the concluding panel discussion.

"Please do not ask your architect, 'How long will it take you to do the preliminary sketches?' A sketch is just a picture and is short-lived. A building must stand for a long time. Rather, ask how much time he can spend with you in reviewing your curriculum problem, how he can interpret your needs," Bergquist said.

To a question about characteristics which are important in selecting an architect, Dr. Stanton Leggett, New York City educational consultant, responded, "Oh, the integrity of the architect, the excitement about a job, the creativity, his ability to spend time and thought about it, his avoidance of hackneyed answers to problems. You are just looking for the second grade teacher, you know, that wonderful person. You are looking for the kind of person whom you feel will be the great member of the group who are going to work on this school."

Commenting on the "dilemma" of the school boards in this respect, Bergquist said, "As I see it in the eyes of a board member, he has to contract for a professional service, that area of service which he does not quite see in a crisp light. It isn't sharp. Yet he is expected to become a party to a contract, and he is representing a taxpaying body or a private school system.

"If I were to give any advice," Bergquist continued, "it would be that they obtain references from previous clients, observe the work of this firm's operations and some of their performances.

"And I would like to make a comment in behalf of the younger man who has not had 20 or 30 years of private practice experience. Give this younger man due consideration, because he's the fellow, in many instances, who is the strong life blood of a larger firm. He's the man that might spend a great deal more time on research and work with your committees and your administrators."

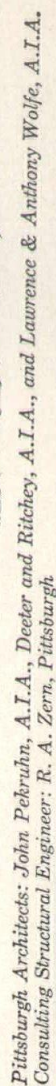
During the discussion, the panel made pungent comments on half a dozen topics:

**Team teaching:** "Before we build a lot of pie-shaped, big rooms, I hope we take a hard look at just what results we might expect. If we herd kids with I.Q.s from 40 to 160 into a large lecture hall and let them sit there, we are going back 40 years. There may be a real place for large lectures, TV, if we have schools large enough to do some grouping on an ability basis."—Dr. L. A. Van Dyke, State University of Iowa, Iowa City.



## Prepared as a service to architects by Portland Cement Association

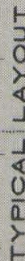
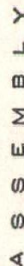
Clip along dotted line



**Entire classrooms precast in concrete** make up the new addition to the Homewood Elementary School, Pittsburgh, Pa. The design brings beauty, extra utility and easy upkeep to what is usually a "temporary" type of construction. Moreover, a degree of portability is achieved which allows future transportation to another site at very nominal cost.

The concrete segments—each 8' wide by 28' long—include a roof or floor section combined with half of each side wall. The precast units were designed for mass production and contain all the essentials of classroom planning. Air ducts, concealed conduits and pipe chases provide a finished room without unsightly exposed utilities.

Oriented to enclosed, planted playgrounds, the structure is completed by a street facade of integrally cast exposed aggregate panels that enhance aesthetic values... keep out dust and noise... discourage vandalism.



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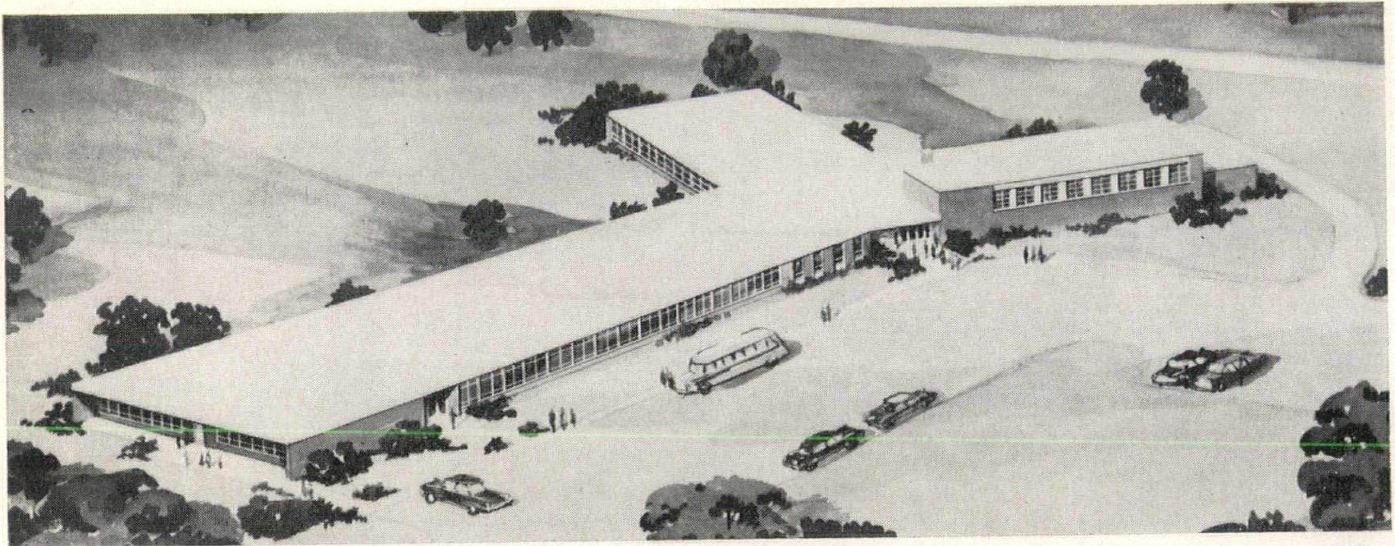
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Architect: Woodburn & O'Neil  
Des Moines, Iowa

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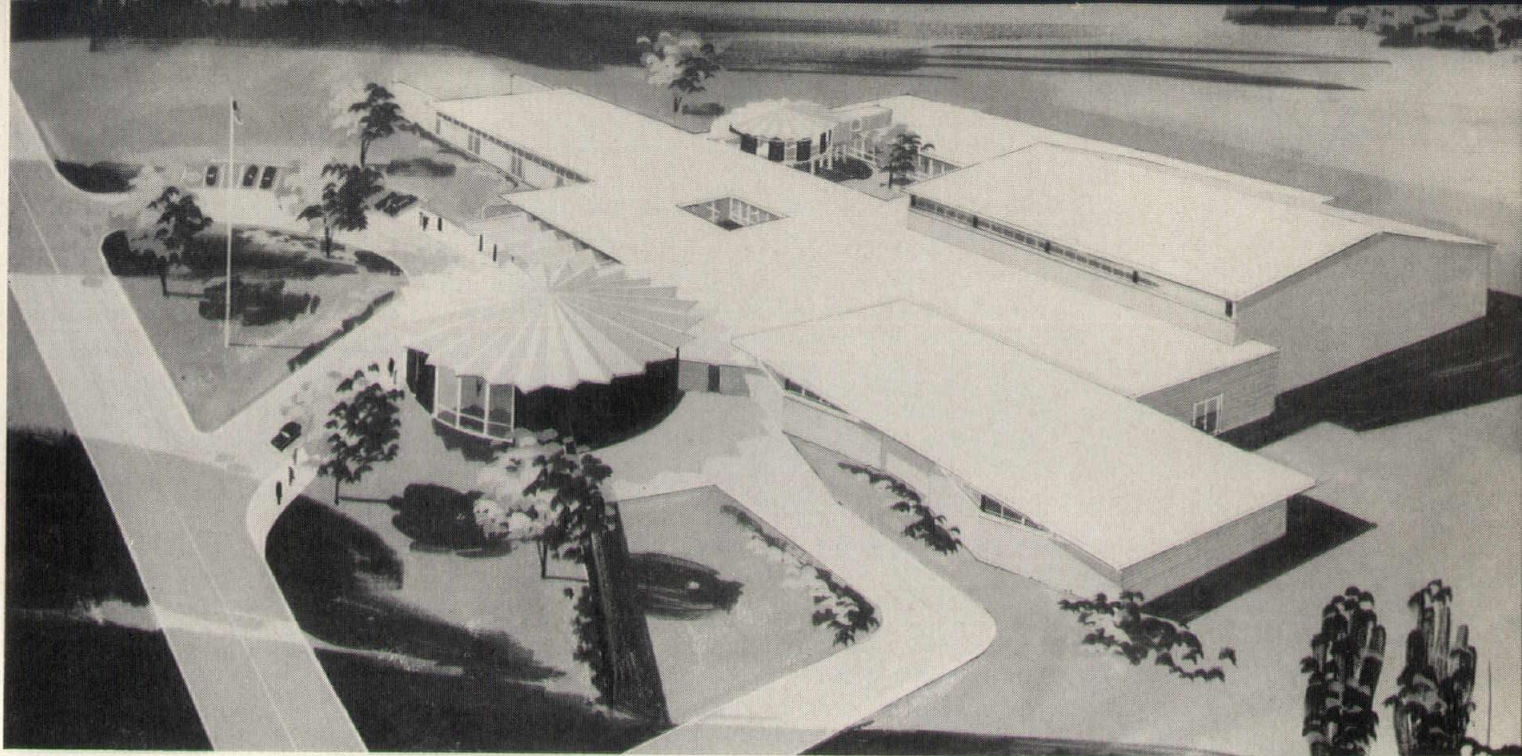


The inherent strength, durability, soundproofing and fire-resistant characteristics of the Sheffield Clay Tile Beam design are well-known. These features combined with the construction economies realized through use of the Sheffield system make it an ideal specification for floor and roof members.

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MAQUOKETA COMMUNITY HIGH SCHOOL, MAQUOKETA, IOWA. STEWART-ROBISON-LAFFAN, ARCHITECTS, DAVENPORT, IOWA

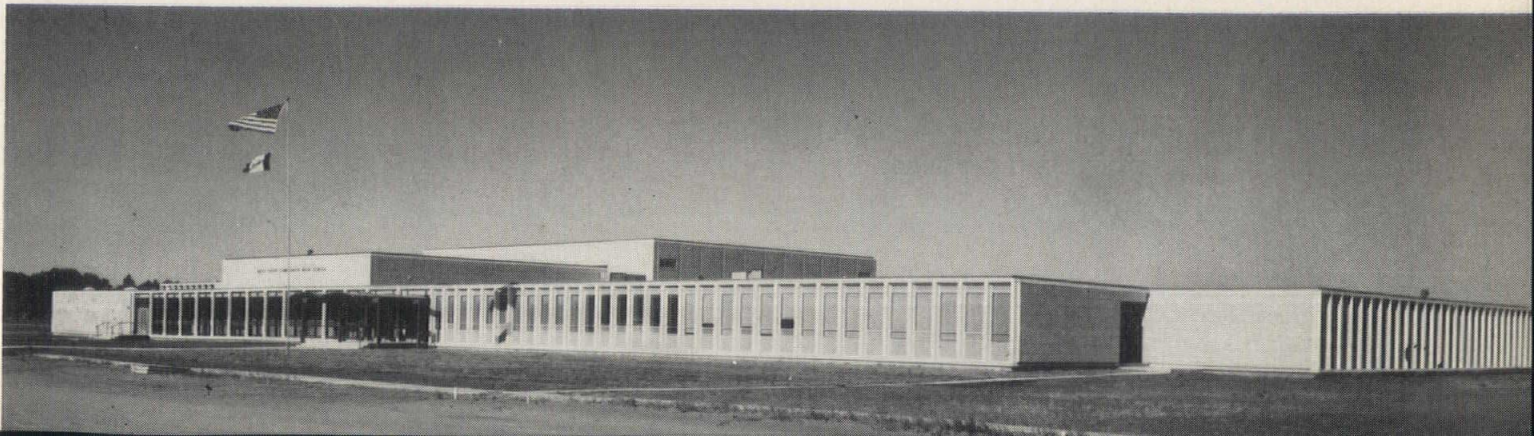
## DESIGN BY IOWA ARCHITECTS

ON THE COVER—La Salle High School, new boys' school in Cedar Rapids, will be the first completely closed, windowless, mechanically heated, ventilated and air-conditioned school in the midwest, to the knowledge of the architect. Plans include 125 tons of air-conditioning. On a 20-acre site in northwest Cedar Rapids, the school will be partially occupied in the fall of 1963. In the photo, a 14-classroom wing is at left; chapel at center; 15-room residence, at right, for the Christian Brothers who will teach. Metal folded plate roof over gymnasium, rear, may be largest ever built. Other facilities include library, theater, music room, multi-purpose room, locker rooms. Light steel frame, long span metal roof deck, pre-cast panels and precast concrete floor system, face brick, block and tile interior walls. There is wide use of glass on the interior. 200-car parking lot, landscaping, athletic field, estimated cost \$800,000. Leo C. Peiffer & Associates.

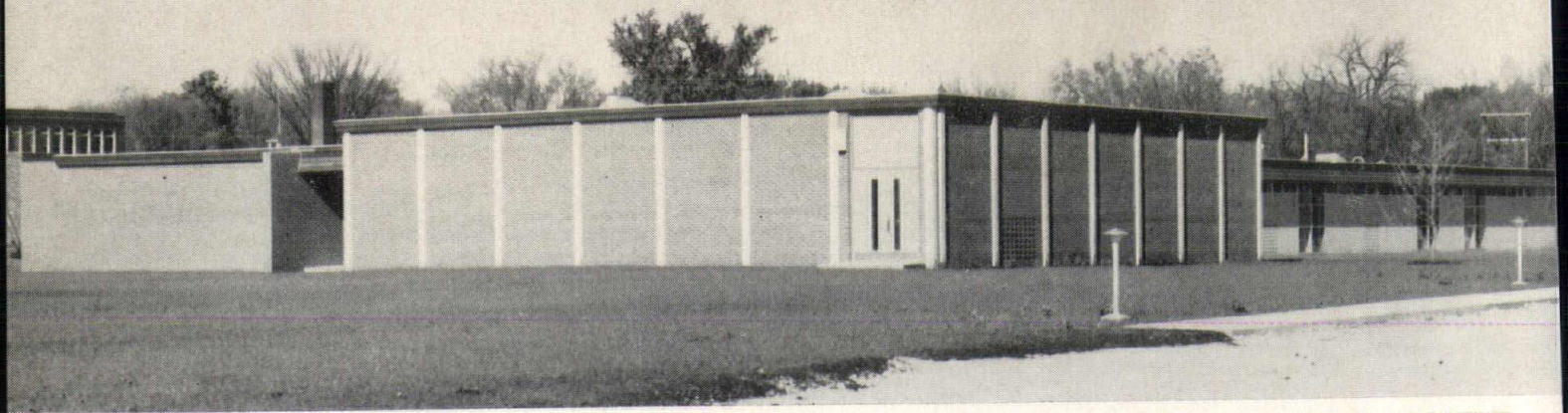
CIRCULAR CAFETERIA of the 500-pupil Maquoketa Community High School is roofed by a folded plate dome of reinforced concrete. Exterior wall of cafeteria is masonry and glass panels. Folded-plate also shelters the entry area, visible behind cafeteria, where pupils may wait for school bus. Library, behind first classroom wing, is similar in design to the cafeteria, but is elevated to connect with upper level of classrooms; second wing is about nine feet lower, on the sloping site. Pitched-roof gymnasium is between the two wings. Flat-roofed music rooms, in foreground, have v-shaped end wall. On the interior, risers for band and chorus rehearsal follow this line. Construction is steel frame with face brick exterior and tectum deck. Classroom window pattern consists of floor-to-ceiling windows at ends of room, connected by strip of high short windows. Contracts were let in October 1962; proposed completion, September 1963. Total contract, not including equipment or finish site work, \$715,000. Total area, 55,700 sq. ft. General contractor,

STAGE in the 400-pupil West Sioux Community School, Hawarden, is located between auditorium and gymnasium and can be used for large audiences in the gym as well as for plays and assemblies in the auditorium. Facilities include an agriculture shop and classroom, industrial arts shop, homemaking room, science room, music room, library, foreign language laboratory, study hall, nine general classrooms; lunchroom, kitchen, locker rooms and offices. On a 40-acre tract on the east edge of Hawarden, the school's exterior uses exposed precast concrete columns and beams; aluminum windows, face brick and stone. Glare reducing glass is used in all classroom windows. General contractor was C. A. Peterson & Sons, Inc., Rock Rapids.

WEST SIOUX COMMUNITY HIGH SCHOOL, NEAR HAWARDEN, IOWA. GERMANSON-FOSS & CO., SIOUX CITY ARCHITECTS.



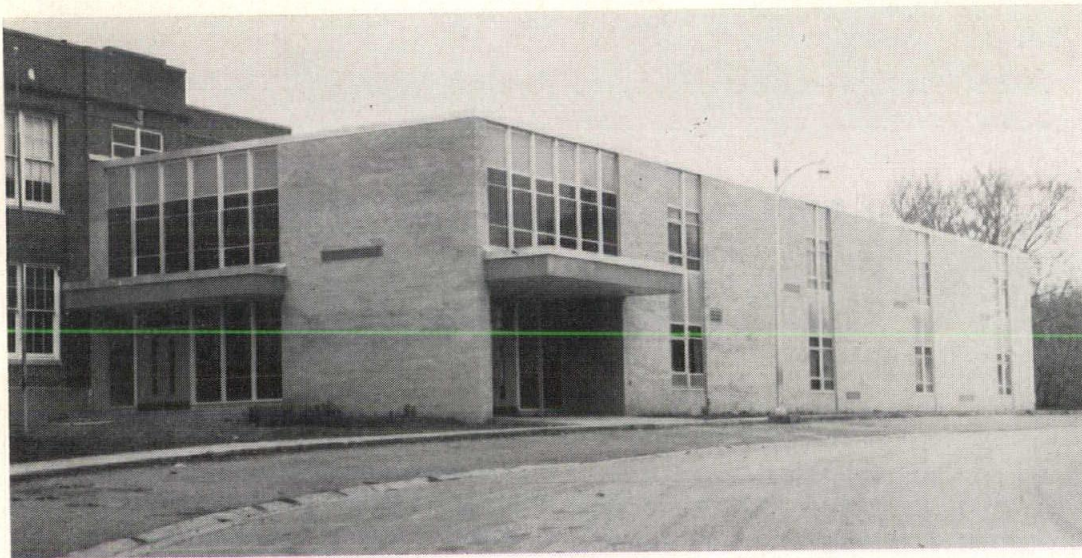




CARLISLE (IOWA) HIGH SCHOOL. FUTURE ADDITIONS TO SOUTH AND WEST. N. CLIFFORD PRALL, DES MOINES, ARCHITECT.

FIRST UNIT of Carlisle High School has fire resistive umbrella type roof construction. Walls and partitions are non-load-bearing. To reduce sun control problem and provide additional wall space, classrooms have vision window at each exterior corner, and high windows

(above 7') elsewhere. Nine classrooms, shop, library, study hall, offices: 20,280 sq. ft. @ \$12.57. Cost, not including site development and fees, \$255,000. General contractor, L. J. Rothfus Construction Co., Des Moines.



WALL LAKE  
SCHOOL  
ADDITION  
N. CLIFFORD PRALL

ON A RESTRICTED site, addition to Wall Lake school connects to existing building at three levels; provides six grade rooms, elementary library, music suite, entrance for gym and offices. Reduced window area provides visual relief but gains wall space in classrooms. 19,340 sq. ft. @ \$12.90, total \$250,000 excluding site work.

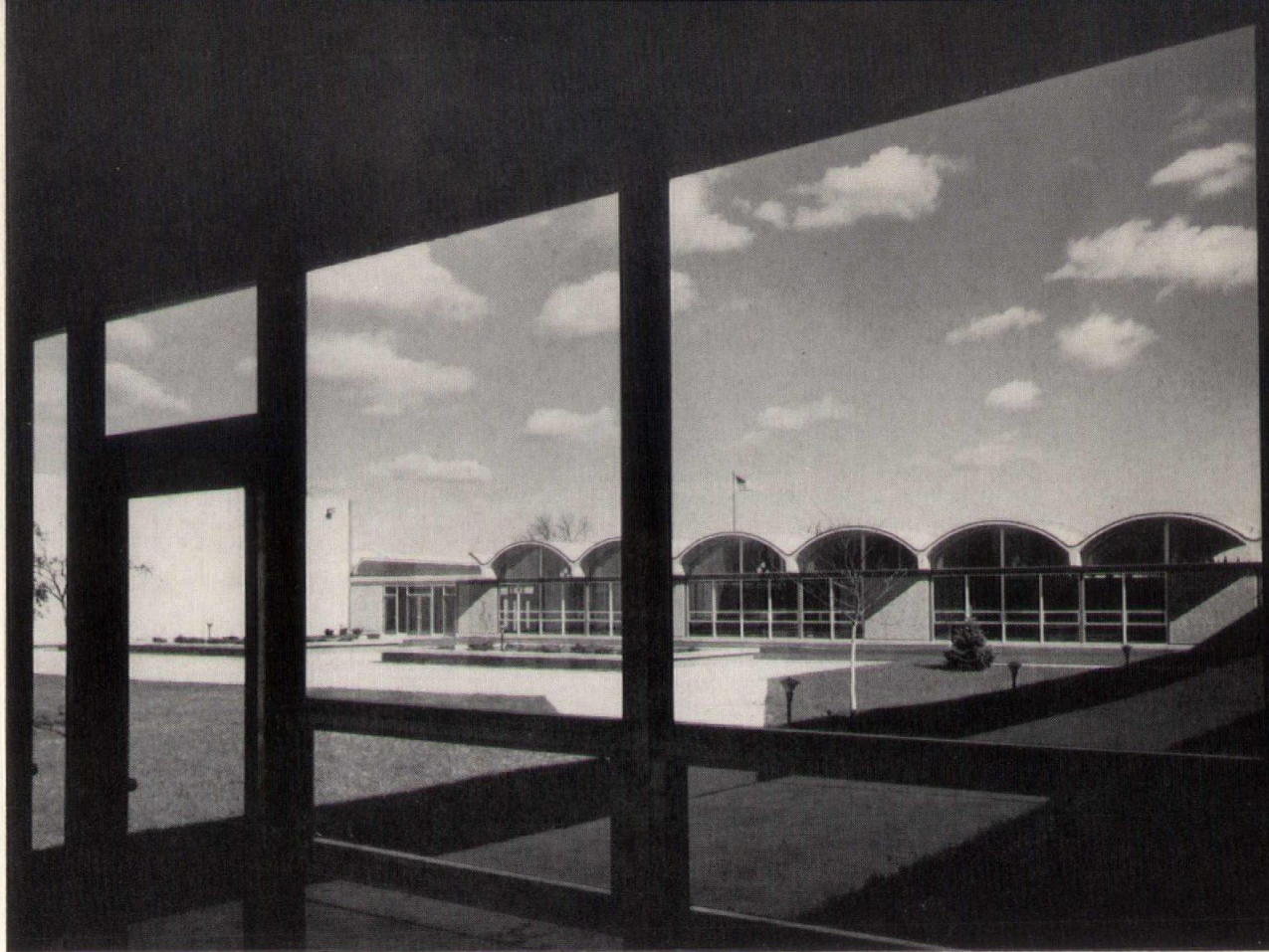
PAGE ELEMENTARY SCHOOL, BOONE, IOWA. KARL KEEFER ASSOCIATES, DES MOINES, ARCHITECTS.

KINDERGARTEN is at left of sheltered entry in this view of Page elementary school at Boone. Offices are at right in the single-story portion. In the two-story section, class-rooms upstairs are for 4th,

5th and 6th grades; lower grades are on ground level. Cubage: 383,451. Contractor: Boone Construction Co. \$489,994.00.







WEBSTER CITY, IOWA COMMUNITY HIGH SCHOOL. SAVAGE AND VER PLOEG, WEST DES MOINES, ARCHITECTS.

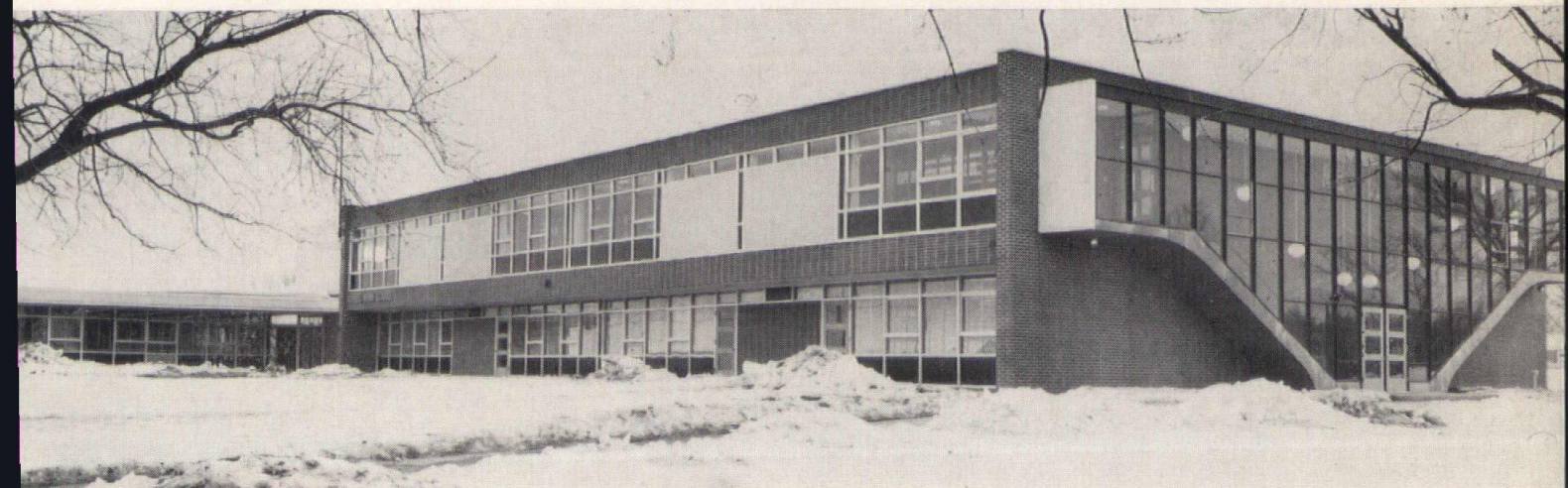
BARREL VAULTS of thin-shell concrete arch over library, cafeteria and music wing of Webster City Community High School. Interior court forms landscaped student plaza. Construction is concrete frame with masonry walls; plaster interior and acoustic ceilings. Planned for 800 students; 84,826 sq. ft., \$1,077,427. General contractor, Woodruff Evans Construction, Ft. Dodge. Frank Pulley, consulting engineer.

# DESIGN

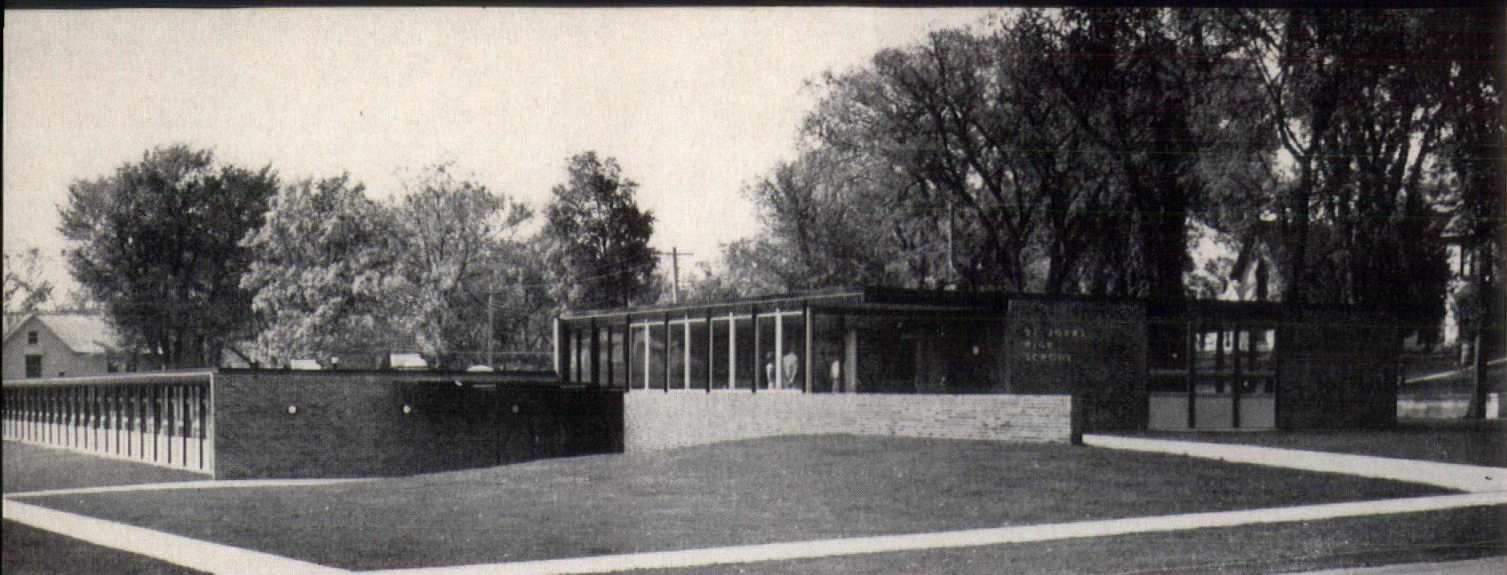
BY IOWA ARCHITECTS

KINDERGARTEN at Horace Mann school, Des Moines, is set apart in the one-story structure at left, and has its own enclosed play area. Stairway hanging on exterior wall becomes major architectural feature, avoids waste space and other problems of conventional stairwell. 540 pupils. Breiholtz Construction Co., \$484,870 (Inc. Elec. & Plumb.)

HORACE MANN ELEMENTARY SCHOOL, DES MOINES. WETHERELL—HARRISON—WAGNER, DES MOINES, ARCHITECTS







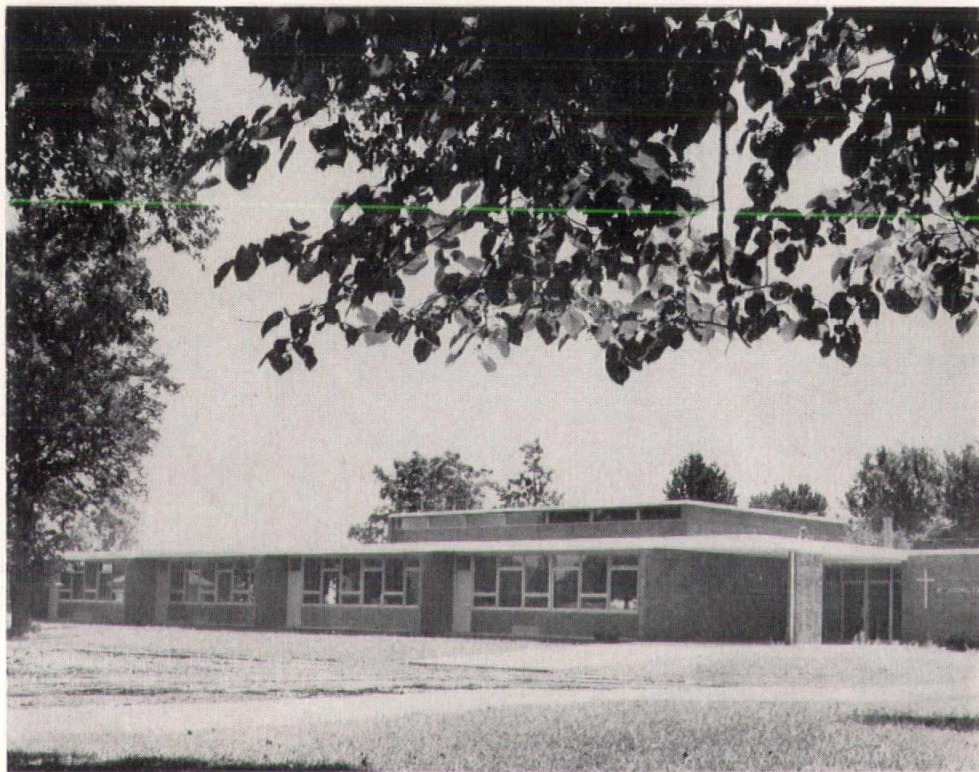
ST. JOHN'S HIGH SCHOOL, INDEPENDENCE, IOWA. LEO C. PEIFFER, ARCHITECT, AND ASSOCIATES, CEDAR RAPIDS

NEW WOOD WINDOW WALL with "Fiberglas" insulated panels is feature of St. John's High School, Independence. Construction is long span metal deck with acoustic ceilings and face brick and glazed brick exterior and interior. Fluorescent fixtures, gas heat, unit ventilators. The 10-classroom school includes facilities for physics, chemis-

try and biology, general science, and a music and study room. Cost is \$10.80 per square foot, A.I.A. method. Music and administration areas are at right in the photograph; classroom wing is on lower level at left; boiler and plumbing are at rear of building.

ST. JOSEPH'S  
ELEMENTARY,  
CHELSEA, IOWA  
PEIFFER & ASSOCIATES

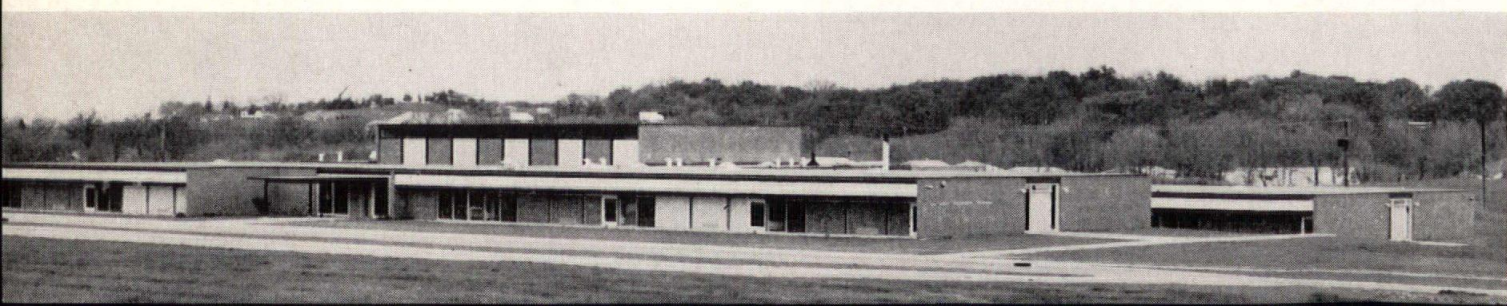
MULTI-PURPOSE room, 40x60, rises above classroom level in St. Joseph's Elementary School, Chelsea. Four classrooms are at left; kitchen is next to multi-purpose room; library, administration and toilets at right. Long span metal deck, acoustic ceilings, oil hot water heat, unit ventilators, fluorescent fixtures, wood windows, face brick and glazed brick exterior and interior. \$11.96 per square foot, A.I.A. method.



EXPANDED METAL sunshades shield the windows of St. Jude Elementary School, Cedar Rapids. Four-classroom wing at left is now used for chapel. Six classroom wing at right also houses administration; wing at rear has six classrooms, library, boiler room. A 60x80 multipurpose room and kitchen are at left rear. Light steel frame,

long span metal deck, acoustic ceilings throughout, gas-fired hot water heat, unit ventilators, fluorescent fixtures. Face brick and glazed brick interior and exterior. 200-car parking lot. Completely landscaped, including play area at rear of building. \$10.86 per square foot, A.I.A. method.

ST. JUDE ELEMENTARY SCHOOL IN NORTHWEST CEDAR RAPIDS. LEO C. PEIFFER, ARCHITECT, AND ASSOCIATES







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noted. "The forward-looking school will certainly want to become acquainted with the possibilities inherent in automated teaching," Dr. Wagner also commented.

"We should recognize that the teaching machine has many characteristics of the good teacher: 1. It is patient; it never scolds. 2. When the child is right he is rewarded. 3. It does not tolerate error."

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question appeared in the window. The student pressed one of four levers, corresponding to four possible answers appearing in the window. If he pressed the lever for the wrong answer, "the machine would just sit and stare," Dr. Wagner said; if he pressed the correct lever, a new question would appear "and you might even be rewarded with the ringing of a bell."

Today's versions, the "programmed" textbook and "programmed units of instruction, follow the same four basic steps: Present the question, elicit pupil response, inform the pupil if his response is correct or not, proceed with a new item in sequence.

Noting the growth of science in Iowa schools, Dr. Wagner reported many districts planning a K-12 science curriculum. Chemistry is offered in 75 per cent of Iowa high schools now, physics in more than 80 per cent, biology, more than 90 per cent.

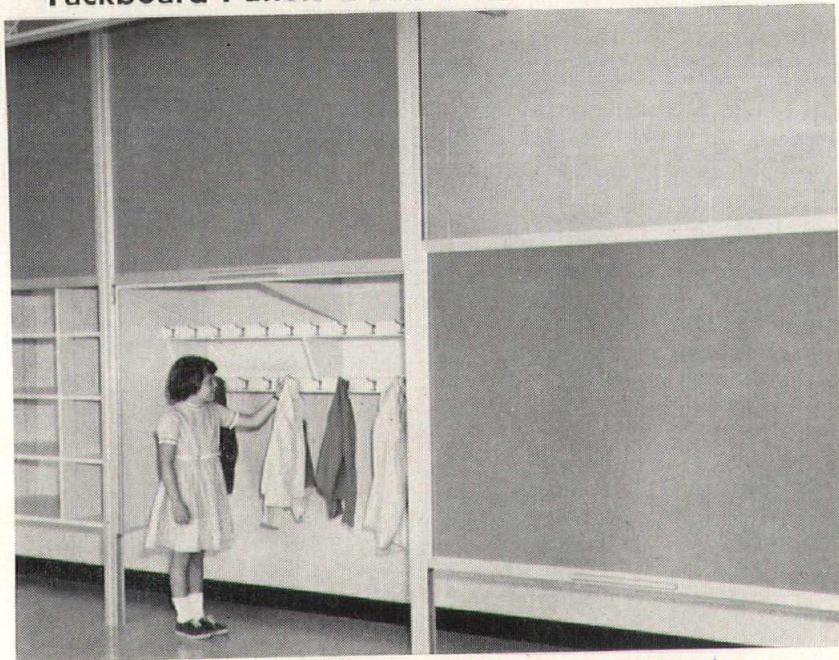
In the summer of 1961, more than two-thirds of the high school dis-

"The curriculum cloth must be tailored to fit the present size of each individual child as well as the future potentialities," Dr. Wagner emphasized. If there are 500 children in a given school, they cannot be adequately served by three, four or five "tracks"; only by a program that provides as many tracks as there are children.

"For example, if we follow Dr. James Conant's recommendation of five solids for the academically gifted in a six-period day, who knows but what Johnny Brown or Mary Jones will be missing something that may be of great importance for them as adolescents, and can be found in other areas of the curriculum?"

"We must not overlook the morale effect on the adolescent of a sound sports program, and the lasting value of good programs in music, dramatics, art and homemaking. Even such a 'luxury' item as an indoor swimming pool deserves very serious consideration both in terms of its contribution to physical fitness and its lifetime recreational value."

### Tackboard Panels Double As Wardrobe Doors



"Lite-Lift" spiral-counterbalanced tackboard panels conceal coat storage and shelves, slide up with ease on nylon guides, at Robert Lucas elementary school, Iowa City. Architects were Henry Fisk and Roland Wehner. Narrow, dull anodized aluminum frames and tracks give these classroom wardrobes a modern, clean look. Dual-purpose units create a low cost solution to classroom storage needs. For information see your "Neal Slate Data File" or write W. E. Neal Slate Co., 1215 2nd Ave. N., Minneapolis, FR 7-8100.



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✓ **MANUFACTURE.** Our two three - block machines not only use vibrations for compacting the

blocks, but they are the only ones in this section using both bottom and top vibration.

✓ **CURING.** We have a large, automatically controlled, high pressure steam boiler which enables us to get just a right temperature and moisture to cure the blocks properly.

✓ **STORAGE.** We have a large all steel building in which more than 150,000 units can be placed under cover to keep them out of the rain and snow. Orders for large buildings are placed under this roof.

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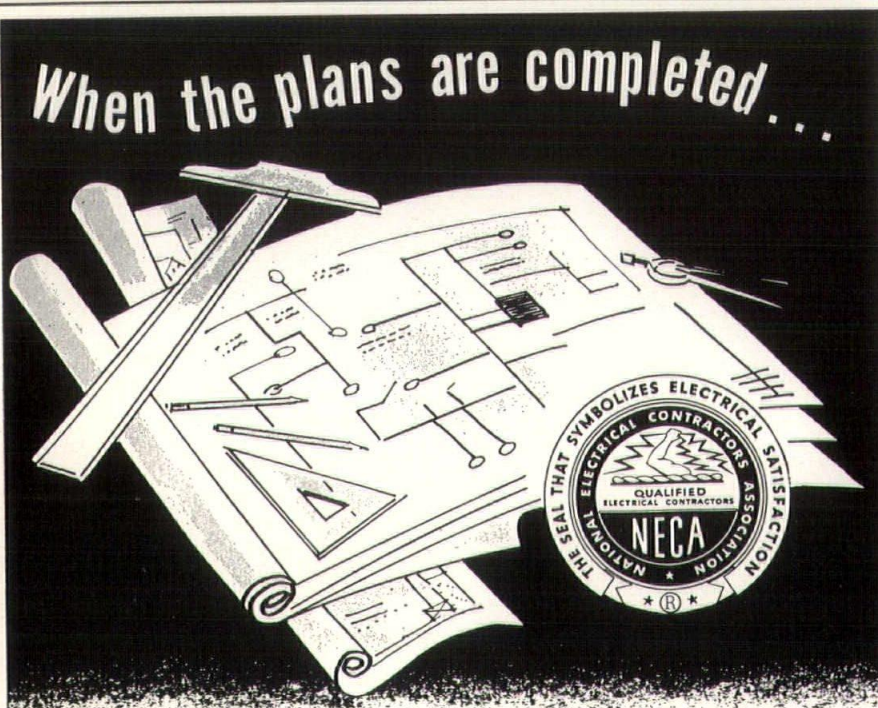
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## HARRIS—

Continued from page 10

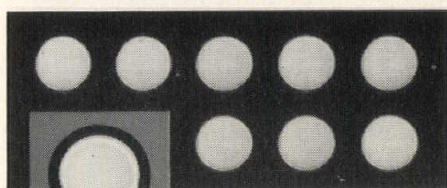
"Today we are told, and we believe it, that we are the most powerful nation on the face of the world. However, we find ourselves challenged at every turn by a power determined to outdo us individually, politically, scientifically and collectively, determined to destroy our way of life and destroy our form of government.

"The thought I would like to get across this podium to you today is that education is our salvation. Lip service from you and me will not suffice. Education at all levels must be taken more seriously.

"I ask you as parents and as friends of education and educators to frown upon mediocrity, to insist upon perfection in the school where you serve, to strive for the best, because brain power is our battlefield.

"We must challenge at every turn those who permit our average to fall below average. Our greatest weapon of protection is an intolerance to apathy. We need superior plants, superior boards of education, superior educators, superior legislators to produce superior education.

"We must think big, act big and above all, we must be big."



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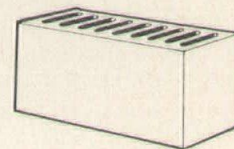
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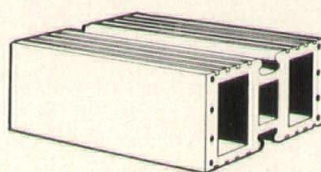
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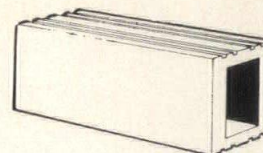


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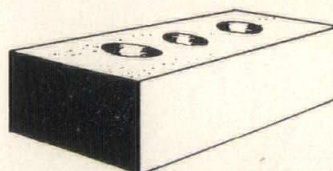


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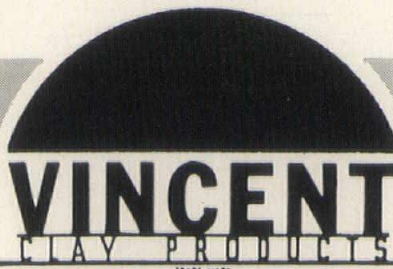
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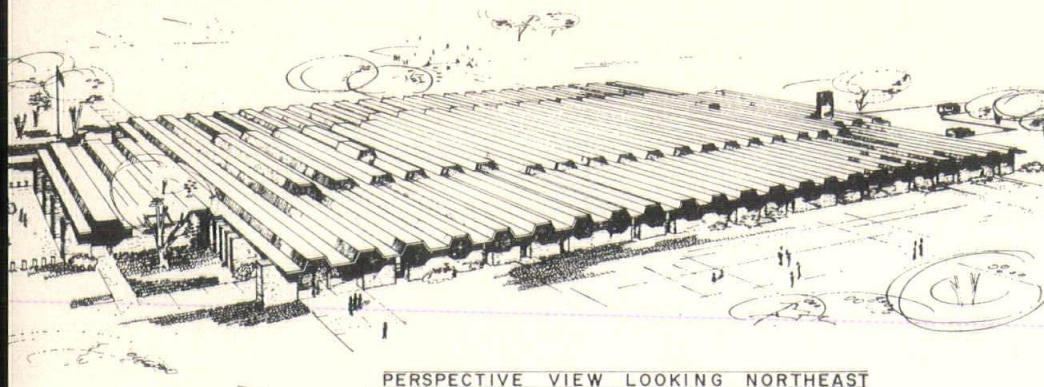


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## Porter Wins \$500 in Fallout Competition

That fallout protection shelters do not have to be underground dungeons has been demonstrated by an Iowa architect, Thomas C. Porter of Des Moines, whose use of a school recreation room won a \$500 prize in a national competition.



PORTER

The school, in which a central commons and recreational area serves as the fallout shelter, was designed for a competition sponsored jointly by the American Institute of Architects and the Department of Defense. Porter's design of the elementary school was awarded third prize in an eight-state region.

Porter, a member of the American Institute of Architects, explained that fallout protection is provided by a 12-inch thick, folded plate concrete roof which weighs 150 pounds per square foot, and by the heavy concrete block and brick masonry walls which support the roof.

"The underground atmosphere is avoided by the use of windows located high under the roof and protected by long overhangs of the heavy concrete. The windows provide some natural lighting into the shelter area without materially reducing the protection factor," Porter explained.

Porter has recently established an office for the practice of architecture at 701 Insurance Exchange Building. He is a 1950 graduate of Washington University, St. Louis, has been associated with N. Clifford Prall, architect, for the past seven years and previously was with Karl Keffer Associates, Des Moines architects.



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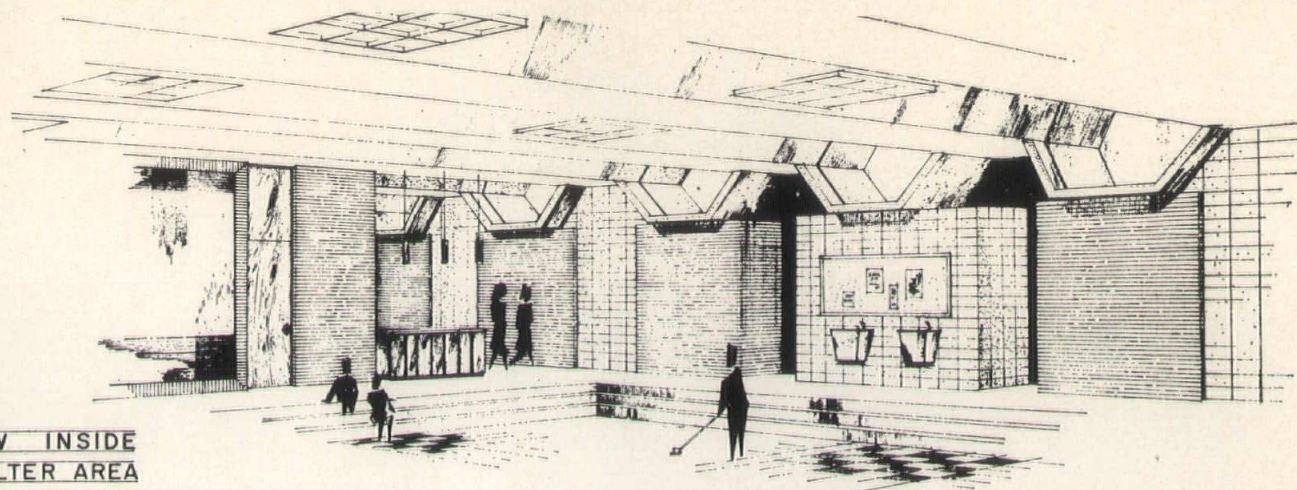
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**VIEW INSIDE  
SHELTER AREA**

## PANEL—

Continued from page 12

*Practical arts:* "Woodworking in the school curriculum today is completely out of place. Our shops should be centered around electronics, automotive, tractors, small gas engines. And business education should teach data processing, electronic equipment, selling, general clerical, more than bookkeeping and shorthand.—Dr. Van Dyke.

*New trends:* Let's not let transient trends cause us to neglect central facilities. Why don't we begin to put some of the same ingenuity into fashioning English laboratories that we have into science laboratories? Social sciences are not keeping up; we need to make a special attempt to design facilities for them".—Dr. Howard Knutson, State College of Iowa, Cedar Falls.

*Portable classrooms:* "I do have some fear over the aesthetic and artistic ability of architects to make texture, feeling and warmth out of this kind of space. As the school people firm up their vagueness and make more clear to the architects what they are after, the architects will start to respond in a little more delightful fashion, the way they can when they have the problem firmly in mind, to give spaces which have emotional appeal and are specialized and at the same time have humility about change".—Dr. Leggett.

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## HILL—

Continued from page 9

have taken the first great step in planning a building."

Defining the roles and responsibility of the board itself, the superintendent, the staff, and adult groups in the community, is the second task, he added. "It must reconcile differences in ideas, determine who starts what."

The third task is to furnish personnel—not necessarily full-time, but specialized in the task at hand, Dr. Hill said. Among this personnel is the architect.

"The architect must be selected

on the basis of competency and creativity, and he must be given a statement of educational needs and community problems to be solved. He must have an idea of the resources available to supply the facilities needed, and then he ought to be challenged to exercise as much creativity to accomplish the ends desired as is possible to give them," he said.

The school board must establish administrative organization for the project, including the pattern by which special change orders are authorized, "and no other way ought to be allowed," he emphasized.

There is a place for the expert in

the democratic process, Dr. Hill emphasized. "When you get a lot of people involved in planning, you don't create knowledge by pooling ignorance."

However, the board has, and must have, final authority, he noted. "There are many ways of doing many things, and in the final analysis you, as board members, decide, on the basis of the expert advice you can muster."

School boards must set an honest economic picture before the people, Dr. Hill stressed.

"I despise people who pretend you can get good schools for nothing. It just ain't so."

"Schools are but one phase of a community's need, and it is a challenge to the board of education to relate the long-term capital program to the current budget."

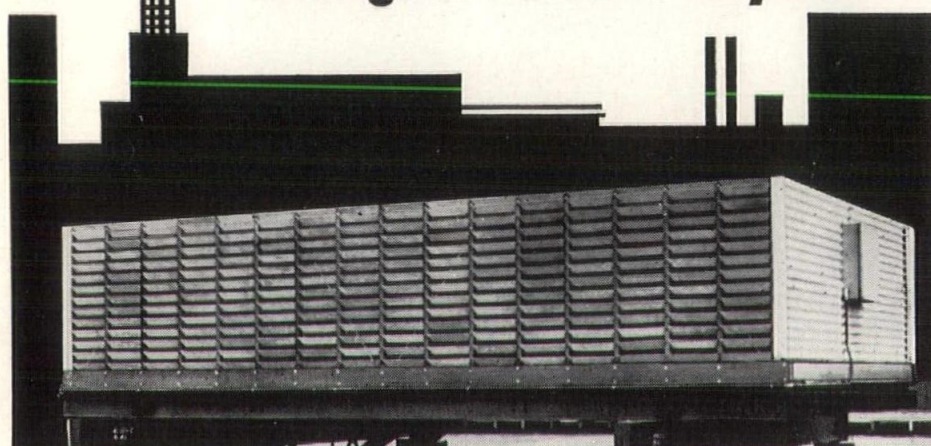
"One of the tragedies of our times is that sometimes we build what we can afford, not because we can't afford to build it, but because we can't operate it after we build it."

"I want to be careful of my diction here, but someone has said it cutely, 'Don't build vast plans on half-vast ideas.'"

"I think this admonition is realistic. In the long run, the art of planning is being visionary within the possible."

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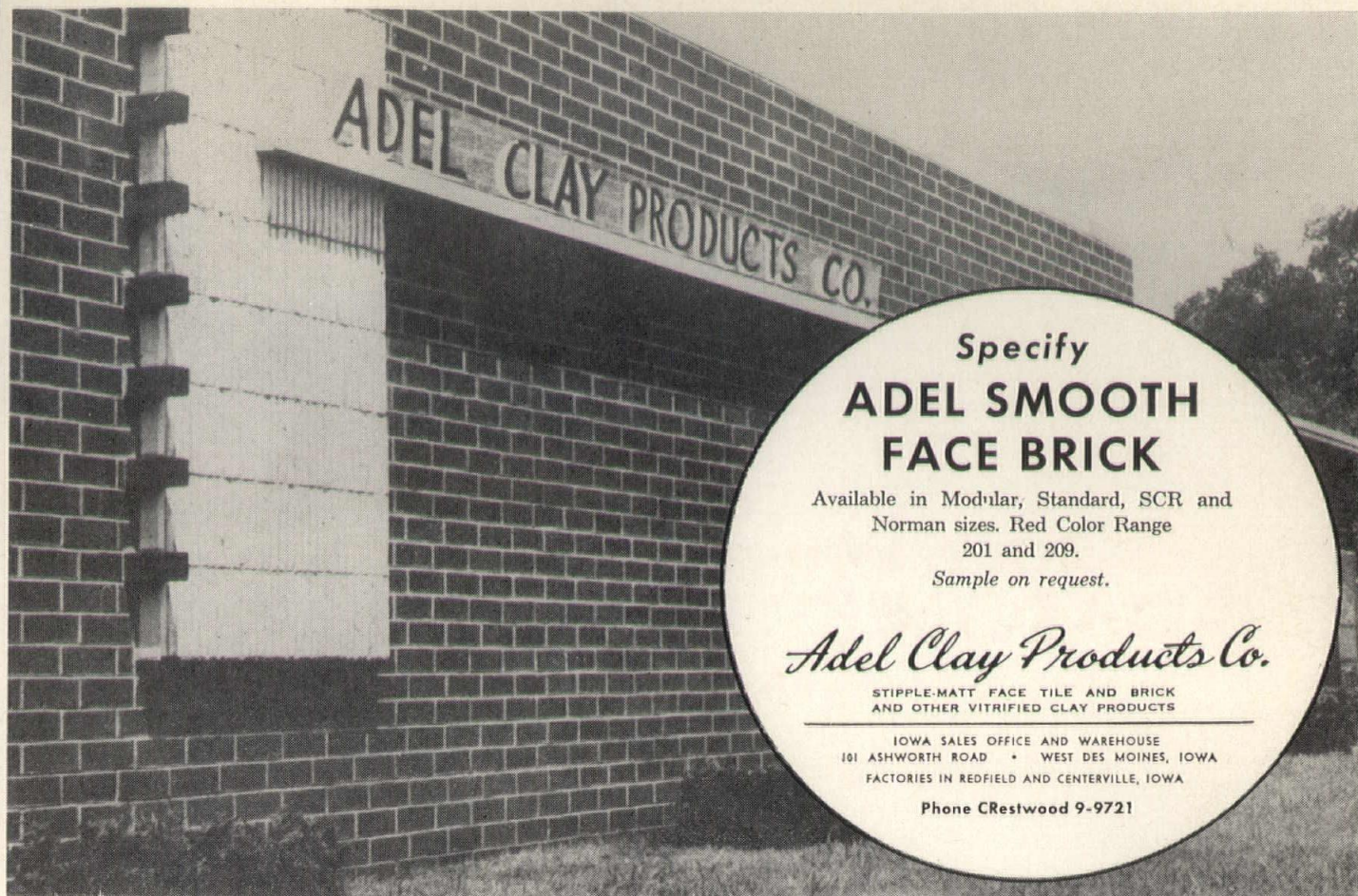
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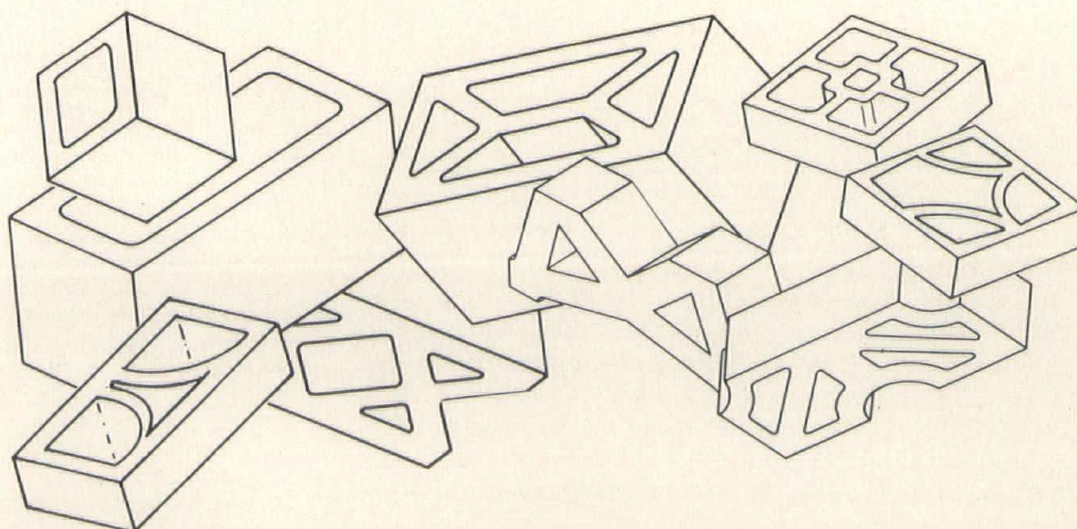
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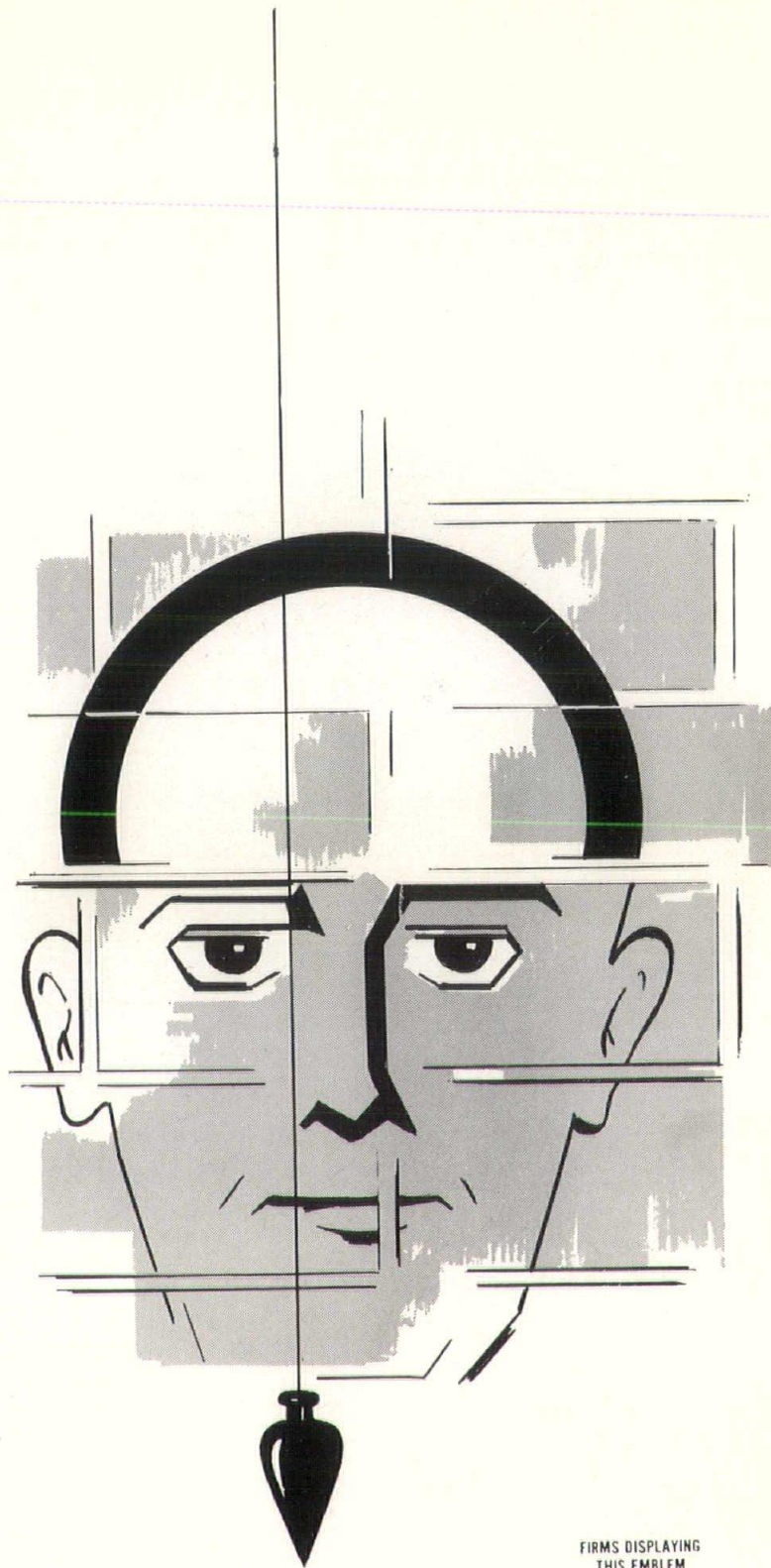
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