

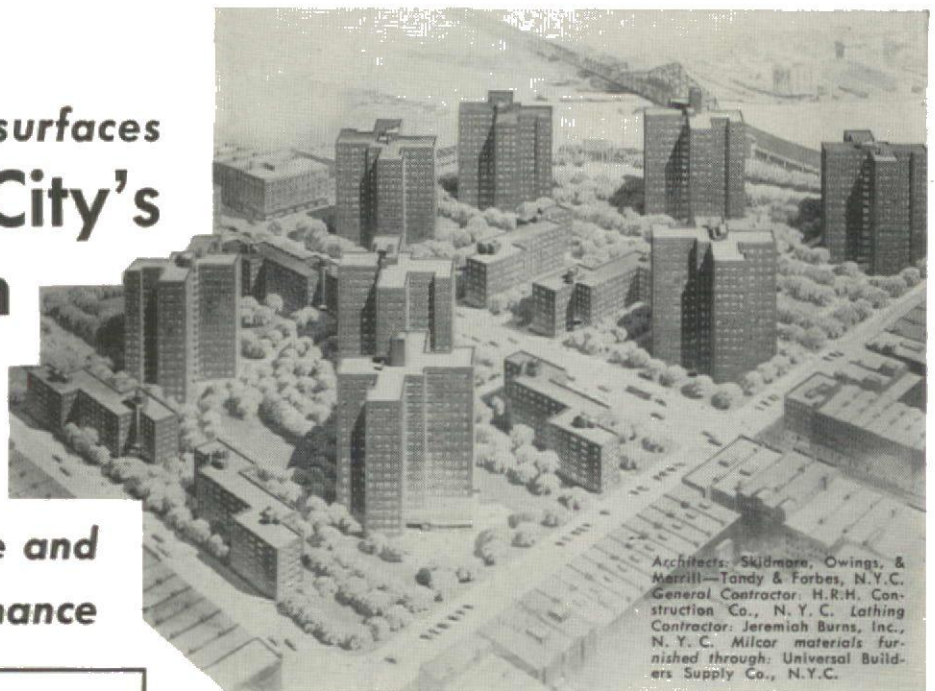
Progressive Architecture

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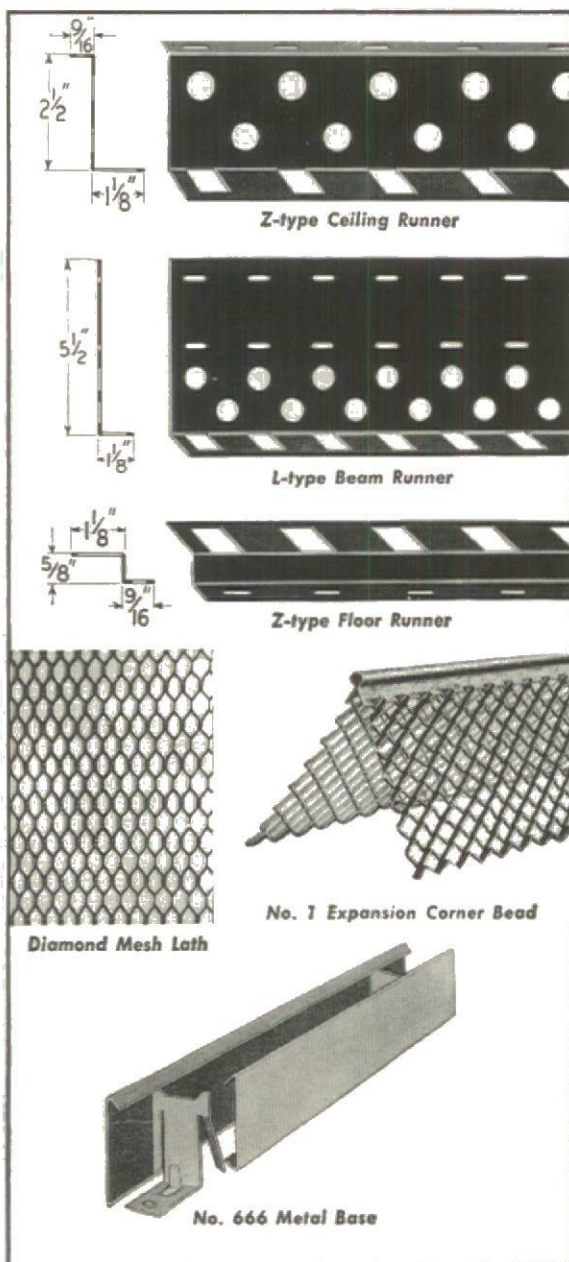
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May, 1948

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Mr. Eric Gugler, Chairman
Committee on Architectural Competitions
American Institute of Architects
The Octagon, Washington, D. C.

Dear Mr. Gugler:

We have been reading the editorial comments in various newspapers about the results of the Jefferson National Expansion Memorial Competition: "A distinctly original yet superbly simple landmark...Here is utility and beauty, a great plan for a great purpose...particularly striking in originality and boldness." Not for many years (not even in the case of the U. N. Headquarters) has so much popular attention been paid to an architectural and planning conception. Why? We feel sure that the reason is the fact that it was a competition—and a good one.

We would like to call your attention to several points. As you know, the program was written for a two-stage competition, the first, open to all, permitting the competitors to "give their imaginations free rein"; the second stage, restricted to five preliminary winners, being "given over more particularly to the study of a plan...for execution." May we recommend that your committee study the procedure and report to the profession as a whole upon it?

There have been other successful competitions recently. The town of Attleboro, Massachusetts, has concluded one for a school building, and its citizens feel that they have a better design to go ahead with than they would otherwise have had. As you know, the competition method of selecting architects has gained much headway in other parts of the world. We all know the advantages—the bringing forth of new ideas, the encouraging of younger practitioners, the popularization of good design.

The Institute gives advice when it is asked for, and approves or disapproves specific competition proposals. Should we now go beyond that point and actively encourage competitions? A good many people in the profession think we should. Perhaps the question should be on the agenda for the Institute convention next month.

Very truly yours,

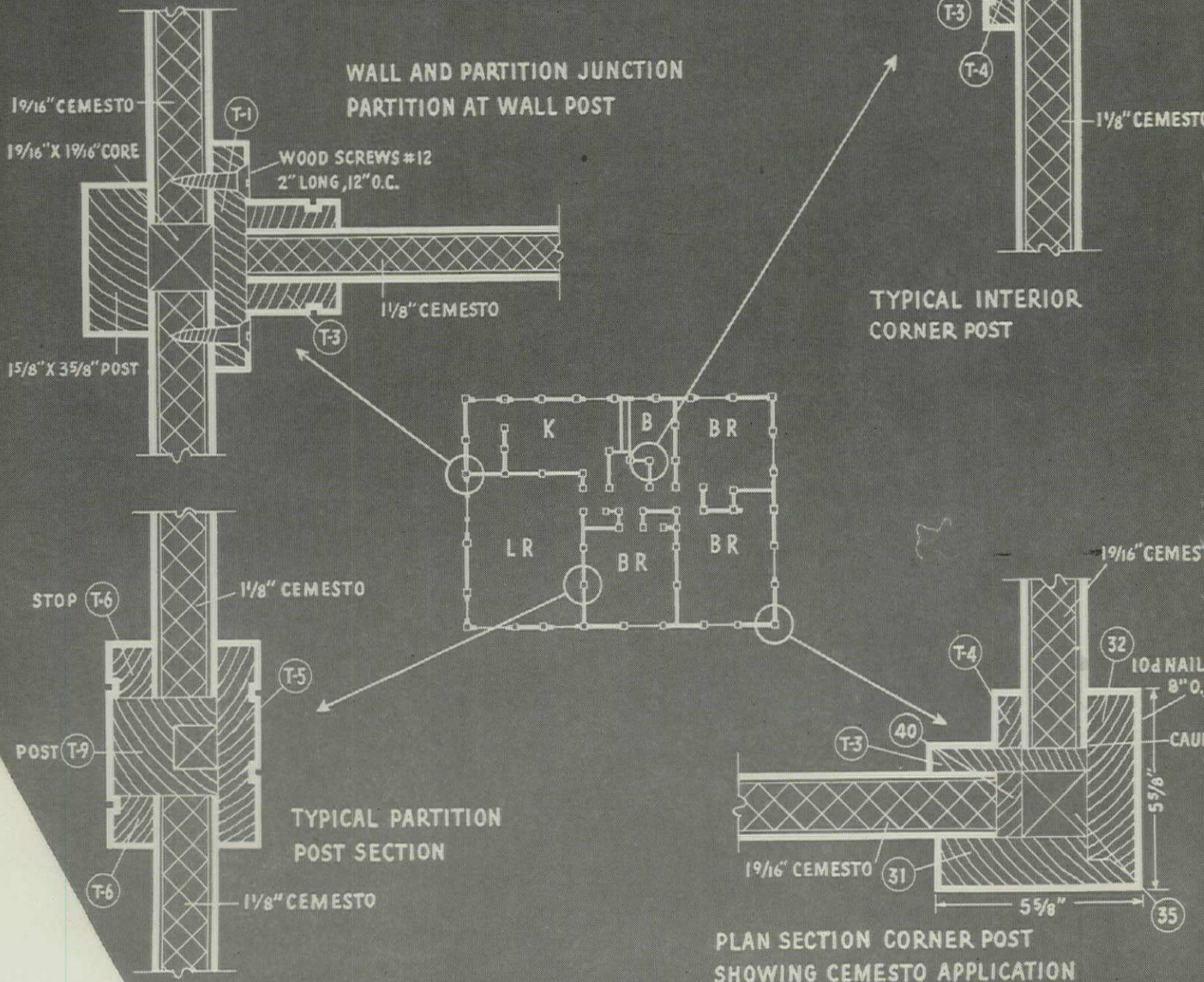
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P/A: czm

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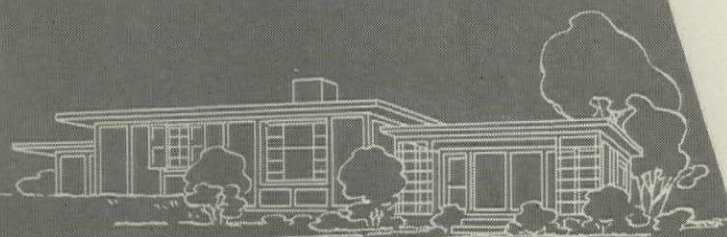
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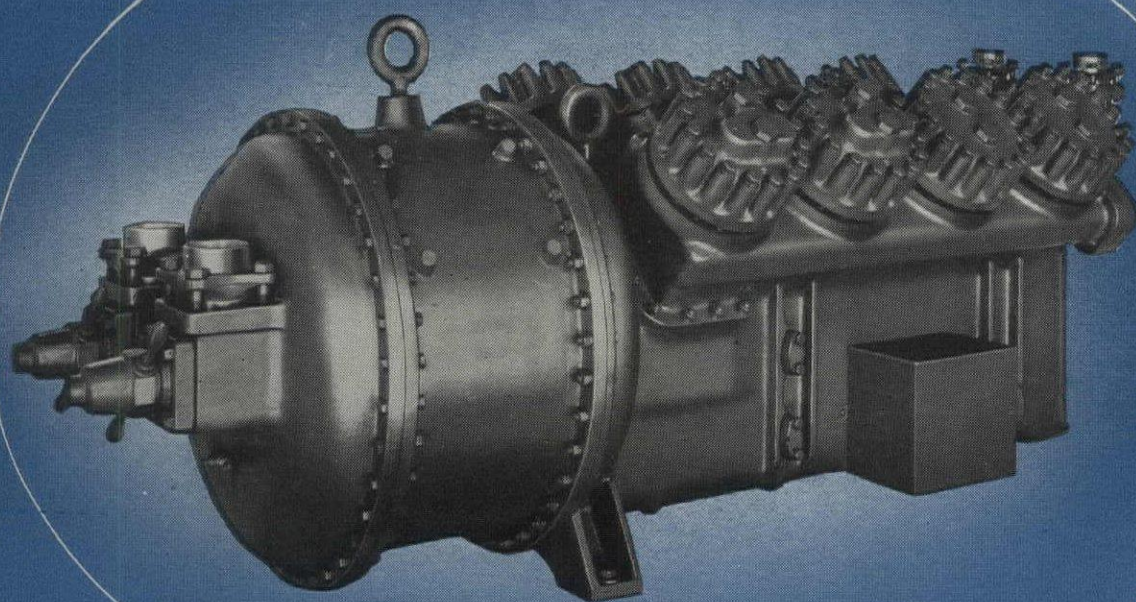
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MAY, 1948 5

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Linotile is slightly higher in price than linoleum of comparable gauge and about equal in price to rubber tile. The cost of Linotile is generally considered to be moderate when judged by the service it gives and its minimum maintenance requirements. The wide variety of sizes that are available makes it possible to obtain minimum installation costs for even complicated designs, because little time is required for on-the-job cutting.

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Linotile should not be installed over concrete subfloors in direct contact with the ground because of the alkaline moisture found in such floors. Linotile is recommended as a flooring on all well-ventilated suspended subfloors, wood or concrete, in commercial, monumental and public buildings, schools, and hospitals as well as in residences and small shops. Because of its resistance to indentation and its extra wearing qualities, Linotile is also well suited as a flooring for lobbies, corridors, and offices. Architects wishing samples, literature, and specifications for the installation of Linotile are invited to write any Armstrong district office or directly to the Armstrong Cork Co., Floor Division, 6905 State Street, Lancaster, Pennsylvania.



FOR THE DEFENSE

Dear Editor: I should like an opportunity to defend my position against the attack made by Mr. Talmadge C. Hughes, editor of the *Weekly Bulletin*, Michigan Society of Architects, in a letter carried in your March issue. First, Mr. Hughes expresses difficulty in seeing the connection between my philosophizing on the architect's responsibilities and my attack on the *Weekly Bulletin* for carrying two years ago an article by Mr. Douglas Whitlock, chairman of the Advisory Board of the Producers' Council, opposing the Patman Bill. The gist of my letter in your January issue, to which Mr. Hughes objected, was in support of the views of Architect Brumbaugh who holds that, given our complex and overly-specialized society, the architect can best be of service to his community and society as a whole by working at the grass-roots level where he can actually live all the daily problems with which the citizens in his community are faced. To be of such "genuine service," I believe that architects must first and foremost concern themselves with bettering the environment of their own communities. As things now stand, their greatest contribution toward this end will be made by fighting for more and better housing. Because I strongly believe architects must take the lead in this fight, I was disturbed two years ago to see the *Weekly Bulletin* give so much prominence to the objections of Mr. Whitlock to the Patman Bill.

I wholeheartedly agree with Mr. Hughes in a policy of considering both sides to any question; such a policy is fundamental. In his letter he maintained that the *Bulletin* was merely reporting the news, which undoubtedly was the case. As I recall, however, there

was no accompanying explanation to the effect that the article in question was a news release; nor was there a statement to the effect that the Society did not necessarily share the views of Mr. Whitlock. Many readers, myself among them, were undoubtedly left with the impression that the Society either shared the views of the Producers' Council or at least preferred not to take an opposing stand. The Society has every right to take such a stand if it so wishes, but I question the wisdom of such a policy if the architectural profession ever expects to convince the public that it is performing genuine, indispensable service. It must do more than merely print both sides; it must take a fighting stand in a constructive, bold direction. We can't be pussyfooters. Mr. Hughes objects to my classification of the Council as a "self-interested, outside organization," and goes on to say that it is the only organization affiliated with the A.I.A. The inference, I take it, is that this affiliation gives the Council a clean bill of health. I need more convincing proof. Mr. Hughes attempts further to erase the "self-interested" label by pointing out that the Council "opposed Government subsidies to its own members." Let's look at this. Most impartial economists are in agreement that the building materials industry is the most monopolistically organized segment of American industry, that competition is virtually nonexistent. In such a situation is it at all surprising that the industry opposed the type of subsidy proposed by the Patman Bill? Let's be honest. Suppose you were producing a vital building material at a rate less than the demand and therefore probably at a high profit. Would you look with favor on financial assistance in any form, Government or other, to a less fortunate producer whose costs happened to be greater than yours, knowing that such assistance might permit the latter to expand his output sufficiently to add materially to the total supply, thereby tending by loosening the market to lower prices — and your profits? If you were human, and most of us are, you would probably oppose any such legislation. That is why I believe the Government, acting through the people's representatives, has a moral responsibility to take action to lower prices. I believe housing is that important to the welfare of the nation. The experience of every nation in the Western World has shown that large portions of its population cannot be adequately housed without some form of public assistance. The evidence is rapidly mounting that this nation is no



P. A. Dearborn

SHELDON BRUMBAUGH, architect, of Klamath Falls, Oregon, died from a heart attack while shoveling his car out of a snowdrift on March 23rd. Brumbaugh was an architect who felt a responsibility to his community as a general practitioner and worked untiringly to serve the people in the area where he lived. When P/A ran a short story on him and his work last October, it had an influence that none of us foresaw. He said in that article, "We need to clear the boards, forget our pride, and begin in a humble effort to be of genuine service to our neighbors and fellowmen. I do not mean by this a sentimental concern over the problems of the underprivileged, or any nostalgic idea of a return to nature. What I do mean is a direct, sensible approach to securing some significant architectural form in our towns and dwellings for the average man."

Sober established architects who had never before written a "fan" letter wrote to us and to Brumbaugh expressing the inspiration they had received from the story of his work. Students decided to go out in the sticks when they graduated, to see if they could establish the same sort of practice. One student corresponded with Brumbaugh and then spent his summer vacation working for him. Last week — six months after the article had appeared — a young New York architect came in to see us and said, rather bashfully, "I want you to know that I've decided to go out home to Kansas and open an office with some friends of mine — in my home town — and it was the Brumbaugh story that decided me."

A Connecticut architect who had known Brumbaugh writes, "His community looked upon him with an almost jealous pride as *their* architect, as they would a loyal doctor whose sole interest was the welfare of his neighbors. This is a rare and enviable position for an architect, and requires rare attributes. Sheldon Brumbaugh had them. We feel that he was a matchless inspiration, and will continue to be."

Featured presentation of our June issue will be announcement of the verdict of a distinguished professional jury which met a month ago to name the winners of the Second Annual PROGRESSIVE ARCHITECTURE Awards. Illustrations will include, in addition to the jury's selections, representative buildings from the scores of entries submitted from all parts of the United States.

(Continued on page 10)

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(Continued from page 8)

exception. Why try to smother it? Those like Mr. Whitlock who argue against public subsidies and who fear their cost to the taxpayer, more bureaucracy (I too am somewhat apprehensive in this regard), "socialism," etc., don't seem in the least aware of the probable far greater cost to our whole culture, a generation or so hence, of our

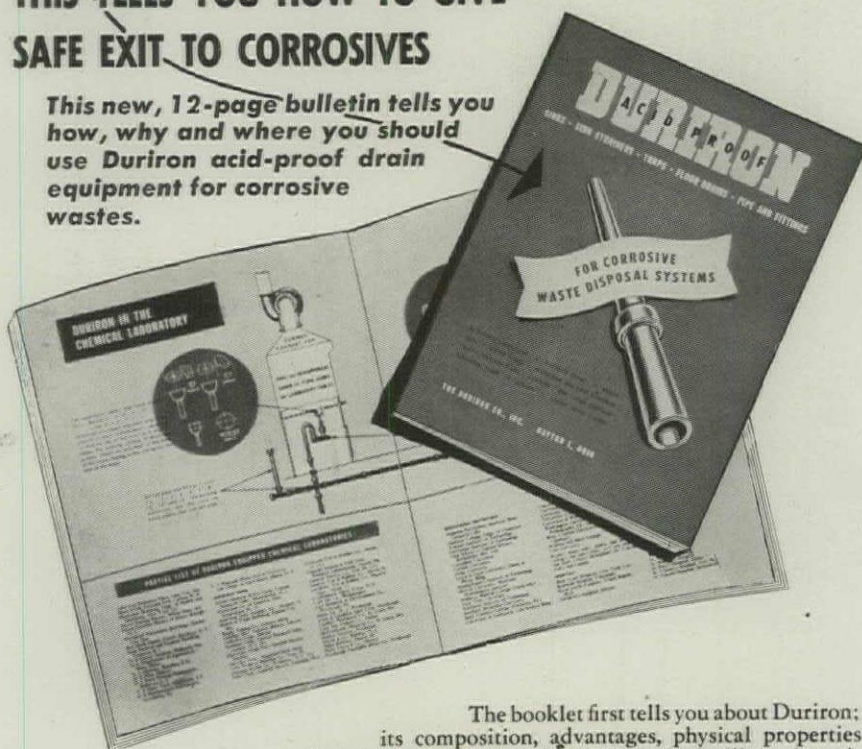
failure to solve today's housing problem. Like the opponents of T.V.A., they talk almost exclusively in terms of today's dollars instead of tomorrow's lives.

My parting question: Do architects wish to become identified with this narrow, defeatist point of view?

WILLIAM W. LYMAN, JR.
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JUST NEEDS HELP

Dear Editor: I was particularly interested in your article ("The Architect and His Community") in the October 1947 issue concerning the field of architecture in the small community. Until I closed my office at the beginning of the war I was located in St. Louis, during which time I had occasion to do some work in southeast Missouri. I was so intrigued with the possibilities of such a field that I located my office here in Sikeston after the war. I find that this town, as well as other communities in this area, are very building conscious and see the need of professional architectural service. They have a remarkably high regard for the profession of architecture. In fact, I find them very appreciative for my having located here.

My work, fortunately, is very varied. At the present I have on the boards residences, educational buildings, church, commercial buildings, medical building, and dairy plant. My only shortcoming is availability of help in staffing the office.

R. PAUL BUCHMUELLER
Sikeston, Mo.

WITHOUT QUAVERING

Dear Editor: I find much food for thought in the article by Bernard Tomson, "You and Your Client" (February 1948 PROGRESSIVE ARCHITECTURE), especially so when considered in the light of experience of many designers with whom I come in contact. It would be embarrassing for me to go to my attorney or to my doctor to discuss the mercenary part of the transaction. When I finally make up my mind to seek the services of a professional man, I have already weighed the probable size of the bill that will be presented, as I am fully aware of the reputation and caliber of the man I am consulting.

If the professional man will conduct himself, at all times, in a dignified professional manner, maintain professional headquarters and home that reflect his ability, then the one seeking his services fully expects to pay well for the services which he feels certain are going to be worth it.

My client is always put at ease about the fee during discussion of the cost of the building or project in question, when among the items of cost I casually mention the fee expected to cover my charges. The fee is just as lightly skipped over as is any other item of the project, without fear or quavering of its effect upon the client.

If the designer knows full well that he is worth the fee he is going to charge and is certain that the client is going to get his money's worth and, what is very important, does business with reliable people, the question of fees and

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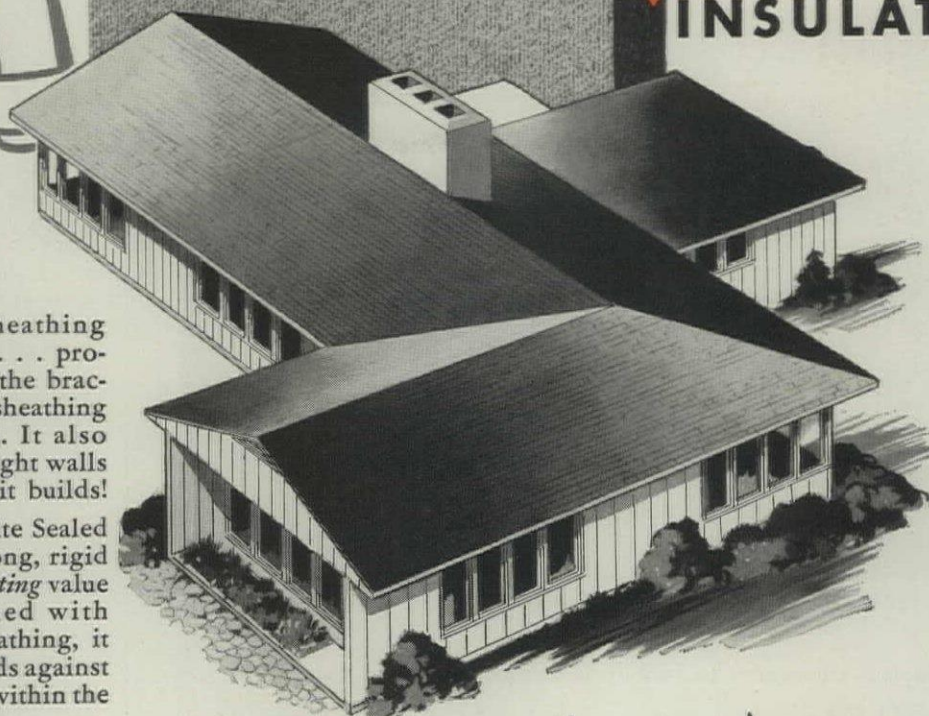
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(Continued from page 10)

the method of collection then just sort of unfolds and takes care of itself. One's conduct in the community assures the client that he is going to get full value for his money as his services stand out while his fee has been already absorbed as but a single item in the cost of the whole.

A. T. CASSIERE
Fontana, Calif.

THE DECIDING FACTOR

Dear Editor: Mr. Bernard Tomson's article, "You and Your Client," should be of paramount interest to all architects. In view of our present-day high cost of building and its resulting "Cost Plus" contracts, the architect's supervision not only becomes increasingly difficult, but, in many cases, may also

become the deciding factor involving the final settlement of fees.

It will be interesting to note what Mr. Tomson's interpretation of the architect's supervision will be. Do we or do we not supervise the work? Both the layman and a jury, guided by the skillful maneuvering of a plaintiff's lawyer, are easily convinced the architect agreed to supervise something. Under our present A.I.A. Form, this "something" has ever remained somewhat ambiguous.

No matter how sincere a contractor tries to be, because of faults directly traceable to both his superintendent and his workmen, human nature prompts him to shift the blame by convincing the owner the architect is wholly responsible for the performance of the contract, because a clause in the General Conditions reads: "The Architect shall have general supervision and direction of the work." It is apparently not enough for the architect to explain to his client that the "Conditions" endeavors to clarify just what the architect's actual supervision means and that a "Clerk of the Works" is the only way to guard the owner's day-by-day interests.

ALFRED F. BOHN
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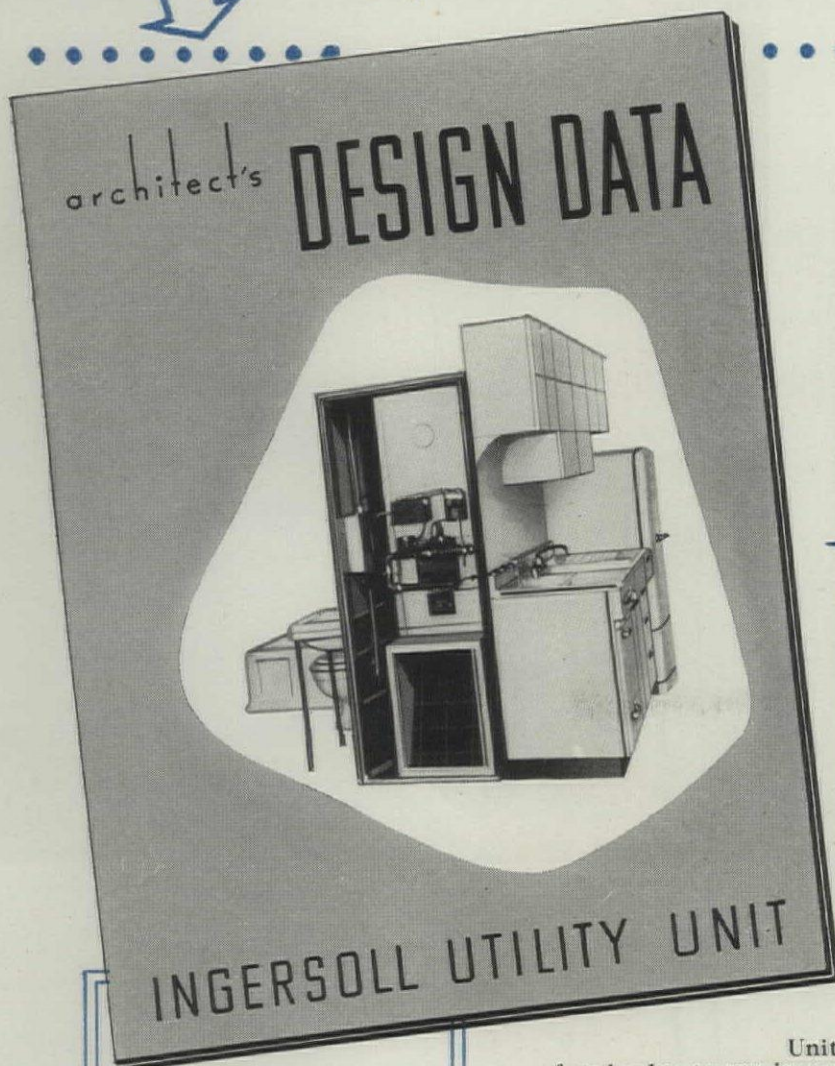
Dear Editor: Reference is made to an article on contracts in the February issue of *PROGRESSIVE ARCHITECTURE* on which you invite comments. The statement was made that the architect should be paid as the work progressed and oftener than stipulated in the A.I.A. documents. In our percentage contracts, we stipulate that payments should be made on a cost-plus basis as the work progresses and on completion of sketches an amount sufficient to bring it to 20 percent of the total amount we are to receive under the contract.

The author mentioned as a basis of charging draftsmen's salaries plus 100 percent overhead and 100 percent profit, and, by inference, making no charge for principals' time. This is a very inaccurate and antiquated method of cost-plus charging. In most up-to-date offices, the principals are on a salary basis and keep time cards the same as the draftsmen. The charges made are the amount of all salaries plus 70 percent for overhead and whatever sum is agreed upon for profit, which is usually 25 percent, 33½ percent, or 35 percent, according to the office. On work where bids are advertised, we find it advisable to stipulate 10 sets of drawings and specifications, with additional sets furnished at cost. It is surprising the number of sets asked for, and the cost sometimes runs into hundreds of dollars.

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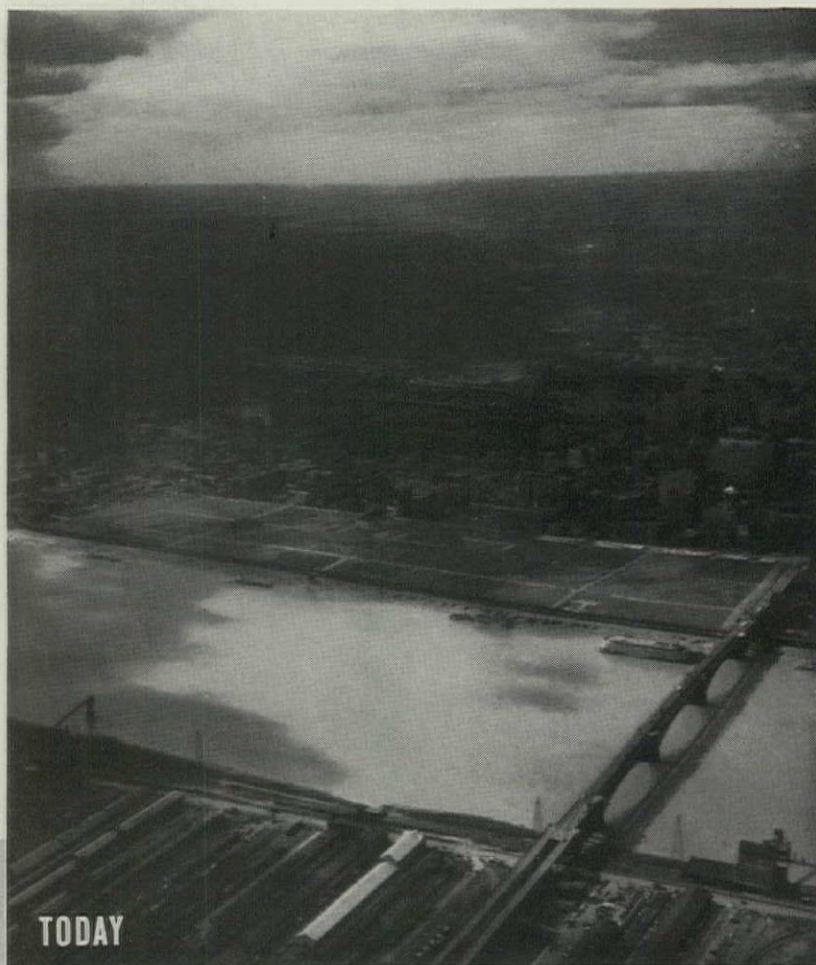
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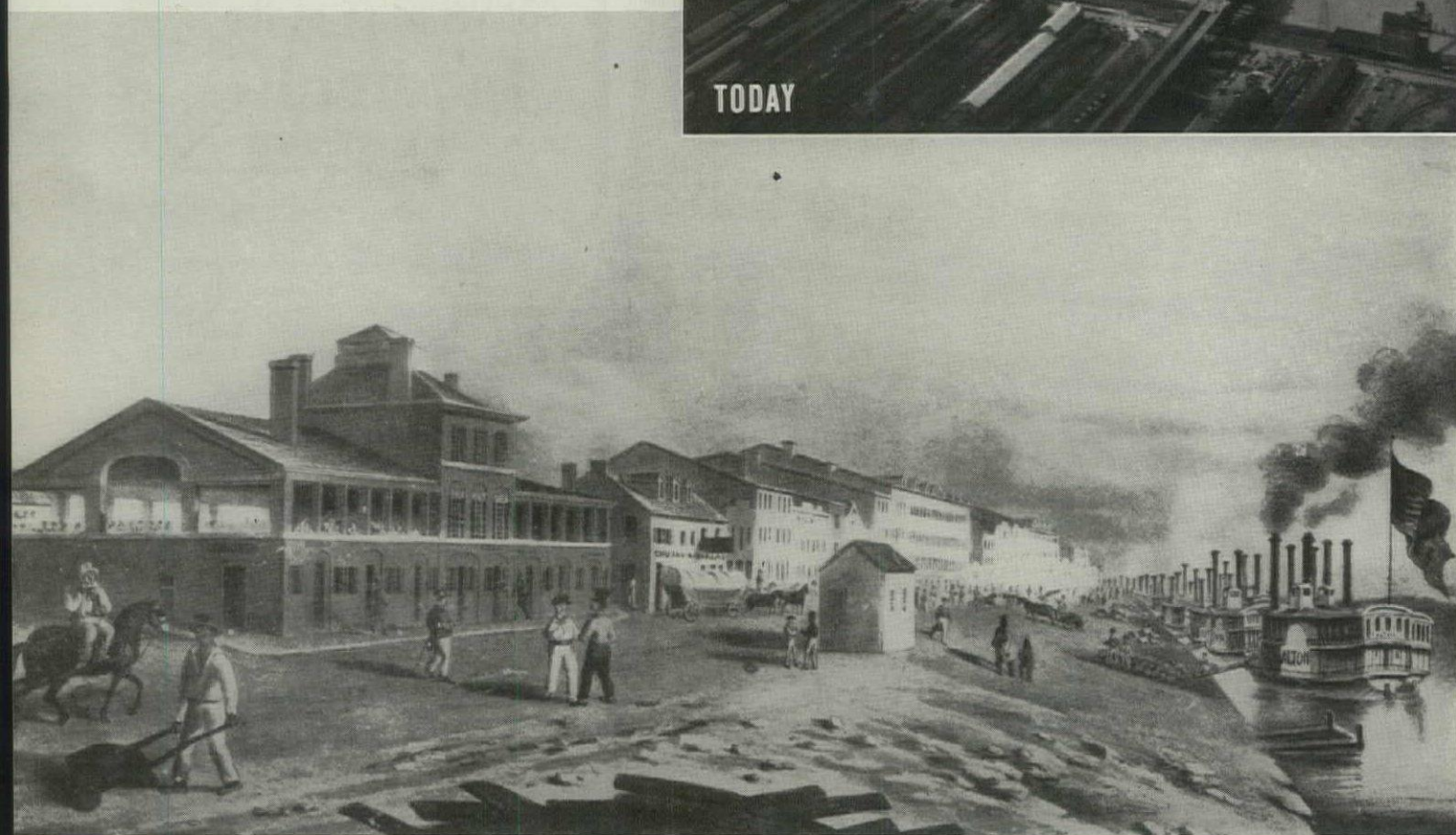
ST. LOUIS

MIRROR OF OUR ASCENDANCY

Choice of St. Louis as the site for the contemplated national memorial honoring Thomas Jefferson and his Presidential derring-do that sealed the Louisiana Purchase—to insure our whole territorial integrity and ultimate national wealth—prompts a look at that city. With acquisition of the unknown plains and mountains in 1804, scarcely 40 years after French fur traders had started a settlement at the junction of the great Mississippi and Missouri waterways, it suddenly became the door to riches. From St. Louis, Lewis and Clark started when bidden by Jefferson to explore the new Northwest. Pioneers and settlers following them also outfitted at the growing river port. Soon Virginians and New Englanders joined with the French settlers to build a city, refugees from stale Europe came by thousands as industry began, and the city grew as America grew.



U. S. Navy Photo



J. C. Wild Colored Lithograph—Missouri Historical Society

1840 On the site of the Jefferson National Expansion Memorial 100 years ago cargoes were unloaded for the western trade from a fleet of river steamers. In the building at left the City Fathers deliberated amid "blood and smells" of the flanking city market. In the basement were "calaboose and grog shop," which supplemented the municipal income.

This Improved Construction Assures a Permanent

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at Minimum Material and Labor Cost!

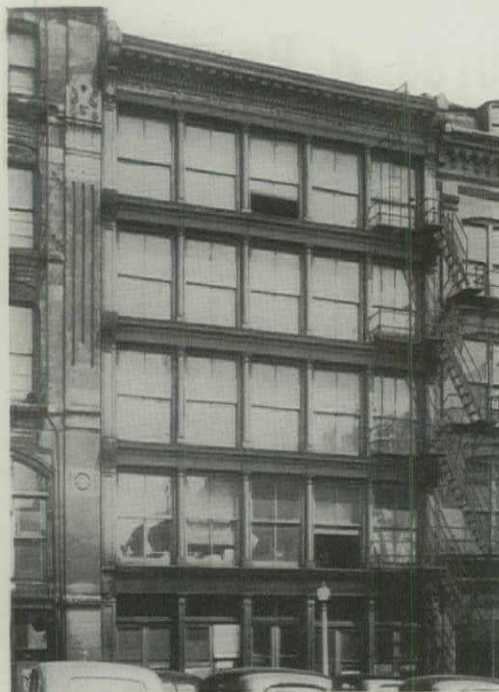


See for Yourself: New wall construction, utilizing the prime features of Sisalkraft and Sisalation, now enables you to stop the passage of harmful moisture into walls easily and economically. This simple method provides a permanent DRYWALL in homes PLUS all the advantages of adequate INSULATION at no extra cost!

Write today for further information about these two products.

The SISALKRAFT Co., Dept. PA, 205 W. Wacker Drive, Chicago, Ill.





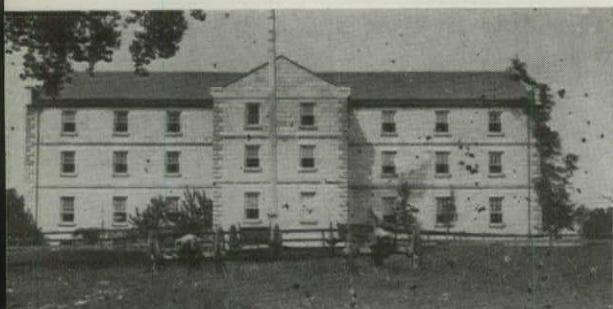
Charles E. Peterson

1840's When few architects dared to expose structural elements, cast iron and glass were candidly used for loft buildings in the blocks now cleared away for a memorial site. The front (above) is one of the last erected there (1877) and is part of a collection rescued by Charles E. Peterson, of National Park Service, and put into storage against the day when a Museum of American Architecture can be established there.

ST. LOUIS

PROSPEROUS AND CONTENTED

Architectural landmarks of St. Louis offer evidence of a cultured society well established in the Creole era and steadily enriched as the city prospered. Successive ideas about building—French, then Anglo-American, and later German—were readily tried, adapted, and merged. Work of a few trained architects shows more self-conscious adherence to styles favored in the Coastal Colonies, along with the inevitable blocks of builders' constructions (whose worst fault frequently is durability). Though based on thriving commerce and Yankee trading, antebellum living seems to have been paced to amiable Southern traditions.



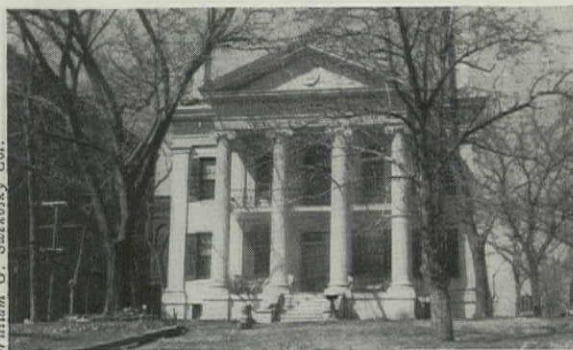
Missouri Historical Society

1861 At the Arsenal, built 30 years before, regiments of volunteers were mustered to keep Missouri in the Union.



Charles E. Peterson

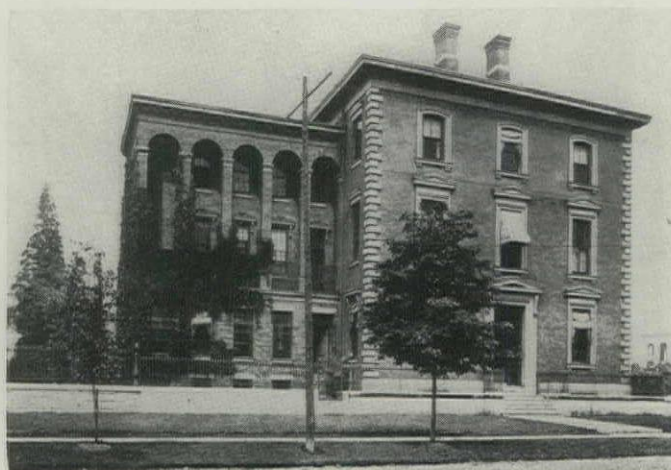
1840's "Jarville" in St. Louis County is now the residence of Edgar Monsanto Queeny.



William G. Szekely Col.

Missouri Historical Society

1842 The mansion of Dr. Alexander N. DeMenil was enlarged in 1863, at the close of the Greek Revival.



William G. Szekely Col. Missouri Historical Society

1850 Architects of the residence of Henry Shaw, the city's greatest philanthropist, were George I. Barnett and Charles H. Peck. The house was moved in 1891 to Shaw's Garden, a city park.

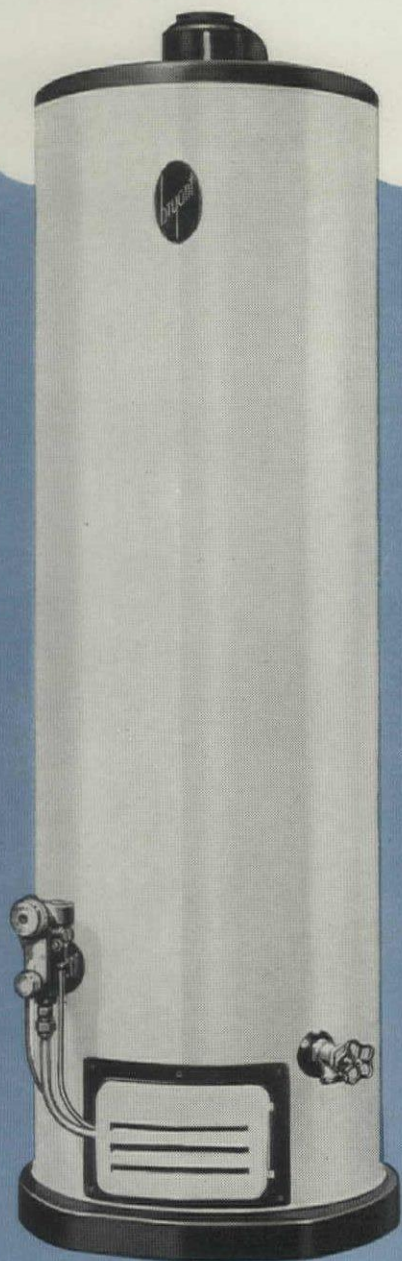
CITY OF BRICK AND STONE

Though timber was so plentiful in the nineteenth century that many miles of plank roads were laid through Missouri, the custom of building with brick and stone was firmly observed in St. Louis and her landmarks have endured. The society that erected them, however, was shattered by the Civil War and the accompanying border state hysteria that burned through business, social, and family ties. During the reconstruction, business and civic interests realigned, new leaders confidently proclaimed the imminent rise of St. Louis to "center of the world's commerce and civilization," and buildings of the era strove to express importance.

HERE'S THE WATER HEATER THAT'S

Designed to

grow old

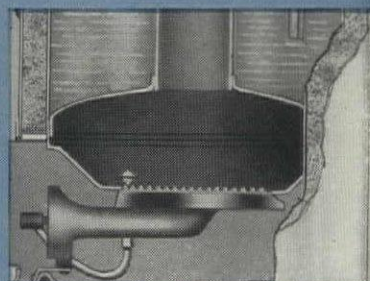


BRYANT MODEL 115—The gas-fired automatic storage water heater with the customer appeal look . . . and with the construction and operating features designed *for long service*. It has a special heavy gauge steel tank, hot-dip galvanized and designed to eliminate air pockets in the head. It has the exclusive Bryant aeration plate that radiates the heat to water, ups efficiency of heater. It has a thick wall of effective insulation that completely surrounds the tank. Its flat-base construction provides a sturdy support and reduces height considerably.

This is the water heater that has *everything!*

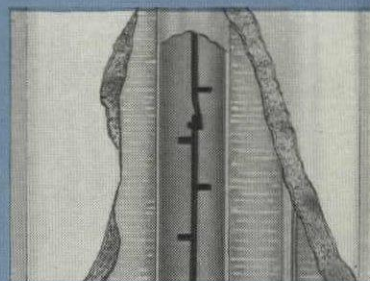
CAST IRON BURNER

with raised ports—*specifically drilled and orificed* for the type of gas to be used. Controlled by 100% safety pilot and new Grayson Unitrol with thermocouple magnetic feature.



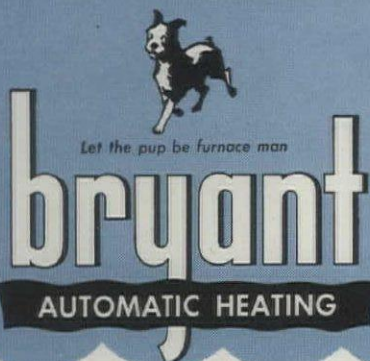
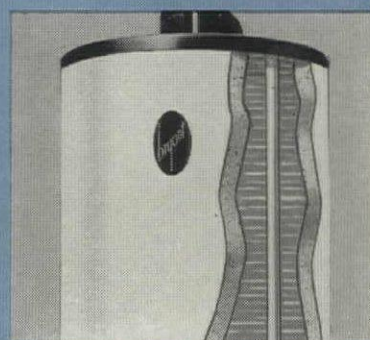
LINK-TRAP BAFFLE

puts all of the heat to work, is constructed in segments so that it can be removed *easily* without breaking pipe . . . *even under low ceiling conditions!* A Bryant exclusive.



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Piaget



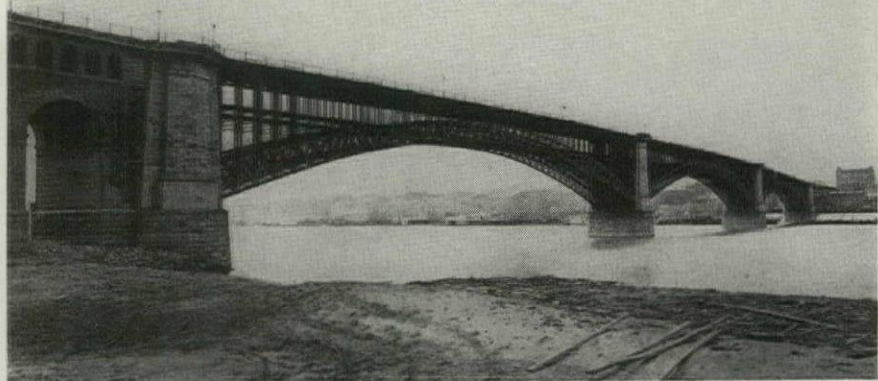
Missouri Historical Society

1875 Merchants Exchange was designed by Thomas B. Annan and Maj. F. D. Lee. The walnut woodwork is notable.



Missouri Historical Society

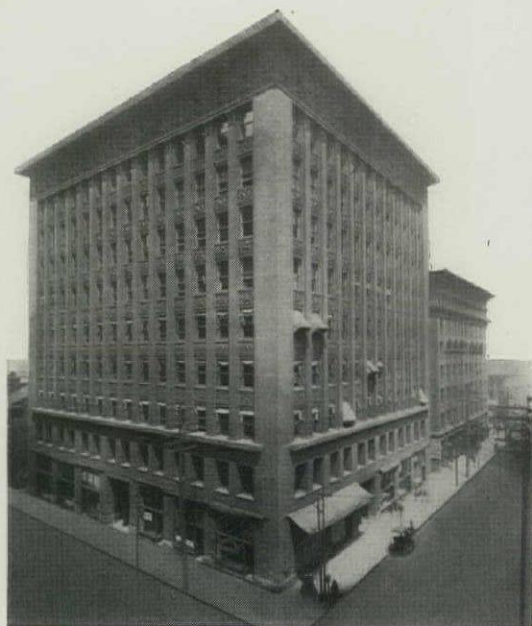
1870 The Methodist Episcopal Church designed by George I. Barnett in 1853-54 in the Lombardy style was lost 20 years later behind tin "Gothic" shops, added to increase the church income.



Missouri Historical Society

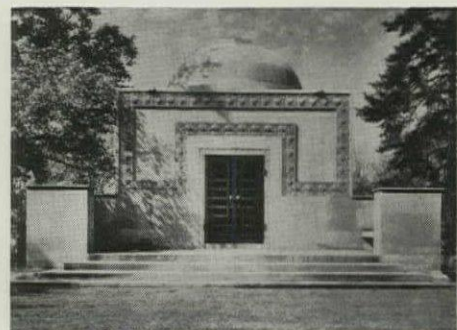
1869-1874 The great bridge designed and built by Capt. James B. Eads spans the Mississippi just north of the memorial site. When it was built, St. Louis was fourth largest city of the country.

ST. LOUIS POWER AND PRIDE



Missouri Historical Society

1891 A distinguished example of the vigorous Chicago School is the Wainwright Building, whose architects were Adler & Sullivan and Charles K. Ramsey. This was done at the peak of Sullivan's popularity.



Ansel Adams

1892 Mausoleum of Ellis Wainwright designed by Louis H. Sullivan.

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in Beautiful
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BUILDER:
John C. Gross Construction Company
St. Louis, Missouri

ARCHITECT:
Bernard McMahon
St. Louis, Missouri

HEATING EQUIPMENT:
American Furnace Company
St. Louis, Missouri

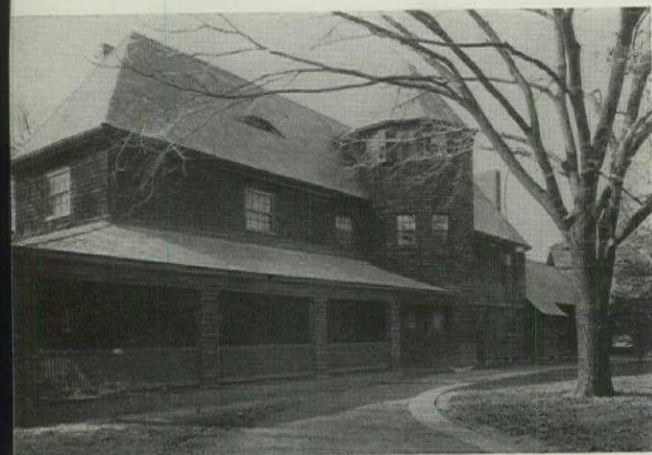
ONE of the largest housing undertakings in the St. Louis area since the war is the Clayton Gardens project—125 dwellings, designed by Bernard McMahon to meet the latest standards of living comfort and built by the John C. Gross Construction Company.

Called "Homes of Distinction," these houses, ranging in design from ranch type to Colonial, include such progressive features as interior gardens, built-in radios, accordion-acting leather doors, weatherstripped aluminum windows and *Moduflow*.

It's to be expected that *Moduflow* would be found in these homes because this heating control system is one of the new features that distinguishes any truly up-to-date home built today. In large homes and small, in community developments and single unit projects, *Moduflow* has literally "taken hold." And there's good reason for this acceptance. *Moduflow* puts an end to the drafts and chilly periods caused by intermittent heat supply and instead furnishes heat continuously with the supply always in balance with heat loss. When you specify *Moduflow* control for the homes of your clients, you're assuring them of the ultimate in heating comfort—a must in every home of distinction.

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MINNEAPOLIS
Honeywell
CONTROL SYSTEMS



W. C. Runder

1886 The residence of E. J. Russell, dean of St. Louis architects, was designed by H. H. Richardson, one of the strongest personalities of the profession in the late nineteenth century.

ST. LOUIS

PARADE OF STYLES

Formal training of more architects in the seventies and eighties and printing of whole libraries that revealed the architectural glories of other ages soon produced a confusion of adaptations and outright copies throughout the country—and St. Louis welcomed the new fashions. The local architects shared their field with renowned Boston and New York firms, as new fortunes called for more imposing mansions and business structures. Native creative talent of the Midwest had already lost favor before it was so nearly drowned by the flood of eclecticism loosed by the Columbian Exposition of 1893 in Chicago. The Louisiana Purchase Exposition 11 years later, in St. Louis, provided another holiday for pseudoclassicists. Not until the present decade has there been apparent an effort to return to original design.



Missouri Historical Society

1889-1895 Architects of the City Hall, denuded of tower and most of the finials since this photo was made, were Edmond J. Eckel and George R. Mann, St. Joseph, Mo., winners of a competition for the structure.



St. Louis Post-Dispatch

1893-1894 Theodore Carl Link, native of Germany who had studied in France, was architect of Union Station. The fountain by Carl Milles, "The Meeting of the Waters," was added to Aloe Plaza in 1937.



Piaget

1908 Elaborate gateways mark the entrances of a number of private residential streets or Places, popular with wealthier residents since the seventies. This one is Kingsbury Place—replete with urns, pilasters, bronze and stone statuary, assembled by Tom P. Barnett, architect.

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NOW RATED
10 amperes
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Sure, selling a top-quality wiring job is a tough deal when clients can't tell an ampere from an ohm. But here's a brand-new focal point for your "better wiring" specifications—silence and smooth action—*features that can be demonstrated!*

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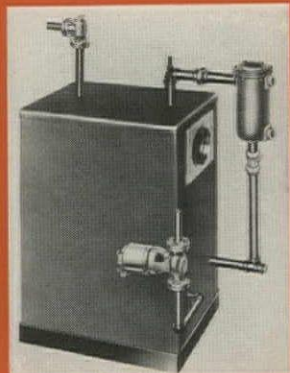
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GROUNDED FOR SAFETY



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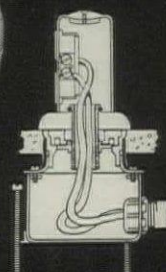
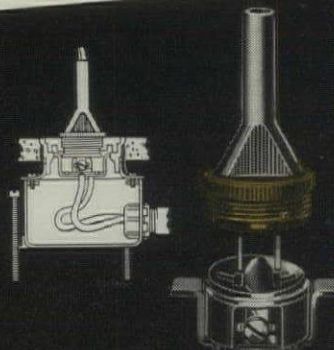
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and waterproof
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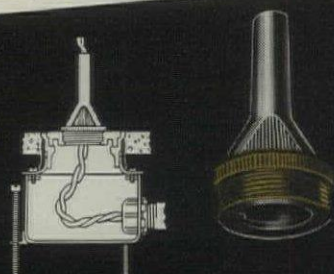
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service
fitting
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receptacle.

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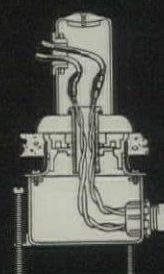
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A GREAT NEW COIL JOINS

TRANE Presents a Non-Freeze Coil That is Years Ahead

Here is a radically improved line of tube-within-a-tube coils. The steam distributing tubes in these new coils are equipped with *kinetic orifices*.

These amazing orifices feed steam faster; cause condensate to be eliminated faster. Protection against freezing is multiplied. The coils are non-stratifying. There is quicker response to steam modulation. Coil capacity is sharply increased.

With an ordinary tube-within-a-tube coil, steam is released to the condensing tubes through a series of small, flush holes in the steam distributing tubes. In practical operation, steam from these small holes strikes the walls of the condensing tubes and mushrooms in all directions. This retards condensate flow; actually holds it up in the tubes. Result: the coil has seriously reduced capacity.

Trane's new *kinetic orifices* overcome these difficulties. Extending beyond the surface of the steam distributing tubes, they induce a jet flow of steam IN THE SAME DIRECTION THE CONDENSATE TRAVELS. Kinetic energy of the steam is imparted to the condensate, literally pushing it out of the coil, and *bringing live steam in rubbing contact with the condensing tubes*. Result: the great new

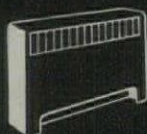
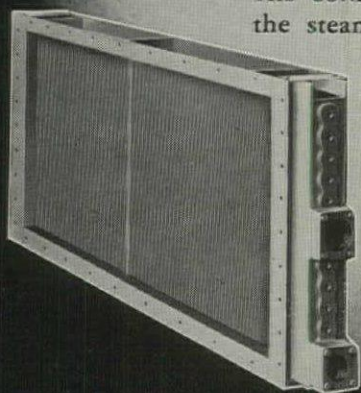
line of Trane SD Coils delivers FULL STEAM CAPACITY—a capacity increase of 15% over old types—without any increase in size, weight, or price.

We sincerely believe that the announcement of this remarkable Kinetic Orifice marks the greatest advancement in non-freeze coils since the introduction of the steam distributing tube.

The Kinetic Orifice is an example of the constant effort of Trane engineers to keep the great Trane line of heating and air conditioning equipment in the forefront of industry. So complete is this line that architect, engineer and contractor can select the right combination for any application.

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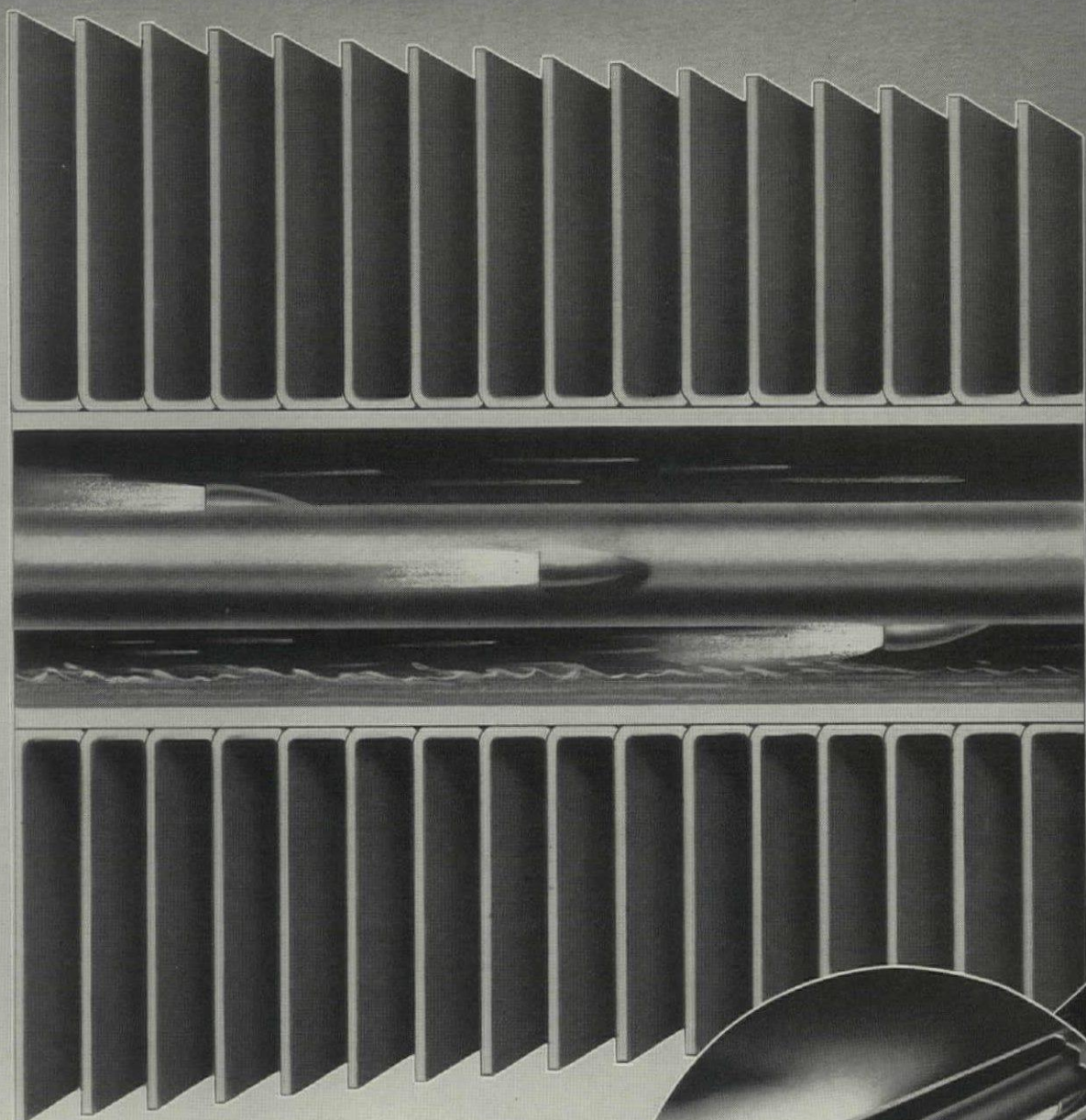


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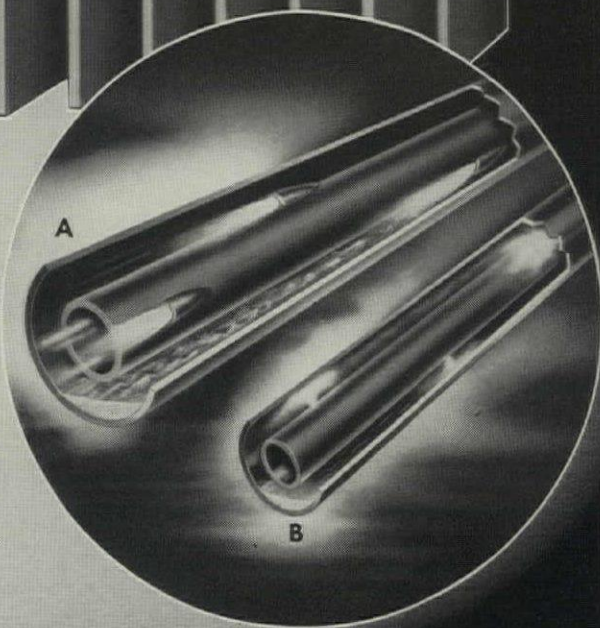


The Trane KINETIC Orifice

The Old Way: Note, at "B," how steam released from flush holes in the steam distributing tube strikes the wall of the main tube and mushrooms in *all* directions. This holds back condensate; reduces coil capacity.

The Trane Kinetic Orifice Way: Illustration "A" shows how the Trane Kinetic Orifice releases steam in the direction of condensate flow, causing positive accelerated flow. Mushrooming, stratification, freezing eliminated. Capacity increased 15% without increase in weight, size, or cost.

New Trane Kinetic Orifice Coil*: At left is shown a typical new Trane SD Coil, designed for same-end connections. A complete line of the new SD coils is available for either same-end or opposite-end connections.



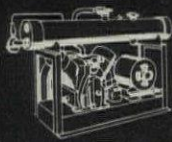
*Patents Pending



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Overhead

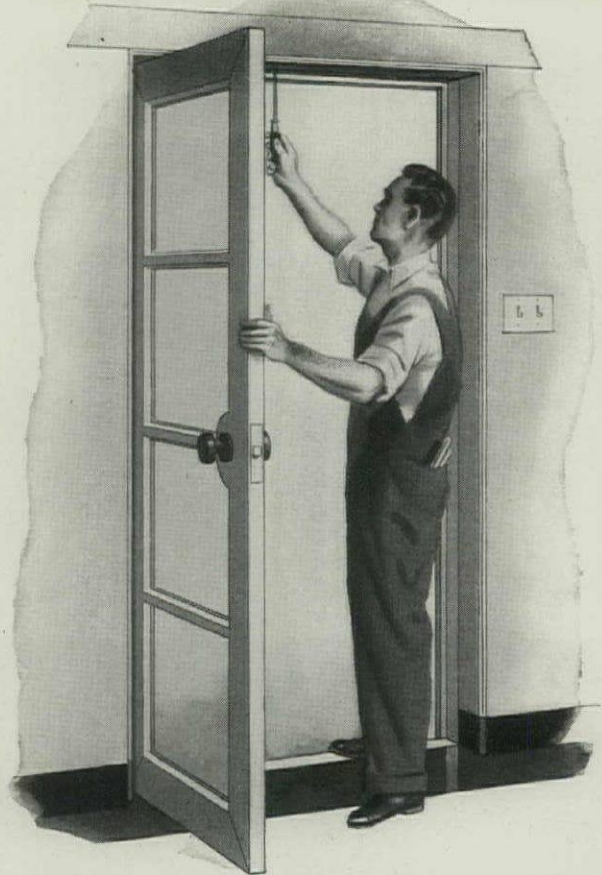
Door Closers

Cost Less { (1) Originally, and
(2) to Maintain

than Floor Type

Door Closers

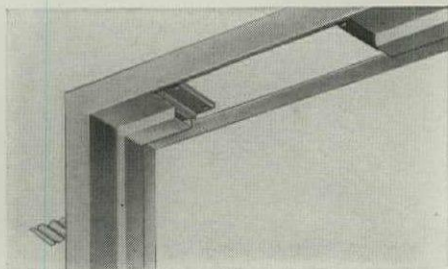
Why?...



They are Much Simpler to Install

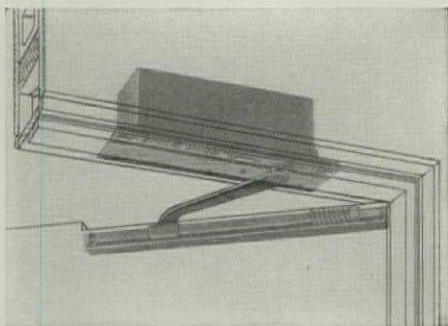
Even if overhead door closers did not work better (which they do) than floor type closers, they would still be a better "buy" as (1) they cost less installed and (2) they last longer and cost much less to maintain.

Consider installation. On-the-job work is so expensive these days no careful architect will pass up a chance to keep it down.



Frame prefabricated for overhead Concealed closer

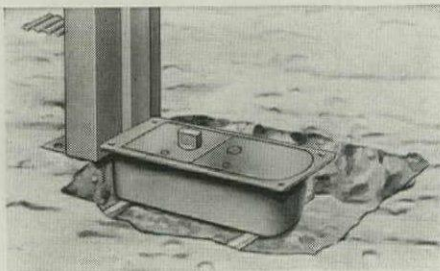
For the LCN Overhead Concealed Closer metal frames and doors are blanked out at the factory and made ready for the closers, which are easily slipped into place on the



Phantom view of LCN Overhead Concealed Closer

job. Wood frames and doors are simply prepared as erected.

No Cutting of Floors

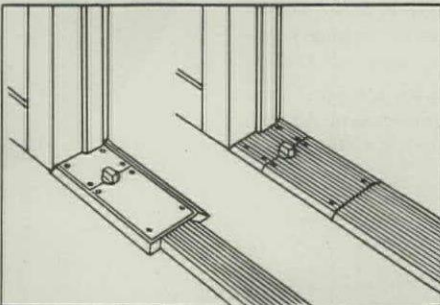


Floor type closer set for grouting

To install a floor type closer a recess must be prepared in the floor, by setting a form while the floor is poured or by chipping out the concrete after the rough floor is in. Often the exact location is uncertain, and beams and conduits sometimes interfere. All this increases costs.

No Expensive Thresholds

If a threshold is used with a floor type closer it must be of the box type or one



Two commonly used, costly types of threshold

specially cut and drilled to take the closer, both expensive. With the overhead closer a simple narrow extruded threshold can be used, or none at all, as conditions require, at a substantial saving.

No Separate Door Holders or Other Extra Hardware Required

As most types of LCN Overhead Concealed Closers may be had with built-in shock absorbers and hold-open features as parts of the closers themselves, there is no need for separate door holding or shock absorbing devices—another saving in costs.

Maintenance is Much Less

The location of an overhead door closer makes for lower maintenance costs in two ways: (1) it is up and away from the floor dirt and scrub water which over the years send floor type closers to the repair shop too frequently, and (2) its power is usually applied farther out from the hinge than that of a floor closer, resulting in less strain, longer life, lower costs.

We are Not Prejudiced

In drawing these comparisons we are positively not prejudiced. We make LCN floor type closers in three series, and believe them the finest of their kind. But they always have to work under inherent handicaps, and we recommend them only when overhead concealed closers cannot be used.

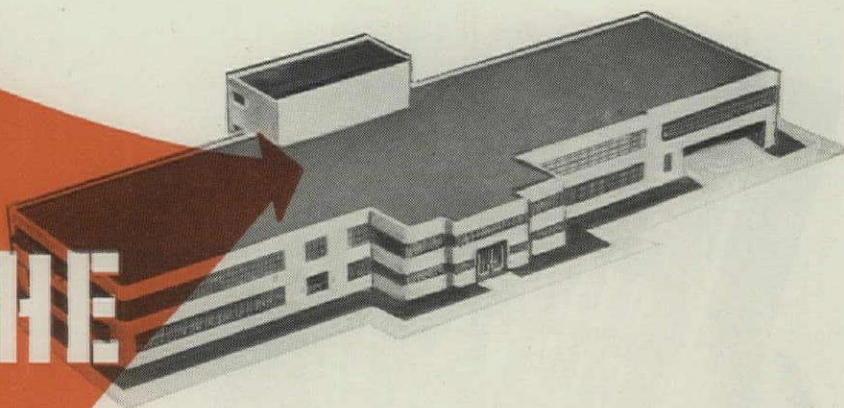
Send for Latest Information

The LCN catalog 11-B is really a handbook of good door control, showing applications of 10 types of concealed closers, principles of operation, getting needed leverage, types of exposed closers, etc. We'll gladly send you a copy. No obligation. Address LCN Closers, Inc., 466 W. Superior St., Chicago 10, Ill.

LCN

Overhead and Floor Type
Concealed and Surface Type Door Closers

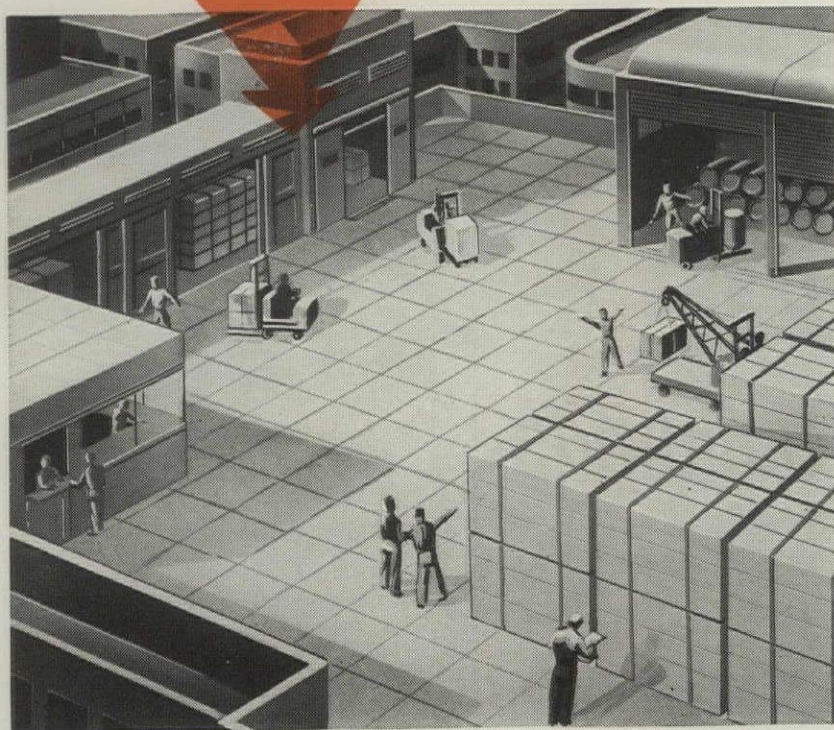
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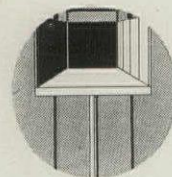
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OILDRAULIC ELEVATORS

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Oildraulic Elevators
have these very important
advantages for modern
2, 3 and 4-story structures



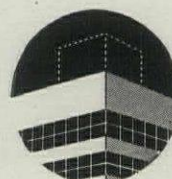
Lighter Shaftway Structure

No need for heavy, load-bearing supporting columns to carry the elevator and its load. The Rotary Oildraulic Elevator is PUSHED up from below by a powerful hydraulic jack . . . not pulled from above.



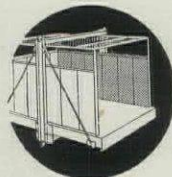
Accurate Landing Stops

Guided by the highly efficient "Oildraulic Controller," this modern elevator operates smoothly and stops at floor landings with accuracy. Very important where loading and unloading is by power vehicles.



No Costly, Unsightly Penthouse

The Oildraulic Elevator does away with the old-fashioned penthouse that interferes with modern, streamlined designs. No special machine room is required . . . the compact power unit can be placed in any convenient space.



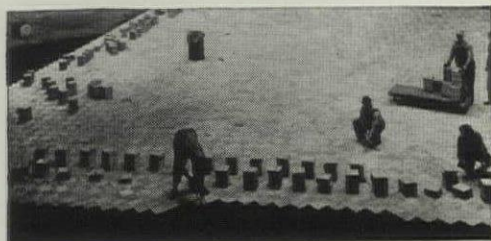
Rugged, Heavy-Duty Construction

Every Oildraulic Elevator is built to take roughest jolts and jars. Construction is all-steel with deep-formed members electrically welded. Sling and platform heavily reinforced. Each car is engineered to do the job for which it is ordered.

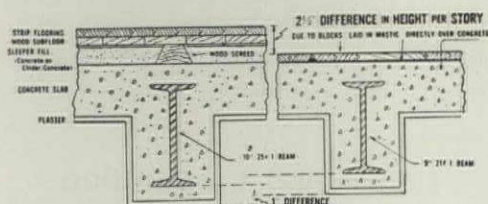


For use over concrete

...IT'S BRUCE BLOCK FLOORS!



Bruce Blocks are laid in mastic over concrete, plywood, steel or similar subfloor. No clips, screeds or wood subfloor are used. The saving in building costs with this type of floor construction is illustrated in the diagram below.



This hardwood flooring is designed for modern construction

Bruce Blocks provide a beautiful hardwood flooring that is practical and economical to install over concrete slab floor construction. They offer, in addition, certain unique advantages not found in other types of flooring.

Installation of the blocks is simple. They are laid in mastic directly over the concrete, as illustrated at left. No clips, screeds or wood subfloor are used. A Bruce Block Floor is a durable floor and will last the lifetime of the ordinary building. Thus it's far more economical than a floor that is easily damaged and must be replaced every few years. With its cushion of mastic, this modern hardwood floor is quiet and resilient underfoot. It's easy to keep clean and beautiful, too. Another plus value is the distinctive patterned design which adds beauty to any interior.

The demand for Bruce Blocks exceeds present production. Specify this flooring on projects being planned now for future construction. See our Catalog in Sweets.

E. L. BRUCE CO., MEMPHIS, TENN. • WORLD'S LARGEST MAKER OF HARDWOOD FLOORS

Bruce Block



HARDWOOD FLOORS

Thrill to This Beauty

Good to Look at...

A Joy to Use...

A Gem to Own



UNDERWOOD

All Electric **TYPEWRITER**



FAST! When typing, your busy hands never have to leave the keyboard... even to return the carriage. Electricity saves you finger travel, hand travel... minutes that add up to hours.



EASY OPERATION! Lightly touch the keys... electricity does the fatiguing work. You'll be delighted with the perfection of work you can always attain with a minimum of effort.



ACCURATE TYPING! An Underwood All Electric assures even spacing between characters... clean-cut, uniform impressions... not shaded or blurred.



AND WHAT BEAUTIFUL WORK! Not only letters, but carbon copies are sharp and clear. You can make as many as 20 of 'em at a light finger touch.

Urge your boss to buy you an Underwood All Electric... and you'll *always* have his letters looking their best.

You'll keep looking *your* best through each day, too... because operating an All Electric is not tiring. You'll simply breeze through your typing... all day!

You control keys, spacing, shifting, tabulating and carriage return *electrically*... therefore more accurately.

It's a good-looker, too... the *world's most beautiful typewriter*. Your local Underwood representative will demonstrate it, let you try it. Phone him... today!

© 1948

Underwood Corporation

Typewriters... Adding Machines... Accounting Machines... Carbon Paper... Ribbons and other Supplies.

One Park Avenue

New York 16, N. Y.

Underwood Limited, 135 Victoria St.,
Toronto 1, Canada

Sales and Service Everywhere



Underwood... TYPEWRITER LEADER OF THE WORLD

Draw your own Conclusions!



Check the Coupon and Check the Facts!

- ✓ **SEE** how *Hi-Density* assures uniform opacity. Only VAN DYKE gives you HI-DENSITY lines that are uniformly opaque in drawings...and sharply white in prints.
- ✓ **NOTE** the *crisp, sharp prints*. Because you get blackness without thickness of lead deposit, there's a minimum of smudging and freedom from erasure-ghosts.
- ✓ **FEEL** how *smoothly VAN DYKE glides*. That's because VAN DYKE Microtomic Leads are made of pure crystalline graphite flakes—chemically reduced 100 times finer than is possible by old grinding methods.

- ✓ **TEST** the *stronger lead for longer wear*. A thermostatically controlled heat treatment produces extraordinary strength through the entire lead.
- ✓ **COMPARE** the *precision of grading*. Ninety-nine years of fine pencil making experience and the use of exacting formulae are your assurance of uniformity of lead in every degree.

MICROTOMIC VAN DYKE HI-DENSITY DRAWING PENCIL



ROUND LEAD in 18 degrees from Sketch-Pad 7B Soft to Naval Architects' 9H Extremely Hard.



EXCLUSIVE CHISEL POINT—a rectangular lead that gives you 20% more line-production between sharpenings! Six degrees only—4B, 2B, HB, 2H, 4H & 6H.

TRADE MARKS REG. U.S. PAT. OFF.

EBERHARD FABER

Dept. PA-5, 37 Greenpoint Ave., Brooklyn 22, N. Y.

Yes, I'll be glad to try a Microtomic VAN DYKE.

Send me FREE a _____ regular lead or
a _____ Chisel Point.
(degree) (degree)

Name _____

Firm _____

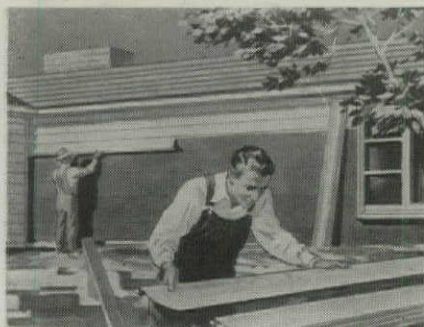
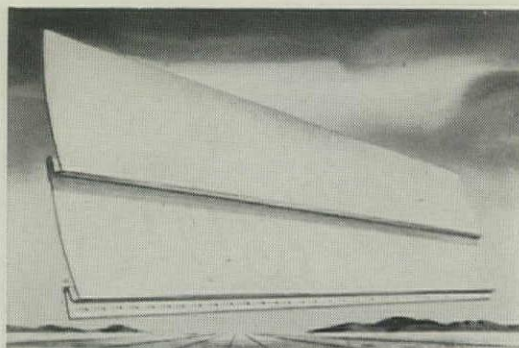
Street & No. _____

City & State _____

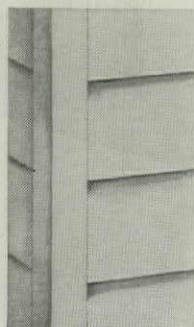
Dealers Name _____

Facts you should know about a brand new material

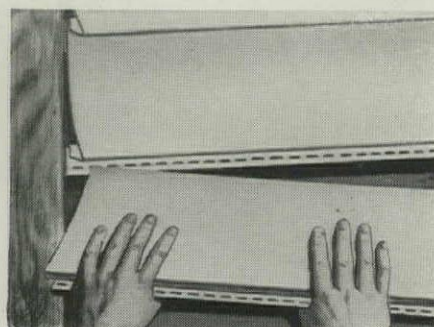
A totally new kind of building material is ready for you now: precision-produced Kaiser Aluminum clapboard Siding and Roofing. Along with permanent, flawless beauty, this tough aluminum siding and roofing assures *long lasting* economy—*maximum* strength.



IT COSTS NO MORE than conventional materials. In fact, it actually *saves* on construction costs. Here's how: Pre-punched nail holes speed work. It requires fewer nails, less paint (because it absorbs none) and no underlying wood sheathing. And it can be worked easily with ordinary wood tools.



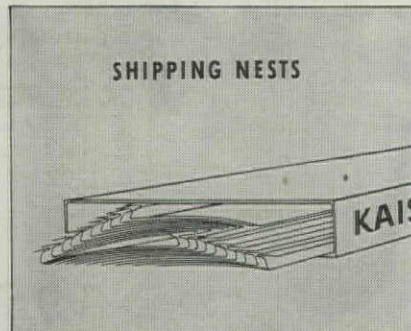
SAVES YOUR CLIENTS money, too! Besides lasting for generations, it will never need ordinary maintenance. For this light, strong metal can't rust, warp, rot or crack. Can't be weakened or marred by knots, splits or sawing scars. Can't be damaged by rats or termites, either, and resists fire.



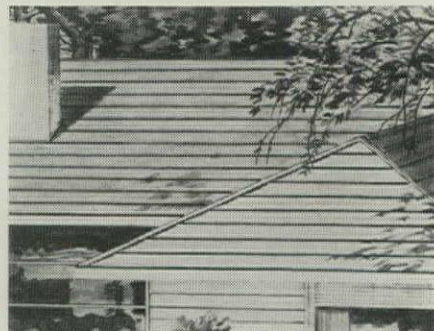
ONLY KAISER ALUMINUM clapboard Siding and Roofing has a curved surface. When each piece is nailed down by its lower edge, the pre-formed curve produces a tension which results in a rigid, weather-tight joint. It eliminates wrinkles and sheen, produces deep shadow lines.



BECAUSE it comes from the mill already prime-painted, it offers a smooth, firm base for superb paint finishes of any color. Paint lasts longer, too, with less danger of cracking, peeling or blistering. And colors stay alive longer, for aluminum doesn't soak up paint-fading moisture. Notice how all nails are completely and forever hidden!



IT IS SUPPLIED in standard lengths of 10, 12, 14 and 16 feet. Siding is $6\frac{7}{8}$ " wide, .030" thick. 1143 base feet weighs 580 lbs., will give 1000 square feet of wall coverage. Roofing has an exposed width of $8\frac{1}{2}$ ", is .025" thick. Siding shipped in boxes containing 200 base square feet. Shipping weight approximately 106 lbs.



KAISER ALUMINUM clapboard Roofing has the same basic design and beauty. It has a pre-curved surface which makes a weather-tight joint when nailed down. As with the Siding, no underlying wood sheathing is needed—so it is both a *structural* material and a waterproof roofing material! And it can be applied at a lower cost than shingles!

Kaiser Aluminum clapboard Siding and Roofing is the logical successor to all other exterior building materials. Nothing else can match its combination of sheer beauty, long life and lasting economy!

You can't afford to pass up all these advantages. Learn more about them! Phone, wire, or write today for free folder packed with detailed information.

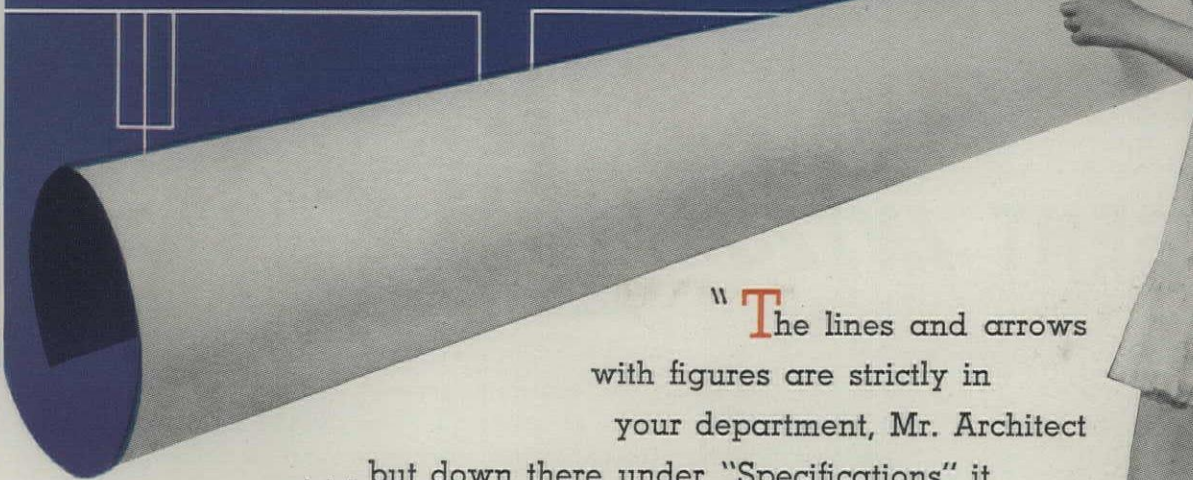
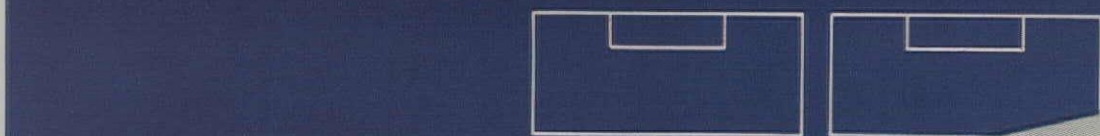
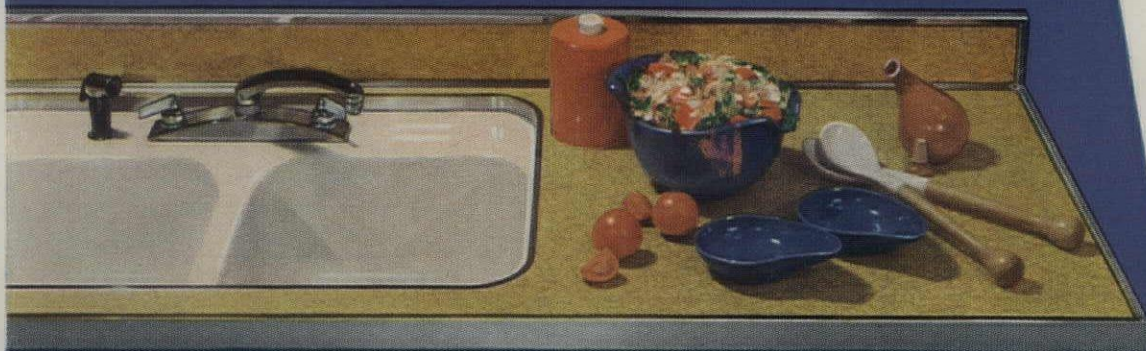
Kaiser Aluminum

SIDING AND ROOFING

a Permanente Metals product

SOLD BY PERMANENTE PRODUCTS COMPANY, KAISER BLDG., OAKLAND 12, CALIFORNIA . . . WITH OFFICES IN:
Atlanta • Boston • Buffalo • Chicago • Cincinnati • Cleveland • Dallas • Detroit • Indianapolis • Kansas City • Los Angeles
Milwaukee • Minneapolis • New York • Oakland • Philadelphia • Salt Lake City • Seattle • Spokane • St. Louis • Wichita

"I can read your blueprint, Mr. A."



"The lines and arrows with figures are strictly in your department, Mr. Architect . . . but down there under "Specifications" it says "Formica", and that makes sense to me."

Beauty Bonded Formica* for sink tops is the kind of specification every Architect likes to write. Color and beauty to delight his Client, solidly backed up with physical properties that make Formica ideal material for

sink top conditions. Sink tops of Formica are fabricated for custom kitchens as well as for many "packaged" cabinet units. We'll be glad to send you the names of near-by Fabricators who build with Formica.

Beauty Bonded
FORMICA
Reg. U.S. Pat. Off.

at Home with People
at Work in Industry

"You and Beauty Bonded Formica" is a new little folder your home-building Clients will appreciate your giving them. Shall we send you a supply? How many, please? And you'll find Beauty Bonded Formica in Sweets'. Formica, 4633 Spring Grove Avenue, Cincinnati 32, Ohio.

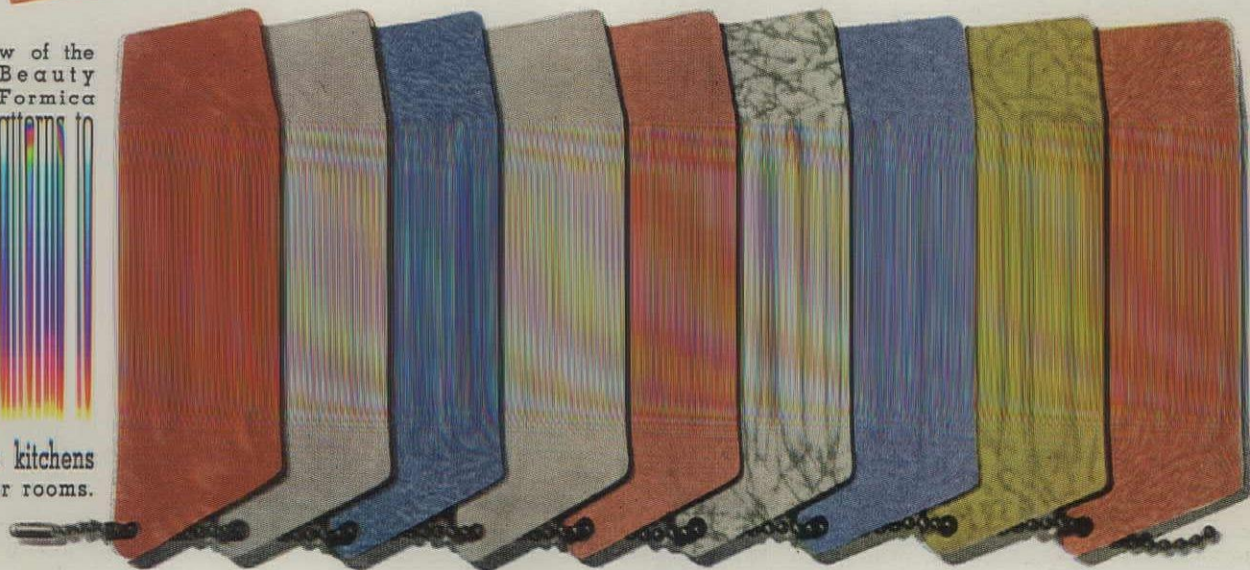
*Reg. Trade Name, U.S. Pat. Off.

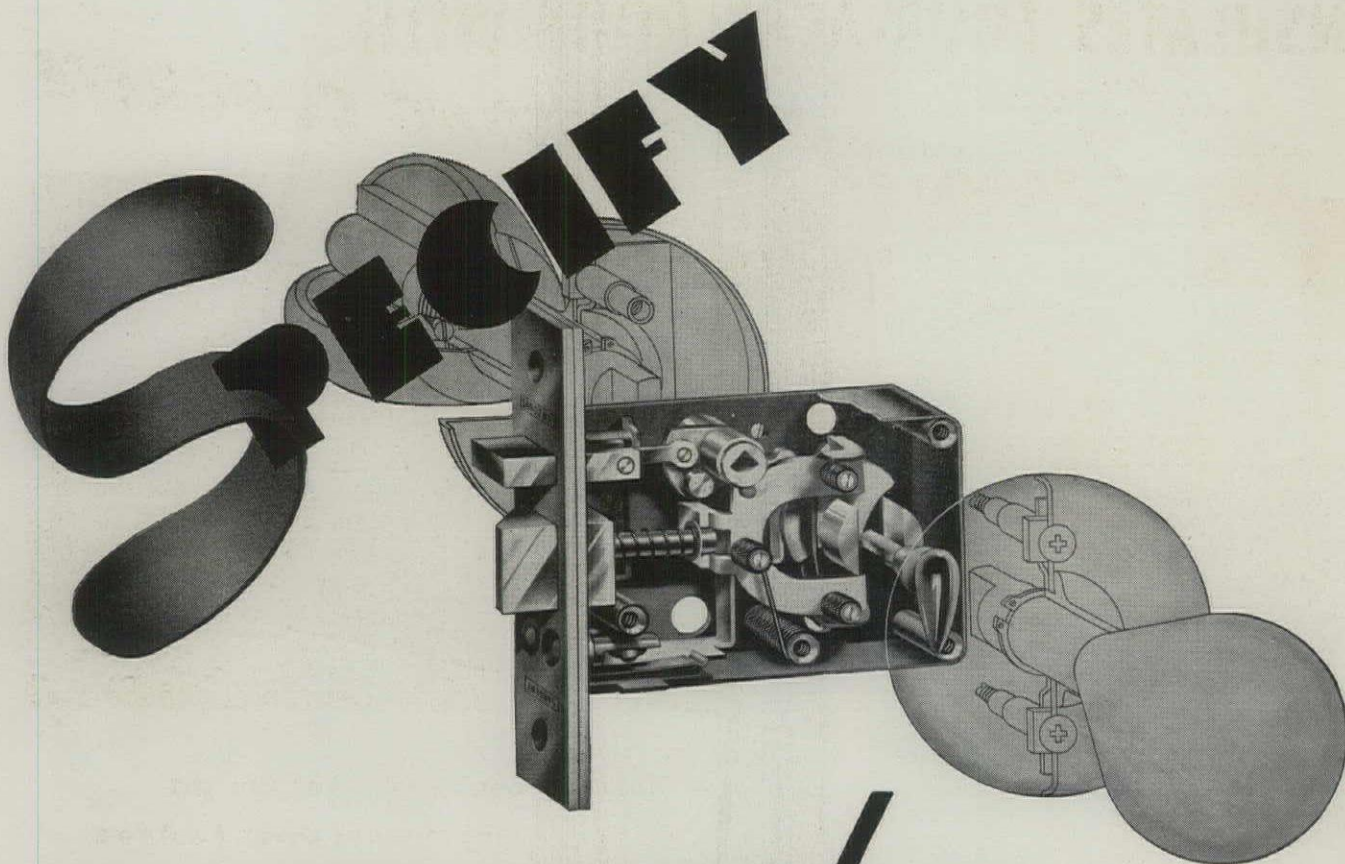
COPYRIGHT 1948, FORMICA, CINTI., O.

Just a few of the many Beauty Bonded Formica



charm-up kitchens and other rooms.



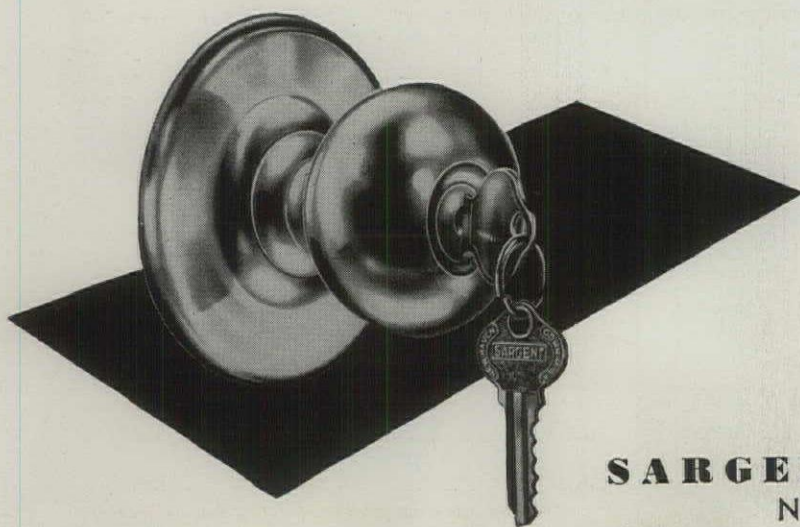


SARGENT *INTEGRA*/LOCK*

PRECISION BUILT

You may now specify the Sargent Integralock* with assurance that it is readily obtainable for all conditions. These precision built locks are now available through dealers everywhere — for structures of every type from office buildings, hospitals, hotels and apartments to the entrance doors of residences. All working parts are made to close tolerances from forgings, extrusions and stampings, permitting a small, compact lock case that is factory sealed, insuring a smooth, positive locking action. Beautifully finished, Sargent Integralocks* will add charm and grace to any building.

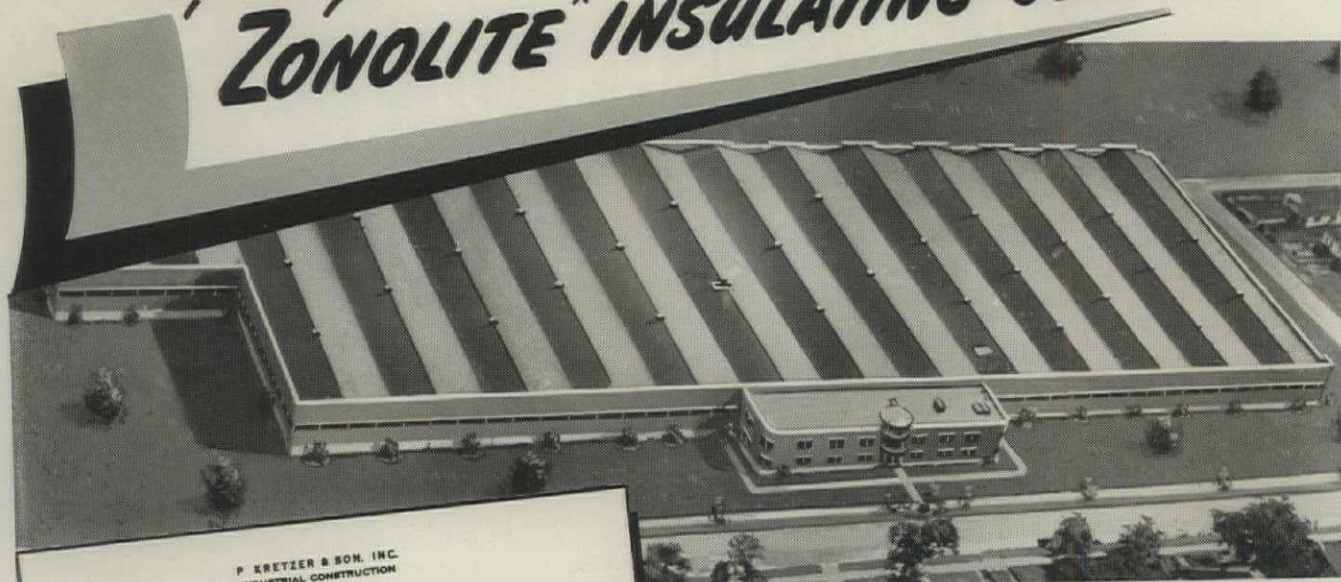
*Trade Mark



SARGENT & COMPANY
 NEW HAVEN, CONN.
 NEW YORK CHICAGO

INSULATES FOUR-ACRE ROOF WITH . . .

Lightweight **ZONOLITE* INSULATING CONCRETE**



P. KRETZER & SON, INC.
INDUSTRIAL CONSTRUCTION
Augusta, Georgia

September 5, 1947

Southern Zonolite Company
407 Chandler Building
Atlanta 3, Georgia

Re: Lily-Tulip Cup Job
1550 Wrightsboro Road
Augusta, Georgia

Attention: Mr. H. K. Sterrett

Gentlemen:

We have your letter of September 2nd in regards to information you desire in connection with advertising the application of Zonolite on the above job.

We hereby give you authorization to use the enclosed pictures and our name for trade magazine publication.

For your information we list the following facts:

The building has approximately 180,000 Sq. Ft. of floor area.

Zonolite insulation was very successfully used over Robertson roof deck on a pitch roof. The cost of Zonolite and its application was less than our anticipated cost.

We were delighted with the splendid cooperation of your local distributor and the supervision and inspection of your representatives. This was the first occasion we had to use your material and we surely will use it on future jobs in this vicinity as well as other operations we are contemplating.

The roofing contractor is also very satisfied with the base he received for his roof covering.

In connection with using Zonolite plaster, we will contact your representative in due time.

Very truly yours,

P. KRETZER & SON, INC.

William Kretzer
William Kretzer, Pres.

WK/hd
Encl.

Zonolite Concrete Saves Weight

. . . Saves Money! Gives Real Fire Protection, Too!

Yes, millions of pounds dead-load were eliminated on the four-acre roof of the Lily Tulip Cup Corporation's new Augusta, Ga., plant. And, as you know, weight costs money! Here, Zonolite insulating concrete was combined with a lightweight steel roof deck to form a permanent, fireproof structure. An equivalent amount of ordinary concrete would weigh five million pounds more than the Zonolite insulating concrete used in this roof.

Zonolite insulating concrete, made by mixing Zonolite brand vermiculite Stabilized Concrete Aggregate with Portland cement and water, weighs as little as 16 lbs. per cubic foot as compared to 145 lbs. per cubic foot for ordinary concrete. Applications of this versatile material are numerous and varied . . . for insulating fill-type roofs, or structural roof decks . . . warm dry floors for industrial, commercial, rural or residential buildings . . . economical, lightweight fireproofing of structural members . . . these are but a few of the many applications.

Send today for full particulars on Zonolite insulating concrete.



Zonolite Company
Dept. PA-58, 135 S. LaSalle St.
Chicago 3, Illinois

**MAIL COUPON
FOR DETAILS**

SEE YOUR LOCAL LUMBER AND BUILDING MATERIAL DEALER

Zonolite Company
Dept. PA-58, 135 S. LaSalle St., Chicago 3, Ill.
Please send me full details about Zonolite Insulating Concrete Roof Decks.

Name.....

Address.....

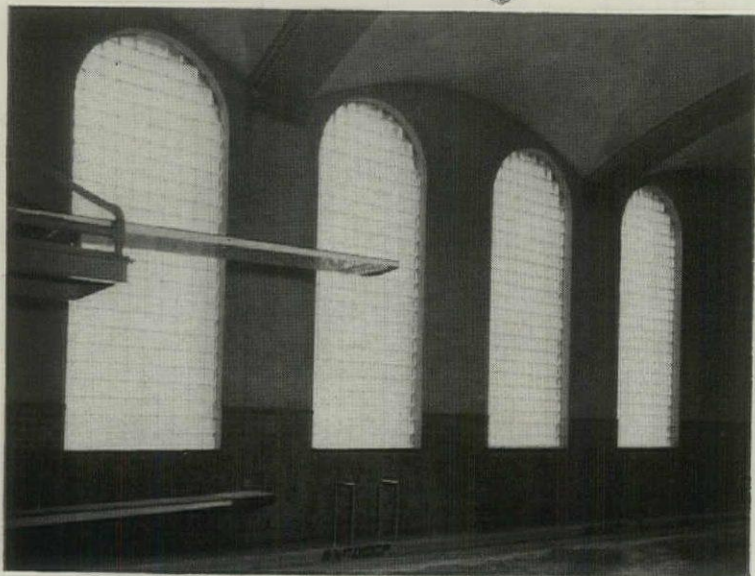
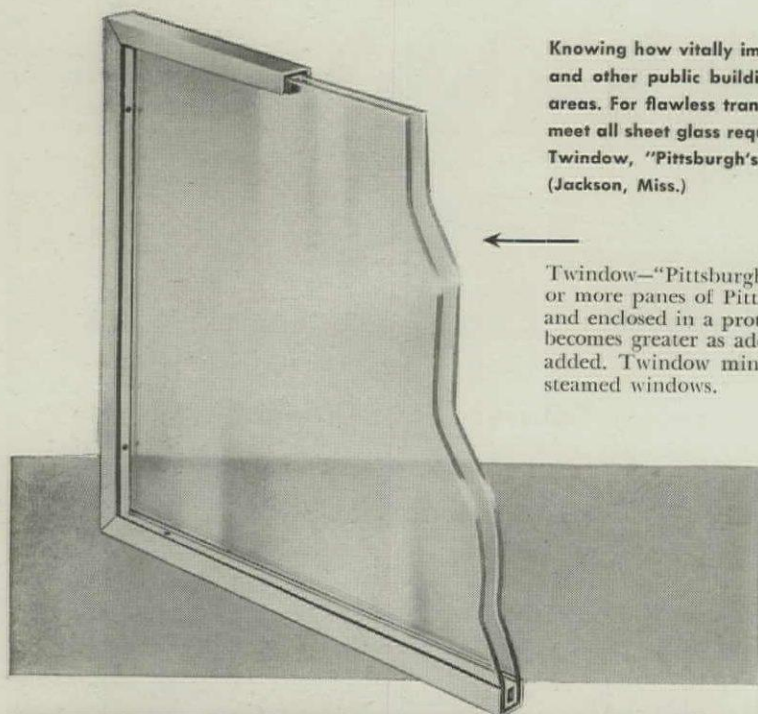
City.....County.....State.....

*Zonolite is the registered trade-mark of Zonolite Company

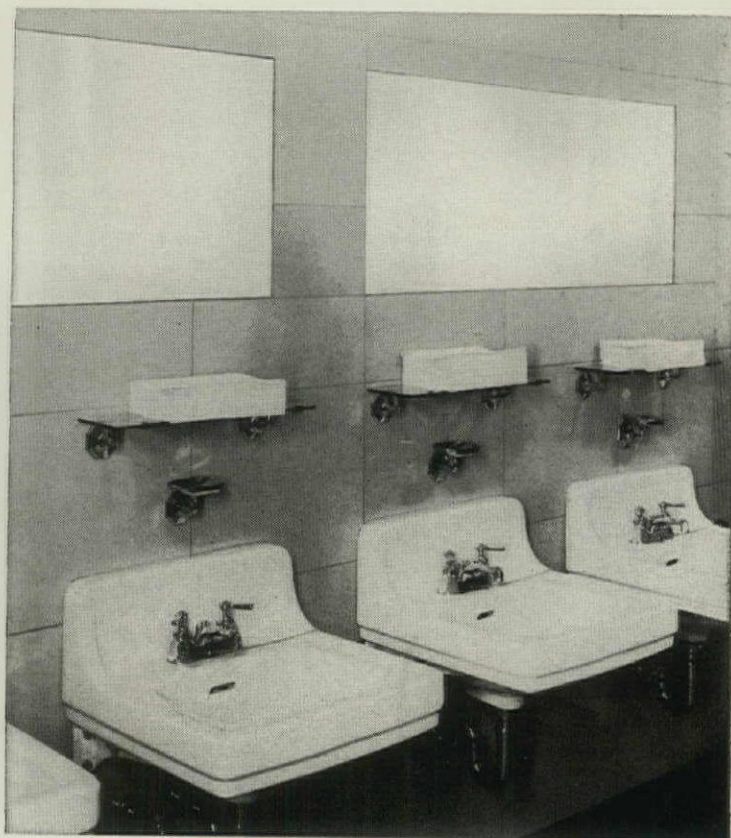
New uses of *Glass*

Knowing how vitally important it is to select the proper glazing material for the windows of schools and other public buildings, many architects have standardized on Pittsburgh Glass to glaze such areas. For flawless transparency and maximum surface beauty—Pittsburgh Polished Plate Glass. To meet all sheet glass requirements—Pennvernon Window Glass. And for greater insulating efficiency—Twindow, "Pittsburgh's" new window with built-in insulation. Architects: Overstreet and Town. (Jackson, Miss.)

Twindow—"Pittsburgh's" new window with built-in insulation, consists of two or more panes of Pittsburgh Glass separated by hermetically sealed air spaces, and enclosed in a protecting frame of stainless steel. Its insulating effectiveness becomes greater as additional panes of glass with corresponding air spaces are added. Twindow minimizes downdrafts, cuts heating costs, helps to prevent steamed windows.



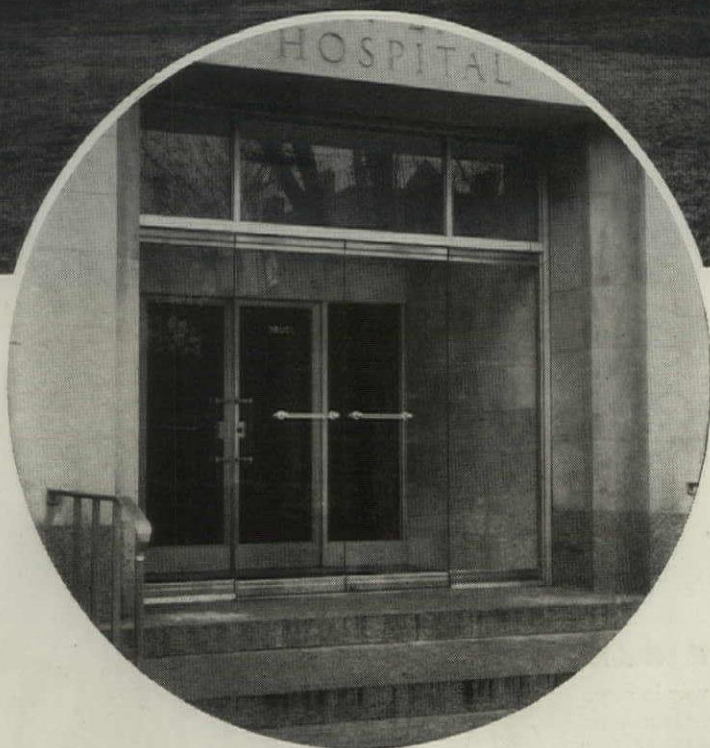
Little wonder that Pittsburgh Corning Glass Blocks are so popular for swimming pool enclosures. These blocks transmit daylight generously. They preserve privacy. And besides being exceptionally attractive in appearance, they have excellent insulating properties that contribute to uniform, economical heating. Architects: Bebb & Jones. (Seattle)



Easy-to-clean—exceptionally good looking, Carrara Structural Glass is ideally suited for public washroom walls, stiles and partitions. Carrara is impervious to moisture, chemicals, pencil marks. It won't fade or stain or absorb odors. It won't check or craze. It is easy to keep spotlessly clean. Available in 10 pleasing colors. Architect: R. A. Spahn. (Cleveland, Ohio)

PITTSBURGH PLATE GLASS COMPANY

in public buildings



Because it has the beauty and transparency of regular Plate Glass yet is four times as strong, Herculite Tempered Plate Glass is regarded by many architects as the ideal material for entrance doors as illustrated; for partitions; and for stair rails, and other applications where transparency combined with strength is desired. Architects: Maritz, Young & Dusard, Inc. (St. Louis)

We believe you will find much to interest you in our illustrated booklet of ideas concerning the use of Pittsburgh Glass in building design. Send the coupon for your free copy.

★ Design it better with

Pittsburgh Glass



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PITTSBURGH PLATE GLASS COMPANY

Pittsburgh Plate Glass Company
2155-8 Grant Building, Pittsburgh 19, Pa.

Please send me, without obligation, your free booklet entitled "Ideas for the Use of Pittsburgh Glass in Building Design."

Name.....

Address.....

City..... State.....

skylines ... by Otis



True enough, Miami is a playland of golden sunshine and rustling palms. But it's a business town as well. Long air-minded, it has become one of the greatest international airports of the world. Even its skyline has that modern upswept look. OTIS is mighty proud of Miami. Why? Seven hundred and seventeen of its eight hundred and sixty-eight elevator installations are by OTIS.

SQUARE ELEVATOR IN A ROUND HOLE.

Why did Peter Cooper build a round elevator shaft in New York's Cooper Union in 1856? Legend has it, he thought a round car would carry more passengers than a square one. Today, a square elevator is doing the job very nicely. Rather upsetting to the old theory about a square peg in a round hole. What?

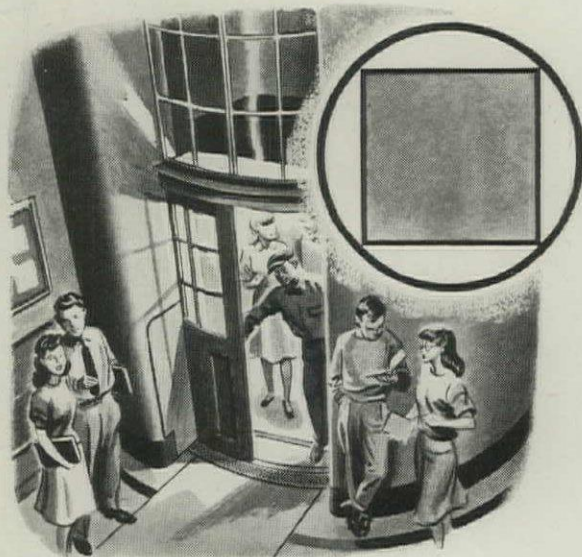


OTIS LIGHTS THE WAY.

Nobody, anywhere, anytime ever did it this way before. What? Lighted an Escalator from inside. Otis balustrades are the first to glow with a soft translucent light. Eleanor Le Maire, prominent New York designer and colorist did the glamorizing. Attractive? Would you like to read the fan mail received by Rike-Kumler in Dayton, Ohio?

With 257 offices located in every state of the Union, OTIS is ready to help you plan, install and maintain freight and passenger elevators and Escalators for use anywhere.

"Escalator" is a registered trade mark of the Otis Elevator Company. Only Otis makes Escalators.



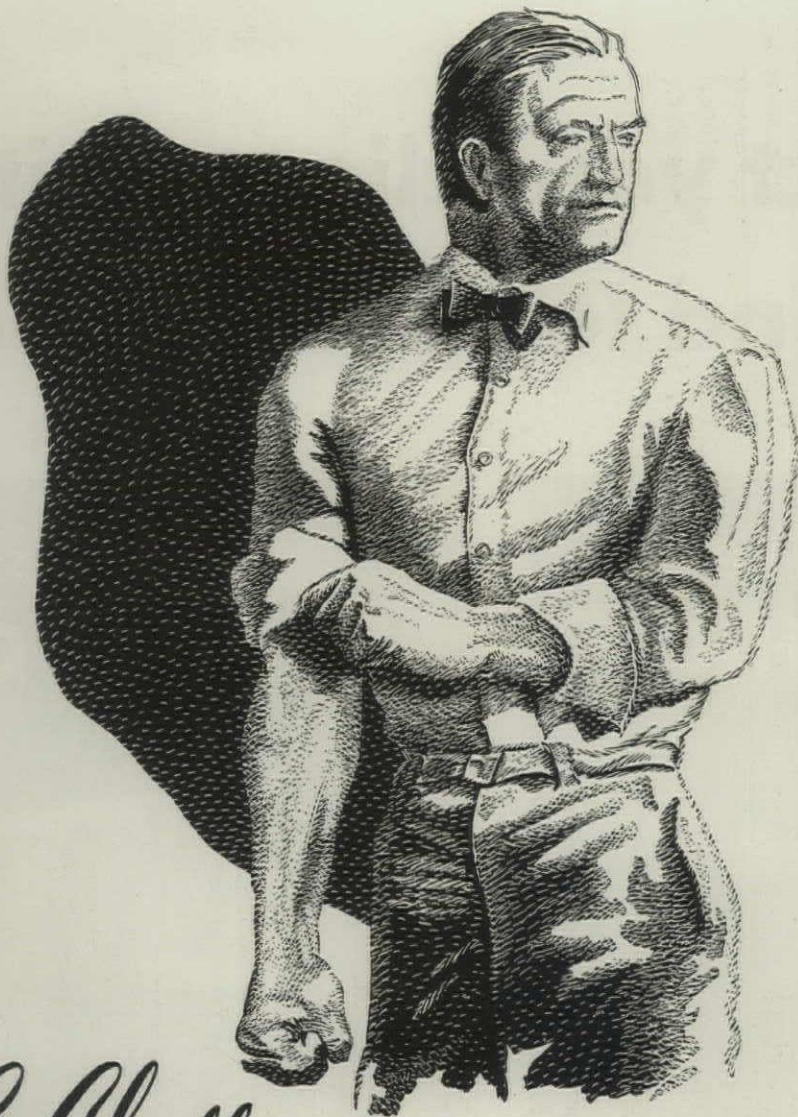
COLLECTOR'S ITEM.

Can a sudden avalanche of button pushing confuse a modern Otis apartment house elevator? Not in the least. It operates by 'collective control'. It simply 'collects' all the calls. Then it arranges them in proper floor sequence. One run UP or DOWN delivers everybody.



ELEVATOR COMPANY

Home Office: 260 11th Ave., New York 1, N. Y.



A Challenge to real Americans

WHY is it necessary to sell America to Americans? One of the reasons is, not until now did the people of this country have to be shown that they lived in the most favored and most favorable country on earth. Where are the salesmen to do this job? Every community has its leaders who have this responsibility, not only to themselves, but to their families, their community and their country

The Youngstown Sheet and Tube Company

General Offices--Youngstown 1, Ohio

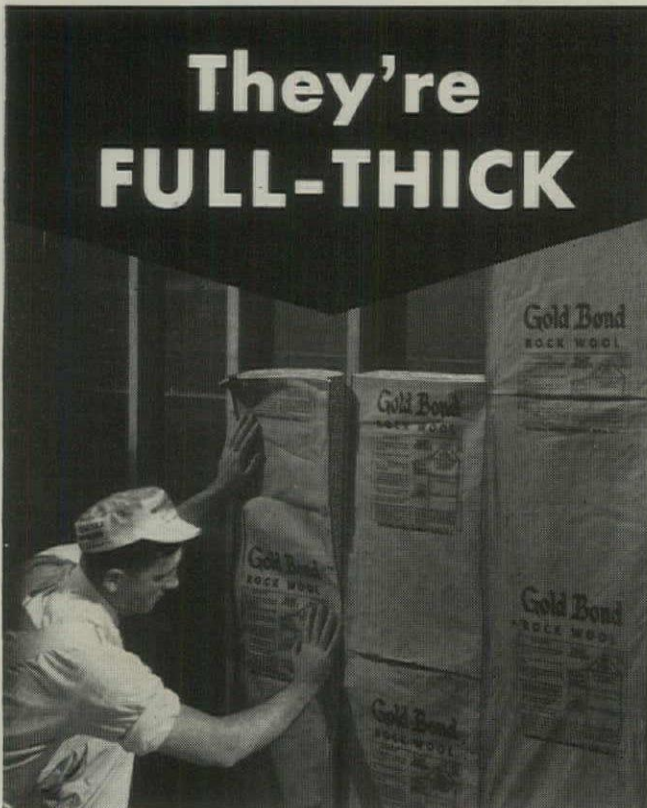
Export Offices--500 Fifth Avenue, New York

MANUFACTURERS OF CARBON ALLOY AND YOLOY STEELS

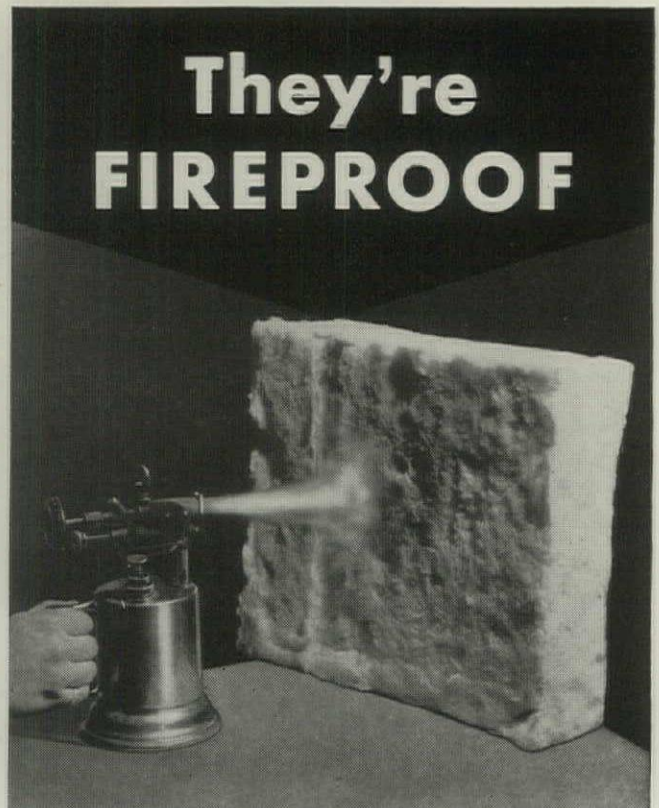
COLD FINISHED CARBON AND ALLOY BARS - SHEETS - PLATES - WIRE - TIE PLATES AND SPIKES -
ELECTROLYTIC TIN PLATE - COKE TIN PLATE - PIPE AND TUBULAR PRODUCTS - CONDUIT - BARS - RODS.

Protect your clients with Gold Bond Rock Wool Batts

**They're
FULL-THICK**



**They're
FIREPROOF**



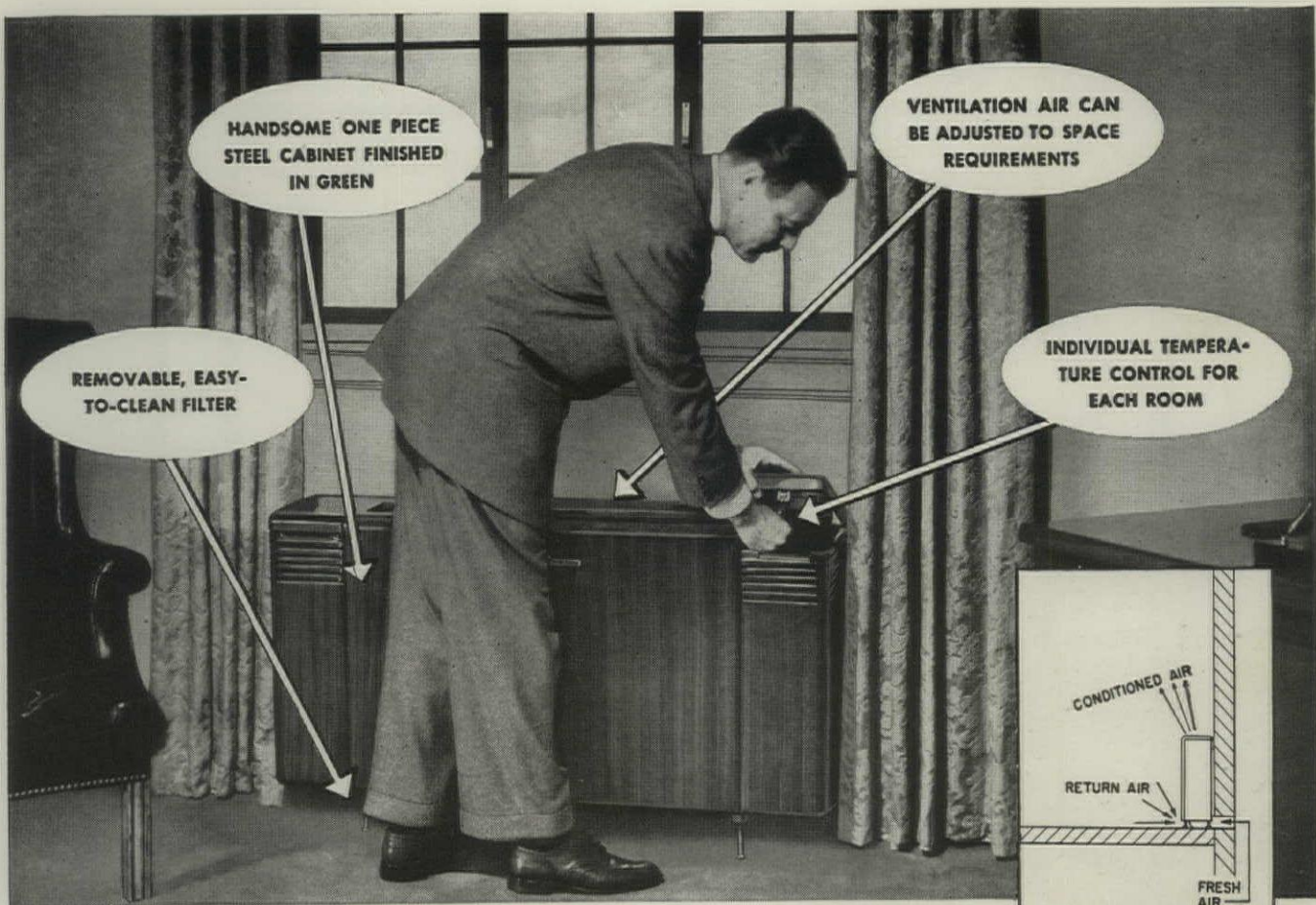
You have a real obligation and a definite responsibility to make sure your clients get two things from the insulation you specify—*full fire protection* and maximum efficiency for *fuel savings and comfort*. Gold Bond Rock Wool Batts are as *fireproof* as the rock from which they're made. And when you specify them *full-thick*—not one or two inches thick—they'll completely fill the wall space between the studs and provide an effective fire barrier and full insulation value. Play it safe! Always specify *full-thick* Gold Bond Rock Wool Batts.

**You'll build or
remodel better with**

Gold Bond

**NATIONAL GYPSUM COMPANY
BUFFALO 2, N. Y.**

Over 150 Gold Bond Products including gypsum lath, plaster, lime, wallboard, gypsum sheathing, rock wool insulation, metal lath products and partition systems, wall paint and acoustical materials.



FOR ANY MULTI-ROOM AIR CONDITIONING JOB

Personal Weather Control

HOT WEATHER—cold weather—tenants can be comfortable in any multi-story building that has a G-E Personal Weather Control system.

This modern air conditioning system can be custom-tailored to your architect's design. Units can be hidden in the wall with only intake and discharge grilles visible. Every part of the G-E unit, including the cleanable metal filters can be serviced from the front.

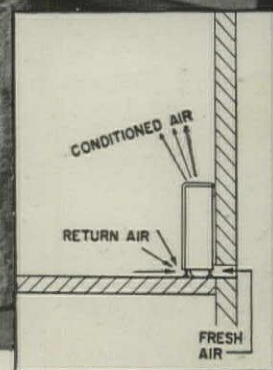
Only filtered air passes through the coils... which means lower costs

for coil maintenance. Fresh air can be introduced through a central plant, a zone plant or simple wall or window openings. Water coils can be used for heating in winter as well as cooling in summer.

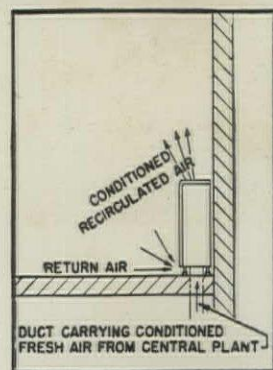
Your local General Electric air conditioning expert will be glad to work with your architect and engineer to provide the system that's just right for your building.

General Electric Company, Air Conditioning Department, Section A8505, Bloomfield, New Jersey.

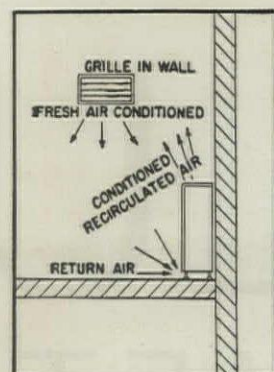
GENERAL  ELECTRIC
Better Air Conditioning



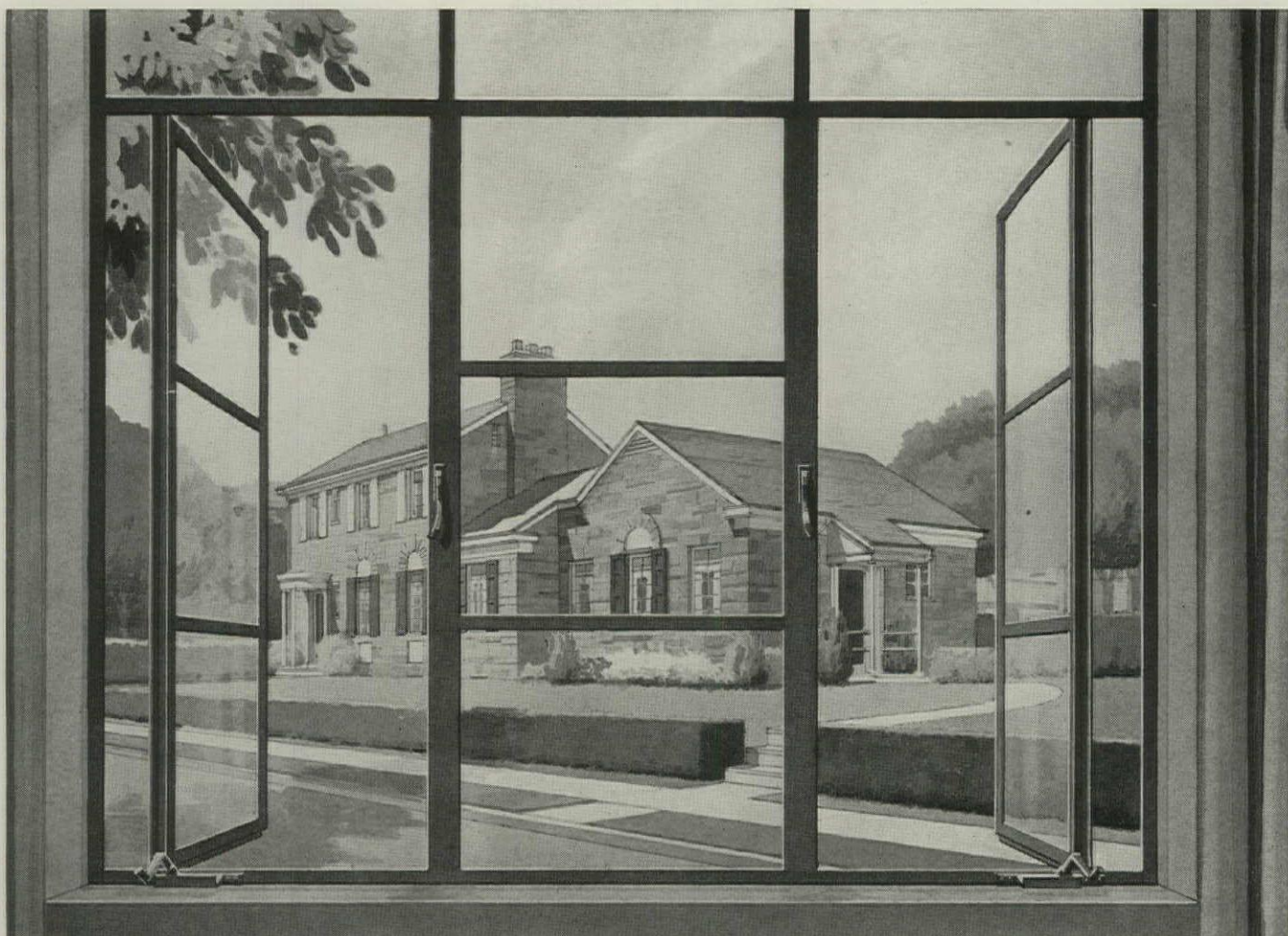
Fresh air can be drawn directly into the unit from an aperture in the wall or directly through the window opening.



Fresh air can be conditioned by a central plant system and carried to each unit by ducts.



Fresh air is centrally conditioned and distributed through wall outlets.



Residence of Dr. and Mrs. L. L. Weber,
Philadelphia, Pa. Architect: Jesse Sterler.
Builder: Meyer Gussman.

Another example of the wide application of Lupton Metal Windows is shown in this physician's office and home. Here, Lupton Metal Casements provide all the benefits of modern window construction. With Lupton Casements, air flow is easily controlled by attractive Roto-operators located at the sill. Extended hinges permit cleaning all glass from inside the room. Neat, metal frame screens or glass insulating panels can be easily attached on the inside of the window. There is a Lupton Metal Window for every type building—industrial, commercial, residential. Write for our catalog or see it in Sweet's.

MICHAEL FLYNN MANUFACTURING CO.
700 East Godfrey Avenue, Philadelphia 24, Penna.
Member of the Metal Window Institute

LUPTON

METAL WINDOWS

save your building

WITH A WATERFOIL RAINCOAT

now you can protect your
weatherbeaten plant and
decorate it to look like new...



before application



applying Waterfoil



complete WATERFOIL job

Yes, you can fully restore your building exteriors and protect your buildings and contents against storms and weather by applying Waterfoil, the raincoat for masonry structures. Unlike other masonry coatings Waterfoil is made of irreversible inorganic gels which upon final hardening bond firmly both chemically and physically to the old surfaces. Water penetration is impeded thus helping to prevent further deterioration, spalling or rusting of reinforcing bars. Save the buildings you now have. Write for the important literature on Waterfoil today.

WATERFOIL

THE UNIQUE TREATMENT FOR EXTERIOR MASONRY SURFACES



A.C. HORN CO., INC.

manufacturers of materials for building maintenance and construction

10th STREET & 44th AVENUE, LONG ISLAND CITY 1, NEW YORK
HOUSTON • CHICAGO • SAN FRANCISCO • TORONTO





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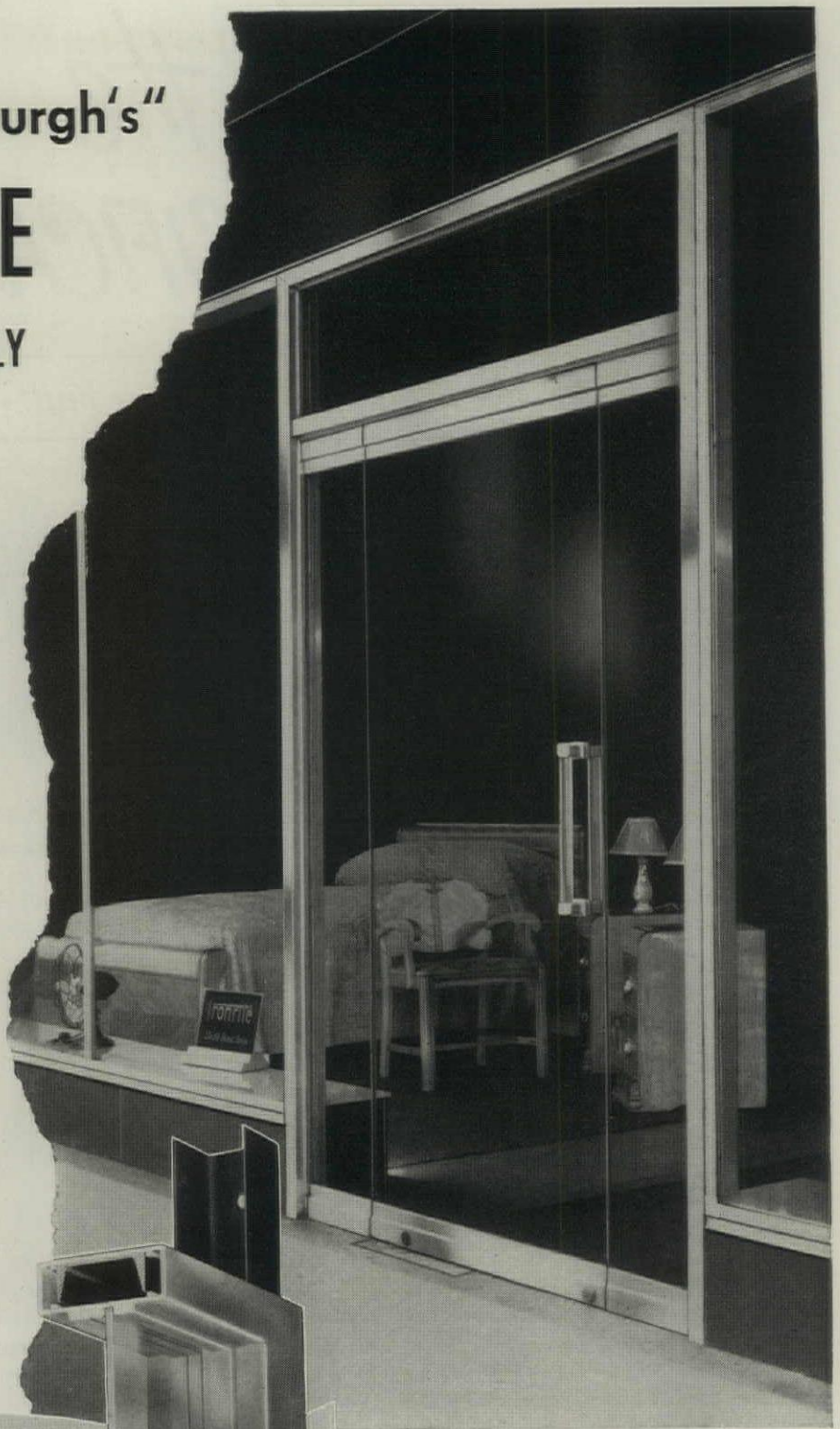
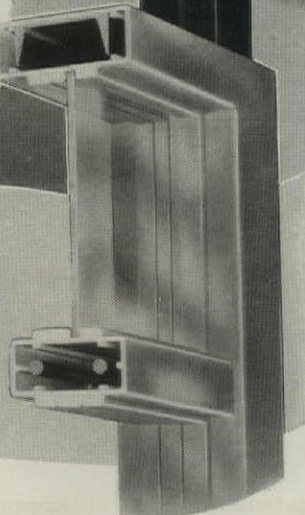
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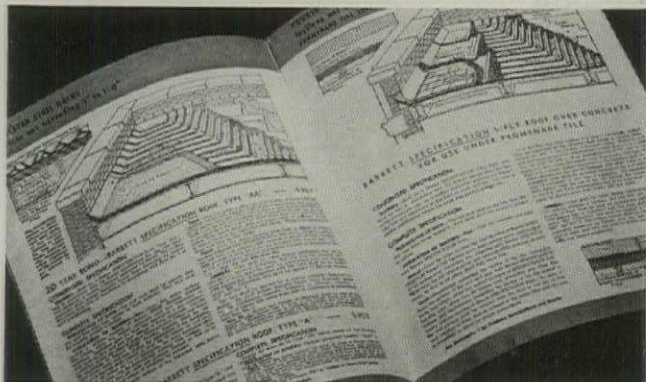


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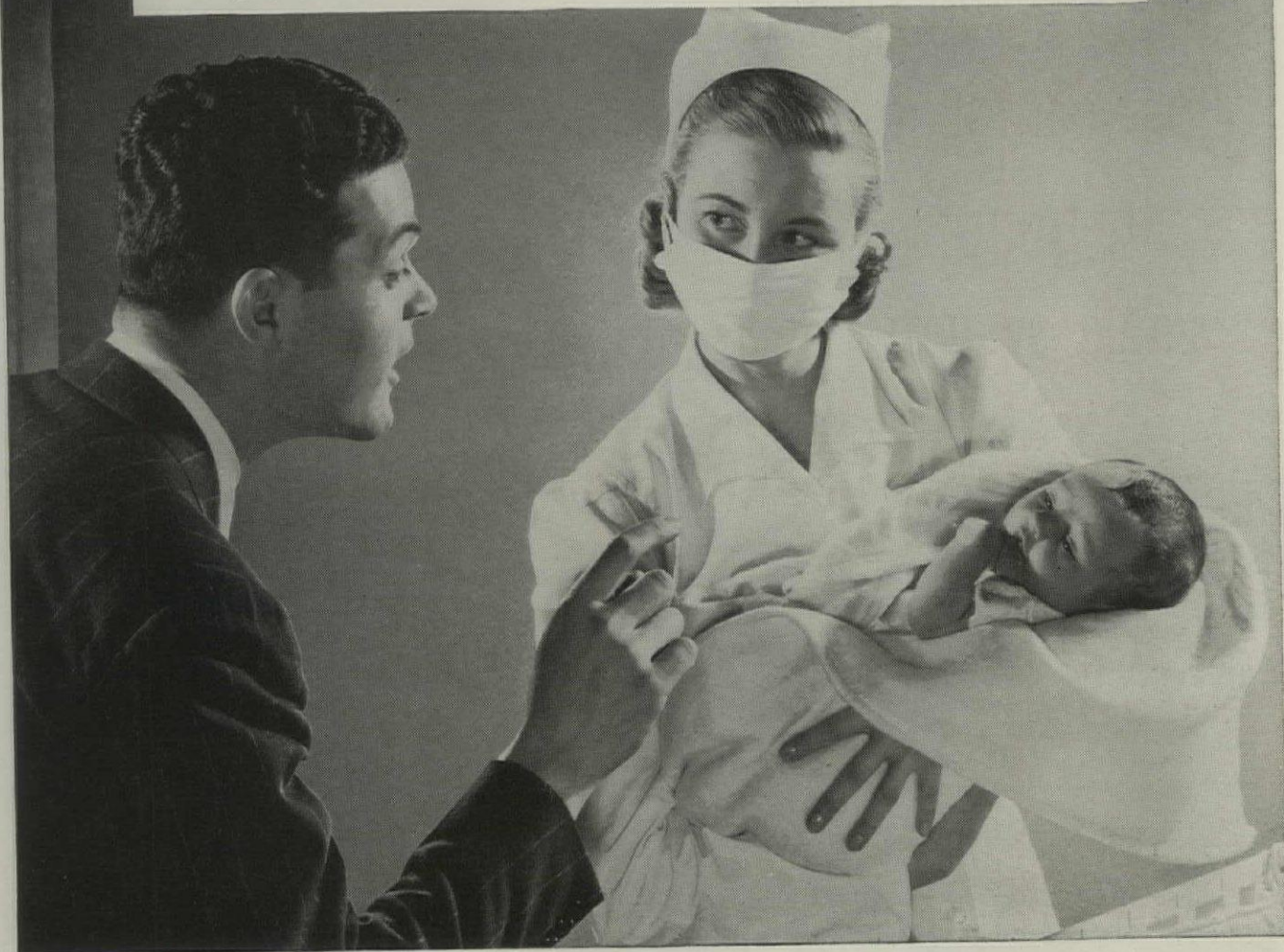
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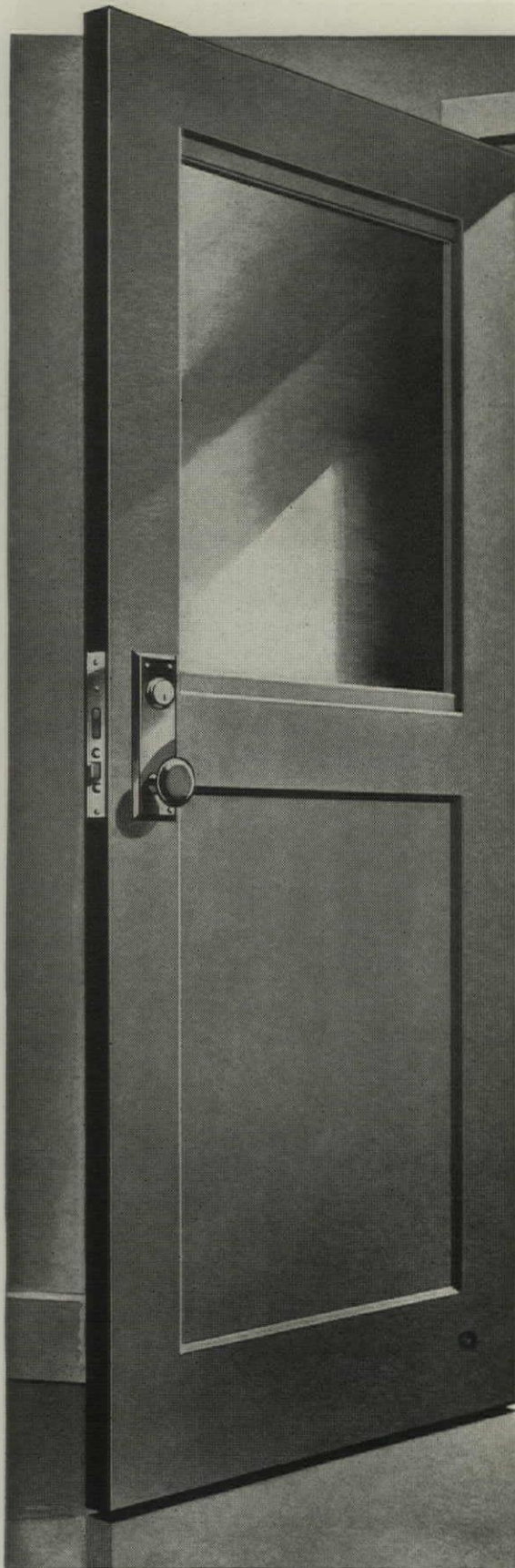
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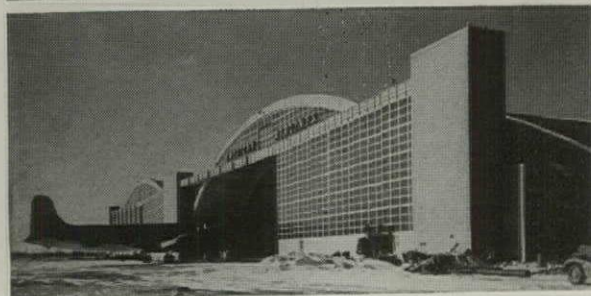
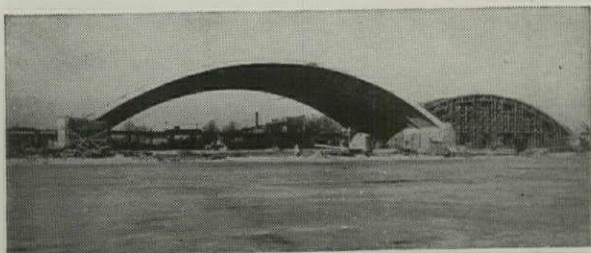
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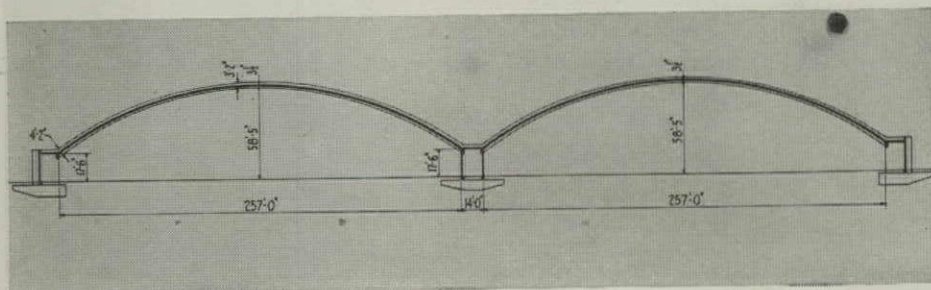


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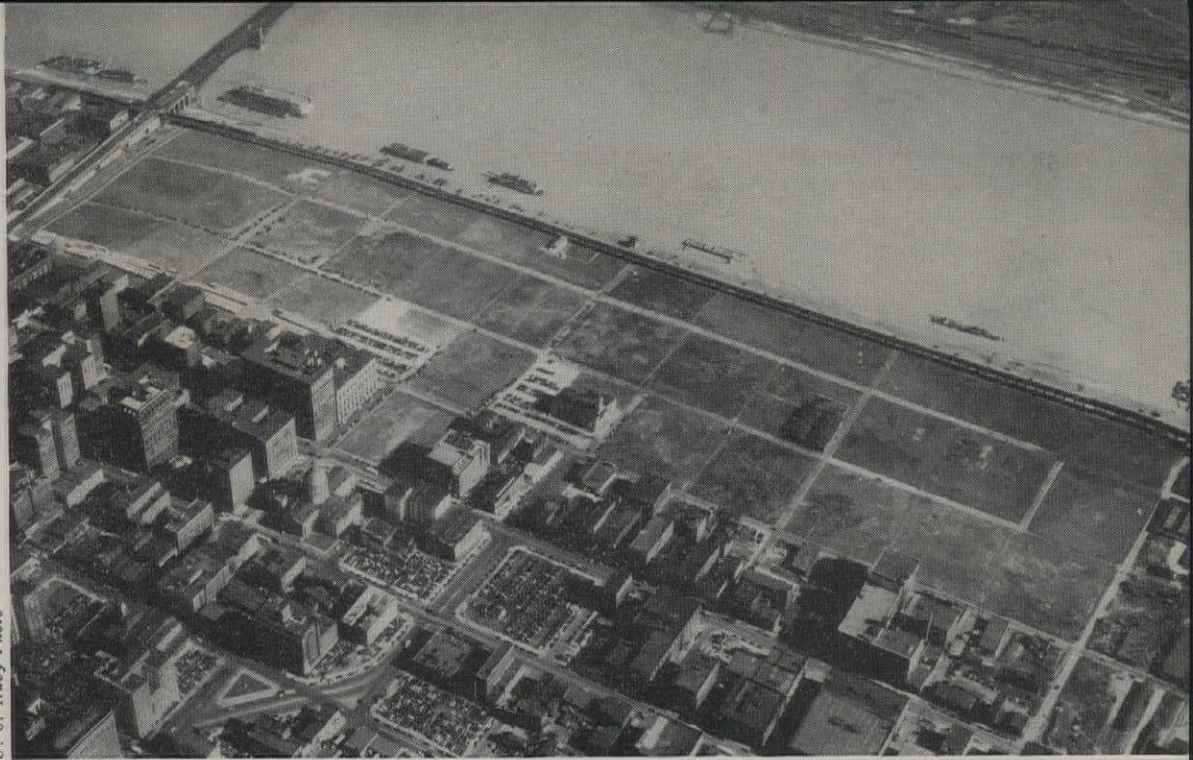
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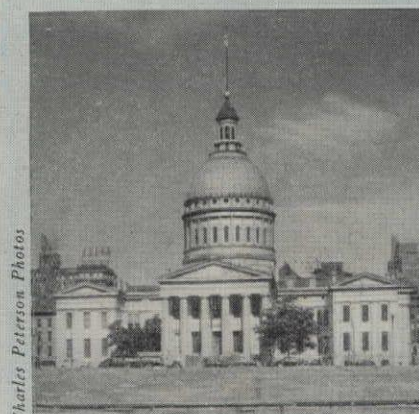
THE MEMORIAL SITE as it appears today, with Mississippi River and Eads Bridge beyond.

COMPETITION

JEFFERSON NATIONAL EXPANSION MEMORIAL

The project to create a \$30,000,000 national park and monument on the west bank of the Mississippi River at St. Louis, memorializing Thomas Jefferson and his Louisiana Purchase, recently caught coast-to-coast attention when an architect and design for the undertaking were chosen through a major competition financed by public-spirited citizens of the Midwest. The Jefferson National Expansion Memorial Association, headed by Luther Ely Smith who has worked diligently for some 15 years to enlist St. Louis and national support for this memorial, is pledged to recommend to National Park Service of Department of Interior, as custodian of this officially designated Historic Site, acceptance of the winning architect and his distinguished design (see pages 54-59).

The historic importance of the city that was literally the Gateway to the West, described in the *PROGRESS REPORT* in our March issue and pictured in the *PROGRESS REPORT* for this month (see pages 14-20), called for preservation of several ancient structures within the national park. We are indebted to George Howe, F.A.I.A., Philadelphia architect who was professional adviser for the competition, for a summary of the event (see pages 68-69) in which 172 entries were received from architects with associated engineers, landscape architects, painters, and sculptors throughout the country.



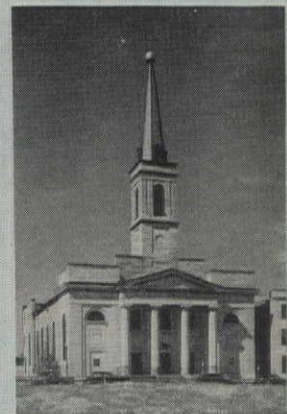
Charles Peterson Photos

1839-1862 Old Courthouse



1818 Manuel Lisa Warehouse

National Park Service acquired the Historic Site under the Historic Sites Act of 1935 and cleared it of all structures but the Old Cathedral, designed by Morton & Laveille, and the stone warehouse built by the fur trader, Manuel Lisa, as river trade began its greatest era. The Old Courthouse was saved near by.



1830-1834 Old Cathedral

JURY COMMENTS ON THE WINNERS UNDER EACH PERSPECTIVE



FIRST PRIZE: \$40,000

EERO SAARINEN & ASSOCIATES

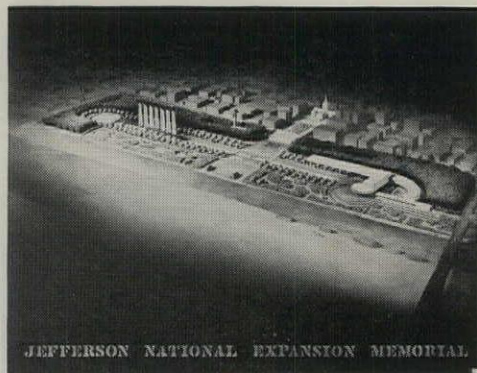
This entry placed in the First Stage, for it contains intrinsically the very features aspired to by the Program . . . a Memorial, a park, balanced harmony, and a fine grouping of buildings. The success of the plan does not depend upon the carrying out of a suggested collaboration of communities on the eastern bank of the Mississippi though it suggests to the full the advantages of such a possibility.

The Second Stage resulted in an enriched and improved plan with no diminution of any of its initial excellencies. It tends to have the inevitable quality of a right solution. The Monument suggests the historic past of St. Louis as the Gateway to the West. It is large in scale, yet does not dwarf other structures, and by its very form is sympathetic with the Courthouse dome. The use of the Manuel Lisa Warehouse as an entrance to the Memorial is a peculiarly happy instance of the brilliant effect to be gained by the occasional . . . juxtaposition of old and new.

The park gives promise of shade in the warm season. The treatment of roadways is an effective guard against traffic intrusion. The approach to the Old Cathedral, and its adjacent dependencies insure a proper setting for that dignified structure. The treatment of sculpture commemorating historical episodes is particularly engaging as it gradually unfolds along the levee edge. A frontier village in the wooded area recalls the flavor of the time of the Western Expansion. Restaurants on either end afford vistas of the Memorial area and the Mississippi. Feature by feature, a masterful plan reaches desired fulfillment.

The entire concept, full of exciting possibilities for actual achievement, is a work of genius; and the Memorial structure is of that high order which will rank it among the nation's greatest monuments.

*Prize Drawings and Contestants
Photographed by W. C. Runder*



JEFFERSON NATIONAL EXPANSION MEMORIAL

SECOND PRIZE: \$20,000

PHILLIPS, ENG & ASSOCIATE

Breadth of treatment and an uncluttered quality, with excellent placing of individual elements, brought this scheme into the Second Stage.

These virtues are kept in the final design and are improved and enriched as a result of study. The Monument has been brought from a minor to a major role, a change of emphasis directly suggested by the Second Stage Program. The final drawing reaffirms the virtues of the design, which endeavors to emphasize the natural fall of the site by placing the long museum building and the restaurant with its panoramic view on the highest ground immediately accessible from the city center. It creates a direct connection between the park and Courthouse, and maintains the long, unbroken quality of the plan and main elevation. This scheme makes a notable contribution when it places a thick and unbroken tree belt between the tensions of city traffic and the repose of the mall.

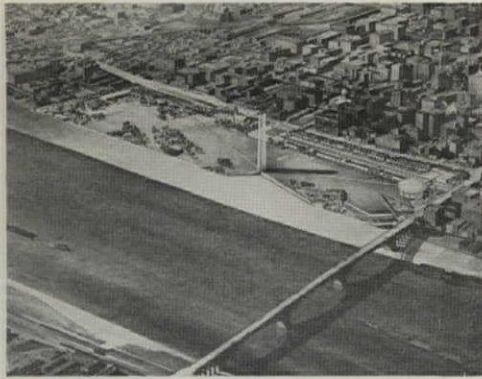
FINAL REPORT OF THE JURY OF AWARD

On September 26, 1947, after three and one-half days of deliberation, the Jury of Award selected five contestants as winners of the First Stage of the Competition, and recommended them to the Professional Adviser to compete in the Second and Final Stage. The winning entries were as follows: #41, #144, #124, #8, #64. In addition, three alternates were selected for substitution in the Final Stage of the Competition in case of default on the part of any of the five winners. The first alternate was #94, the second, #27, and the third, #125.

In the opinion of the Jury the five top-ranking projects represent, as the Program postulated, a useful variety of essential concepts and ideas. The variety concerns the grouping of buildings and emphasis on them; the approach, traffic, and the important parking problems; the means by which the Memorial character is accomplished. The projects contain a most constructive array of material to be used by the Professional Adviser in the preparation of the Program for the Second Stage.

The object of the Competition's First Stage was to select five designers to participate in the Second Stage, rather than five designs. Qualities of imagination, vision, power of analysis, and practical ingenuity were considered with great care and the selection was based chiefly on breadth of conception rather than on particular details.

The Jury reassembled on February 17, 1948, to consider the final submissions of the five winning contestants in the First Stage of the Competition. After thorough discussion and detailed consideration of each of the projects submitted, the following awards were made: First Prize, #144; Second Prize, #124; Third Prize, #64; Runner-up, #41; Runner-up, #8. It is worthy of note that the winning award was made by a unanimous vote on the Jury's initial secret ballot.



THIRD PRIZE: \$10,000

BREGER, HORNPOSTEL, LEWIS & ASSOCIATES

A single great idea carried through with conviction, in the form of a terrace, earned a place in the first group of five.

In the development of the Second Stage a Monument was introduced which has beauty and a stated symbolism. This symbolism is to emphasize that through this one city were funneled the countless settlers to spread through the West. The terrace museum is retained on the high ground and an intimate grouping of the old buildings developed at the levee. The picnic and restaurant areas at each end all contribute to the human scale, which would make it a pleasant place in which to relax.

The envelopes were then opened and the identity of the authors established as follows:

#144 Eero Saarinen, Bloomfield Hills, Mich., designer; J. Henderson Barr, Birmingham, Mich., associate designer; Dan Kiley, Franconia, N. H., landscape architect; Alexander Hayden Girard, Grosse Point, Mich., painter; Lily Swann Saarinen, Bloomfield Hills, Mich., sculptress.

#124 Gordon A. Phillips, Urbana, Ill., architect; William Eng, Urbana, Ill., architect; George N. Foster, Champaign, Ill., painter.

#64 William N. Breger, Woodstock, N. Y., architect; Caleb Hornbostel, New York, N. Y., architect; George S. Lewis, New York, N. Y., architect; Allan Gould, Woodstock, N. Y., painter; Andre Schwob, New York, N. Y., painter; Donald L. Kline, New York, N. Y., landscape architect; Ralph J. Menconi, New York, N. Y., sculptor; Christopher Tunnard, New Haven, Conn., landscape architect.

#41 Harris Armstrong, Kirkwood, Mo., architect.

#8 T. Marshall Rainey, Cleveland, Ohio, architect; John F. Kirkpatrick, Cincinnati, Ohio, landscape architect; Robert A. Deshon, Cincinnati, Ohio, planner; John B. Sheblessy, Cincinnati, Ohio, engineer-planner; John F. Bechtold, Ft. Thomas, Ky., sculptor; Robert S. Robison, Cincinnati, Ohio, painter.

The identities of three alternates were also established as follows:

#94 Percival Goodman, New York, N. Y., architect; Jacques Lipchitz and Mitzi Solomon, New York, N. Y., sculptors; Ben Zion, New York, N. Y., painter; Paul Goodman, New York, N. Y., poet.

#27 Pilafian & Montana, Detroit, Mich., architects; Samuel A. Cashway, Detroit, Mich., sculptor; Henry Bernstein, Detroit, Mich., mural painter; Edward A. Eichstedt, Detroit, Mich., landscape architect.

#125 Hugh Stubbins, Jr., and G. Holmes Perkins, Lexington, Mass., architects.

Respectfully submitted,

S. HERBERT HARE LOUIS LABEAUME RICHARD NEUTRA
FISKE KIMBALL CHARLES NAGEL, JR. ROLAND A. WANK
WILLIAM W. WURSTER, Chairman

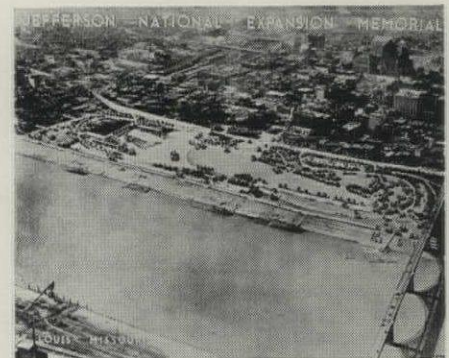


MENTION: \$2,500

HARRIS ARMSTRONG

The first submission raised high the symbolism of the levee although in so doing it violated possibility. A broad conception which by its very austerity would mark it as a monument amidst the natural turmoil of commerce.

Real study of the site brought, in the Second Stage, a Memorial structure which in its simple mass would stand clear of the existing structures on either riverbank. Great sensitivity brought the need of presenting the view from the city which is day by day truth. The Cathedral close and the tree-shaded area are pleasant in scale and concept.



MENTION: \$2,500

T. MARSHALL RAINEY & ASSOCIATES

An orderly but informal park with welcome open space, surrounded by the structures required, brought this scheme up for further consideration.

These qualities were retained in the Second Stage, with the Monument developed as a minor structure in relation to the museum buildings. The Cathedral has been used successfully as a means of transition from a fully contemporary plaza to an area of historical flavor.

1
FIRST PRIZE

EERO SAARINEN & ASSOCIATES



EERO SAARINEN



J. HENDERSON BARR



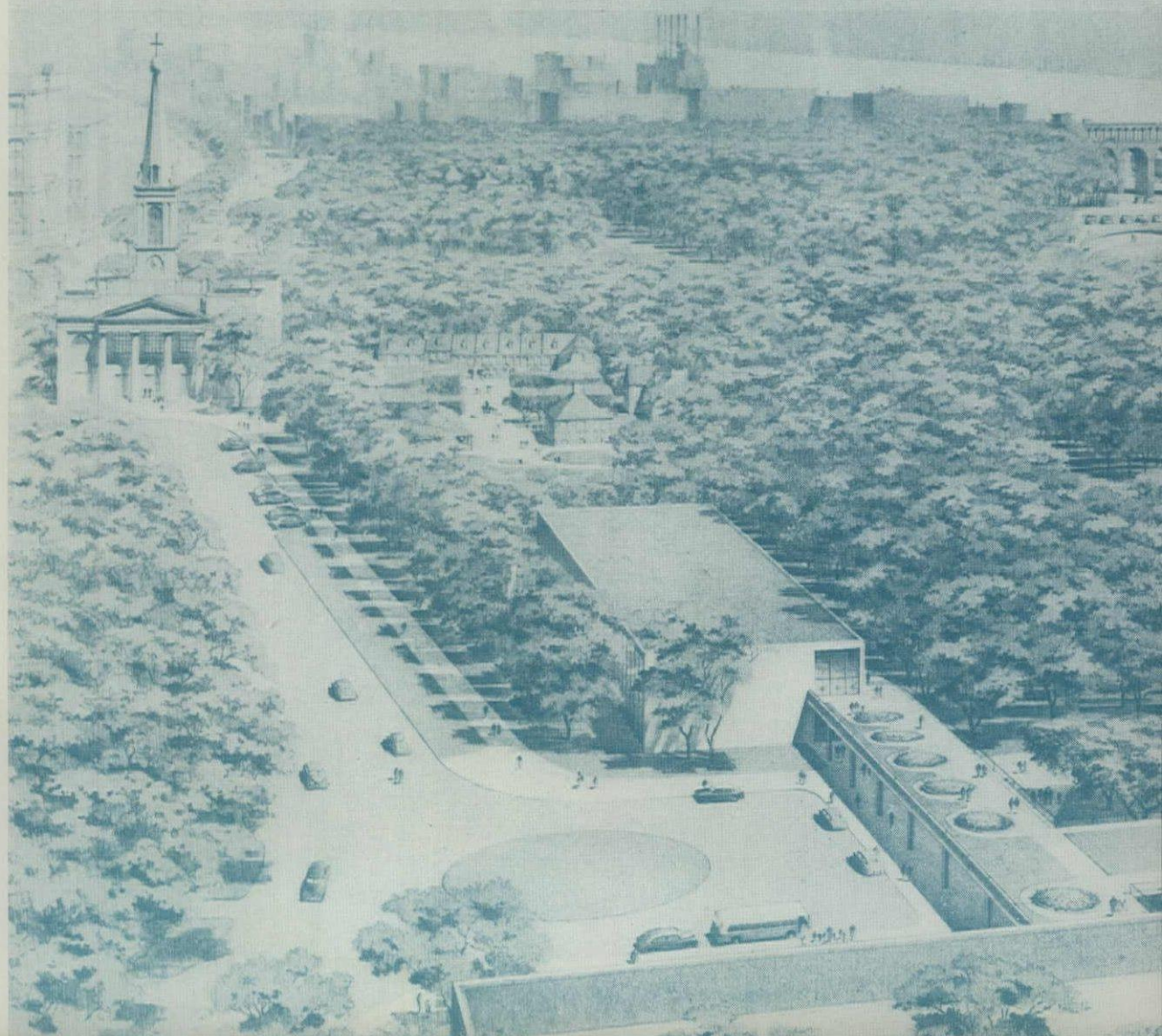
DAN KILEY



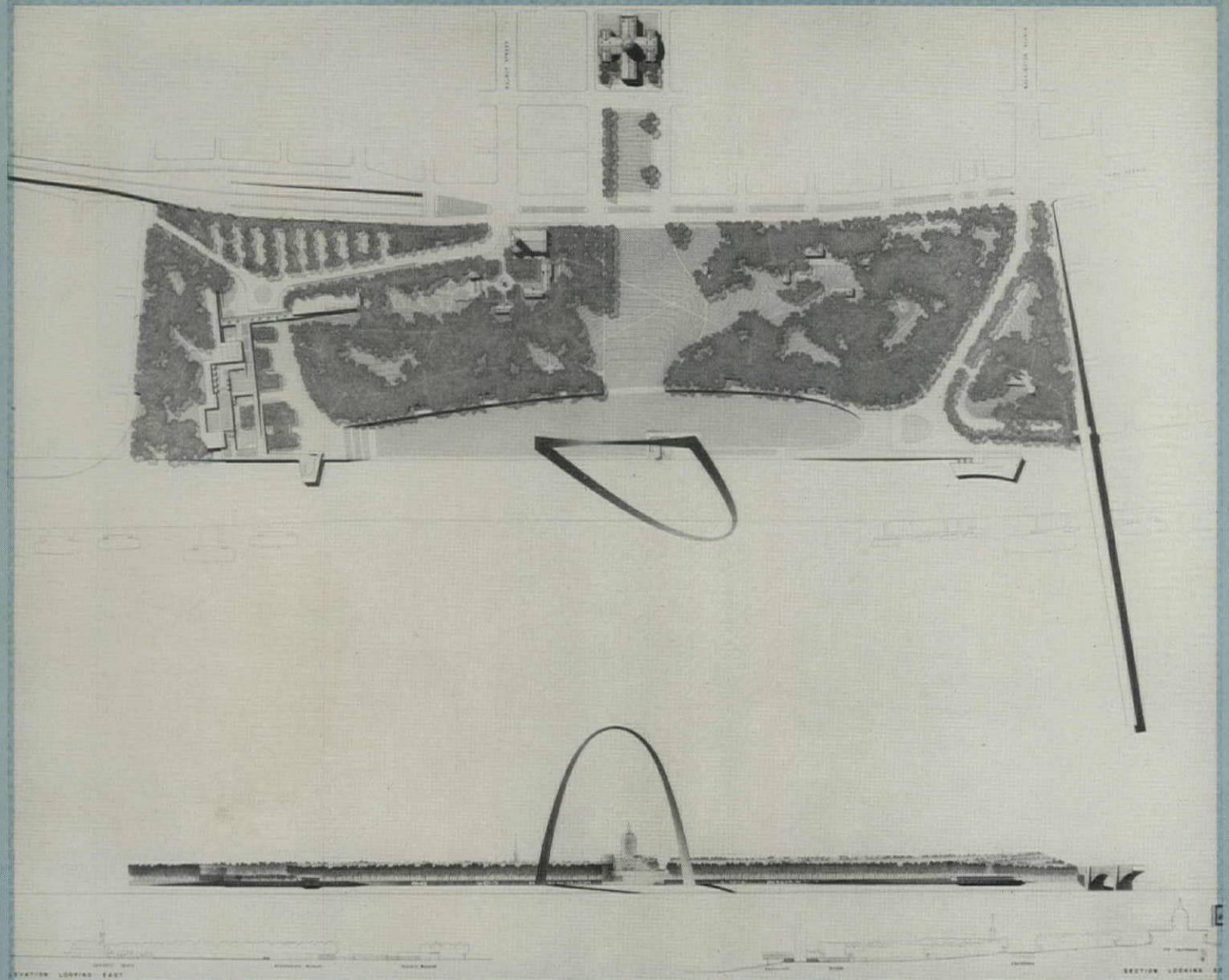
ALEXANDER H. GIRARD



LILY SWANN SAARINEN







FINAL STAGE Museum (left); Cathedral Square, Mall connecting Old Courthouse to Arch on levee before Historic Arcade (center); Frontier Village, Campfire Theater, waterfront Restaurant (right).

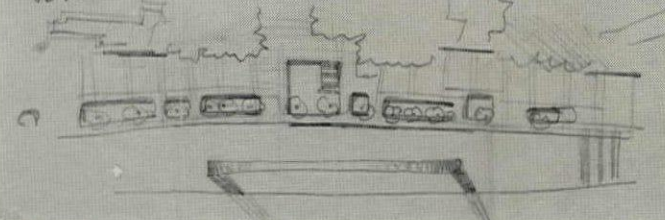
FIRST PRIZE

1

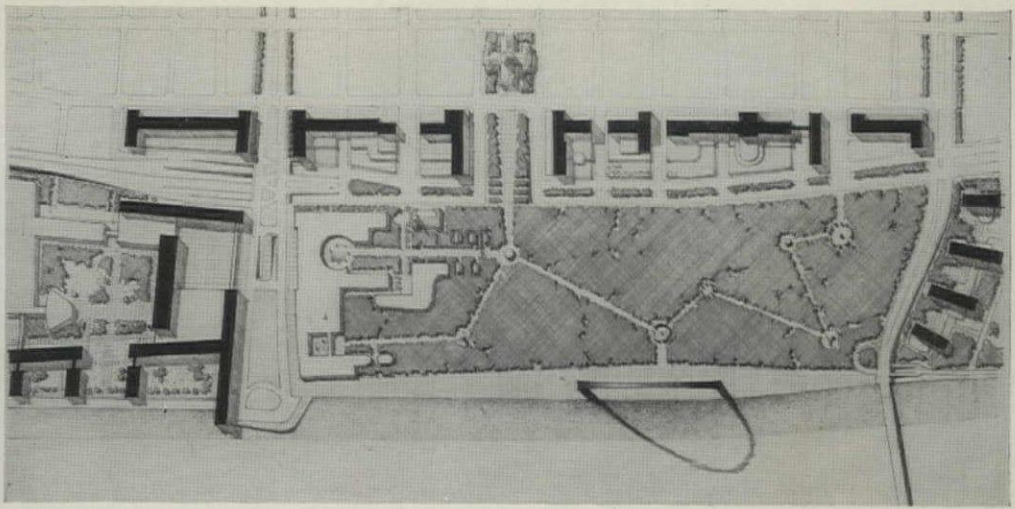
EERO SAARINEN & ASSOCIATES

Development of the winning design from earliest rough sketches, through the First Stage solution that won for the Saarinen team their chance to compete in the Final Stage of the Competition, is suggested by the drawings shown here and on the three following pages. The search was continuous for an appropriate development of the site, contours of which were closely studied in clay model, that would provide free flow among the various prescribed elements of the area. At left is one of the first sketches, with a critical note by Saarinen. Scores of sketches and rendered studies (B, across-page, is one) followed until the First Stage solution was reached. Studies such as C (across-page) followed the First Stage, as the elements were "enriched" for the solution above.

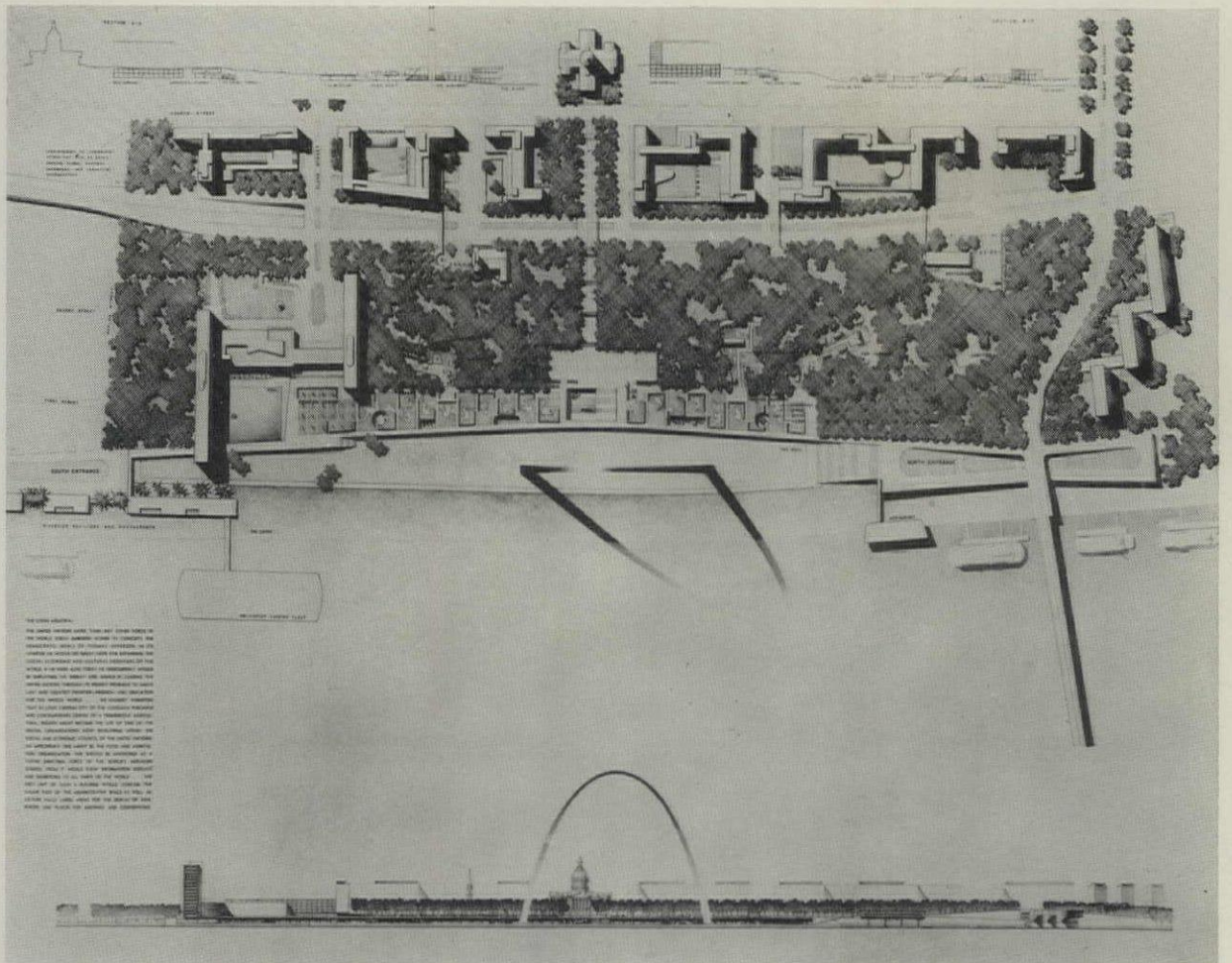
I haven't really had a chance to draw this up carefully but I think it has real possibilities. It would eliminate any feeling that the lower area is to avoid - It would give us a chance to put trees further out - it would give us a chance to place sculpture in a human way and so that people have the patience to look at it. - This has one disadvantage - it does take room but I think we can adjust the whole thing so that the first point doesn't get to them



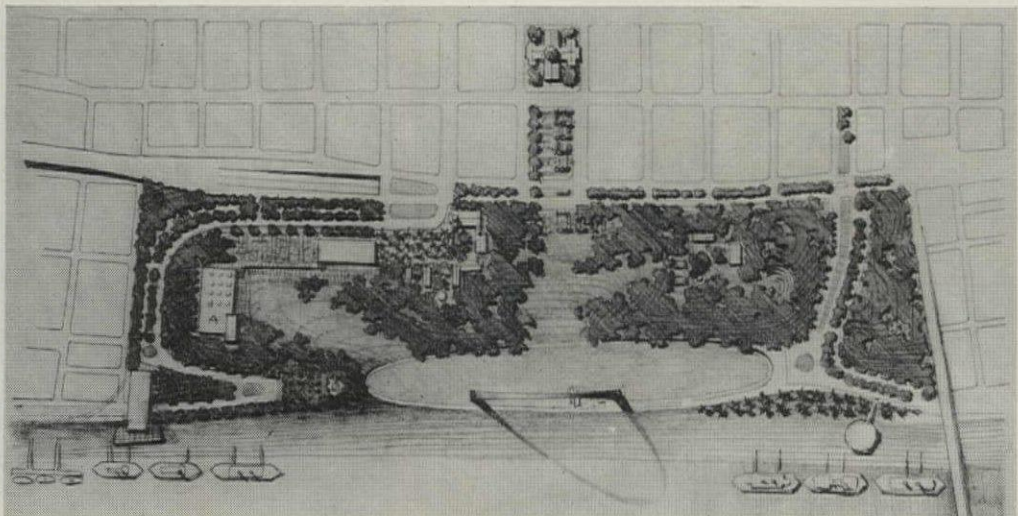
A



B



FIRST STAGE



C

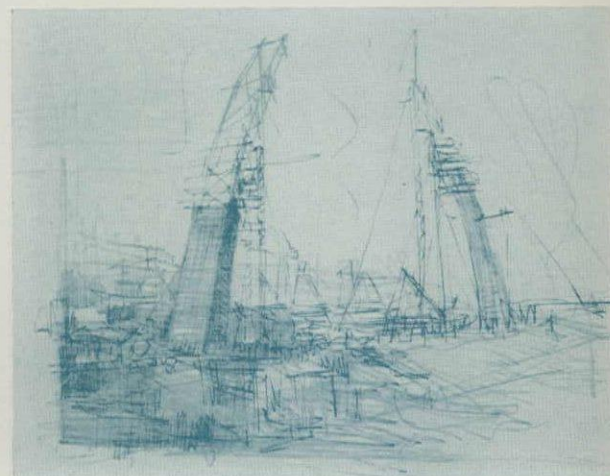
1
FIRST PRIZE

EERO SAARINEN
& ASSOCIATES



A

Design impact of the monumental arch from viewpoints around the compass—and around the clock—were pictured during Final Stage study by the Saarinen team in a series of about 100 color sketches and preliminary renderings by J. Henderson Barr. A view from under Eads Bridge, A, was “to emphasize scale of the arch and bring the levee into the foreground,” while B, across-page, took the top of the bridge as a viewpoint and C, also across-page, was one of many experiments with atmospheric effects. Meanwhile the design itself was being simplified by continuous study of all the elements—for instance, the triangular section of the parabolic arch was introduced as a sculptural refinement. The viewpoint finally chosen for the Competition rendering dramatized the arch but also showed old and new structures, and Eads Bridge.



B



C





JEFFERSON NATIONAL EXPANSION MEMORIAL

SECOND PRIZE

2

PHILLIPS, ENG & ASSOCIATE



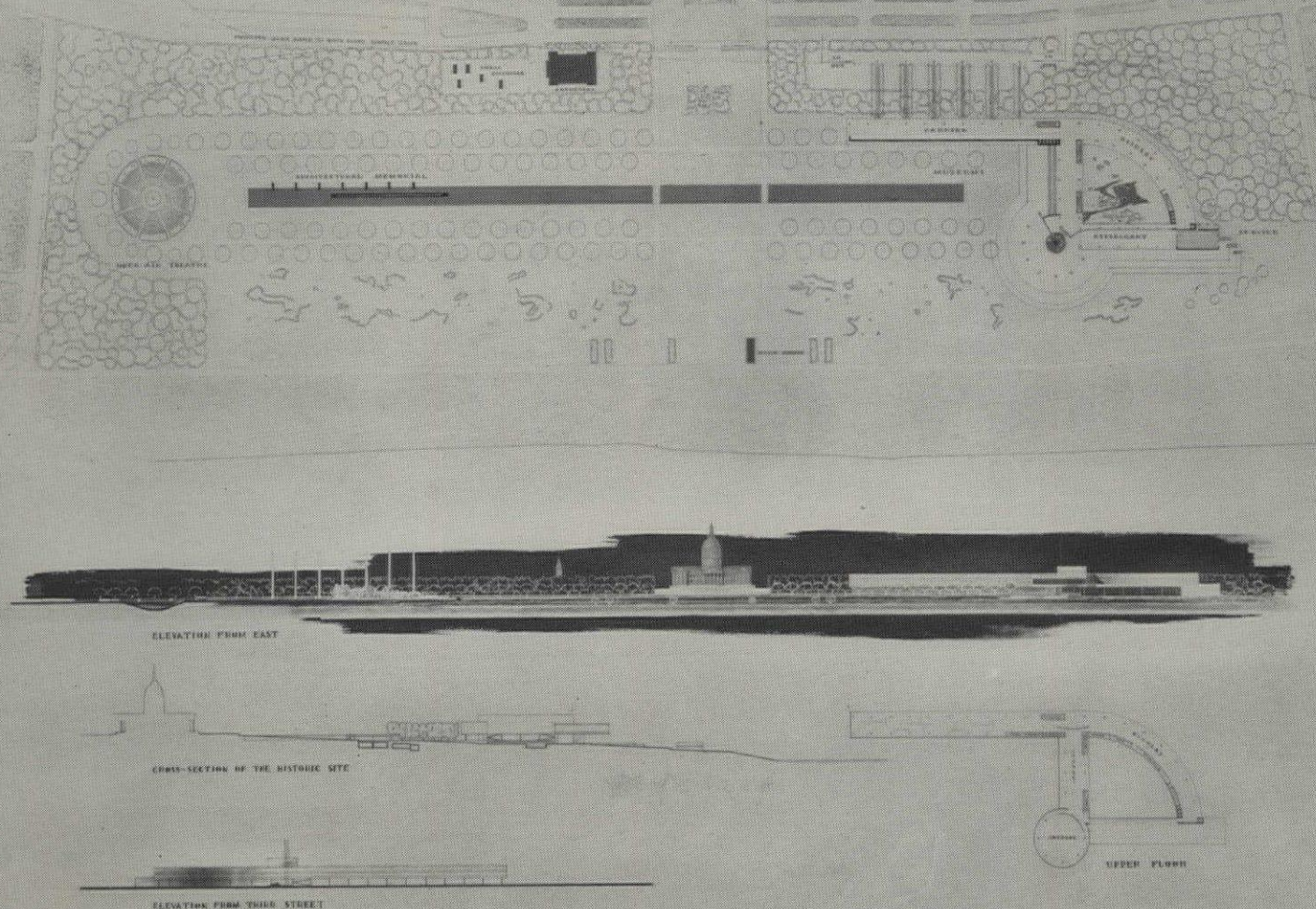
GORDON A. PHILLIPS



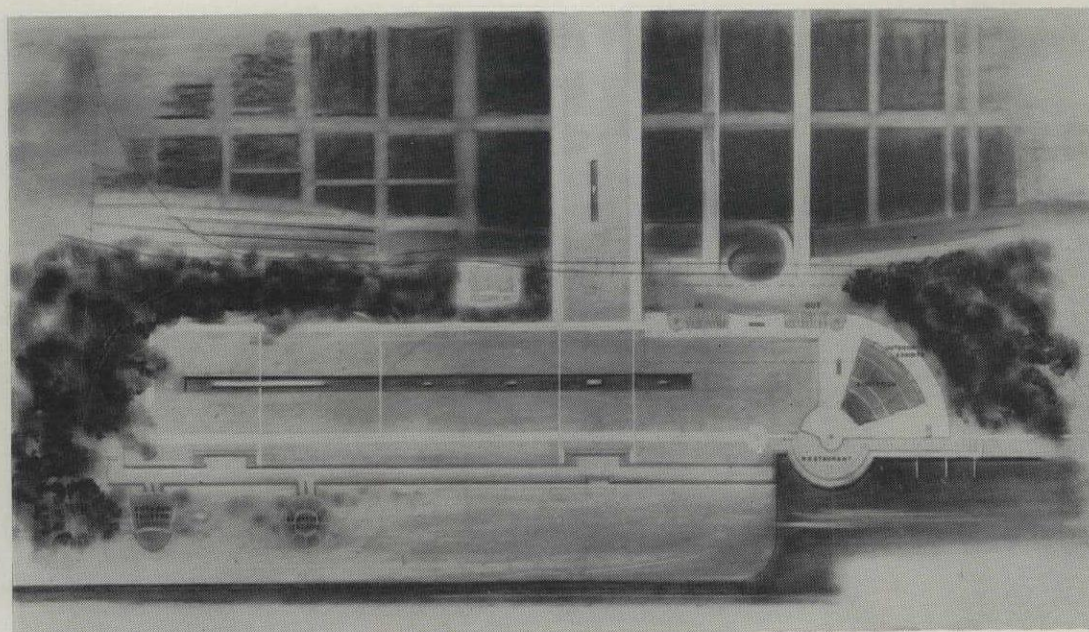
WILLIAM ENG



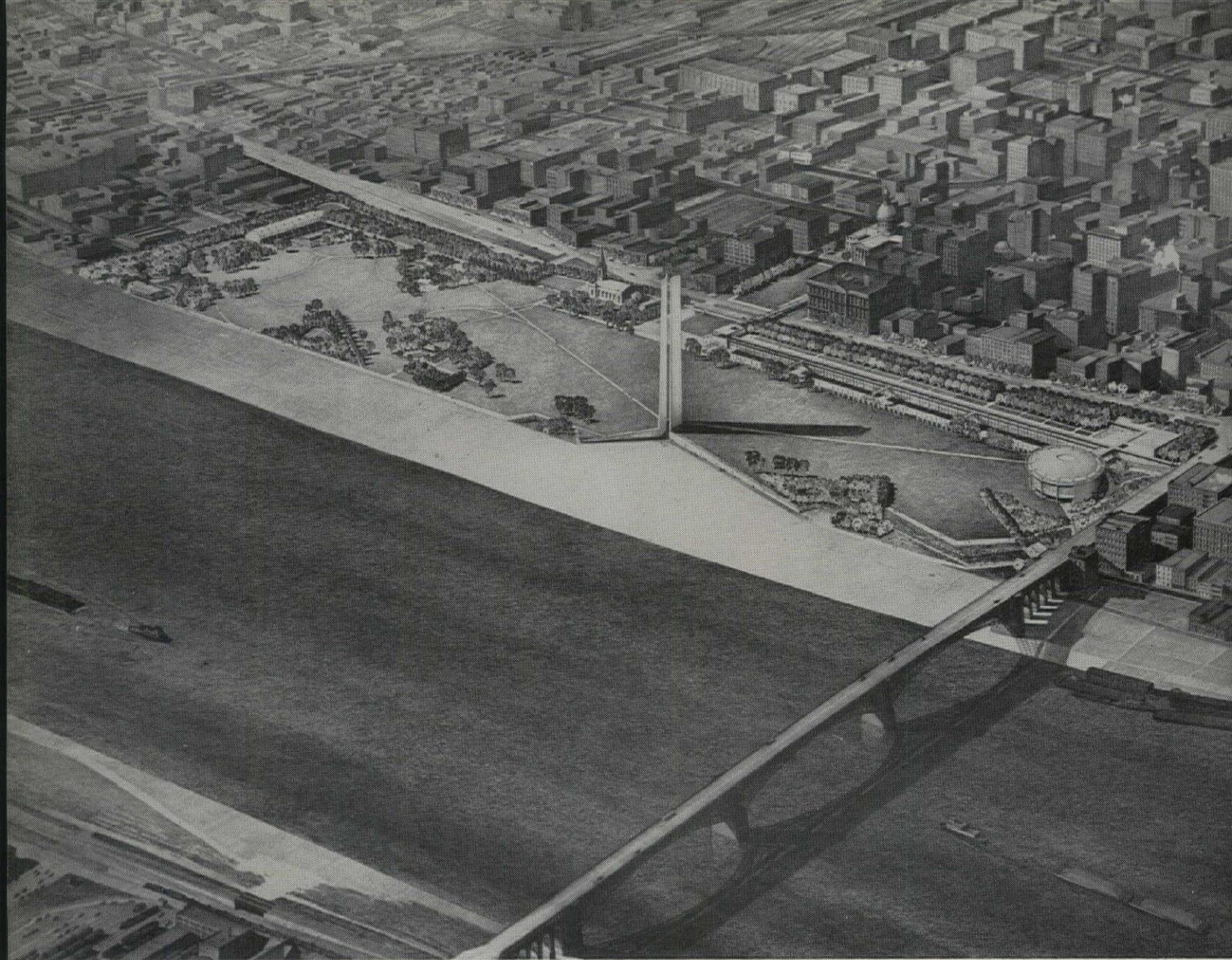
GEORGE N. FOSTER



FINAL STAGE This design was praised for endeavoring to emphasize the natural fall of the Memorial Site.



FIRST STAGE Breadth of treatment and an "un-cluttered quality" won favor with the Jury of Award.

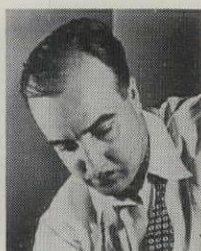


3
THIRD PRIZE

BREGER, HORNPOSTEL, LEWIS & ASSOCIATES



WILLIAM N. BREGER



CALEB HORNPOSTEL



GEORGE S. LEWIS



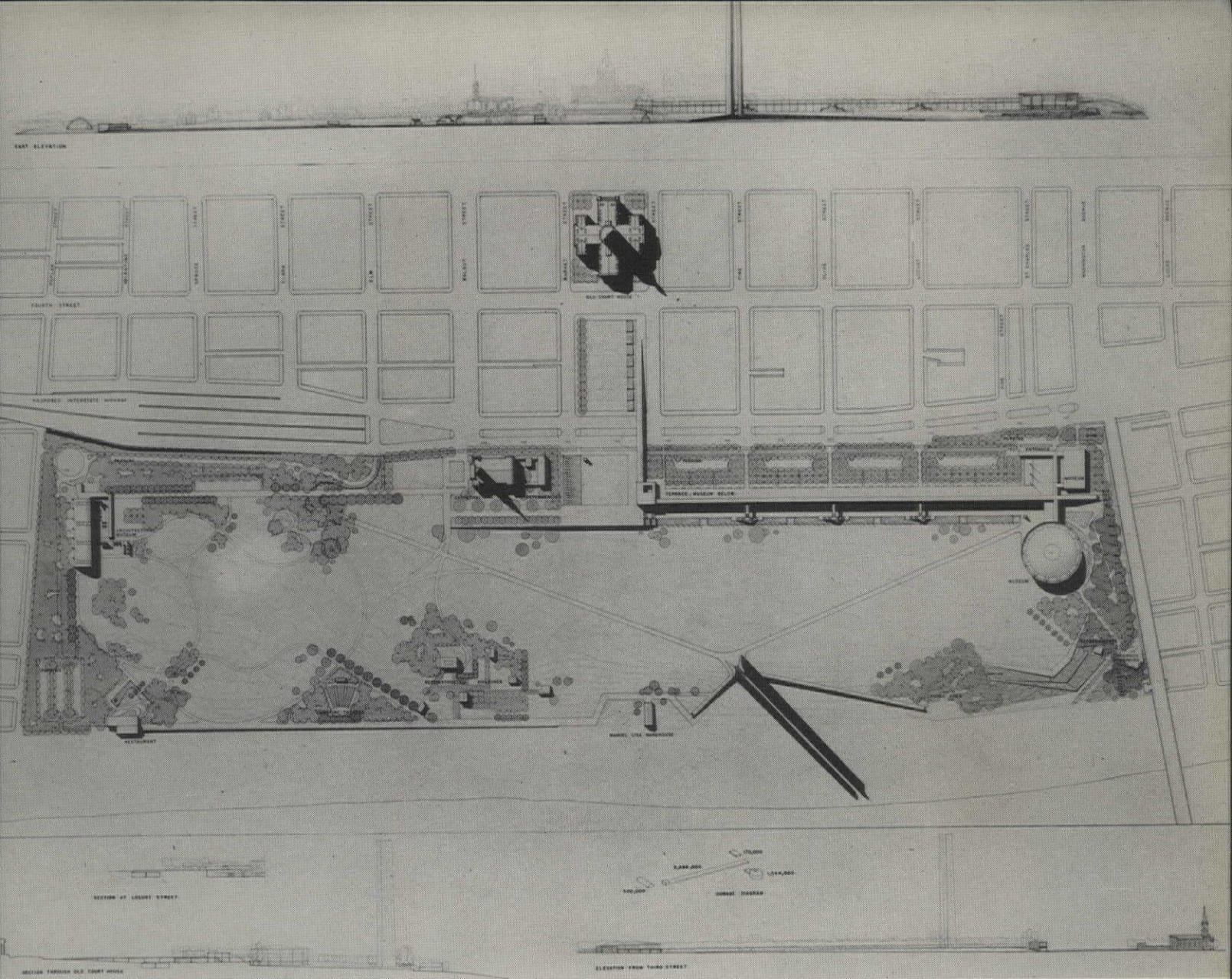
ALLAN GOULD



ANDRE SCHWOB



DONALD L. KLINE



FINAL STAGE

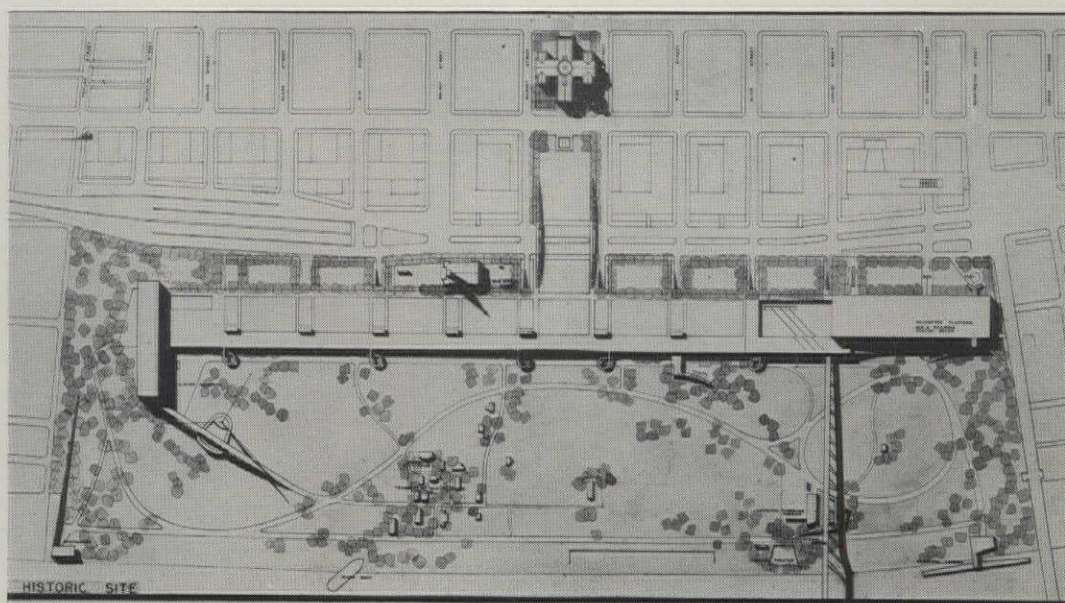
The Monument symbolizes "that through this one city were funneled the countless settlers . . . (of) . . . the West."



CHRISTOPHER TUNNARD



RALPH J. MENCONI



FIRST STAGE

A single great idea in the form of a terrace carried through with conviction made this a Jury choice.



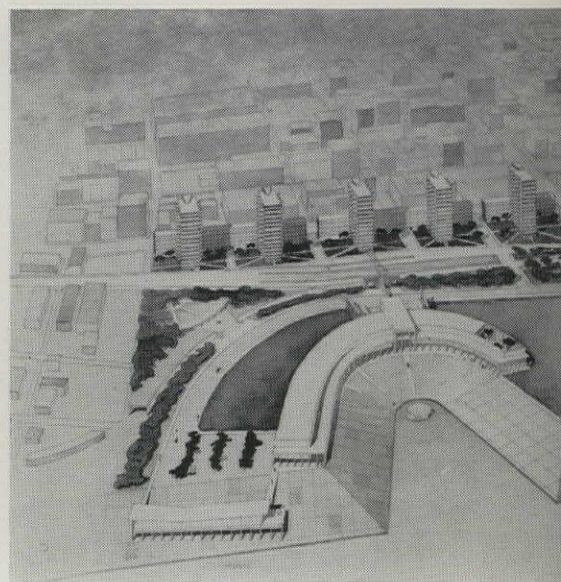
JEFFERSON NATIONAL EXPANSION MEMORIAL COMPLEX

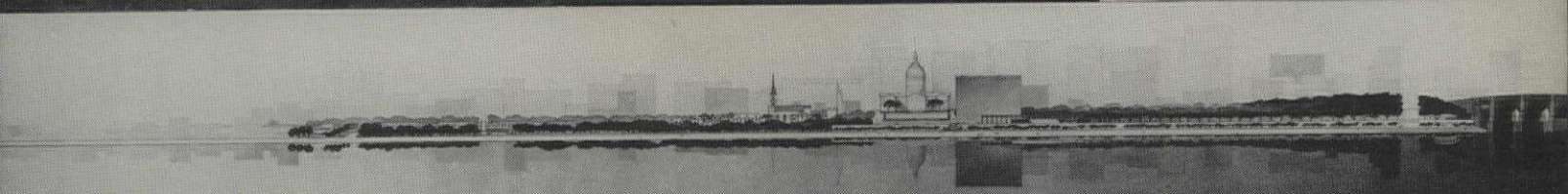
MENTION

HARRIS ARMSTRONG



HARRIS ARMSTRONG





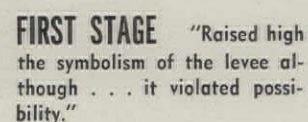
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41

JEFFERSON NATIONAL EXPANSION MEMORIAL COMPETITION

Praised for "a Memorial structure which in its simple mass would stand clear of the existing structures . . ."





MENTION

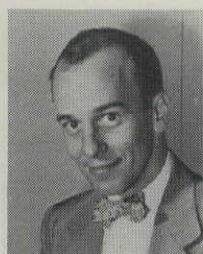
T. MARSHALL RAINEY & ASSOCIATES



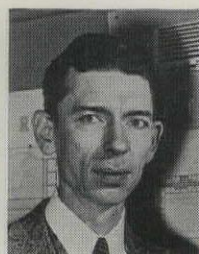
T. MARSHALL RAINEY



JOHN F. KIRKPATRICK



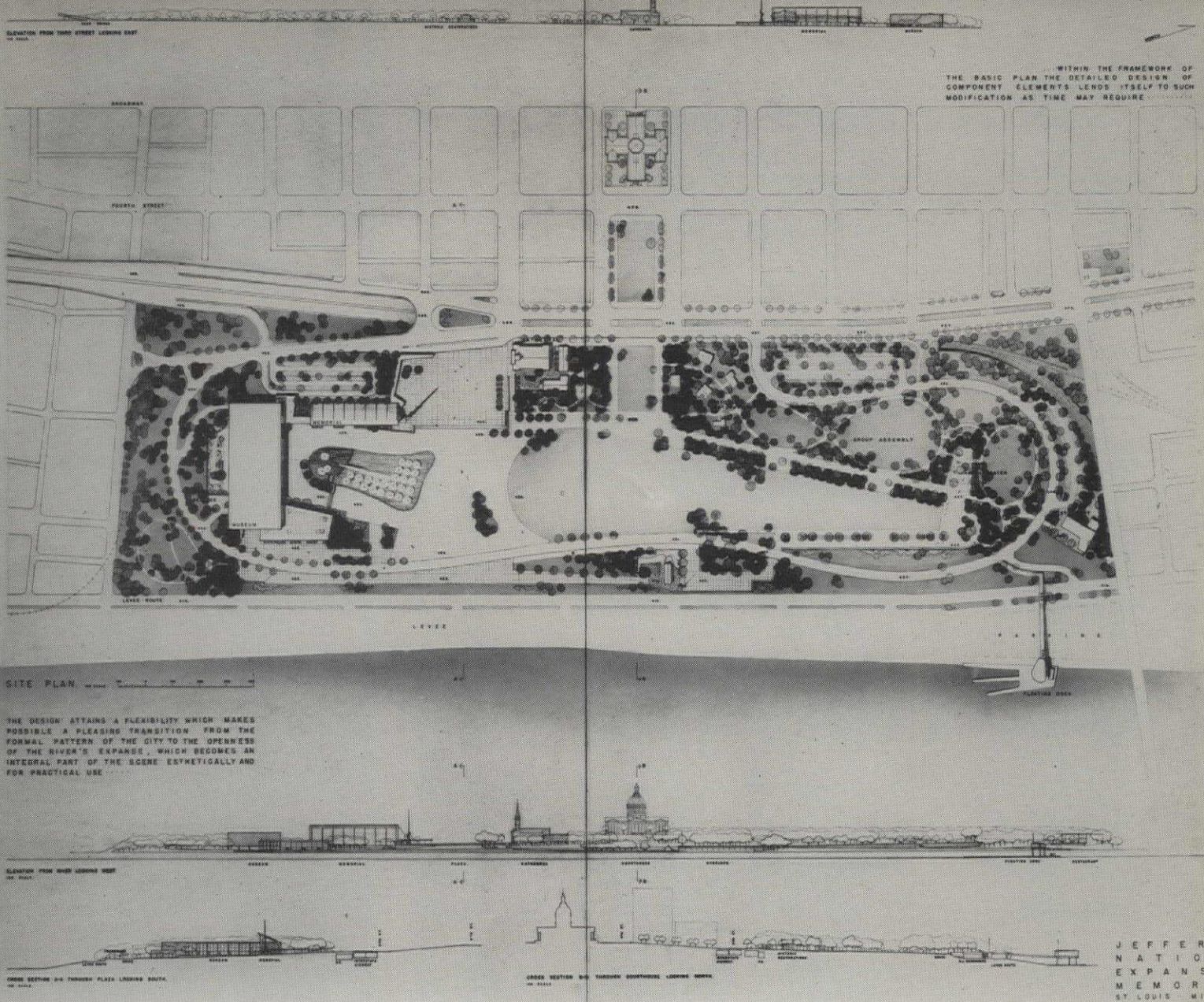
ROBERT A. DESHON



JOHN B. SHEBLESSY

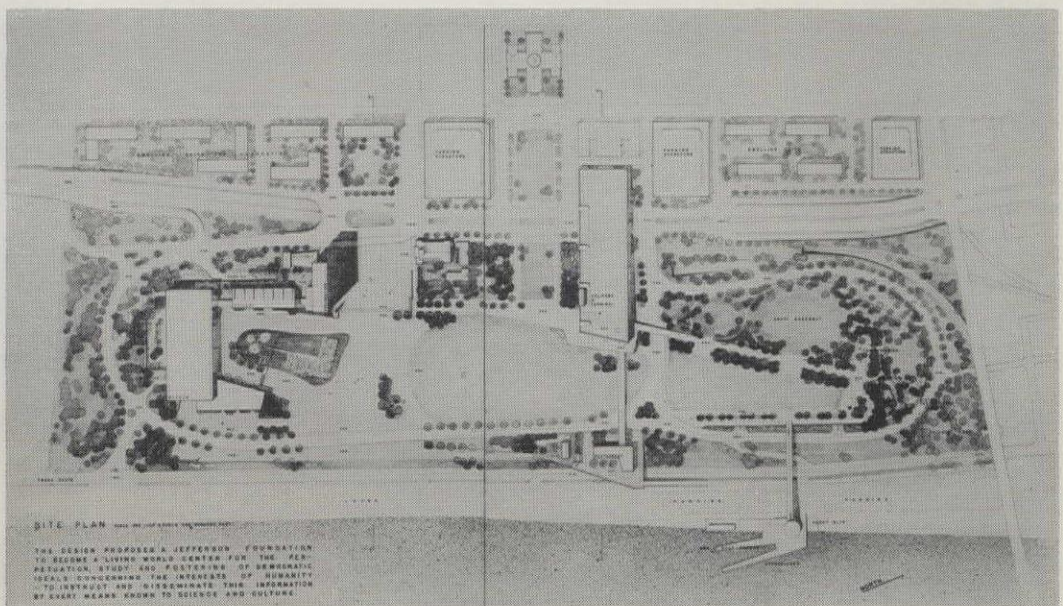


JOHN F. BECHTOLD



FINAL STAGE

The qualities that recommended the First Stage design to the Jury of Award were retained in this solution.



FIRST STAGE

"An orderly, but informal park with welcome open space" brought this design up for further consideration.



ROBERT B. ROBISON

ON VIEWING THE RESULTS OF THE

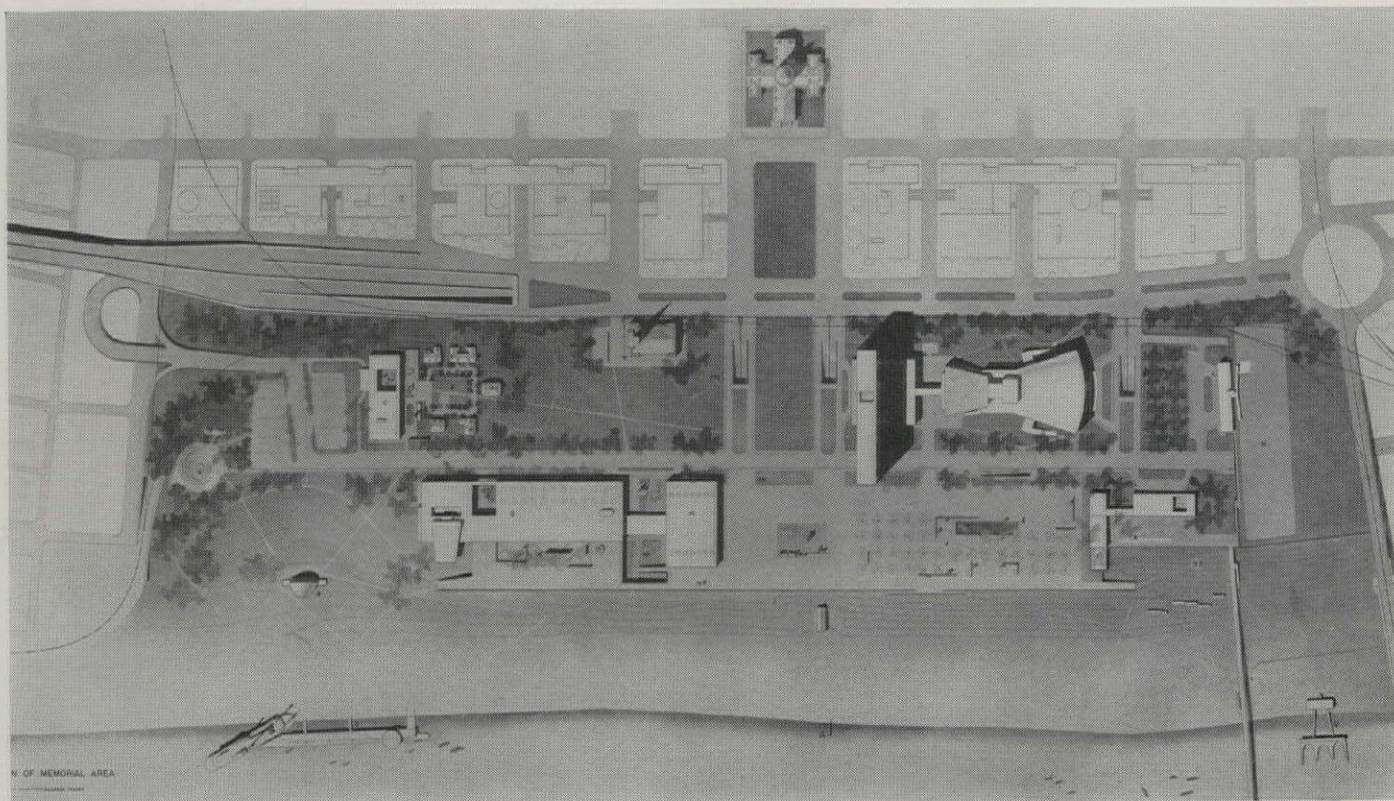
Variety of the solutions offered in the two stages of the Jefferson National Expansion Memorial Competition is suggested by the drawings cited by the Jury of Award—supplemented in this issue by a selection of the design motifs of six additional entries in the First Stage which did not win prizes or mention (see pages 71-73). In an appreciation* of the efforts of the 172 competing teams, which have been estimated to represent collectively an outlay of some \$225,000 in time and preparation, George Howe, professional adviser, has commented:

"The printed Program prepared for the open First Stage of the Competition suggested a very broad study of the Memorial Area in relation to the Cities of St. Louis and East St. Louis, including such features as underground parking, the provision of terminal facilities for land, water, and air transportation, the redevelopment of the Levee and other adjacent

areas, the rearrangement of approaches, and the inclusion of the east bank of the Mississippi in the general plan. As stated in the text, the purpose of this study was to suggest a resolution of the 'conflict' existing between the complex needs, purposes, and obligations of those whose interests are, or will be, affected by the Memorial development. . . . On the other hand, in the . . . Second Stage . . . the requirements were limited essentially to those fulfilling purposes already sanctioned in principle by Federal law and policy, namely a Monument, the landscaping of the Historic Site, and a Museum or Museums, all within the boundaries of the Site. These limitations have caused some questioning, as to whether they had been anticipated when the First Stage Program was prepared and as to the propriety, in a two-stage competition, of establishing requirements for . . . time and thought to the solution of complex problems which were to be eliminated in the Second Stage.

"In answer to the first part of the question, as to whether the ultimate limitations were anticipated or not, the answer is that the possible necessity of such

* The editors have received permission to excerpt from a foreword written by Howe for a book of the Competition drawings and related material to be published by J.N.E.M.A.



FIRST STAGE ALTERNATE

a recreation area across the river.

Hugh Stubbins, Jr., and G. Holmes Perkins suggested "an Institute for Democracy" in the Memorial Site, and

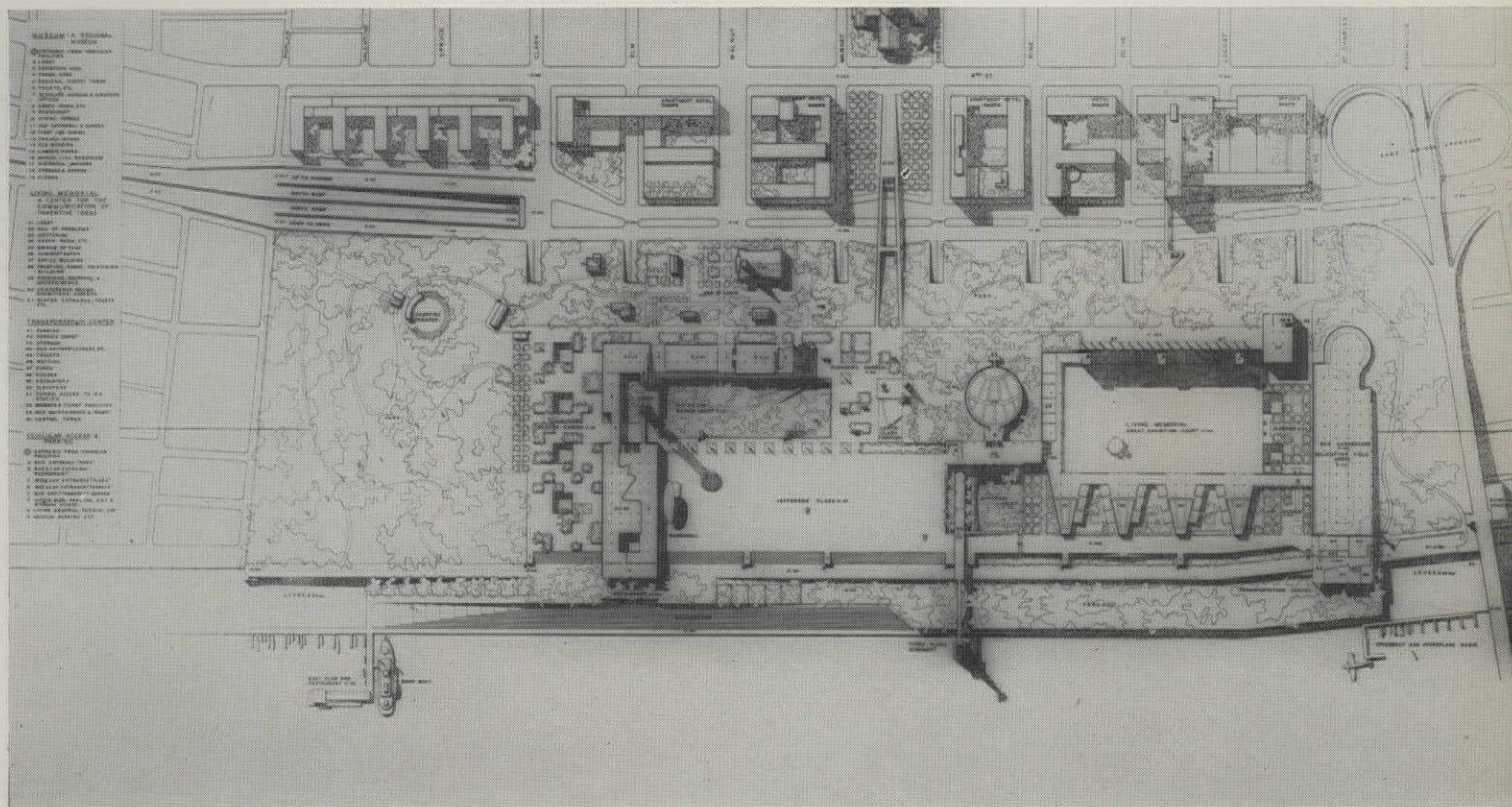
COMPETITION

limitations was always in view in preparing the Program, and the Program actually so stated. . . . The Sponsoring Association hoped and made every effort, using the First Stage of the Competition as a fulcrum, to obtain the consideration, in the Second Stage, of problems other than those under the direct control of the owner . . . the owner being the People of the United States. . . . However, the representative of the owner at the Site, namely the National Park Service of the Department of the Interior, maintained to the end that it was unauthorized, either by law or policy, to consider such problems or to accept for recommendation to higher authority any plan in which these were presented. Since the next necessary step in the political series is acceptance by the Secretary of the Interior of a plan for recommendation, the Association . . . decided, wisely I believe it must appear to all, to lower its sights for the time being. This does not mean that the accessory features included in the First Stage requirements have been permanently abandoned. . . .

"The answer to the second part of the question, as

to whether it was proper to establish such broad requirements . . . knowing they might have to be radically reduced . . . (is) . . . I cannot but feel, as the Professional Adviser solely responsible for the decision to do so, that it was. From the point of view of the Competitors in the First Stage these broad requirements permitted them to display their skills more fully and from the point of view of the Jury to establish an opinion as to their way of thought and abilities. . . .

"As I was also responsible for the suggestion contained in the First Stage requirements that architects associate themselves with painters and sculptors and include their designs in the submissions, I feel impelled to state for the record that the suggestion was a mistake. . . . It proved humanly impossible for the Jury to arrive at balanced judgments based on plan and adornment simultaneously. . . . As a matter of practice, therefore, I am now convinced that competitions in architecture, including landscape architecture on the one hand and the two sister arts on the other, should be held independently."



FIRST STAGE ALTERNATE Percival Goodman, with Jacques Lipchitz, Mitzi Solomon, Ben Zion, and Paul Goodman, envisioned a Regional Museum and a Center for Communication of Inventive Ideas.

ENTRANTS IN THE COMPETITION

Kazumi Adachi, Los Angeles, Calif.; Bissell Alderman, Holyoke, Mass.; Joseph Amisano & Associates, New York, N. Y.; Frank T. Andrews, Cleveland, Ohio; **Harris Armstrong**, Kirkwood, Mo.; Associates in Modern Architecture, Chicago, Ill.; L. F. Ayres, Indianapolis, Ind.

Shelley I. Baggett, Chicago, Ill.; Roger Bailey, Ann Arbor, Mich.; David Baker, Washington, D. C.; Harry Balisky, Elmhurst, N. Y.; Herman J. Bargehr, Chicago, Ill.; George D. Barnett, Kansas City, Mo.; Stuart Moffett Barnette, Ithaca, N. Y.; L. S. Bellman, Toledo, Ohio; Noland Blass, Jr., Little Rock, Ark.; Charles A. Blessing, Boston, Mass.; William Boedefeld, Kansas City, Mo.; Charles E. Boettcher, Rockford, Ill.; **Breger, Hornbostel & Lewis**, New York, N. Y.; C. C. Briggs, Peoria, Ill.; Ralph M. Buffington, Houston, Tex.; Henry Charles Burge & Associates, Los Angeles, Calif.; J. W. Burt, McComb, Miss.; J. J. Butler, New York, N. Y.

Joseph Caponetto & Associates, New York, N. Y.; David W. Carlson, Chicago, Ill.; J. Gordon Carr, New York, N. Y.; W. Brooks Cavin, Jr., St. Paul, Minn.; C. J. Chamales, Chicago, Ill.; Gordon W. G. Chesser, Philadelphia, Pa.; James I. Clark, Kansas City, Mo.; H. P. Clarkson, New York, N. Y.; Paul E. Corrubia, Tulsa, Okla.

A. G. d'Angelo, New York, N. Y.; A. F. Deam, Philadelphia, Pa.; J. S. Detlie, Seattle, Wash.; Frank C. Dill, Houston, Tex.; L. C. Dillenback, Syracuse, N. Y.; Grover W. Dimond Associates, St. Paul, Minn.; Kaneji Domoto, New Rochelle, N. Y.; Frederick Dunn & Associates, St. Louis, Mo.

Charles Eames, West Los Angeles, Calif.; Robert Elkington, St. Louis, Mo.; Thomas S. Elston, Jr., Carmel, Calif.

Edward M. Fearnley, Gainesville, Fla.; A. Fingado & D. E. Olsen, San Francisco, Calif.; Edward J. Flemming, Orelan, Pa.; Herbert Fritz, Atlanta, Ga.

Earl T. Gerding, Ottawa, Ill.; Paul Gerhardt, Jr., & Lester O. Johnson, Chicago, Ill.; F. M. Ginsbern & Associates, New York, N. Y.; Arthur H. Goddard, Bayside, N. Y.; Joseph P. Golden, Bala-Cynwyd, Pa.; **Percival Goodman**, New York, N. Y.; Anthony A. Grasso, Brooklyn, N. Y.; G. J. Griese-

nauer, St. Louis, Mo.; Walter Gropius, Cambridge, Mass.; M. DeWitt Grow, Toledo, Ohio; Eric Gugler, New York, N. Y.

William C. Hale, Jacksonville, Fla.; Ralph W. Hammett, Ann Arbor, Mich.; L. Nicholas Haritonoff, New York, N. Y.; Albert H. Harmon, Lexington, Ky.; W. K. Harrison, New York, N. Y.; Fred J. Hartstern, Louisville, Ky.; Don Hatch, New York, N. Y.; Robert Helmer, St. Albans, N. Y.; Thomas K. Hendryx, Bradford, Pa.; Axel Horn, New York, N. Y.; Lawrence E. Hovik, St. Paul, Minn.; Hugman & Silber, San Antonio, Tex.; John W. Huntington, Hartford, Conn.; Leon Hyzen, Chicago, Ill.

Sten Jacobsson, Detroit, Mich.; B. E. Jamme & Oliver M. Wiard, Summit, N. J.; Bubi Jessen, Austin, Tex.; G. Robert Johnson, Chicago, Ill.

Louis I. Kahn, Philadelphia, Pa.; William E. Kapp, Detroit, Mich.; Sidney L. Katz, New York, N. Y.; R. W. Kennedy & Jordan & Associates, Boston, Mass.; George L. King, Jr., & Associates, Auburn, N. Y.; Martin Douglas King, Seattle, Wash.; A. M. Kirschbaum, Arlington, Va.; Reginald C. Knight, East Aurora, N. Y.; Edward E. Knott, Mt. Rainier, Md.; Carl Koch & Tech Associates, Belmont, Mass.; C. R. Kohlmeier, St. Louis, Mo.

Frank J. LaBianca, Yonkers, N. Y.; Russell W. Lehmann, Milford, Conn.; F. Ray Leimkuehler, St. Louis, Mo.; Frank R. Leslie, University City, Mo.; George Stephen Lewis, Boston, Mass.; Robert A. Little, Cleveland, Ohio; Samuel E. Lunden, Los Angeles, Calif.; Wm. E. Lunt, Jr., & Stephen B. Hazzard, Philadelphia, Pa.

E. J. Mackey, Jr., & Associates, St. Louis, Mo.; Evelina Magruder, Charlottesville, Va.; Douglas P. Maier, Cleveland, Ohio; Guy C. Mariner, Pelham Manor, N. Y.; George J. Maritz & Jasper D. Ward, St. Louis, Mo.; Raymond E. Maritz, St. Louis, Mo.; George M. Martin, Cincinnati, Ohio; James A. Mitchell, Pittsburgh, Pa.; W. G. Moeckel & A. W. Franzen, Wilmington, Del.; William Mooser, Jr., San Francisco, Calif.; David H. Morgan, Philadelphia, Pa.; James D. Murphy, Boston, Mass.

New Age Associates, Minneapolis, Minn.; Mr. & Mrs. Edward W. Novak, Decorah, Iowa; John Nussbaum, Jr., Normandy, Mo.

Paul Joseph Ockert, Cleveland, Ohio; E. J. O'Con-

nor, Washington, D. C.; E. W. Ohlinger, Brooklyn, N. Y.; Allison Owen, New Orleans, La.

Horace Peaslee, Washington, D. C.; R. C. Perkins & Paul F. Schelp, Detroit, Mich.; **Gordon A. Phillips & William Eng**, Urbana, Ill.; **Pilafian & Montana**, Detroit, Mich.; Ralph Pomerance, New York, N. Y.; J. O. Post, New York, N. Y.

T. Marshall Rainey & Associates, Cleveland, Ohio; Percy E. Ramsay, Webster Groves, Mo.; Ralph Rapson, Cambridge, Mass.; W. L. Rathmann, St. Louis, Mo.; A. D. Reed, Scotia, N. Y.; H. Carl, B. Reiff & John Conzelman, St. Louis, Mo.; Norman N. Rice, Philadelphia, Pa.; Walter T. Rolfe, Houston, Tex.; George C. Rudolph, Jr., New York, N. Y.; Henri Rush, St. Louis, Mo.

Eero Saarinen & Associates, Bloomfield Hills, Mich.; Eliel Saarinen, Bloomfield Hills, Mich.; Clinton A. Schofield, New York, N. Y.; William L. Schubert, Libertyville, Ill.; E. J. Schutt, Rutherford, N. J.; Isadore Shank, Clayton, Mo.; Benjamin S. Sheinwald, Boston, Mass.; John T. Sheridan, Columbia, Ill.; Grant M. Simon, Philadelphia, Pa.; Skidmore, Owings & Merrill, New York, N. Y.; R. H. Smythe, New York, N. Y.; Eldredge Snyder, New York, N. Y.; Leon R. Snyder, Jr., Battle Creek, Mich.; J. D. Stephen, New York, N. Y.; Harold Sterner, New York, N. Y.; Harvey Stevenson, New York, N. Y.; Edward D. Stone, New York, N. Y.; Charles M. Stotz, Pittsburgh, Pa.; **H. Stubbins, Jr.**, Lexington, Mass.

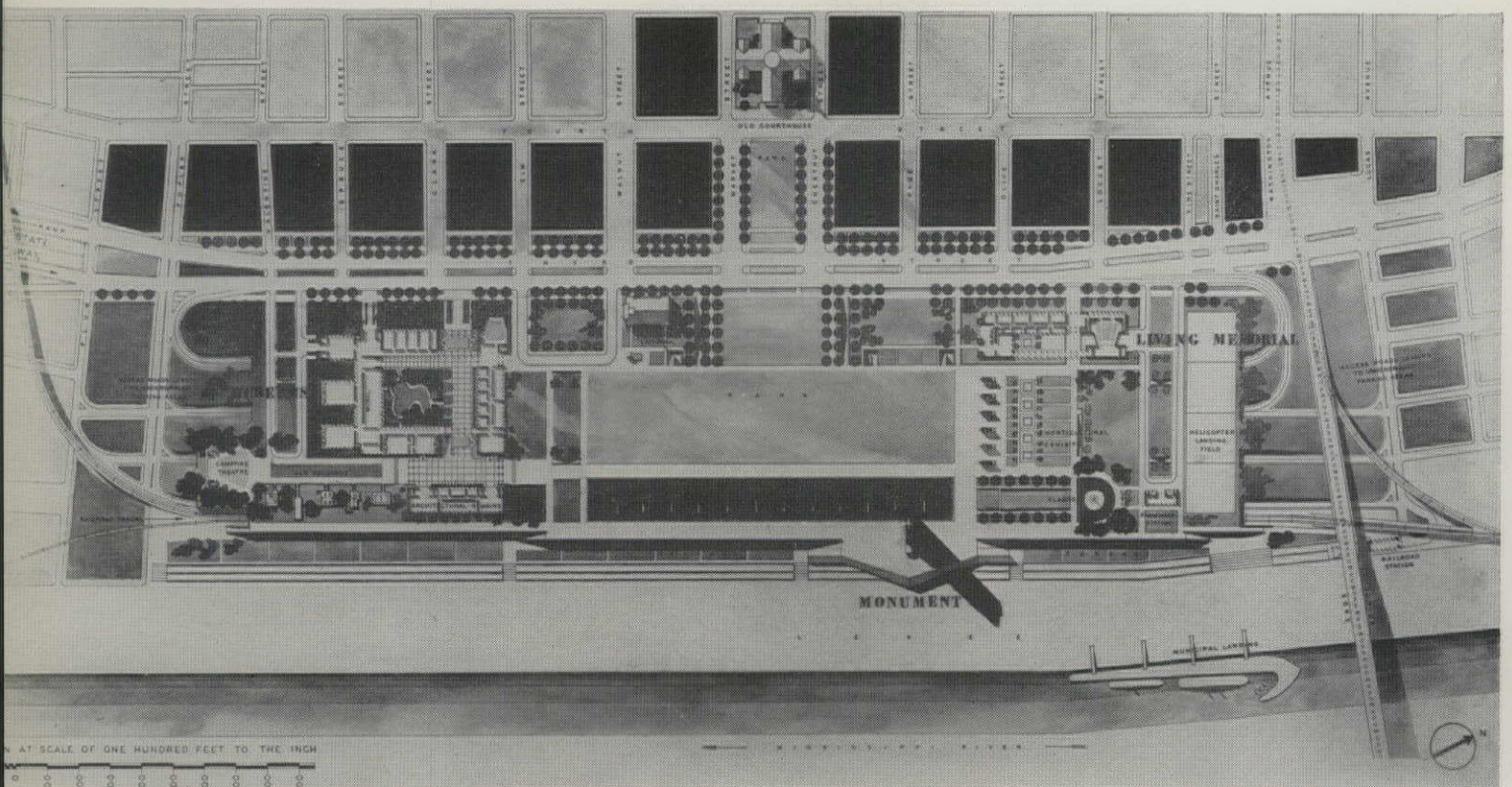
P. J. Tarlowski, Miami, Fla.; Paul Thiry, Seattle, Wash.

Paul Valenti, St. Louis, Mo.; Hari Van Hoefen, St. Louis, Mo.; Anthony J. Varnas, New York, N. Y.; Irene Von Horvath, New York, N. Y.

Edwin Wadsworth, San Mateo, Calif.; Bernard Wagner, Hyattsville, Md.; Harry & John Weese, Chicago, Ill.; Frank E. Wehrle, Sewickley, Pa.; Frank Weise, Chicago, Ill.; Marcus E. Weston, Spring Green, Wis.; Austin Whittlesey, Pasadena, Calif.; Charles D. Wiley, Chicago, Ill.; C. H. Williams, Atlanta, Ga.; Edgar I. Williams, New York, N. Y.; K. E. Wischmeyer, St. Louis, Mo.; A. J. Wolf, Jr., New Orleans, La.

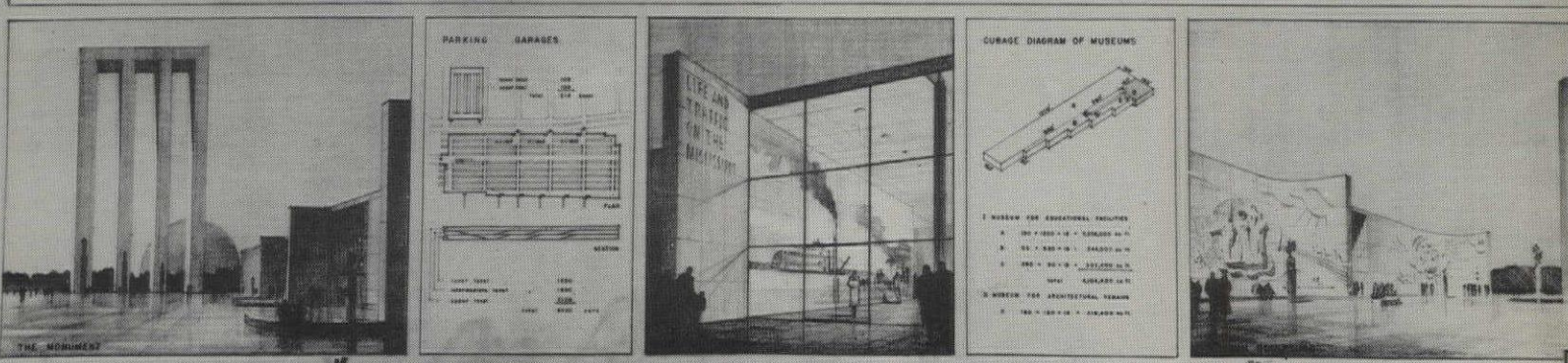
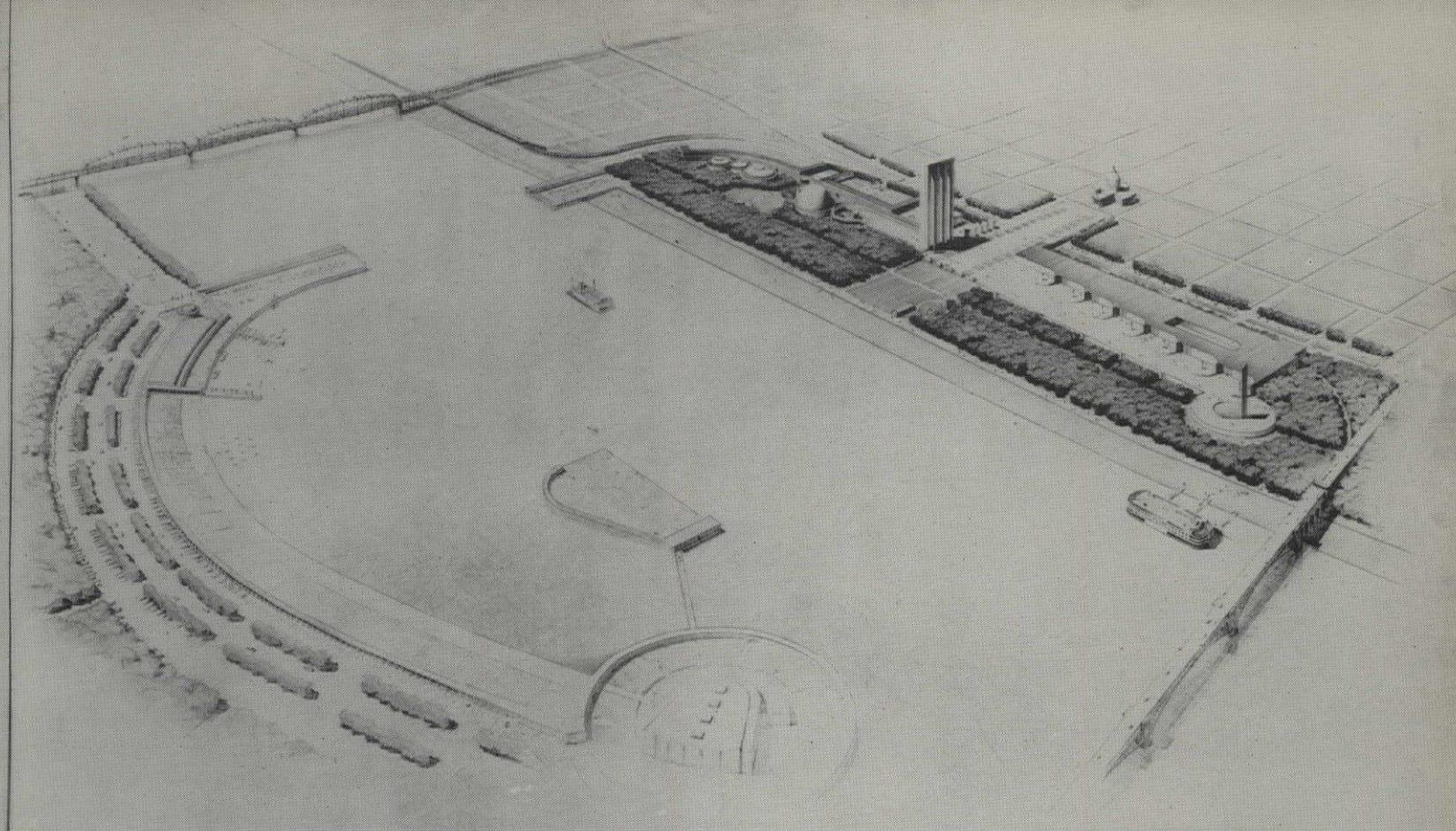
Minoru Yamasaki, Detroit, Mich.; Basil Yurchenco, Washington, D. C.

C. C. Zantzinger, Philadelphia, Pa.



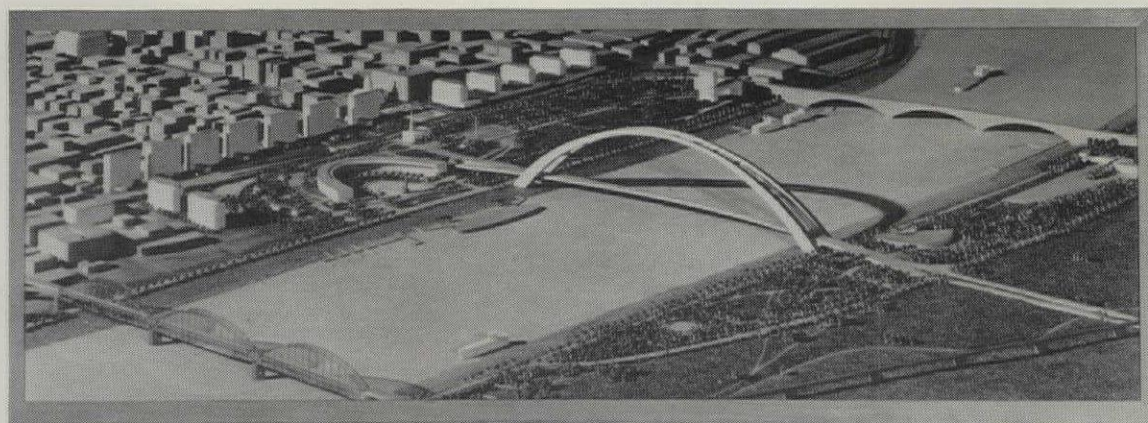
FIRST STAGE ALTERNATE
of the required elements.

Pilafian & Montana with Samuel A. Cashwan, Henry Bernstein, and Edward A. Eichstedt submitted this orderly disposition

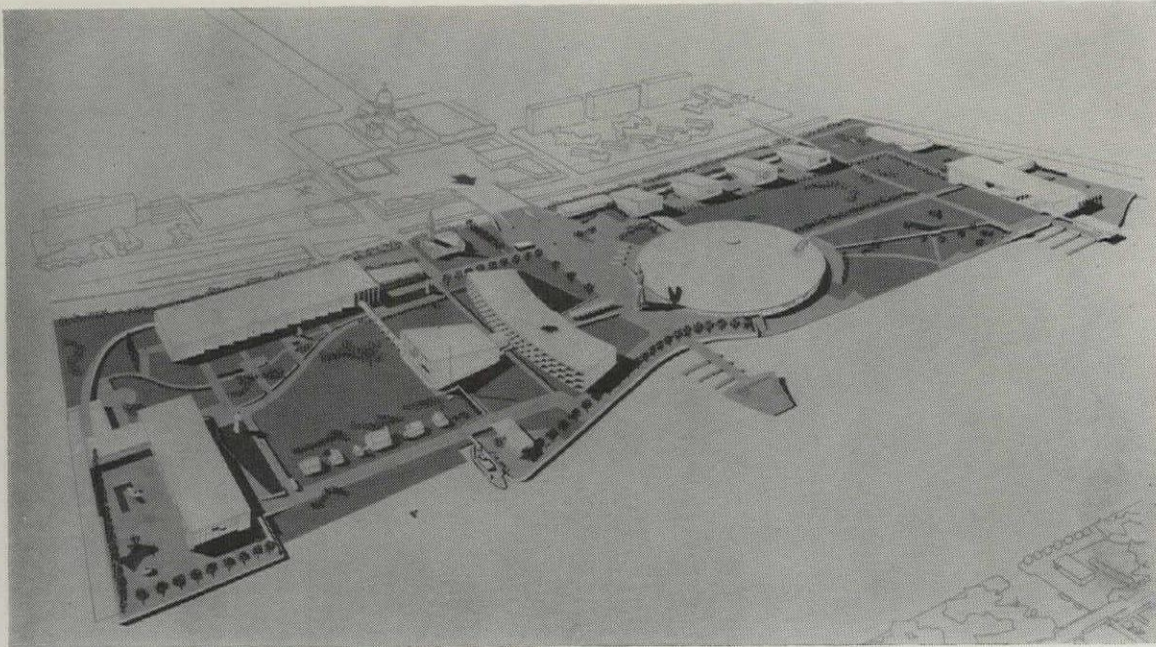


ENTRY Eliel Saarinen, with J. Henderson Barr, proposed a lofty Monument facing the intersection of a mall to the Old Courthouse and a court beside a tapering museum.

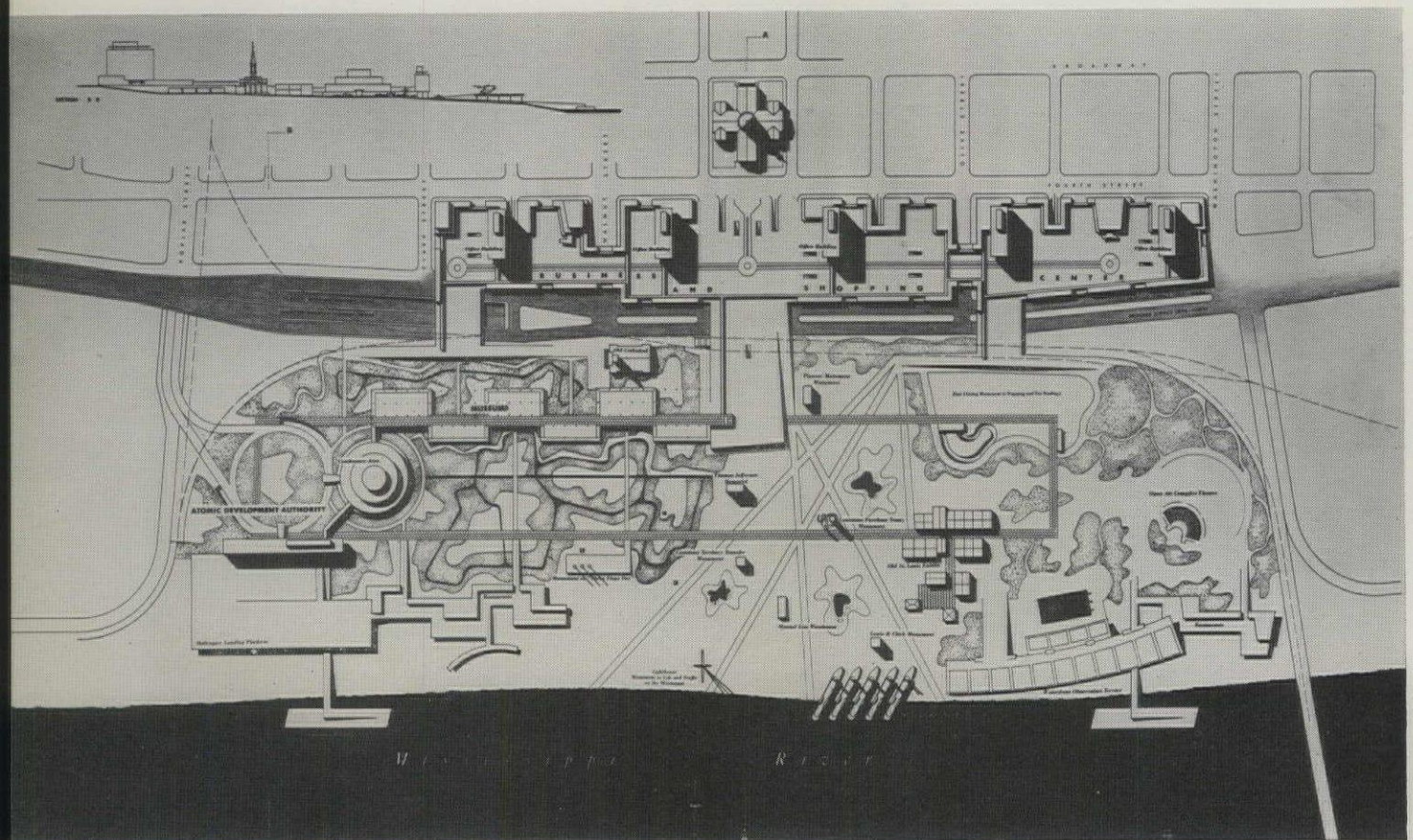
OTHER FIRST STAGE ENTRIES



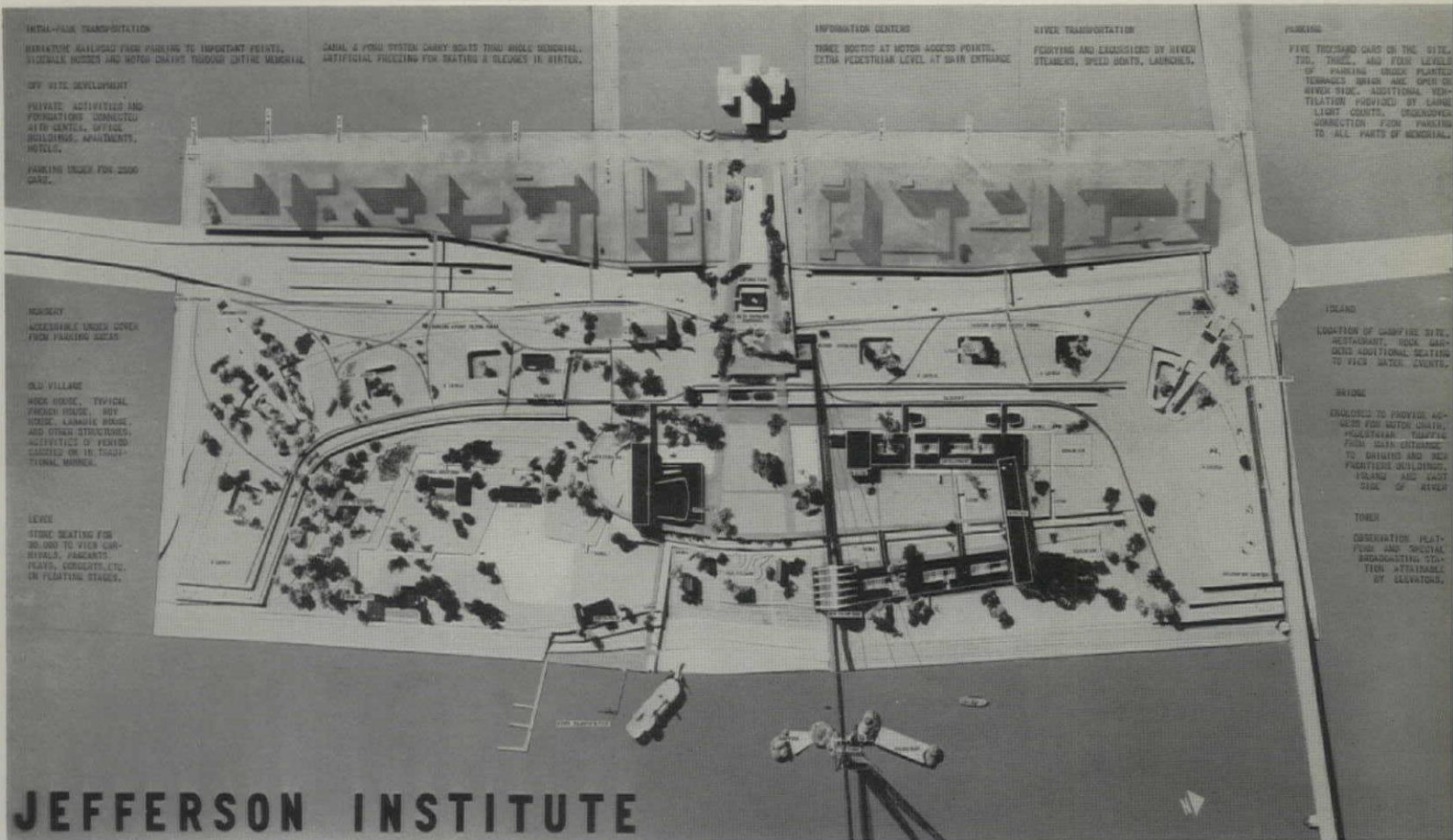
ENTRY Eugene J. Mackey and Joseph D. Murphy used for illustration a photograph of a model of their design, featuring a monumental bridge to play area across the river.



ENTRY Robert A. Little designed a series of museums and display buildings which would dominate the Memorial Site, with a monumental figure on the mall bisecting the park.

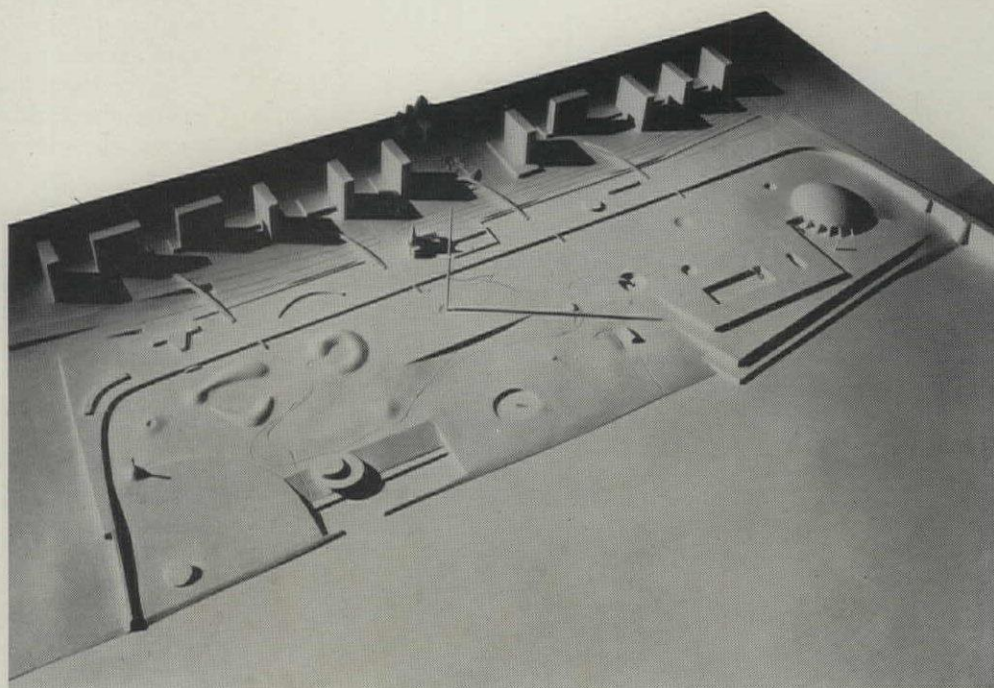


ENTRY Harrison & Abramovitz developed a diffuse scheme for a park dotted with monuments to historic events and (at left) on Atomic Development Authority building.

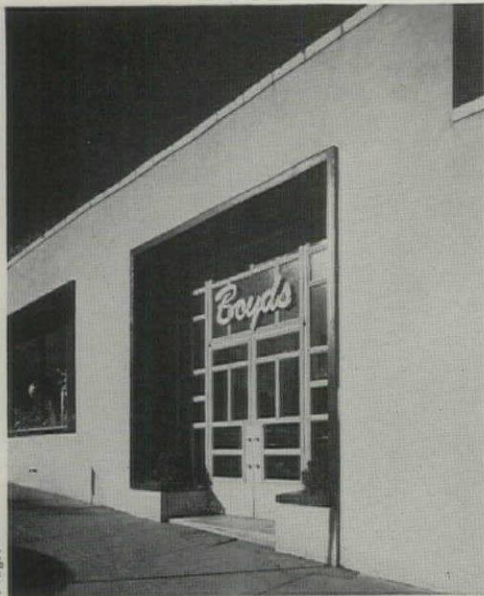


ENTRY Carl Koch with Frederic L. Day, Joel L. Lipschutz, Julian and Suzanne Underwood, Arthur McVoy, Karl Zerbe, and Peter Abate submitted this plan dominated by a bridge.

OTHER FIRST STAGE ENTRIES



ENTRY Edward D. Stone Associates with Isamo Noguchi and Henry Billings sought to maintain the freedom of the open site, placing many facilities of their plan partially underground.



Plagett



SPECIALTY SHOP from a row of suburban stores, by Frederick Dunn, architect, accommodates Boyd's Clayton Store. A low cost alteration, it is distinguished for its simple exterior relieved only by the patterned door of natural color wood and glass.

ST. LOUIS CONTEMPORARY WORK

COMMERCIAL

In preparation last year of a Comprehensive City Plan for St. Louis, statisticians of the active City Plan Commission* found the commercial areas to be "extremely small" in proportion to present land use of the entire city, having actually declined in the last decade, due partly to metropolitan decentralization. The entire site of the Creole town of St. Louis has now been cleared as a riverfront Historic Site (see page 51) but efforts will be made to save the adjacent banking and downtown shopping center through enforcing existing zoning regulations and by clearing the narrow streets of parked cars. Meantime, shopping centers are forming at strategic points throughout St. Louis County, principal department stores downtown are establishing branch stores for neighborhoods, and the new pattern seems to be stimulating trade.

*E. J. Russell, chairman; Harland Bartholomew, engineer.



PUBLISHING PLANT for Pulitzer Publishing Company, by Mauran, Russell, Crowell & Mullgardt, architects, is a million dollar reinforced concrete structure faced with gray Indiana limestone and base of Stygian black granite at sidewalk level — where passers-by see through a band of large windows the high speed presses printing the "St. Louis Post-Dispatch". The louver-type casements are all steel.

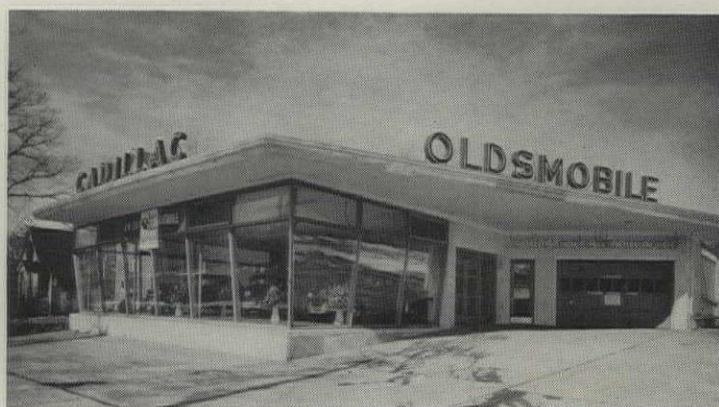


Piaget

OFFICE AND DISPLAY BUILDING for American Stove Company, featuring Magic Chef line, is just being completed by Harris Armstrong, architect and landscape architect. The display and office structure is faced with Indiana limestone and the service wing at back, containing fire tower, elevators, toilets, etc., is faced with warm red brick, a material virtually traditional in St. Louis for industrial and commercial buildings.



Piaget



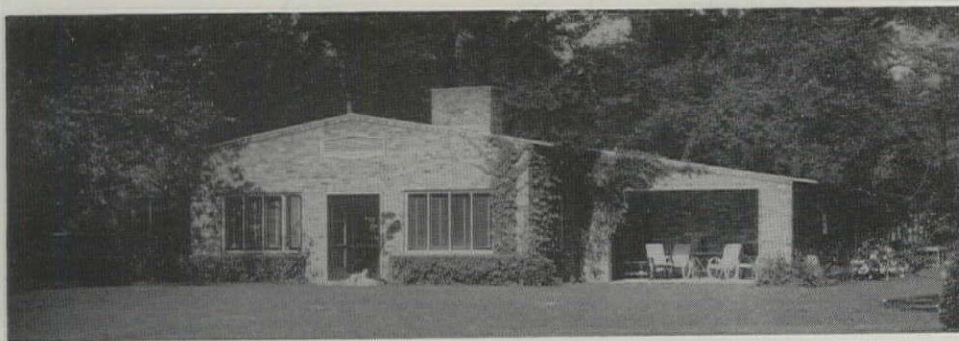
Piaget

AUTOMOBILE DISPLAY AND SERVICE BUILDINGS (left) by Marcel Boulicault, architect, and (right) by Hugo K. Graf, architect, are prototypes of a number that are being built on traffic arteries and at strategic intersections, as neighborhood shopping centers of St. Louis thrive on the decentralization now taking place. Display windows are set at varying angles, or tilted, or curved to offer better visibility to passers-by.

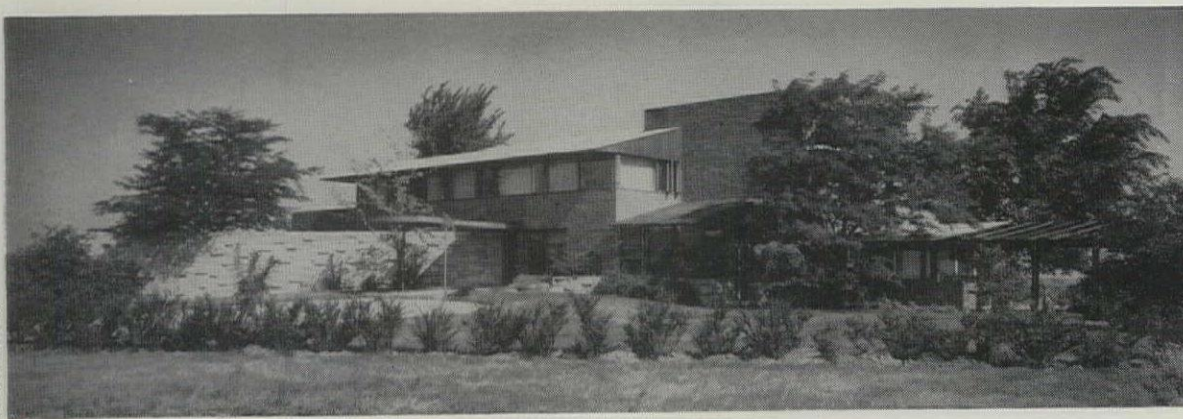


HOUSE of rough-cut local stone and brick by Samuel A. Marx, Noel L. Flint & Charles W. Schonne, Chicago architects, and Guy Study, resident architect for Morton D. May. A metal canopy shades the open glass front overlooking the garden terrace.

Hedrich-Blessing



HOUSE of random brick construction with low-pitched roof designed for the DeStaeble family by Kenneth E. Wischmeyer & Charles W. Lorenz, architects.



Charles Lorenz

HOUSE of red brick and natural color wood, by Harris Armstrong, architect, for Dr. and Mrs. Evarts A. Graham, in St. Louis County. Service yard is hidden by the wall of rough-cut stone along the entrance drive.

ST. LOUIS

CONTEMPORARY WORK



HOUSE of deep red brick and stained oak, by E. J. Mutrux & W. A. Bernoudy, architects, was the first in St. Louis (1940) to use hot water radiant heating. It is now the Louis E. Mutrux residence.

RESIDENTIAL

Consistent with the conservative atmosphere of St. Louis, it is a city of homes. About three-fourths of the net occupied area of the city is used for residential purposes, with related public and semi-public buildings. New homes are almost all in suburbs which have developed in a wide arc west of the older neighborhoods. The westward move started when railroad traffic began to supplant the teeming river carriers. Obsolescence and blight have followed the same direction.



R. P. Buchmueller

HOUSE of local limestone and stained oak, by Robert L. Fischer, designer, for himself and another faculty member at Washington University. Roofs can carry 1½" of water for insulation during hot summer months.

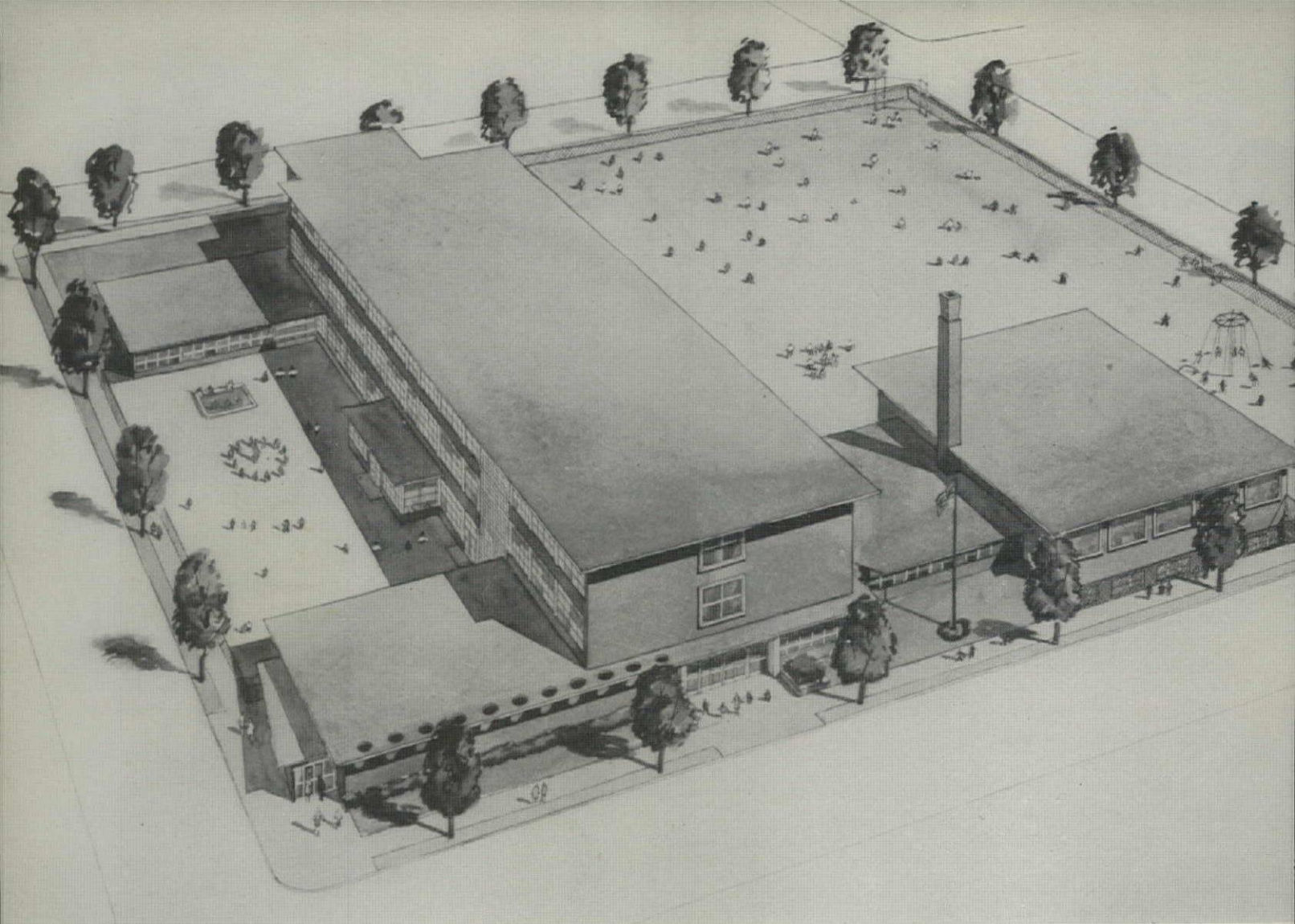


Piaget

HOUSE of brick and wood, by Robert Elkington, architect, on a suburban site for Beecher Metz.

LOW COST HOUSES of stressed-skin plywood panels insulated on both faces, fabricated in a shop built on the 21-acre community site by G. R. Kiewitt, architect-engineer. The kitchen-bath units are of the prefabricated "core" type. Large windows and also ventilated attics help to combat summer temperatures.





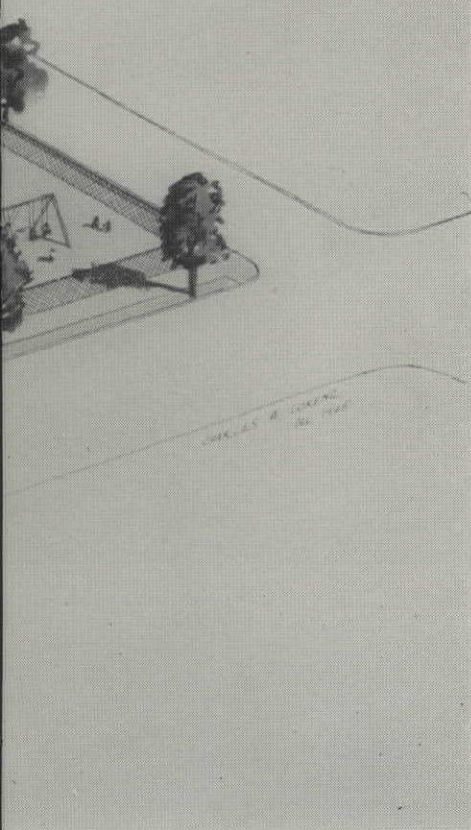
ELEMENTARY SCHOOL of reinforced concrete construction is the first unit to be started under the large scale school modernization program directed by Joseph P. Sullivan, commissioner of school buildings, with Wischmeyer & Lorenz as consulting architects (See May 1946 PROGRESSIVE ARCHITECTURE). Aluminum sash, glazed tile in corridors, controlled daylighting, wardrobes replacing the usual small lockers, sturdiest types of furniture and equipment have been specified to provide optimum classroom conditions but minimum maintenance cost.



DOCTORS' OFFICE BUILDING to be built in Clayton, a St. Louis suburb, designed by Joseph D. Murphy and Eugene J. Mackey, architects, for a group of doctors who are veterans and former students of both St. Louis and Washington Universities. Contours of the property suggested the parking area at an intermediate level, with access to the second floor by a short ramp.

ST. LOUIS

CONTEMPORARY WORK



INSTITUTIONAL

Pride in public and semi-public buildings is evident among St. Louisans. The religious heritage is rich, resulting in hundreds of churches and church schools and related structures; education has been of grave public concern since the first English school was opened in 1808 by George Tompkins, a young Virginian studying law who later became chief justice of the Missouri Supreme Court; millions of dollars were lavished on city buildings and public plazas in the ostentatious styles of the twenties. The emphasis locally on residential character of St. Louis is reflected by the present objective of the planners there to "create an attractive environment for living throughout the city" which implies stabilization of home neighborhoods and further zoning protection of the related schools, churches, clubs, and other community structures.

Piaget

CHURCH of St. Mark, By Charles Nagel, Jr., and Frederick Dunn, architects, for a Protestant Episcopal parish, is a simple structure of reinforced concrete and brick, enriched by Sheila Burlingame's sculpture of St. Mark beside the entrance and by blue-gray leaded windows by Emil Frei.



MACHINE SHOP in a suburban setting, by Harris Armstrong, architect and landscape architect, for Semple Developments Company, is a one-story concrete structure, air-conditioned and otherwise specially designed for safeguarding manufacture of precision machines.

ST. LOUIS CONTEMPORARY WORK

INDUSTRIAL

The exceptional number of her small and large industries long has been the boast of St. Louis — and the diversity of these has pulled the city through hard times and depressions more than once. Presumably the making of equipment for the horde of pioneers and settlers who poured through St. Louis to the newly-acquired West, provisioning and outfitting in the booming river port, started many of the industries that have continued to our time. Then the bigger expansion of the city after the Civil War, with its emphasis on solid growth and big business, completed the picture. Presently a new impetus is being felt — large plants expanding and new smaller industries springing up there. Architecture of these factories and shops ranges from the Germanic glories of the castellated breweries to the grim realities of rolling mills — but there is evident attention now to improved layout of the plant facilities, simpler enclosing structures.

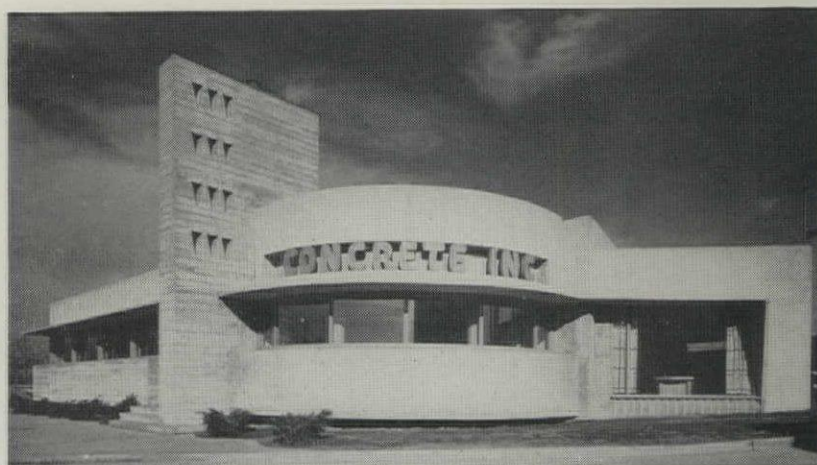


CENTRAL OFFICE BUILDING for Monsanto Chemical Company is a new "semi-windowless" steel and brick structure. To provide the same working conditions for all employees, it is uniformly lighted and air-conditioned throughout. The few windows provided by the architect, Walter J. Knight, are intended for emergency use only.



Piaget

FACTORY designed by Diedrich F. Rixmann, architect, for the manufacture of machinery, industrial conveyors, etc., required for "flow-line" production of coal, fronts on a city park and its appearance had to win approval of city authorities. Exterior walls are brick. On the street front, the windows are shaded from the west sun by transite "eyebrows" at two heights, which lower temperature perceptibly in that end of the factory. Principal daytime light source is a monitor skylight extending the length of the Central Mine Equipment Company factory.



PLANT OFFICE for Concrete, Inc., by Hari van Hoefen, architect, demonstrates uses of the company's product. Filing cases for the office are set in the portion of the building projecting under the bands of windows. The structure is air-conditioned.

Piaget

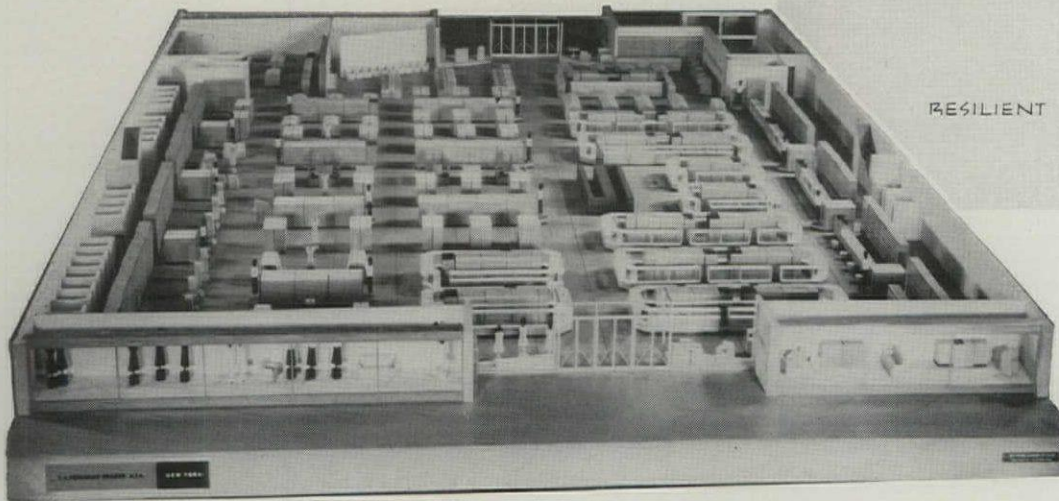


Piaget

WAREHOUSE recently completed for United States Steel Supply Company was designed and built by American Bridge Company. Storage facilities are being increased in St. Louis to accommodate new industries and growing Midwest trade.



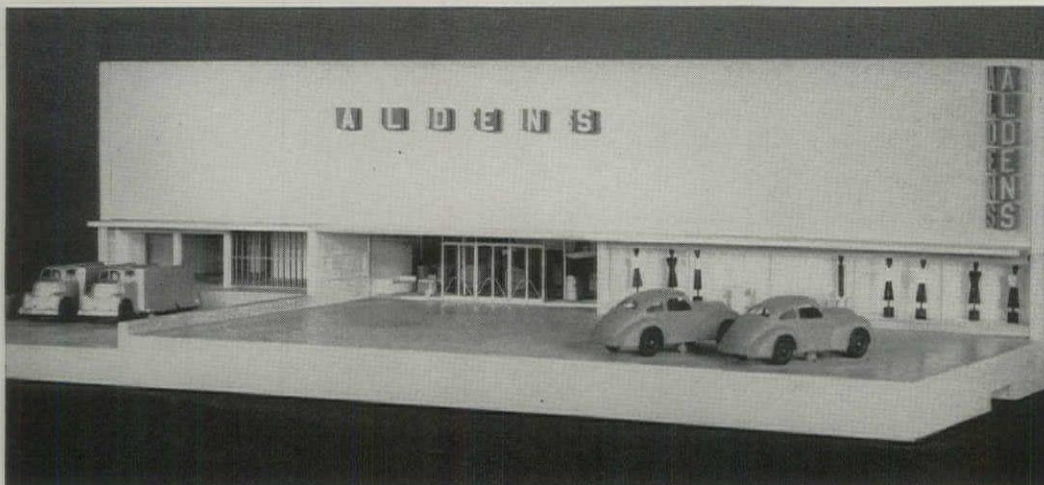
Materials and Methods



RESILIENT SIDEWALK SURFACING

MODEL of a hypothetical retail store

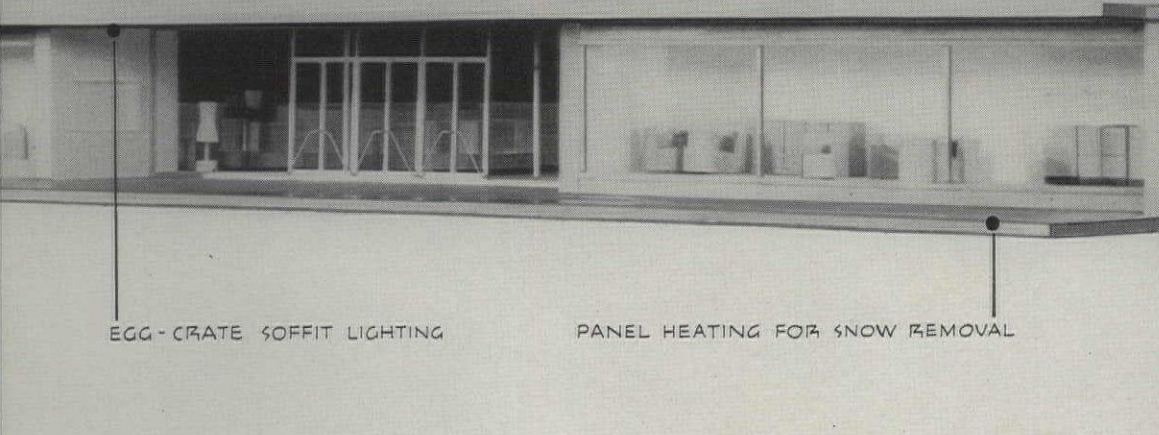
PLANNING is demonstrated by means of magnetic models on a light steel plate representing the floor, marked off modularly by painted lines. Each fixture model has a small but powerful magnet in its base. This makes it possible to stand the store model on edge, for viewing by a number of people around a table or in a lecture room, or to move the model without displacing fixtures. Areas allotted to each department can be chalked off on the model floor so that fixture arrangement can be worked out in the round. The magnets are of "Alnico," a wartime development. Use of magnetic models offers many possibilities (in addition to store design) to architects. In this model, note the off-center customer entrances which, with the aisles between them, separate the main selling floor into two unequal areas; the larger is for departments requiring ample floor space, the smaller for less demanding departments.



REAR OF MODEL demonstrates importance of parking area and direct customer entrance from it, as well as need for adequate trucking entrance and facilities.

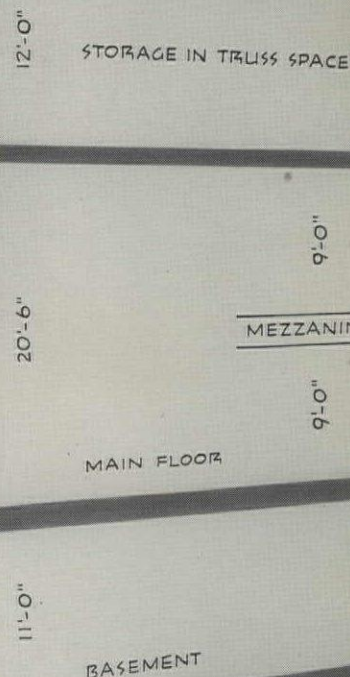
A L D E N S

5



EGG-CRATE SOFFIT LIGHTING

PANEL HEATING FOR SNOW REMOVAL



for a Midwest chain, an example of graphic presentation of planning and equipment selection. Features noted are explained in accompanying text.

VISUAL PLANNING, EQUIPMENT SELECTION, AND ARRANGEMENT FOR SMALL DEPARTMENT STORES

FERDINAND C. A. F. KRAMER, Architect

Department store planning and equipping, in the past, have usually been made on the basis of lengthy written reports and exhaustive statistical surveys. The factual data remain essential; but Architect Kramer has developed a visual method of presentation which enables the store owner to understand instantly what such-and-such a statistic means in architectural terms. In developing his method, Kramer has arrived at a few extremely important conclusions:

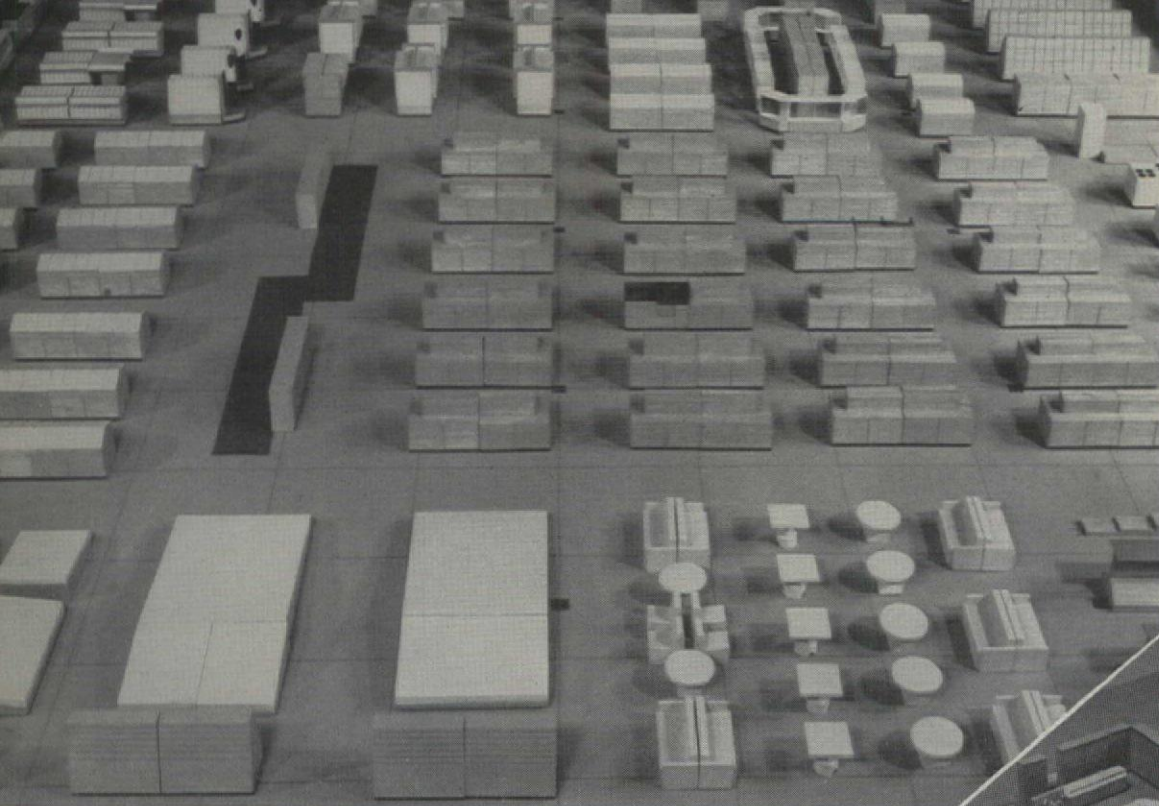
1. Modern construction and building equipment techniques can be better adapted to the department store problem than they have in the past.
2. The presentation is best made with a 3-dimensional model.
3. The multiplicity of selling fixtures found in the usual store can be reduced to a small number of basic units which can be mass-produced and assembled or reassembled into a great variety of modular fixtures.
4. The conventional selling fixture is extremely inefficient, and can be substantially improved by a rational approach to its design.

The architect has assumed a set of normal conditions for a hypothetical store, one of a chain of retail outlets for a Midwest mail-order house. The assumed site has a frontage of 140 ft on Main Street of a small city, and a depth of 200 ft, with parking facilities and trucking access at the rear. The rear customer entrance is as important as the Main Street facade. Areas are as follows:

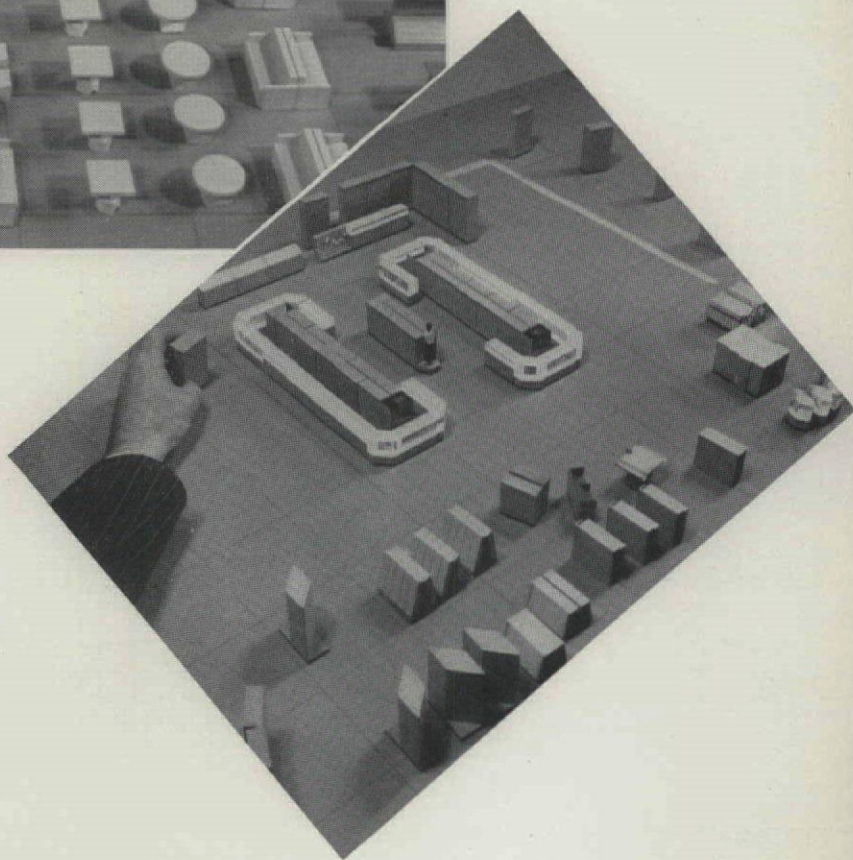
Basement	27,325 sq ft
First fl	27,315 " "
Mezzanine	12,332 " "
Storage fl	26,430 " "

Total — 93,402 sq ft

A basic characteristic, differing from usual construction practice, is complete elimination of columns on the main selling floor. Mezzanine and roof are both supported by deep trusses which span the full 140-ft width. By placing a floor at the bottom chord of the trusses, the truss space becomes a storage warehouse entirely within the building, eliminating expense



PLANNING WITH MODELS makes it possible to proceed from idea directly to reality in miniature, eliminating the steps of translating to and from drawings (at least so far as the lay client is concerned) and reduces the number of costly trial and error attempts which result from incomplete understanding of three-dimensional problems. Rearranging a whole department can be done in a few minutes with the magnetic models, to determine both its suitability and its relationship to the rest of the store.



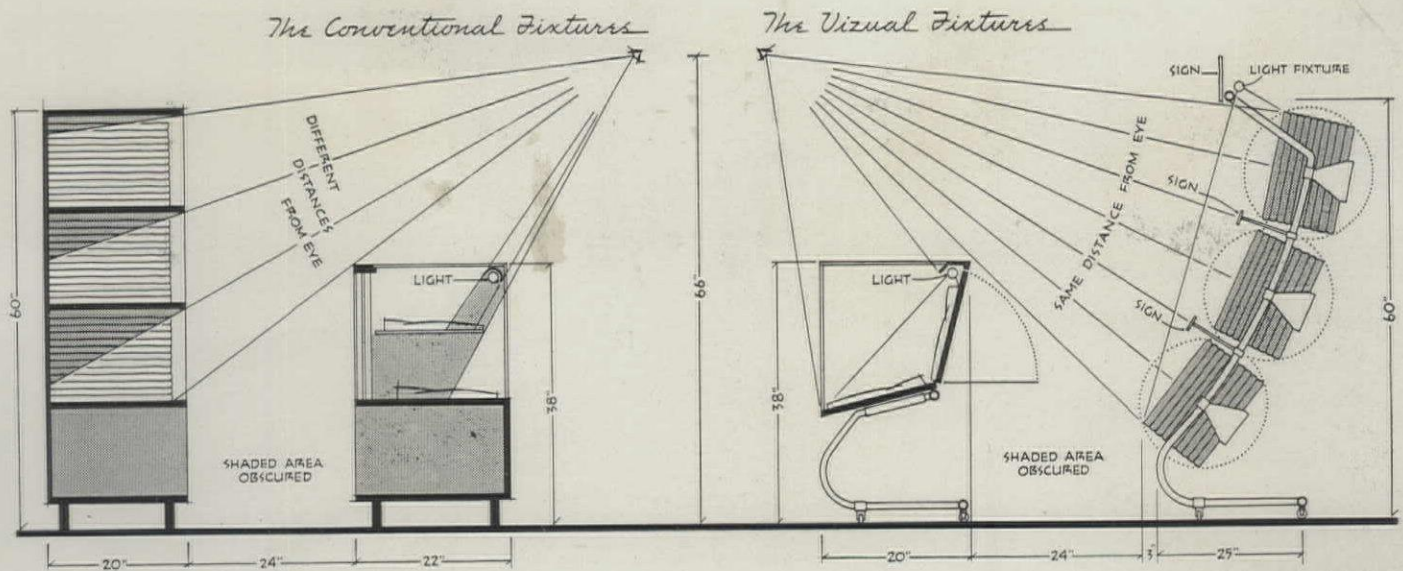
of maintaining a separate warehouse and of trucking facilities ordinarily required. Also, since stock is available immediately at the selling point, more efficient store operation results. In the basement, obvious difficulties lead to support of the first floor by columns; but since these carry little of the structure, bays can be as large as 35 x 25 ft.

The advantages of column elimination, especially valuable on the main floor, are complete flexibility of the selling area and uninterrupted vision in every direction; the increased openness can also help direct attention to the merchandise, which means better selling. Further, not only does a column occupy its own space; it also has unusable space around it, particularly when fixture layout, which customarily is changed periodically, does not fit it.

The building has three entrances. The principal customer entrance is on Main Street, and connects by means of a wide, straight aisle with the rear customer entrance from the

parking space. The truck entrance has space for three trucks, and has adjacent to it a small receiving and shipping room and a freight elevator. Other vertical circulation includes stairs and push button-controlled lifts which deliver wheeled containers of merchandise to a selected floor and return automatically. Most of the vertical circulation of customers is between first floor and basement; moving stairways are needed for this, with supplementary sets of wide, easy stairs which also have flights to the mezzanine.

Show windows, stock and fitting rooms, and shipping room are located around the periphery of the first floor; unloading, stock, and repair space, as well as toilets and mechanical plant, are at the rear of the basement; customer services and offices occupy part of the mezzanine; all the remaining space on these floors is devoted to selling. On the storage floor, trusses are so designed that doors can be cut through them at frequent intervals. One bay is used for marking and distributing merchandise received via freight elevator, and for



SELLING FIXTURE PRE-EVALUATION

ELEMENTS A GOOD FIXTURE SHOULD POSSESS		OPTIMUM RATING	COMMITTEE RATING OF CONVENTIONAL TYPE	YOUR RATING OF "VIZUAL" TYPE
1	VISIBILITY OF MERCHANDISE	16	5	
	A. LIGHTING	8		
	B. SIZE AND SHAPE OF FIXTURE	8		
2	ADEQUACY OF SPACE	14	11	
	A. SPACE FOR DISPLAYED STOCK	6		
	B. SPACE FOR RESERVE STOCK	3		
	C. COMPACTNESS	5		
3	APPEARANCE	12	10	
	A. ATTRACTIVENESS	4		
	B. SIMPLICITY	4		
	C. ABILITY TO BLEND WITH CONVENTIONAL FIXTURES	4		
4	ACCESSIBILITY OF MERCHANDISE TO SALESPERSON	12	6	
5	PROPER SIGNING	10	2	
	A. ATTRACTIVENESS	2		
	B. ABILITY TO ARREST ATTENTION	2		
	C. DURABILITY	2		
	D. CHANGEABILITY	2		
	E. SPACE FOR ADEQUATE INFORMATION	2		
6	SAFETY	8	8	
	A. SAFETY FOR SALESPERSON	3		
	B. SAFETY FOR CUSTOMER	3		
	C. SAFETY FOR MAINTENANCE DEPARTMENT	2		
7	FLEXIBILITY	8	6	
	A. ABILITY TO DISPLAY ADDITIONAL MERCHANDISE	3		
	B. ABILITY TO DISPLAY DIFFERENT MERCHANDISE	3		
	C. EASE OF SHIPPING AND STORING	2		
8	PROTECTION, CLEANABILITY, MAINTENANCE	8	7	
	A. PROTECTION OF MERCHANDISE FROM DUST AND DIRT	4		
	B. EASE OF CLEANING	2		
	C. EASE OF CLEANING FLOOR UNDER FIXTURE	1		
	D. EASE OF REPAIR AND MAINTENANCE	1		
9	ECONOMY OF CONSTRUCTION	6	4	
10	PATENTABILITY	6	0	
		TOTAL 100%	59	

VIZUAL FIXTURES. Out of the studies which led to standardization of conventional selling fixtures there came also the conviction that a more rational approach to fixture design would produce a fixture that would sell more merchandise, and that would be much cheaper to manufacture than the conventional combination of cabinetwork, glazing, lighting, and hardware. The result of much study along this line is the Vizual Fixture, shown at right above in comparison with the conventional. The tabulation herewith presented shows the functions of a fixture and their importance (expressed in percentage terms) as rated by the chain's researchers.

air-conditioning equipment. (If a smaller amount of storage-warehouse space will suffice, the mezzanine well may be floored over and used for storage; this will probably be less costly initially than long-span trusses, but it reintroduces the disadvantages associated with columns.)

While in an actual job the store front would require further study, the architect has several suggestions. The front above the marquee should contain a large identifying sign or signs to be read at a distance. The ones provided on the model, with simultaneous orientation both up and down the street, have individuality as well as readability.

The soffit of the marquee itself contains an egg-crate lighting construction, to throw a soft, pleasant light on passers-by and make them subconsciously aware of the store they are passing. Another suggestion is that the sidewalk in front of the store should be constructed of a durable, slightly resilient substance,

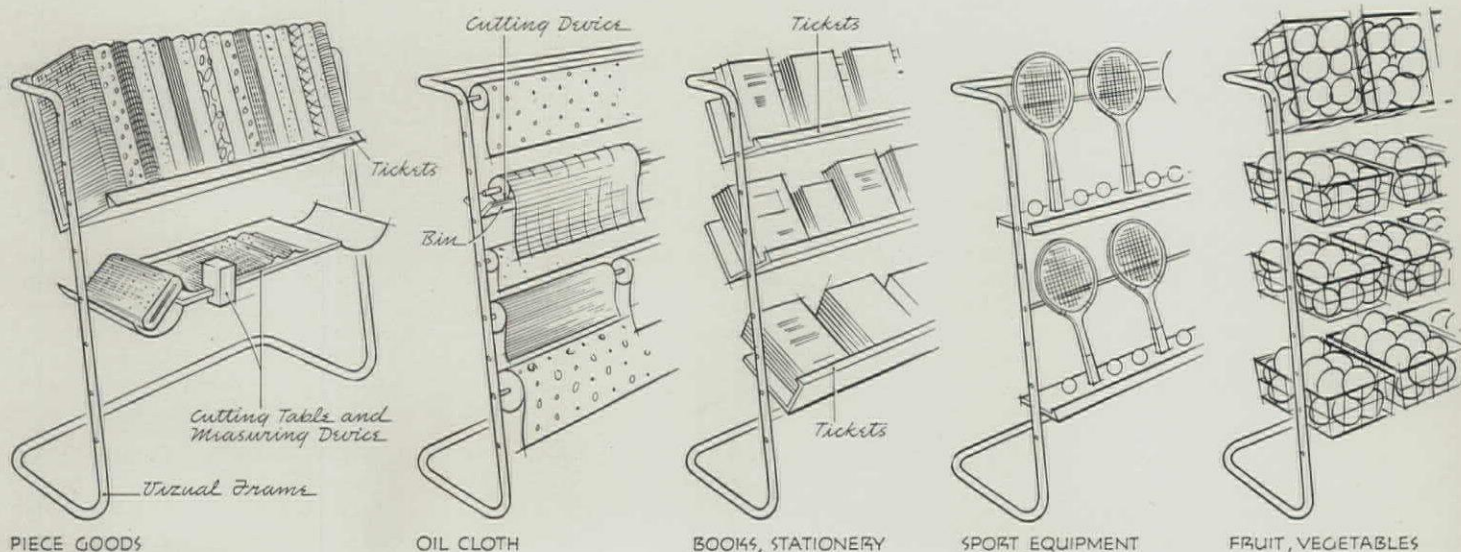
relaxing to walk on, such as rubber terrazzo. In addition, the sidewalk should, in the winter, be slightly warmed by a panel heating system, to serve the double purpose of eliminating snow removal and giving physical relief to the prospective customer.

There are large show windows with closed backgrounds on each side of the front. These will concentrate interest upon the merchandise and, with the necessary separation of vertical lighting units, will make a flexible series of separate show windows which will be easily assignable to various departments. In addition, around the entrance doors there is a 40-ft section of completely open display to allow a clear view of the store within as well as merchandise in the foreground. This concentration upon the interior in the vicinity of the entrance doors will tend to draw the customers in, by removing all visible barriers and attracting interest to things actually within the store.

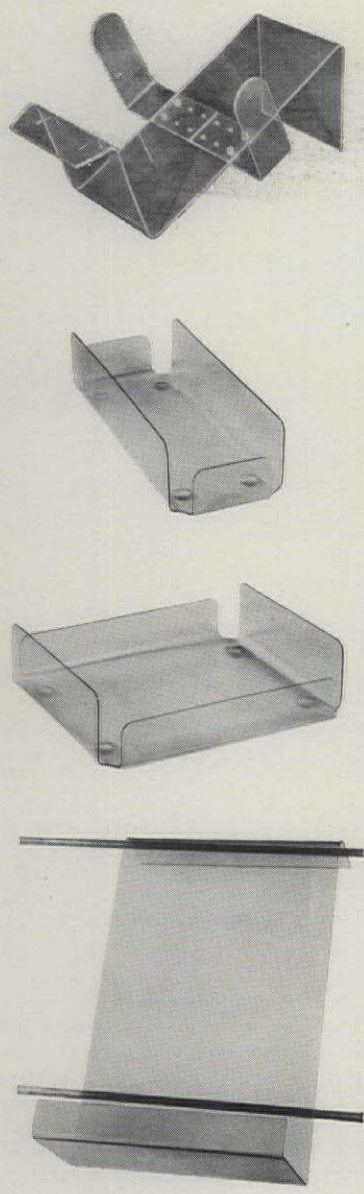


DRAWING to show how an installation of Vizual Fixtures would look.

VIZUAL FIXTURES, as will become apparent from a glance at the illustrations below, are adaptable to many different types of merchandise. The display technique they employ brings the customer close to the things to be sold; it also requires use of devices not ordinarily associated with selling fixtures; and since the merchandise is exposed to such an extent, a store using Vizual Fixtures would probably benefit from air conditioning, or, at least, some form of air cleaning.

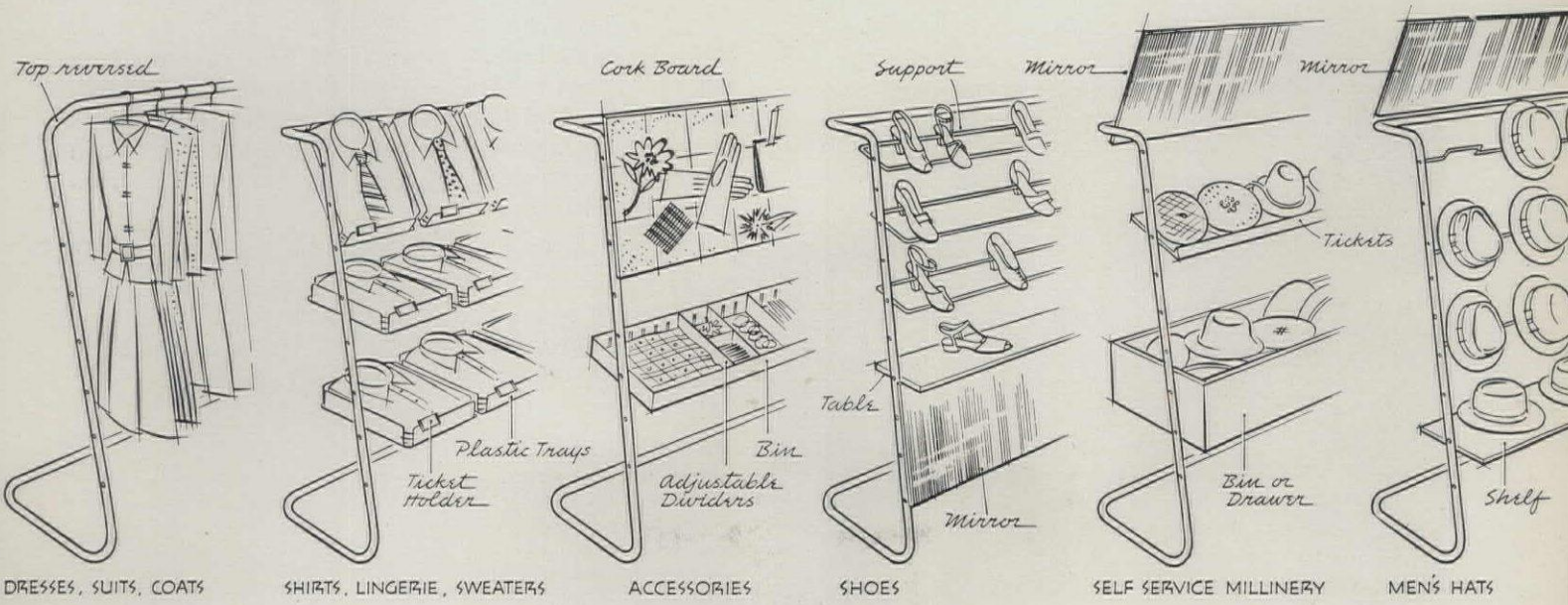


TYPICAL PLASTIC DISPLAY TRAYS



CONVENTIONAL FIXTURE REDESIGNED to approach the Visual Fixture in some respects. Note that merchandise is displayed so that it lies perpendicular to the line of sight, so the beholder's eyes do not have to change focus, for instance, between size-marking on the collar band and details of a shirt cuff. The whole object can be taken in at a glance. In redesigning the fixtures, it was found that part of the standard 30-in. depth of "front" fixtures (showcases, etc.) was waste; these have been redesigned to 20-in. depth. Into this all types of merchandise fit efficiently; it saves floor space, removes part of the barrier between salesperson and customer, and permits display of more merchandise per sq ft of selling floor. In addition, it was found that all types of fixtures could be assembled from six standard parts which can be mass-produced.

PLASTIC DISPLAY TRAYS, designed, patented, and sold by the architect, are made of Vinylite sheet so formed that they support the merchandise in the desired plane; they are available in several sizes and shapes for various types of merchandise. Complete visibility of the merchandise is another asset.



DRESSES, SUITS, COATS SHIRTS, LINGERIE, SWEATERS ACCESSORIES SHOES SELF SERVICE MILLINERY MEN'S HATS

PART II of this article presents the functions which auditorium lighting has to fulfill, as well as certain recommendations and an explanation of common pitfalls. (Part I, published last month, covered the elements which determine auditorium shape, in both plan and section.) In Part II:

Lighting to help the audience find seats, read programs, etc.;

Lighting to create a desired atmosphere in the auditorium;

Lighting required for safety, etc., during the performance.

Parts One and Two are portions of a chapter from a forthcoming book — a volume in the Progressive Architecture Library — on theater design.

THE AUDIENCE SEES

PART II

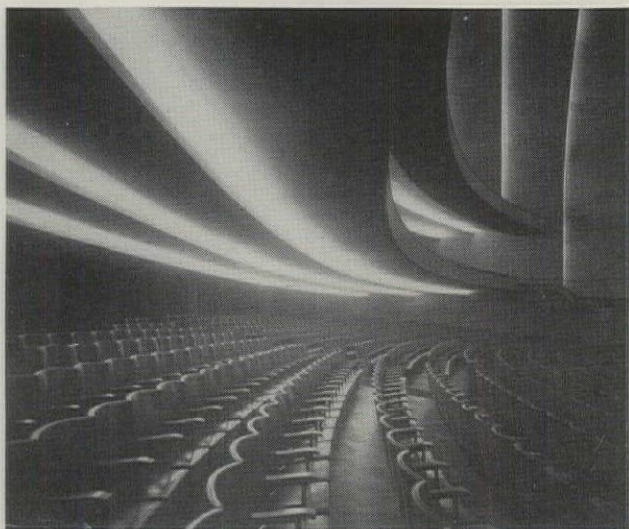
By HAROLD BURRIS-MEYER and EDWARD C. COLE

LIGHT

Seeing requisites determine the shape of the house and to some extent its size. They also determine the provisions for house illumination.

Requisites for lighting are mentioned earlier in the article. There are three basic functions involved:

1. Visibility
2. Decoration
3. Mood

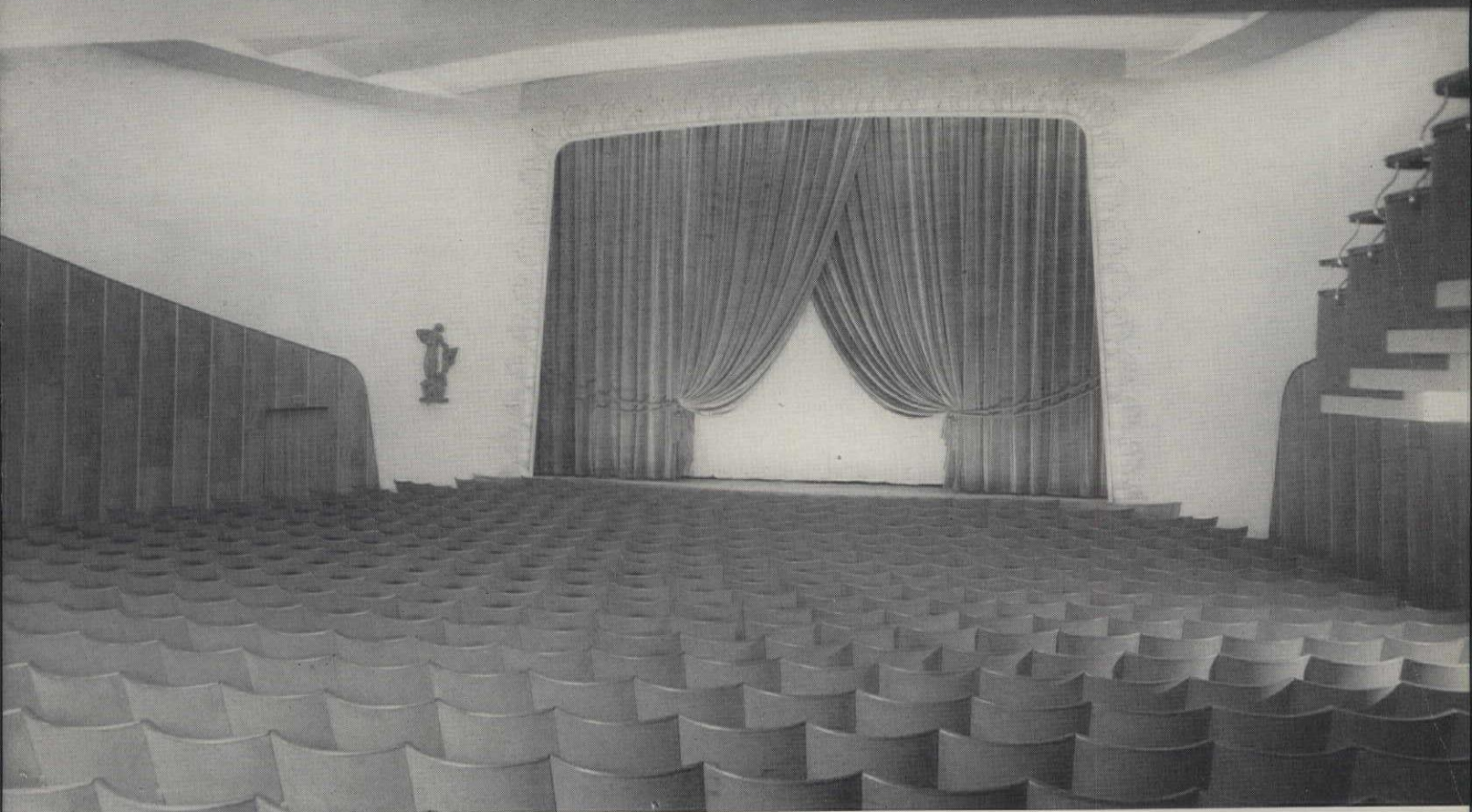


To fulfill these functions it is necessary to plan the lighting for each separately, combining instruments only if and when the requirements are satisfied. It is axiomatic in stage lighting that a different light is assigned to do each job. The McCandless method is the most economical of any which can accomplish a creditable result, and it does not duplicate functions of any instrument or group of instruments. This basic approach is as applicable to the house as to the stage, as examination of houses thus lighted will show.

It is as important to keep light away from areas where it is not needed as to get it where it is wanted, and a great deal harder. To the application of this principle we may trace much of the improvement in appearance and comfort that has come to interiors in the last two decades.

The best light by which to read the program will not produce a pleasing effect if it strikes the walls. The light which gives the house warmth and intimacy will require programs in Braille if that's all the light there is. The bunch light, chandelier, sconce, or other

GRAN REX THEATER, Buenos Aires: lighting and structure blend to provide for the escapist movie-goer a palatial atmosphere. Note also that visibility within the auditorium is excellent.



PARK THEATER, Stockholm: decorative auditorium lighting on a more comfortable, human scale than in the Gran Rex; the delicate fixtures focus attention on the proscenium — an excellent example of fixtures designed into the theater.

open light source may be a desirable decorative device, but if it is bright enough to see by, the audience won't see anything else, and will be seeing spots instead of the show when the curtain goes up.

VISIBILITY

Light for visibility in the auditorium by which the patrons may find their seats, read their programs, and recognize their friends must be generally distributed with a minimum of shadows and preferably from concealed or low-brightness sources installed in the ceiling, the light passing through small holes or louvered openings. Even distribution at a relatively low level of intensity (3 to 5 foot-candles) is desirable. White light is best. Light thus controlled will not upset the balance of the house; in fact, the house may seem dim, though the patron sees and is seen. And the light source will not be seen unless the patron looks directly upward, and not many theatergoers do that often or gracefully.

Special visibility lights are requisite for safety. Building codes in many localities provide that in the interests of safety, aisle lights be provided near the floor on each or on alternate aisle seats. This number is clearly in excess of what is needed to give the requisite visibility, but a minimum safe number and arrangement of such lights is one for every three rows on alternate sides of the aisle, plus lights on both sides wherever there is a step or change in pitch

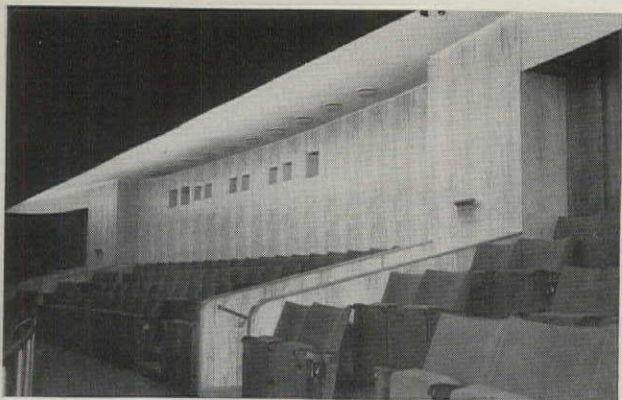
of the floor and at intersections and ends of aisles and crossovers. Luminous guide lines and tread edges in the carpet, activated from ultraviolet sources, promote safety with minimum distraction.

All doors must have exit lights over them. Most fire regulations require that the lights be red. It is unfortunately true that red lights attract attention even when there isn't any fire. When they are close to the arc of vision of the spectator, they often constitute a source of visual distraction. Blue exit lights are perfectly visible when the spectator wants to see them, but do not obtrude into his consciousness when he is looking at something else. Therefore, blue exit lights are desirable.

DECORATIVE LIGHTING

Decorative lighting is a part of the decorative scheme. In itself and by means of that which it illuminates it establishes the character of the house. It does this by:

1. Illumination of walls, ceilings, and proscenium: balanced background lighting, intensity less than for audience area, color chosen to give desired quality to wall and ceiling color.
2. Highlighting of focal points in decorative scheme: niches containing objets d'art, wall hangings, etc.
3. Decorative lights: chandeliers, sconces, etc.



RIGOLETTO THEATER, Stockholm; Hagstrand and Lindberg, architects: decorative cove lighting is reflected from projection-booth wall (faced with *prima vera*), which prevents the balcony from seeming too dark under the flat-back ceiling.

The instruments for decorative lighting may be concealed direct sources, or indirect cove lights, to illuminate the walls and ceiling. Transverse ceiling louvers reduce the apparent depth of the house. Highlights, of course, require special instruments. Open light sources serve a decorative purpose (chandeliers sometimes serve an acoustic purpose) only when they can be seen by a considerable portion of the audience. If they are bright enough to supply illumination they are more annoying than attractive, and are therefore to be thought of as decorative objects rather than as lighting sources. They may contain concealed lighting sources for visibility, decoration, or mood.

MOOD

It has never been absolutely established that the use of an appropriate color in house lights can do much to set the mood called for by the play in advance of the curtain, though theory inclines in that direction and almost every director will try to accomplish something by means of color if given the opportunity. Color control on house lights is always useful for spectacle, as is amply demonstrated in New York's Radio City Music Hall, and it is probable that that fact alone justifies provision therefor. To achieve it, two things are necessary—concealed lights in primary colors controlled as are the footlights, and a

neutral tinted wall and ceiling surface to be illuminated by those lights.

DISTRACTIONS

The music stand lights are often a source of a good deal of distraction and consequent annoyance to the audience, except perhaps at some performances of opera where the enjoyment is in inverse ratio to the visibility of what transpires on the stage. While it is easy to mask the music stand lights, it is impossible to stop reflection from scores and thus a relatively bright area will be in the audience line of vision whenever the musicians are visible. There are several ways to overcome this:

1. An orchestra lift.
2. A deep pit.
3. A louvered orchestra pit cover.
4. Scores with white notes on black paper.

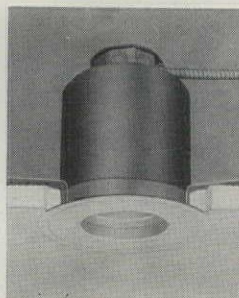
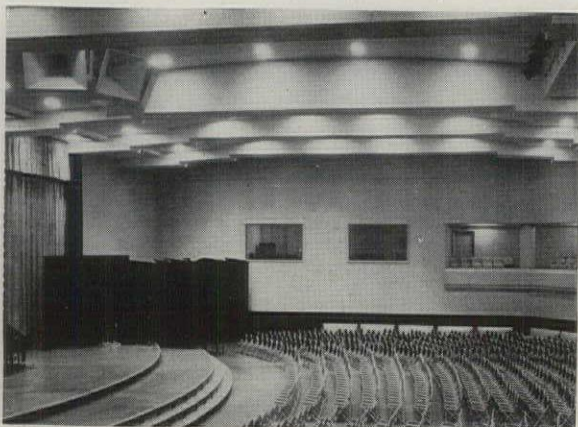
COMMENT

There are two elements which tend to prevent the lighting of auditoria from being as good as it should be:

1. **The unwillingness of architects to plan lighting before wall and ceiling shapes are settled.** This is a result of ignorance, and the consultant is called in more often to correct what has been incorrectly built than to insure the correct design of a theater. The design, construction, installation, and consultant's fee for one of the most elaborate theater lighting projects in America cost less than just the installation costs in many smaller theaters lighted without expert counsel, and badly done.

2. **There is an inexplicable illusion among some architects and builders that light must come from "fixtures,"** despite the obvious fact that if you hang a light out where you can see it, when it is turned on you can't see much else.

While seeing is the first consideration in planning the position of proscenium, walls, floors, seating, and house lighting, all of these elements must also be planned with relation to the acoustics of the theater (for a more complete discussion of acoustic problems see "The Audience Hears," October 1947 P/A).



EXAMPLES OF FLUSH, RECESSED DOWNLIGHTS of the kind recommended for visibility: left, Holophane lensed units as installed in an NBC broadcasting studio; next, "Series 388" fixture, Century Lighting, Inc.; next, "Series NL," and last, "Hi-Hat" fixtures, from General Lighting Co.



New Products

AIR AND TEMPERATURE CONTROL

Jetronic Burner: new oil burner; converts any type of oil into gas in special firing head before combustion takes place. Claimed to average better than 90% efficiency in manufacturer's laboratory. Expected to reduce oil consumption by as much as 50%. Adaptable to hot air furnaces, steam and water boilers.

Consolidated Industries, Inc., Lafayette, Ind.

Automatic Water Heater: new, streamlined, oil-burning; controls enclosed within casing as safety measure. Pilot light with in-built anti-flood device; safe from drafts. Fiberglass insulation saves heat, gives faster recovery. 30- and 45-gal. capacities. Both models in baked white enamel. J. L. Gillen Co., Dowagiac, Mich.

Floor Model Electric Heater: features built-in thermostat with adjustable temperature control. Heats by both radiation and convection. 2,000, 3,000 and 4,000w capacities. All units are 19" high and operate on 230 AC. Electric Heating Dept., Westinghouse Electric Corp., Emeryville 8, Calif.

Wall-Type Auxiliary Electric Heater: model B-1.25A, flush-to-wall unit for the bathroom or wherever extra heat is desired. Rustproof grille of satin-finished aluminum. Measures 10 $\frac{3}{4}$ " x 20". Capacity 1250w, operates AC or DC on 115v. Westinghouse Electric Corp., 306 Fourth Ave., Pittsburgh 30, Pa.

DOORS AND WINDOWS

Lumi-Shade: aluminum door canopy constructed of rolled interlocking sections. Designed for protection against rain, snow, or sun. Simple installation. Finished in baked enamel colors. Thabet Mfg. Co., 626-628 Huron St., Toledo 4, Ohio.

Fenestra Inside Metal Storm Windows: combines with steel residential casement and screen to form complete window unit. Second glass area eliminates condensation, giving clear window vision. Detroit Steel Products Co., 3119 Griffin St., Detroit, Mich.

ELECTRICAL EQUIPMENT AND LIGHTING

Aluminum Eggcrate Louvers: new change-over from steel to aluminum construction, resulting in easy maneuverability. Rigidity assured by use of one-piece, heavy gage metal. Also **Permalux**, new satin finish for fluorescent reflectors. Edwin F. Guth Co., 2615 Washington Ave., St. Louis 3, Mo.

Sierra Triplex: new 3-outlet receptacle with double contacts of heavy-duty bronze, for residential, industrial use. Provides additional outlets for lamps, appliances, radios, etc. Specially constructed to assure a flush def-

inite register. McDonald Mfg. Co., 544 E. 31st St., Los Angeles, Calif.

Multiple Louvered Ceiling: requires no construction alteration when installed. Special stock sections, individually hinged to facilitate change of lamps, can be added, eliminating need for custom-built louvered ceiling. Neo-Ray Products, Inc., 313 E. 22nd St., New York 10, N. Y.

INSULATION (THERMAL AND ACOUSTIC)

Rigidized Metal: new material with exceptional sound-deadening qualities. Rigidizing process produces clear-through geometric pattern which conceals scratches, dents, fingermarks; eliminates bulging problems often present with ordinary flat rolled sheet. Rigid-Tex Corp., 658 Ohio St., Buffalo 3, N. Y.

SANITARY EQUIPMENT, WATER SUPPLY, AND DRAINAGE

Floating Sentinel: new, balanced pressure shower mixing valve maintains any desired water temperature; works solely on automatic water pressure. Sudden cold or hot changes claimed impossible. Concealed or exposed models available. Speakman Co., 30th & Spruce Sts., Wilmington 99, Dela.

SPECIALIZED EQUIPMENT

Migh-T-Safe: a steel, rustproof dial lock safe (wall or floor model) for domestic or business use. Two large compartments, key-locking lower door, combination locking upper door; cash slot in lower vault. Completely tamper-proof. Cal Management Co., Inc., Lynwood, Calif.

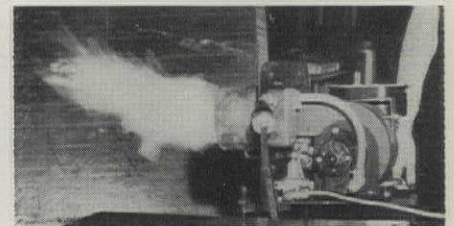
Porter Masking and Transfer Cement: a synthetic cement with extra adhesive strength. Will not become stringy and unmanageable under normal use and storage. Porter Mfg. & Supply Co., 2500 W. Sixth St., Los Angeles 5, Calif.

SURFACING MATERIALS

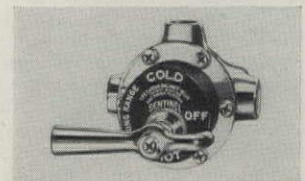
Pyroply: fire-resistant paneling claimed to protect human flesh within one inch of a 2200° fire. Made with Du Pont "Strux" cellulose acetate plastic core between thin carbon steel sheets. Panels are $\frac{1}{4}$ " thick, weigh less than one lb per sq ft. Skydyne Corp., Port Jervis, N. Y.

Korina: light colored decorative plywood made from imported wood veneers, ranging from a striped effect to a highly figured variety. Said to be more uniform than prima vera. Panels come in $\frac{1}{4}$ " and $\frac{3}{4}$ " thicknesses; sizes are 48" x 72", 48" x 84", 48" x 96". Counter-fronts 144" x 36". U. S. Plywood Corp., 55 W. 44th St., New York 18, N. Y.

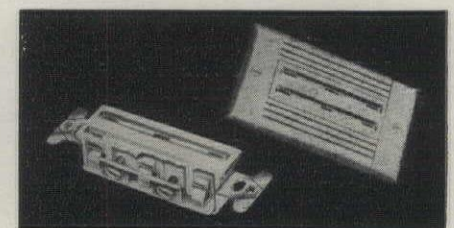
BRIEF NOTES: According to Pittsburgh Plate Glass, double-glazed, insulating Twindow units are now available in 26 standard sizes, ranging from 35 $\frac{1}{2}$ " x 46" to 116" x 58". Thanks to this standardization plus additional production facilities delivery time has been reduced to two weeks . . . In South Ashburnham, Mass., an area where more chairs are made than in any other spot in the world, the problem of combating swelling, loosening, and general falling apart of joints during wet and dry seasons was solved some years ago by the ingenuity of a Frederick Valiton. Using an ordinary press, he compressed the tenon member without crushing the wood fibers beyond a certain point, until it fit the mortised joint member. When the joint was glued and assembled the water in the glue acted as a plasticizer and released the compressed fibers from bondage. They then expanded and exerted an internal pressure which remained for the life of the article, keeping the joint solid and tight. Since then highly improved machines, developed from Valiton's one-way squeeze press, compress tenons and dowels from all directions under pressure of nearly 10 tons without rupturing fiber—to the invaluable profit of the woodworking industry . . . Local shortages of skilled masons could snaffle a maximum volume of masonry construction this year. However, with the aid of the Apprentice Training Service of the U. S. Department of Labor, industry specialists throughout the country are setting up courses to meet shortages as they occur.



The Jetronic Home Burner consumes any type oil at the rate of less than one gal. per hr. Consolidated Industries, Inc.



New shower mixing valve by Speakman Co., Wilmington, Del., holds water automatically to unwavering temperature.



The McDonald Mfg. Co. provides the old-fashioned receptacle with bronze double contacts and a triple outlet for added convenience.



Manufacturers' Literature

★ **Editors' Note:** Items starred are particularly noteworthy, due to immediate and widespread interest in their contents, to the conciseness and clarity with which information is presented, to announcement of a new, important product, or to some other factor which makes them especially valuable.

Air and Temperature Control

1-161. *Agitair (G-101 Job 25)*, Air Devices, Inc. Reviewed April.

From American Radiator & Standard Sanitary Corp. Reviewed April:

1-162. *American Redflash Boiler (Form 634)*.

1-163. *Ideal Hot Water Supply Boilers (Form 635)*.

1-164. *American Gas Boilers (Form 7028)*.

1-165. *American Exbrook Boiler (Form 675)*.

1-166. *Frozen Foods — a Billion Dollar Market (CR. 238-4-46)*, Carrier Corp. Reviewed April.

1-167. *Steel Boilers and Air Conditioners*, Fitzgibbons Boiler Co. Reviewed April.

1-168. *Foundry Ventilators, AIA 12-K*, H. H. Robertson Co. Reviewed April.

1-169. *Selecting the Right Type of Steam Trap (1600-10M-11-47)*, Sarco Co., Inc. Reviewed April.

1-170. *Equipment for Air Conditioning and Refrigeration (Bul. C-1100-B31)*, Worthington Pump & Machinery Corp. Reviewed April.

★ 1-171. *Axeman-Anderson Anthracite*, 4-p. folder on a new type of automatic anthracite heating plant with rapid heat generation; coal consumption said to be cut from 25% to 38%. Advantages. Axeman-Anderson.

1-172. *Homease Economy Heat Maker (Bul. 4P-3C-8X11)*, 4-p. booklet on a heating and hot water boiler unit designed for low fuel consumption. Features, specifications. Bogue Electric Co.

★ 1-173. *Airjet, AIA 30-D1*, 16-p. illus. catalog on roof ventilators and vent flue-caps designed on the Venturi and siphon principle. Advantages, dimensions, weights; specifications, engineering data; tabulations of maximum, minimum annual temperatures, humidity, prevailing wind directions and velocity in all the United States; assembly and installation. C. R. Gelert Co.

1-174. *Walton Industrial Humidification Systems*, 4-p. illus. folder on heavy duty humidification system; new filter (replaceable) removes air-borne particles. Advantages. Walton Laboratories, Inc.

★ 1-175. *Fuel Conservation Handbook (Form LO-45-2-45)*, 46-p. catalog on an analysis of various heat distributing systems, problems of heat loss, fuel consumption, and their solutions. Diagrams, charts. Williams Oil-O-Matic Div., Eureka Williams Corp.

Doors and Windows

4-123. *Preslok*, Preslok Corp. Reviewed April.

4-124. *Thermopane, AIA 26-A (TP-6)*, Libbey-Owens-Ford Glass Co. Reviewed April.

4-125. *Windows and Industrial Doors*, Truscon Steel Co. Reviewed April.

4-126. *Alumidor, AIA 15A*, 4-p. illus. folder on aluminum flush door for all purposes; sound-deadening inner material. Specifications, sizes, advantages. Alumidor Corp.

4-127. *Electronic Serviceman*, 4-p. folder on a garage door opener that operates from automobile dashboard button at any spot within 85-ft. radius of garage. Diagram, illustrations, features. Federal Industries, Inc.

4-128. *Universal Knock Down Housing Frames (Service Sheet No. R8)*, illus. sheet on fireproof, knock down door frames for low cost housing. Detailed construction drawings, installations. Special features, dimensions, specifications. Richmond Fireproof Door Co.

4-129. *Ware Aluminum Windows, AIA 16E*, 4-p. folder on residential casements and accessories. Types and sizes, installation details, specifications. Ware Laboratories, Inc.

Electrical Equipment and Lighting

5-113. *Motor Controls (Cat. 10)*, Arrow-Hart & Hegeman Electric Co. Reviewed April.

5-114. *Fluorescent Lamps and Auxiliary Equipment (LS-101)*, General Electric Co. Reviewed April.

5-115. *Timing Motors and Devices (Cat. 320)*, Haydon Mfg. Co., Inc. Reviewed April.

5-116. *Whiton Steam Turbines (Cat. ST101, 1147-10)*, Whiton Machine Co. Reviewed April.

5-117. *The Light of Tomorrow ... Today, AIA 31-F-2*, loose-leaf catalog on cold cathode fluorescent lamps, luminaires, lighting accessories. Typical installations, data charts, specifications, prices. Catho-Lite Co., Inc.

★ 5-118. *Modernize Your Lighting with a Louverall Ceiling*, 4-p. illus. folder on plastic "eggcrate" louvers, both standard and custom-made. Suspending apparatus furnished for each installation. Advantages, sizes. Louverall Lighting Corp.

Two 8-p. illus. catalogs on indirect and focal lighting fixtures and accessories for classrooms, stores, offices, etc. New lighting techniques, advantages, diagrams, photographs. Kurt Versen Co.:

5-119. *Indirect Lighting at its Best (KV 96)*.

★ 5-120. *Spectacular Focal Lighting (KV170)*.

Finishers and Protectors

6-116. *Devoe Painting Guide (Release*

No. 99), Devoe & Raynolds Co., Inc. (50 cents per copy). Reviewed April.

6-117. *Wax in Paint (Adv. 235) (1057)*, S. C. Johnson & Son, Inc. Reviewed April.

6-118. *Paint Progress, AIA 25 (Vol. 7, No. 1)*, New Jersey Zinc Co. Reviewed April.

6-119. *Protexol Fireproofing, AIA 19: A:33* Protexol Corp. Reviewed April.

6-120. *Floorcrete*, 4-p. illus. folder on a plastic product for underlayment, resurfacing, levelling, patching; deadens sound, reduces vibration. Other products include terrazzo floors, pre-cast industrial tiles, asphalt primers, etc. Camp Co.

6-121. *Maintenance, Cleaning, Finishing and Coloring of Copper, Brass and Bronze*, 28-p. illus. handbook offering detailed advice on maintenance of copper and copper-base alloys widely used for ornamentation. Methods of cleaning, finishes, and coloring, including coloring formulas. Color plates illustrate results. Copper & Brass Research Assn.

6-122. *Fight Water, AIA 7 (10M-7-47)*, 4-p. brochure on a concrete additive that increases densification, reduces water content. Also cement coats, water resisting compounds, joint sealers, caulking, hardeners. Directions, features, check list, applications. Sika Chemical Corp.

Insulation (Thermal, Acoustic)

From Armstrong Cork Co. Reviewed April:

9-90. *Fiberglas Insulation (ED-5-846)*.

9-91. *Armstrong's Mineral Wool Board (11-27-1146)*.

9-92. *Voltron*, Industrial Synthetics Corp. Reviewed April.

9-93. *Roof Insulation (11-18-845)*, 7-p. illus. booklet on corkboard roof insulation. Prevents heat loss, condensation; aid to air conditioning. Installation methods in steel, wood, precast gypsum slab, and monolithic concrete decks. Tables, details. Armstrong Cork Co.

9-94. *Kimsul Insulation, AIA 37B (Form KLB 12-12)*, 12-p. illus. booklet on insulating and acoustical material in blanket form, compressed to one-fifth of its installed volume for shipment and storage. Technical data, specifications, diagrams. Kimsul Div., Kimberly-Clark Corp.

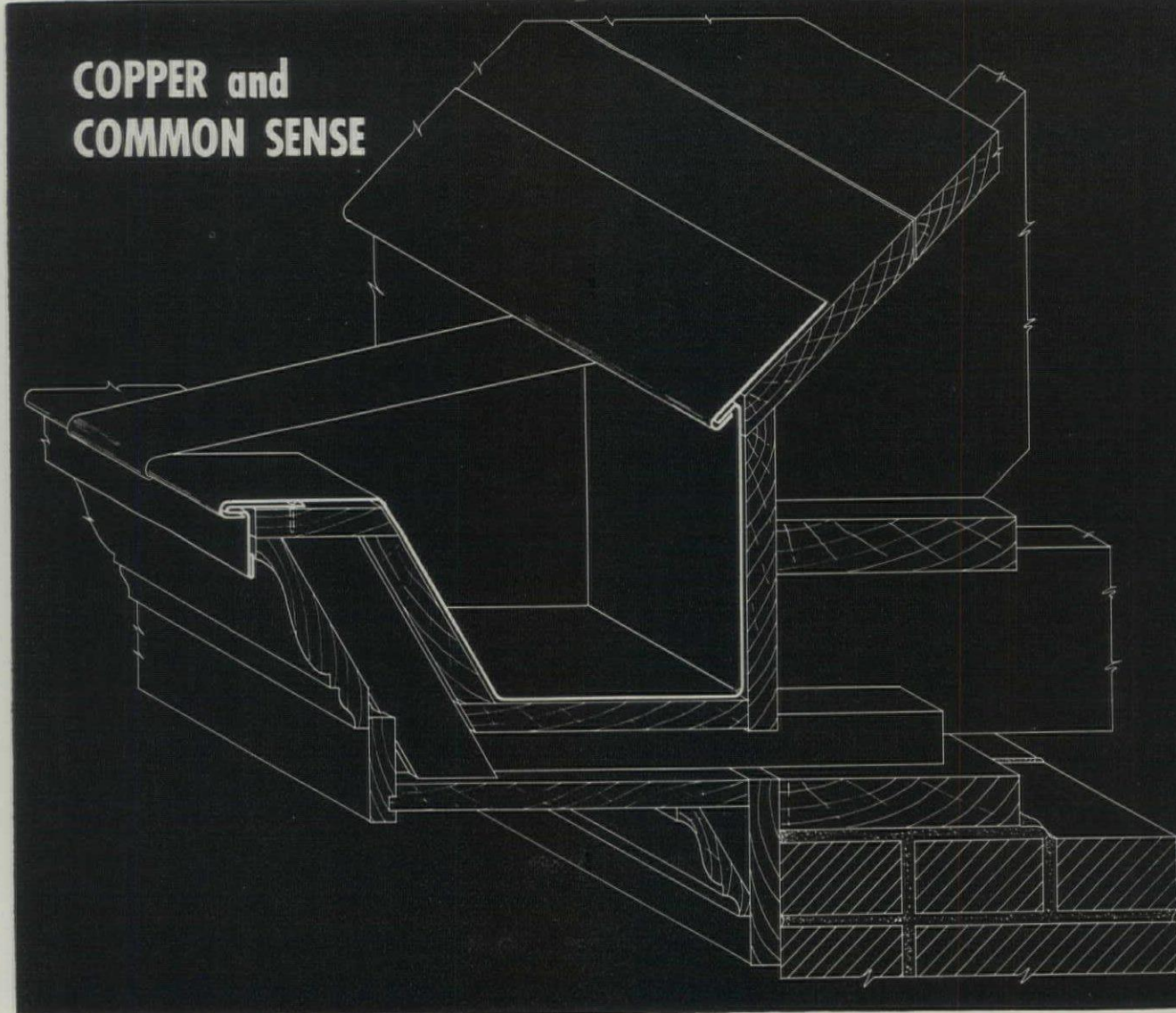
Load-Bearing Structural Materials

12-146. *Besser Modular Standard Building Units, AIA 10-C (10M 4-47)*, Besser Mfg. Co. (\$2.00 per copy). Reviewed April.

12-147. *20 Years — A New Era in Concrete*, Lone Star Cement Corp. Reviewed April.

12-148. *Stran-Steel*, 24-p. illus. brochure on system of steel framing employing

COPPER and COMMON SENSE



QUESTION: What is the best way to determine locations of expansion joints in sheet copper construction?

ANSWER: Use the chart on page 28 in Revere's Manual of Sheet Copper Construction*

A CHART which makes it easy for you to determine the correct gauge copper for any gutter lining as well as the maximum distance that may safely be used between an expansion joint and a fixed point is one of the important results of Revere's extensive sheet copper research program. This chart and simple instructions for using it are on pages 28-29 in Revere's 96-page manual of sheet copper construction.*

This booklet is filled with new facts which enable you to design or install gutter linings, flashings and roofs that give *extra* years of service. It is complete with charts, illustrations and detailed information so arranged that you can read and apply final figures that insure the finest sheet copper construction.

This book has been widely distributed to archi-

*"Research Solves Problems of Stress Failures in Sheet Copper Construction."

ects and sheet metal contractors, and in all probability it is in your office files. Be sure to refer to it. If you do not have a copy, write for one now on your office letterhead.

For further information or assistance with the design or installation of sheet copper, the Revere Technical Advisory Service, Architectural, will be glad to help you.

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Sales Offices in Principal Cities, Distributors Everywhere.



Manufacturers' Literature

a patented "nailing groove" in all joists and studs, for light occupancy structures. Engineering data, erection methods, typical installations, specifications. Also structural accessories and packaged framing. Stran-Steel Div., Great Lakes Steel Corp.

Materials of Installation

13-65. *Housing Construction Specialties*, Hohman & Barnard, Inc. Reviewed April.

13-66. *Nu-Wood Clip System (Form 731-9 50M)*, Wood Conversion Co. Reviewed April.

★ 13-67. *Hazard Building Wires (Bul. H-408)*, 47-p. illus. catalog on insulated wires and cables and their proper selection for every building application. Descriptions of finishes, outer coverings, insulations; table of contents, specifications, engineering data, tests, installation photos, and charts. Hazard Insulated Wire Works Div., Okonite Co.

Non-Load-Bearing Structural Materials

From Copper & Brass Research Assn. Reviewed April:

14-56. *Valleys and Flashings (Monograph I)*.

14-57. *Roofs and Decks (Monograph II)*.

14-58. *Batten Type Roofs (Monograph III)*.

14-59. *Gutters and Leaders (Monograph IV)*.

14-60. *Glass, AIA 26-A (MC1146)*, 24-p. illus. catalog on types, uses, and qualities of glass for building purposes. Specifications, advantages, guide charts,

and diagrams. Libbey-Owens-Ford Glass Co.

Sanitary Equipment, Water Supply, and Drainage

19-202. *Septic-Tank Systems (Circular Series No. G5.5)*, Small Homes Council, University of Illinois. Reviewed April.

19-203. *Drain-Dri, AIA 29cl (Bul. 3207)*, Yeoman Bros. Co. Reviewed April.

★ 19-209. *Briggs Beautyware (Cat. F)*, 64-p. illus. catalog on wide range of plumbing fixtures and accessories for bathroom and kitchen. Roughing-in and dimensional data. Briggs Mfg. Co.

19-210. *The Ross Sprinkler Co. (Cat. 5)*, 20-p. illus. booklet on lawn sprinklers and equipment, including an underground sprinkler system layout. Descriptions, specifications, capacities. Index, price list. Ross Sprinkler Co.

19-211. *Bath Tub Hanger*, loose leaf on a metal support that anchors tub securely to wall, preventing crack at tub rim due to settling and shrinking; features spacer for tile walls. Advantages, photographs. Titewall Hanger Co.

Specialized Equipment

19-204. *Cannon Signal Systems, AIA 31i*, Cannon Electric Development Co. Reviewed April.

19-205. *Dunbar for Moderns*, Dunbar Furniture Mfg. Co. Reviewed April.

19-206. *Termite Control*, The Hill Termite Control Systems. Reviewed April.

19-212. *Planning for Home Telephones*, 8-p. booklet on most practical locations for residential telephones. Complete in-

stallation diagram, photographs. American Telephone & Telegraph Co.

19-213. *Erco Bronze Tablets and Memorials*, 6-p. folder on bronze plaques and tablets for many purposes, including memorials, grave markers, office and commercial window display, door pushes, and pull plates, etc. Photographs, descriptions. Erco Mfg. Co.

19-214. *Surgical Equipment (Vol. XV, No. 1)*, 30-p. illus. trade magazine includes articles on suturing units for surgical techniques, description of the Kreiselman-Heidbrink resuscitation apparatus, operating room furniture, a new hydraulic operating table, amino acids in surgery; also manufacturers' news, and wide scope in surgical equipment advertisements. Ohio Chemical & Mfg. Co.

★ 19-215. *The Exhaust-Water Spray Fire Protective System for Wellways, AIA 33E-1 (Otis File No. B-703)*, 16-p. catalog on new method of combating fire and fumes in public buildings by unique fire control system installed in moving stairways. Tests, description, application, diagrams. Otis Elevator Co.

Surfacing Materials

19-207. *Specifications, AIA 25-G*, Higley Chemical Co. Reviewed April.

19-208. *Keystone Kapeo Board (820-8-47)*, Keystone Asphalt Products Co. Reviewed April.

19-216. *Danbury Rubber Tile*, 4-p. illus. folder on rubber tile floor designs. Illustrations, colors, properties, facts for specifications. Danbury Rubber Co.

19-217. *Textolite Laminated Plastics (CDP-548)*, 64-p. illus. bulletin on widely diverse forms of laminated plastic, i. e., sheets, tubes, silent gears, decorative and work surfaces, bearing materials, etc. Properties, tolerances, sizes, production methods, ordering instructions. General Electric Co.

★ 19-218. *Heavy Duty Finishes*, three mimeographed sheets comprising a complete list of heavy-duty and gymnasium-type finishes for maple, beech, and birch floors, as approved by M. F. M. A. Trade names alphabetically arranged, proprietors and addresses recorded. Maple Flooring Manufacturers Assn.

19-219. *Marlite, AIA 23-L12*, 8-p. illus. booklet on plastic-finished wall and ceiling panels. Specifications, installation data; color and pattern charts. Also aluminum, plastic, and Presdwood moldings for wallboard installations, bathroom accessories, adhesives, caulking, and surface polish. Mars! Wall Products, Inc.

Traffic Equipment

19-220. *Folding Stairway*, 4-p. illus. folder on compact, space-saving stairway which folds into ceiling unit when not in use; counterweights ease assembly into position. Advantages. Precision Parts Corp.

PROGRESSIVE ARCHITECTURE, 330 West 42nd Street, New York 18, N. Y.
I should like a copy of each piece of Manufacturers' Literature listed.

We request students to send their inquiries directly to the manufacturers.

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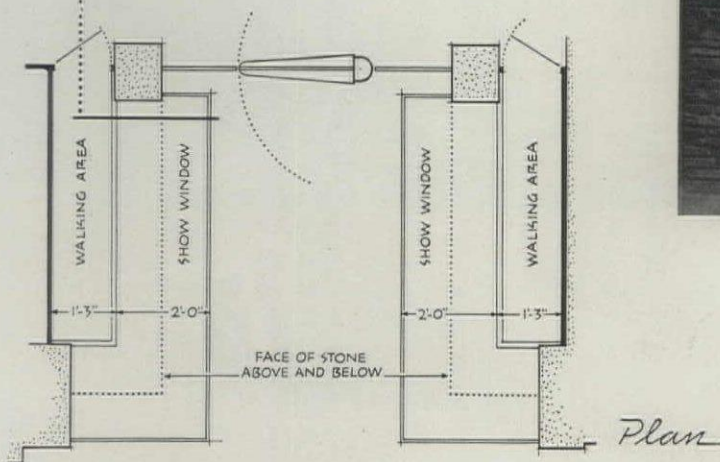
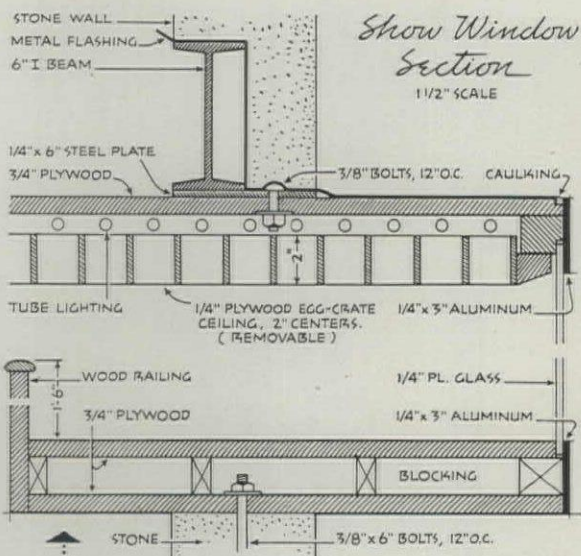
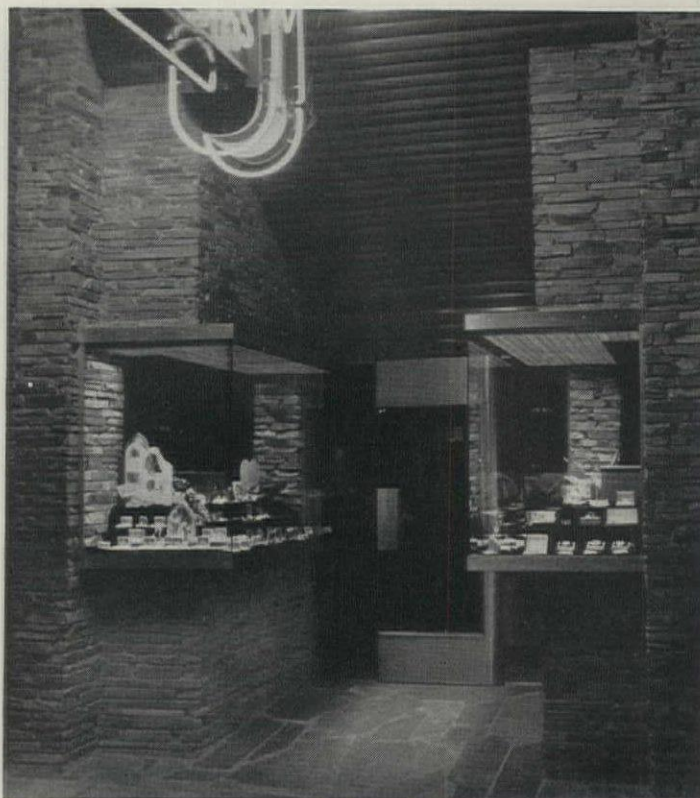
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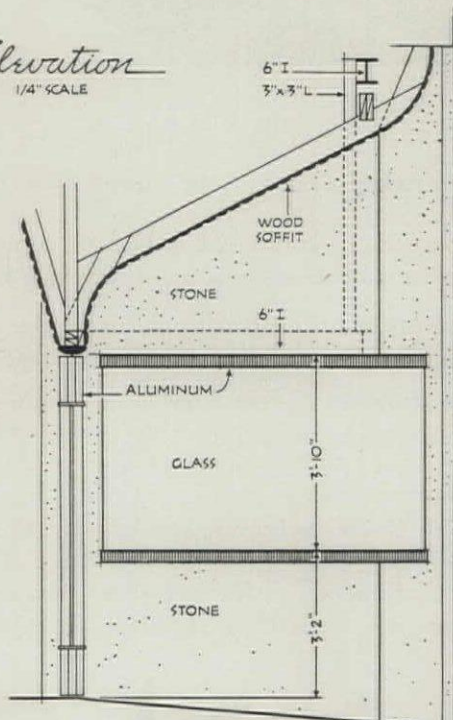
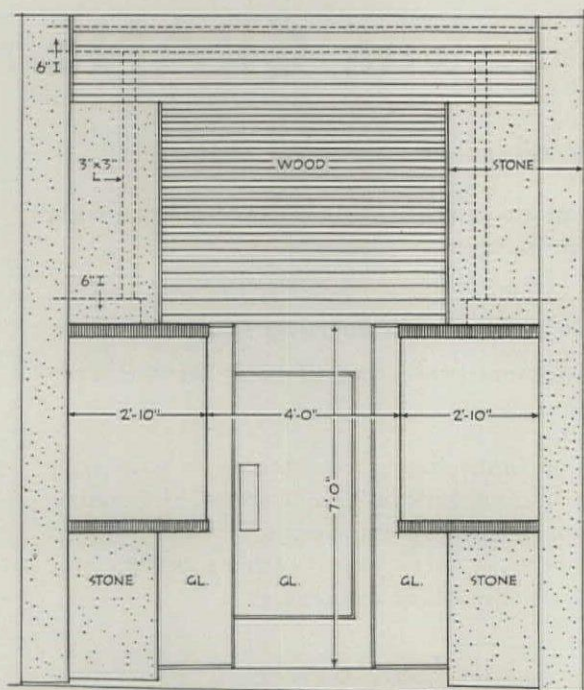
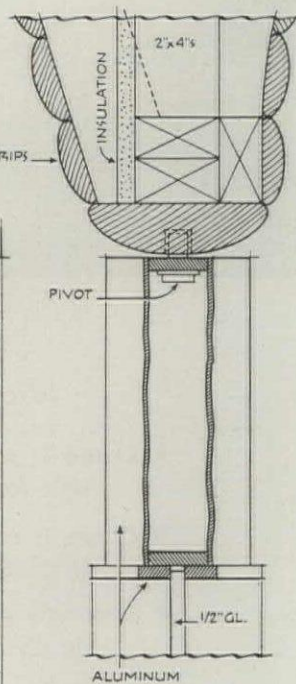
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STORE: EXTERIOR SHOWCASES



Door Head Section
1 1/2" SCALE



STRATFORD'S JEWELRY STORE

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Designers



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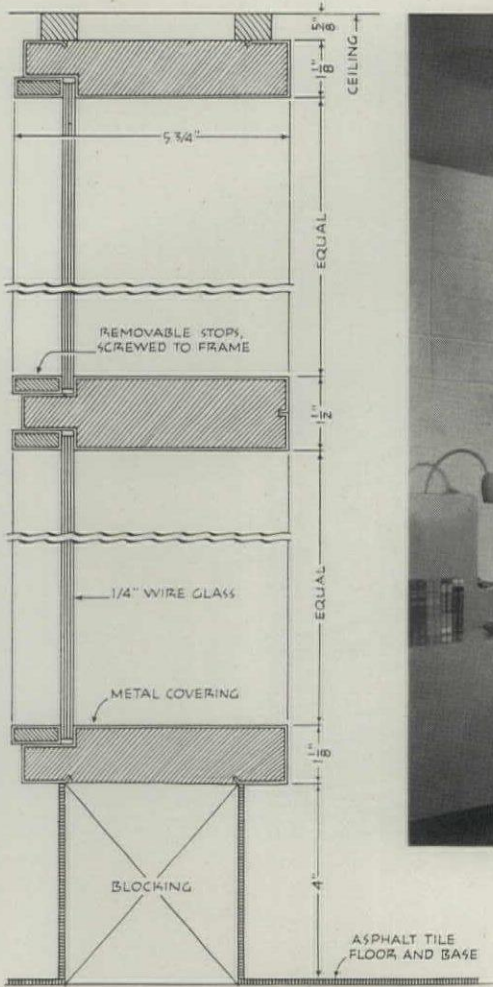
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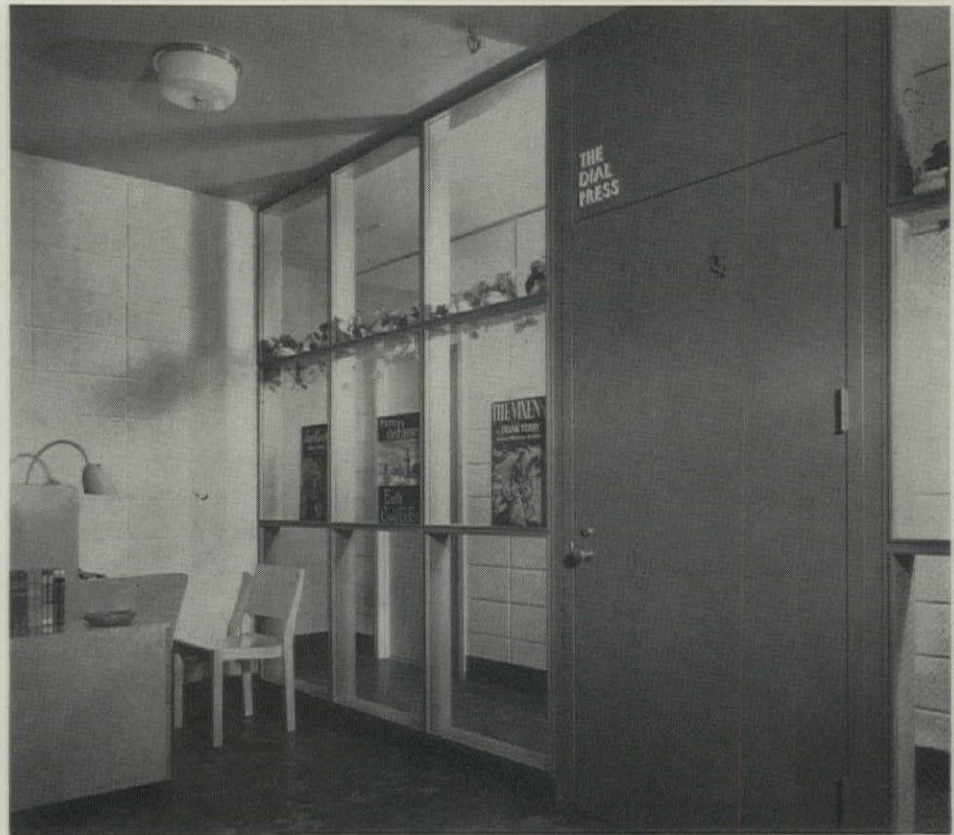
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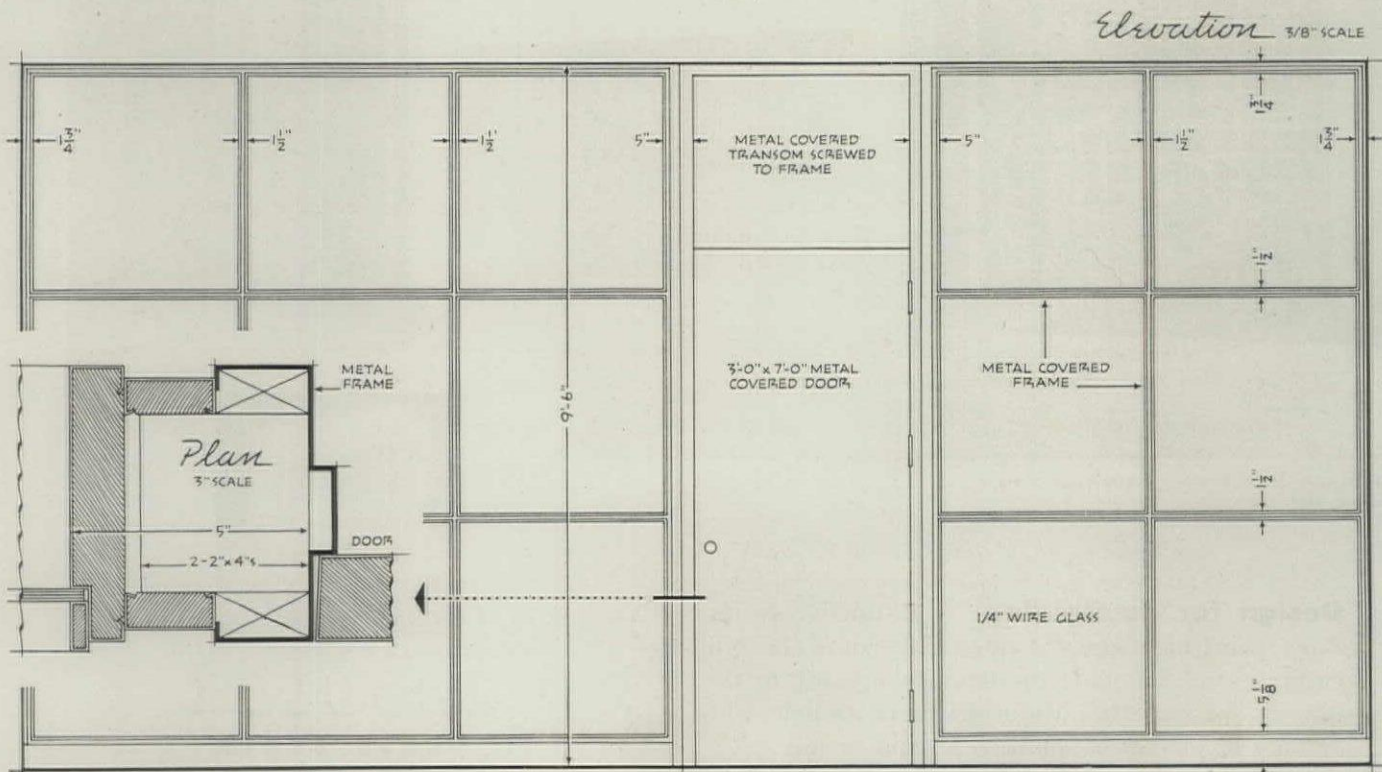
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Section 3/8" SCALE

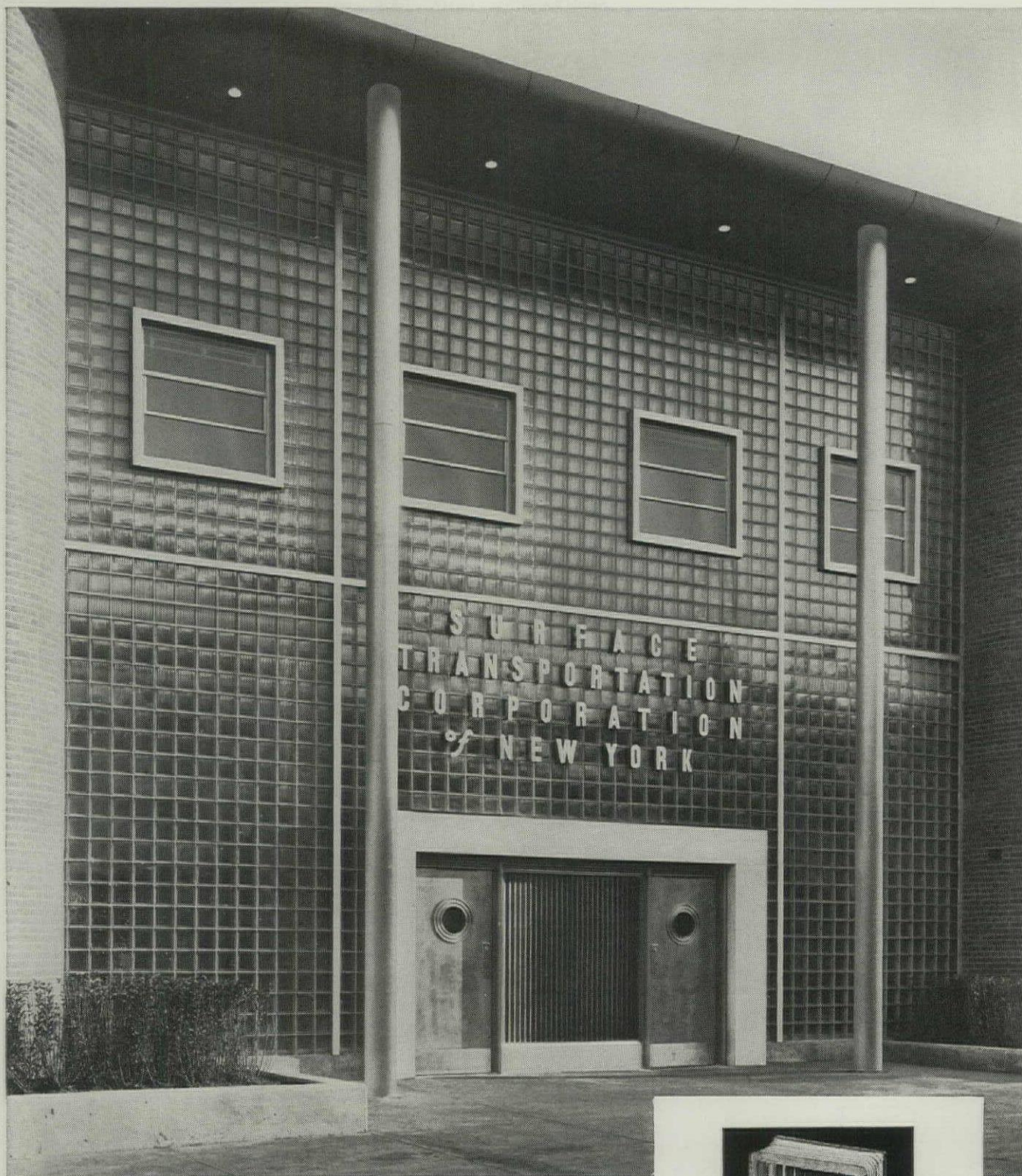


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New York, New York

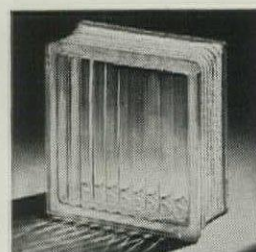
REISNER & URBACHN
Architects



ARCHITECTS AND ENGINEERS: WININGER & SELBY COMPANY, INC., N. Y. C.
CONTRACTOR: WILCOX CONSTRUCTION CO., LONG ISLAND, N. Y.

Design for daylighting: A distinctive Insulux Glass Block panel highlights the exterior design of this building entrance and transmits excellent daylighting to the interior. Versatile Insulux brings extra daylight without sacrifice of privacy or undue heat gain or loss.

For details, consult GLASS section of Sweet's Architectural Catalog or write Dept. E-24, American Structural Products Company, P.O. Box 1035, Toledo 1, Ohio.

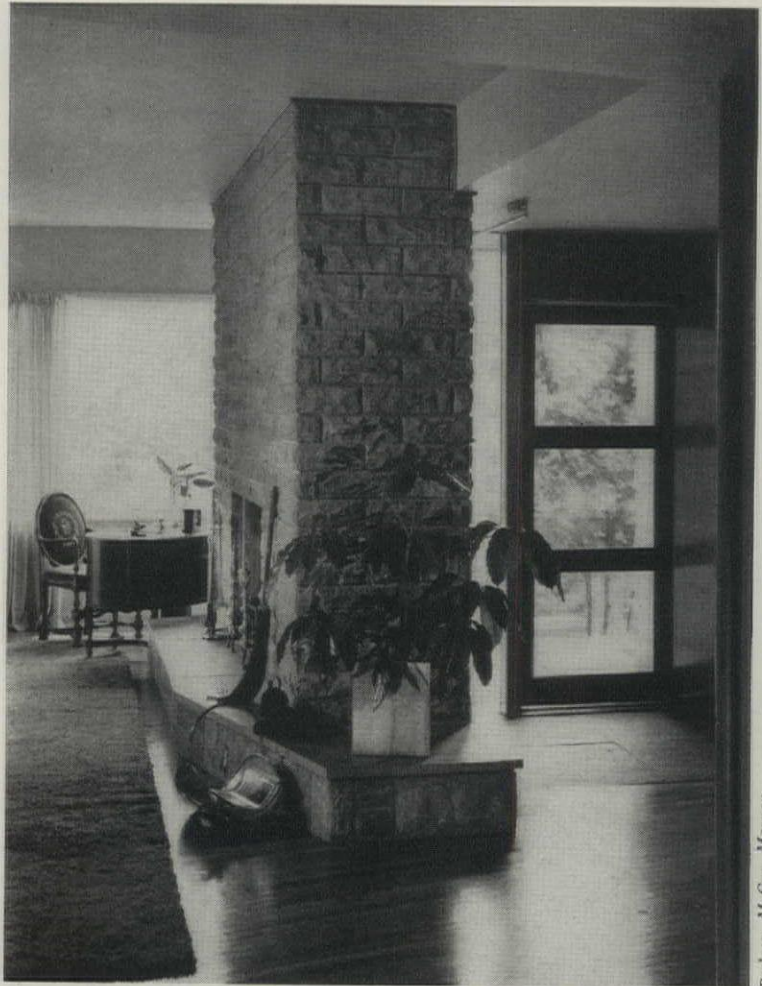
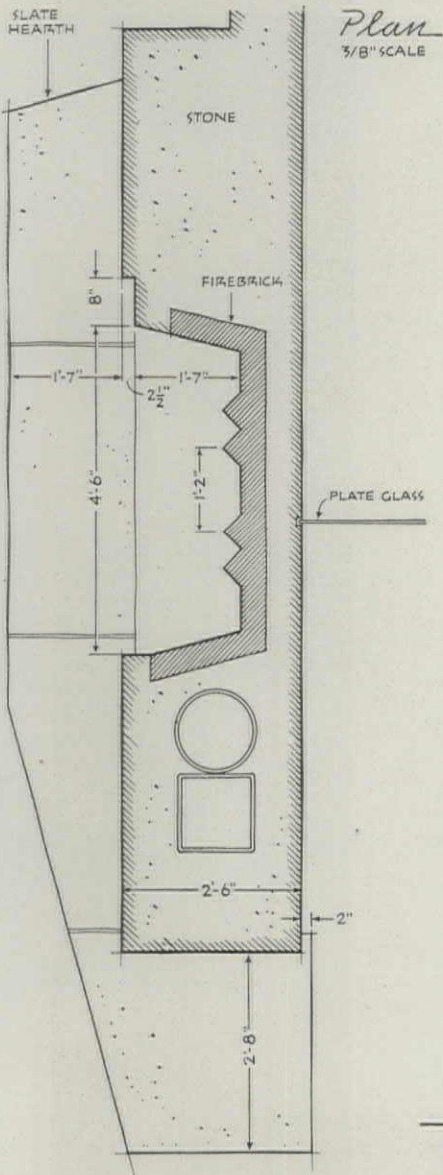


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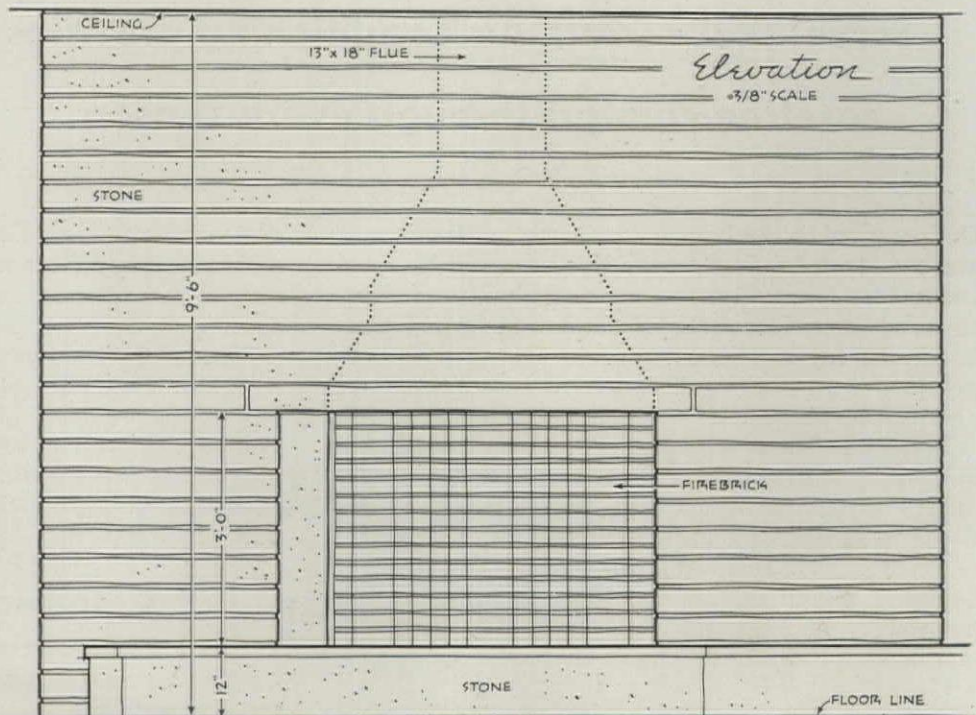
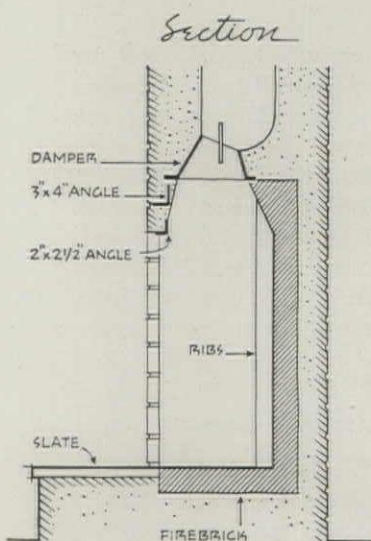
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Rodney McKay Morgan

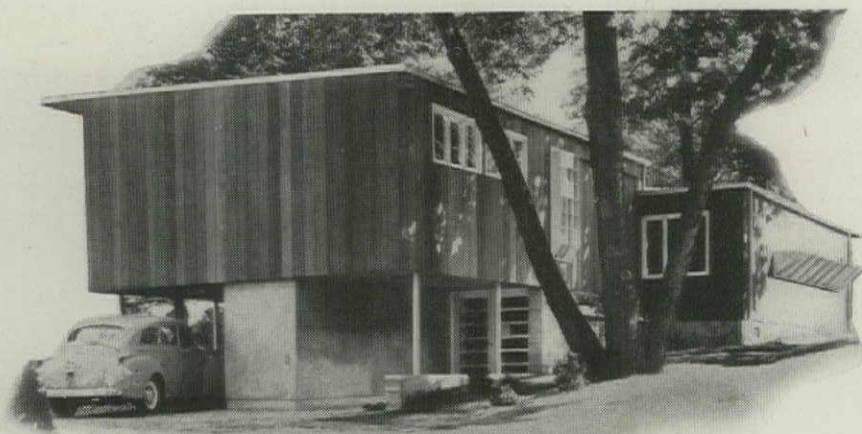


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Solon, Ohio

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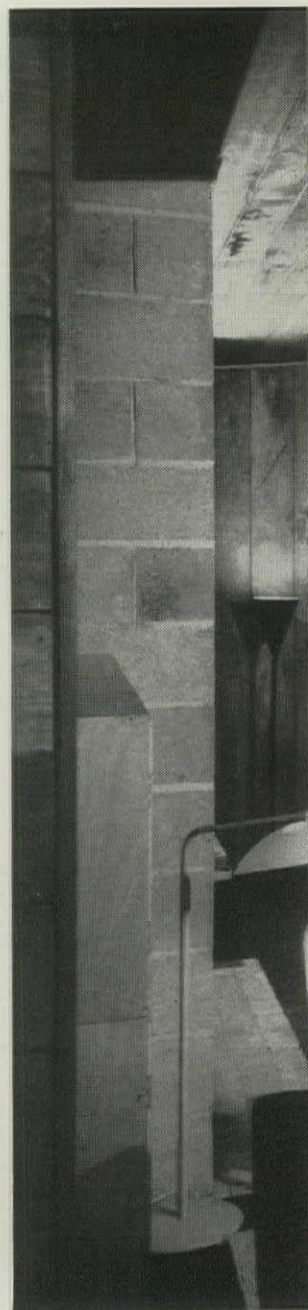
Architect



IDEA HOUSE FEATURES

"Climate at your fingertips"

Servel *All-Year* Air Conditioning provides carefree comfort through every season



Co-sponsored by the Walker Art Center in Minneapolis and the Home Institute of the Northwestern National Bank, Idea House II is one of a series built to demonstrate advanced ideas in home planning and equipment. It features one of the most important developments in year-round comfort . . . "climate at your fingertips" provided by Servel *All-Year* Air Conditioning.

In the Idea House, the homeowner selects the climate indoors . . . through every season . . . without ever having to go downstairs. The Servel *All-Year* Air Conditioner is controlled automatically by the Selectrol—a combination thermostat and control device—conveniently placed in the main-floor living area. The homeowner merely dials the temperature he wants and flips a switch for cooling or heating.

Cools in summer, heats in winter

In summer, the Servel unit refreshingly refrigerates the air. It removes sticky humidity and filters out dust,

dirt, and irritating pollen, bringing welcome relief for asthma and hay fever sufferers. Furniture and drapes stay fresh and new-looking longer. There's lots less housework, too.

During the winter months, the same compact Servel unit supplies plenty of clean, even warmth. Just the right amount of moisture is added for comfort. There are no "layers" of hot or cold air. And in between seasons, the Servel *All-Year* Air Conditioner circulates cleaned air throughout the house at the prevailing outdoor temperatures.

Operating costs are low

Yet with all these benefits, the Servel *All-Year* Air Conditioner costs surprisingly little to operate. Maintenance costs are low, too. Like the famous Servel Gas Refrigerator, the Servel *All-Year* Air Conditioner hasn't a single moving part in its refrigeration system to make noise, to wear or need repair.

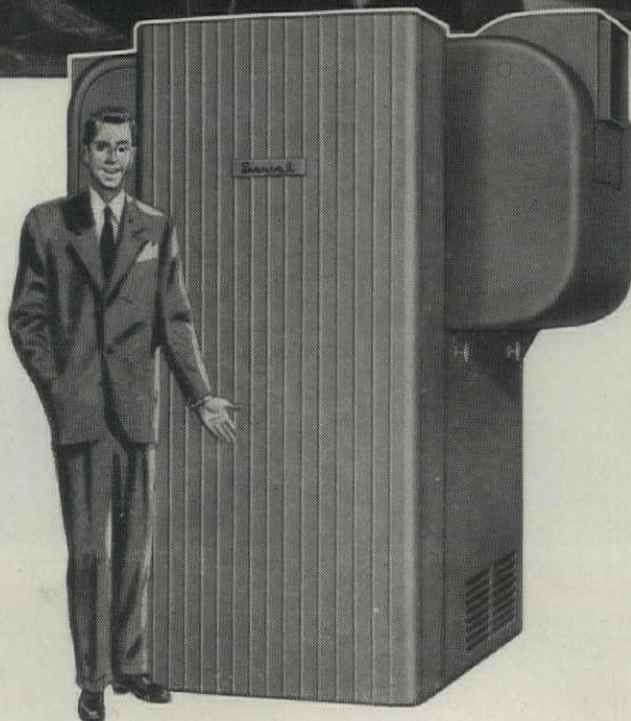


The Minneapolis Idea House II dramatically illustrates how Servel *All-Year* Air Conditioning can help you bring a "new quality of living" the year-round to any home you may design or build. What's more, when you plan your new houses around the Servel unit, you'll find it possible to make many design innovations and construction economies.

Get the facts on Servel *All-Year* Air Conditioning from your local Gas Company or Servel dealer. Or write to Servel, Inc., 4805 Morton Ave., Evansville 20, Ind.

Servel

All-Year AIR CONDITIONER



50 ACRES of



In construction products **CECO ENGINEERING**

Saving

WITH CONCRETE JOIST CONSTRUCTION BY CECO

Back in 1929, big savings were made in construction costs when Ceco provided 50 acres of steelform equipment and service for the Merchandise Mart, Chicago. Today you can make similar savings to offset rising prices . . . At the same time you can provide the most rigid sound-proof structure.

Yes, today as in 1929, concrete joist construction costs less than any other way of building, strength and durability considered. That's because the use of Meyer steelforms reduces the amount of concrete needed for any space or live load.

A further saving is possible because a nominal rental charge is made for Meyer steelforms, since they can be moved from job to job and used time and time again from floor to floor. Construction is speeded up.

CECO FIRST IN THE FIELD . . .

Ceco originated the removable steelform method of concrete joist construction—the company is first in the field—actually providing more service than all competitors combined. So, for concrete joist construction, call on Ceco—the leader over all.

CECO STEEL PRODUCTS CORPORATION

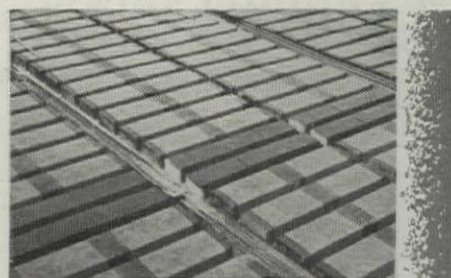
GENERAL OFFICES: 5701 W. 26th Street, Chicago 50, Illinois

Offices, warehouses and fabricating plants in principal cities

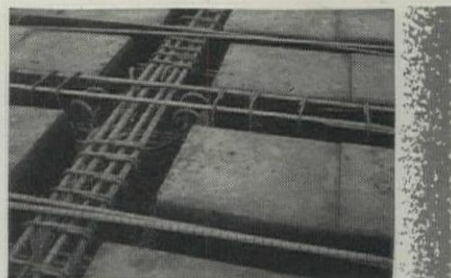
See Ceco catalogs in Sweet's Architectural File or send for free descriptive literature

**CECO
STEEL**

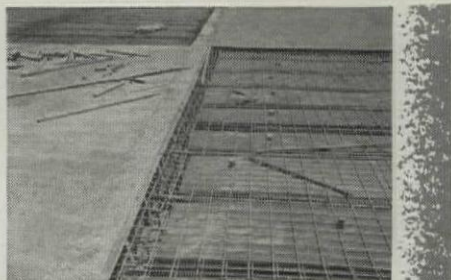
makes the big difference



Meyer steelforms completely erected on open wood centering, ready for placement of reinforcing steel and concrete.



In this photograph, the reinforcing bars are installed as detailed by Ceco, in proper relation to the erected steelforms.



Here the mesh, also known as welded wire fabric, has been placed in correct position and the pouring of concrete for the top slab has commenced.

Partial list of other Ceco Products

STEEL JOISTS AND ROOF DECK METAL WINDOWS AND DOORS • METAL FRAME SCREENS
ALUMINUM STORM PANELS • METAL LATH AND ACCESSORIES • HIGHWAY PRODUCTS
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FROM THE TECHNICAL PRESS

By **JOHN RANNELLS**

holder's questions, clearly illustrated, with nontechnical explanations. Damn good!

MANUALS, PAMPHLETS

Foundations and Basements. Heating and Air Conditioning. Insulation. Weatherstripping. Storm Sash. Bulletins issued by Good Housekeeping Build-

ing Forum, 8th Ave. & 57th St., New York 19, N. Y. 8½" x 11", illus.

Pretty thorough answers to the house-

Paints for Exterior Masonry Walls. National Bureau of Standards BMS 110. 19 pp., 8½" x 11", illus. 15 cents

Report on out-of-door weathering tests to determine serviceability of various paints applied to specimen walls constructed of new and used common brick, cast concrete, stone-, cinder-, and light-weight aggregate-concrete block and wood frame with asbestos shingles.

Cement-water paint proved best as a class, with oil base, resin-emulsion, and synthetic rubber base following in that order. Durability of the paints was determined on the basis of type of paint used, type of surface coated, and method of application and curing. Ratings are given, based on weathering characteristics and performance of each type of paint, and painting methods for coating different surfaces are evaluated.

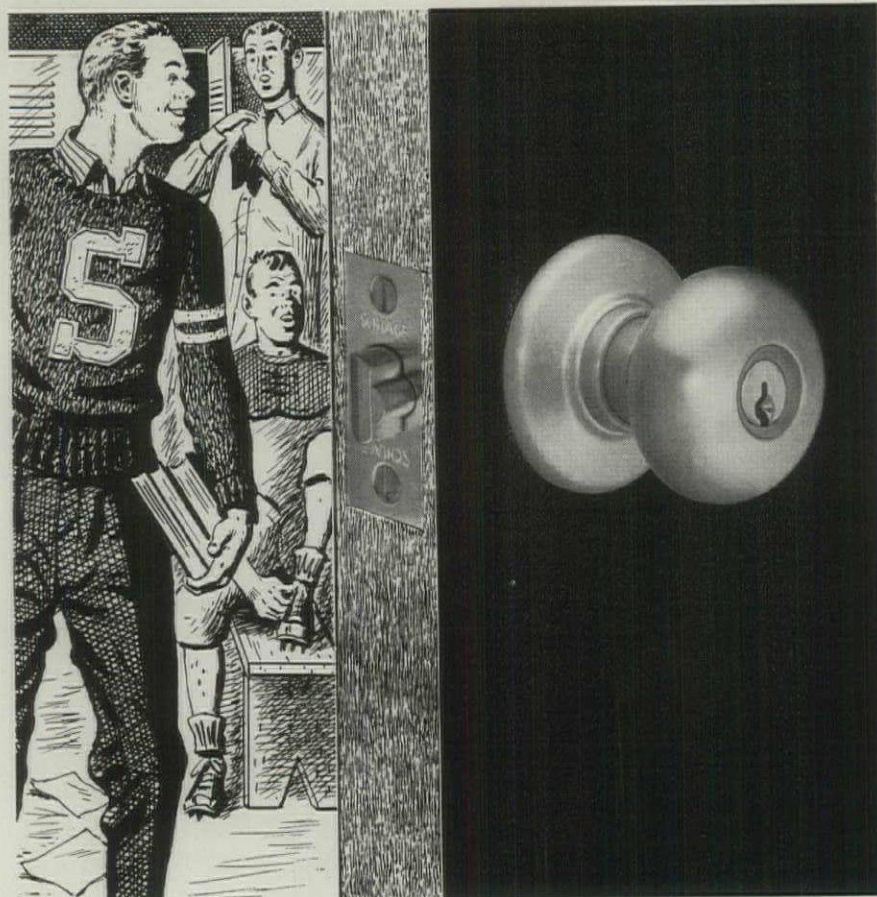
The growing use of porous masonry building materials makes this a much needed and most useful report.

Planning Kitchen Cabinets; Patterns for Kitchen Cabinets. Maude Wilson. Agricultural Experimental Station, Oregon State College. Station Bulletins 445 & 446. 90 pp.; 94 pp.; 6" x 9", illus., indices.

Very complete investigation of all the items to be stored and how best to plan the spaces, chiefly in terms of farm kitchens, carpenter-built. For economy an adequate minimum area of counter surface is recommended for each type of use, with added storage in floor-to-ceiling cabinets. Methods are outlined for determining best heights for different individuals but the heights recommended have proved satisfactory to 80% of the women who cooperated in the study. (Floor of sink, 32½"; rim, 38½"; mixing table, 32"; surface adjacent to range, same height as range; lap table or board, 24"; planning desk, 28".)

Emphasis on different heights for different tasks while standing or sitting down makes for very workable (and good looking) kitchens. A uniform height for stove and all counters looks good, too, but it doesn't work so well,

A Schlage Installation because...



Schlage is Durable

When the Stanfield school board planned their new high school, they didn't realize the importance of good locks. But their architect did. He specified Schlage to stand up under rough usage by thousands of hurried students.

Write for illustrated booklet: "Locks by Schlage"



SCHLAGE
LOCK COMPANY
SAN FRANCISCO NEW YORK

"ORIGINATORS OF THE CYLINDRICAL LOCK FOR SCHOOLS"

(Continued on page 106)



TYPE D PANEL—Box beam formed by welding together two steel sections. Side laps interlock to form continuous flat surface. Cover plates available for open cells to provide two flat surfaces. Standardized in 16" width. Depth 1½" to 9". Gages 18 to 12.

NEW METHOD OF FLOOR CONSTRUCTION

Better Floors-Faster!

**with Fenestra
Building Panels**

Fenestra Building Panels come in a range of types, sizes and weights for almost any building need... save you time in construction of floors, walls, roofs, ceilings and partitions. For full information, mail the coupon, or call us.

1. WHY IT APPEALS TO BUILDING OWNERS.

It's a stronger, safer, noncombustible floor of steel. It can't warp, shrink or rot. That makes it an ideal floor for plants, shops, homes, every type of building. It marks your buildings as up to date—tells your clients that you have designed well.

2. WHY IT SAVES CONSTRUCTION TIME.

Two men, without special skill or special tools lay the 16"-wide panels in standard joist lengths. Since the panels serve as joists, bridging and subflooring, much time is saved. Linoleum, wood or other finished floor material of your choice can be laid quickly on the smooth top surface of the panels.

Fenestra
BUILDING PANELS FOR

ROOFS

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FLOORS

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Please send me, without obligation, information on Fenestra Building Panels.

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Company

Address

(Continued from page 104)

even when we call it "streamlined." (By the way, these bulletins would have been improved by "streamlining." They use too many words too many times.)

FROM OTHER PUBLICATIONS

Illuminating Engineering as a Profession. R. L. Bieseke, Jr. Illuminating En-

gineering, 51 Madison Ave., New York 10, N. Y. Feb. 1948.

The author raises the question whether illuminating engineering is a profession — and what is a profession anyway. A Supreme Court definition states that a profession is "a vocation involving relations to the affairs of others of such a nature as to require for its proper conduct an equipment of learning or skill, or both, and to warrant the

community in making restrictions in respect to its exercise."

Is illuminating engineering a branch of electrical engineering? Hardly! Except for circuit wiring there is very little electrical engineering required. Is it a separate branch of engineering? If so, it will have to be pretty clearly defined by its practitioners before the States can be expected to license it as a profession.

This is an interesting discussion altogether, for engineers and architects, in these days of looser boundaries between fields of practice. Are architects no longer functioning as architects when they engage in industrial designing? Is industrial designing (for instance) a profession or capable of becoming such? What about city planning? It does none of us any harm to do a bit of rethinking on our status.

BOOKS

PENCIL PICTURES

Theodore Kautzky. Reinhold Publishing Corp., 330 W. 42nd St., New York 18, N. Y., 1947. 88 pp., illus. \$5.00

This book, *Pencil Pictures*, unlike Kautzky's previous book, *Pencil Broad-sides*, which dealt principally with technique, deals with making of pictures in pencil out of the great variety of subject matter to be found in nature. Landscapes of the seashore, farming country, mountains, and woodlands — with fishing boats, barns, village streets, and country homes — are illustrated and analyzed with attention to the arrangement of picture elements in line and value to produce pleasing design pattern. The accompanying text explains the principles upon which the author bases his picture making.

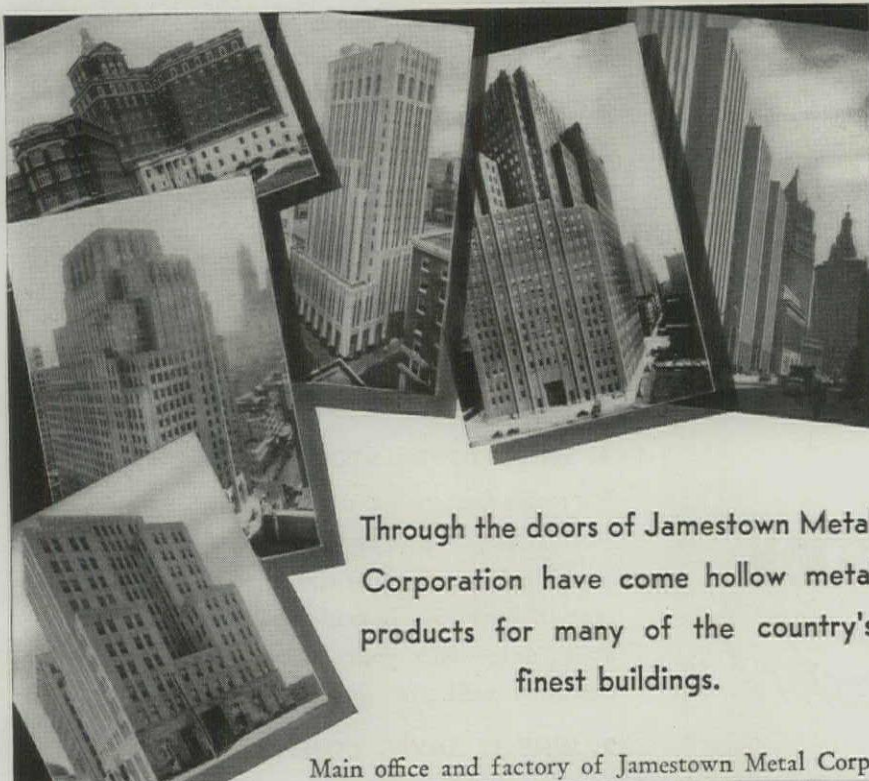
K. R.

THE CITY OF TOMORROW

Le Corbusier. Translated by Frederick Etchells. The Architectural Press, 18, Queen Anne's Gate, Westminster, S.W.1, London, England, 1947. 310 pp., illus. 15s.

Again in print after a lapse of 18 years, an English edition of this "standard work" by Le Corbusier is now available. It is uniform in size and general presentation with the recent new edition of *Towards a New Architecture* (December 1947 PROGRESSIVE ARCHITECTURE).

C. M.



Through the doors of Jamestown Metal Corporation have come hollow metal products for many of the country's finest buildings.

Main office and factory of Jamestown Metal Corp.



5 ACRES OF ONE-FLOOR FACTORY
designed for straight line, efficient production

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(Continued on page 110)

WORTHINGTON

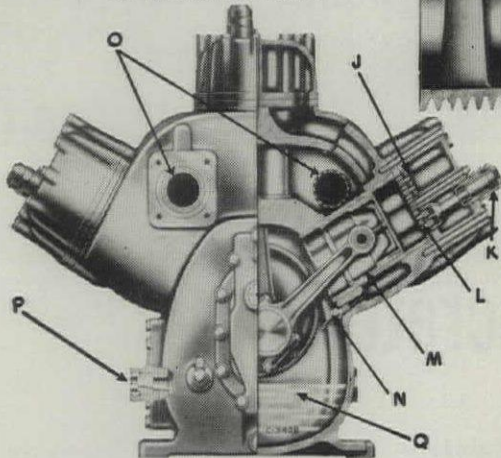
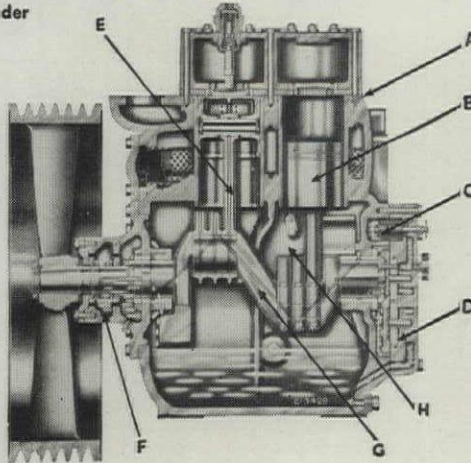
Air Conditioning and Refrigeration Report

Worthington Pump & Machinery Corporation, Harrison, New Jersey

USERS REPORT LOWEST MAINTENANCE COST WITH WORTHINGTON FREON-12 COMPRESSORS

Longitudinal Section through 6-Cylinder Compressor

- A—Valve Plate and Cylinder Head
- B—Automotive-Type Pistons
- C—Cleanable Oil Filter, Disc-Type
- D—Gear-Type Oil Pump (Models 3-HF-4 and larger)
- E—Forged Connecting Rods, Rifle-Drilled
- F—Shaft Seal
- G—Balanced Crank Shaft
- H—Oil Check Valve



Transverse Section through 6-Cylinder Compressor

- J—Discharge Valve
- K—Suction-Valve Unloader
- L—Suction Valve
- M—Cylinder Liners
- N—Oil Check Valve
- O—Suction Strainer
- P—Oil-Level Sight Glass (Wide angle vision)
- Q—Large Crank Case (Exceptionally generous lubricating-oil capacity)

A number of Worthington design features are responsible for the success of Worthington single-acting, multi-cylinder compressors in providing efficient operation at very low cost for maintenance.

The famous Worthington Feather* Valve—lightest, quietest ever made—eliminates valve grinding and rarely needs replacement.

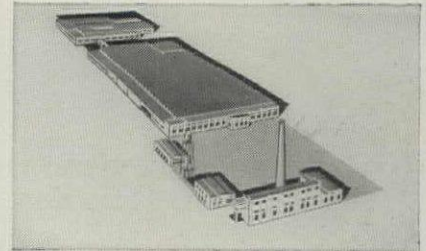
On most models, lubrication is force-fed from a self-contained gear-train-type pump driven directly by the crank shaft. A disc-type, continuously-cleanable filter keeps the oil clean.

* Reg. U. S. Pat. Off.

Cylinder liners in larger models are centrifugally-cast from special high-grade alloy cylinder iron having exceptionally high wearing qualities.

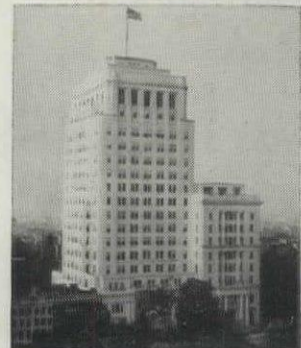
Main suction manifold, oil pump, oil passages and oil filters are built into the body casing, reducing the danger of leakage.

Write us for Bulletin C-1100-B30 on the complete line of Worthington Freon-12 compressors from 3 to 125 hp. *Worthington Pump and Machinery Corporation, Harrison, N. J. Specialists in air conditioning and refrigeration for more than 50 years.*



300-Ton Worthington Compressor Aids in Yarn Processing

At the Hopewell, Virginia plant of the famous Celanese Corporation a 300-ton Worthington refrigeration unit is used in the processing of viscose yarns.



Penn Mutual Employees Work in Comfort

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An important reason for the fine performance of Worthington equipment in both large and small installations, both air conditioning and refrigeration, is the fact that every Worthington job is a *balanced* installation. All the vital parts are made by the *one* manufacturer and are carefully balanced, one with another. It adds up to smooth performance, low cost, long life—*more worth with Worthington*. See your nearby Worthington distributor (in the Classified Telephone Book) for details.

AB-31

WORTHINGTON



Air
Conditioning
and
Refrigeration

A photograph of the Jacob Riis Housing Project now being built to rid New York City of one of its worst slum areas. Architects: James C. MacKenzie, Sidney L. Strauss, Walker & Gillette. Contractors: Willcox Construction Company, Maurice L. Bein, Inc., N. Fish Construction Company.



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project proves
advantages of...

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KIMPREG* plastic surfacing is a tough, durable material fused to exterior grade plywood in manufacture. Carloads of KIMPREG+Plywood panels were supplied for the tremendous Jacob Riis construction job and here's why:

Lower Ultimate Cost. KIMPREG increases the strength—adds to the life of plywood. KIMPREG-surfaced plywood concrete forms—handled with reasonable care—can be re-used scores of times.

Smooth Concrete Finish. Plywood panels protected with KIMPREG produce a remarkably smooth, long-lasting surface. They were ideal for the giant Jacob Riis Project because ceilings were not plastered, but painted directly over the concrete. The exceptional smoothness of the slab kept rubbing and stoning labor at a minimum.

Far Less Maintenance Expense. Light in weight, KIMPREG+Plywood panels cut handling time. Highly resistant to water, they won't swell—require no separation while drying. And oiling is reduced to a minimum. They strip easily—clean quickly.

Full Information For You. Time-saving, money-saving KIMPREG-surfaced plywood concrete forms are available through your local plywood jobber. They are also sold by individual plywood manufacturers under the trade names Laminex, Inderon and Westboard Industrial Plastic. For complete details write:

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PLASTIC SURFACING



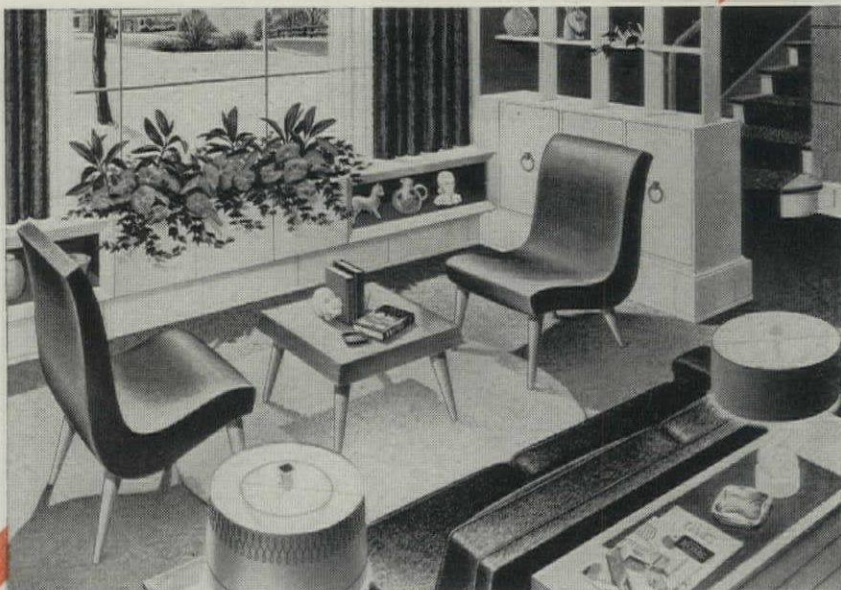
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FIRST

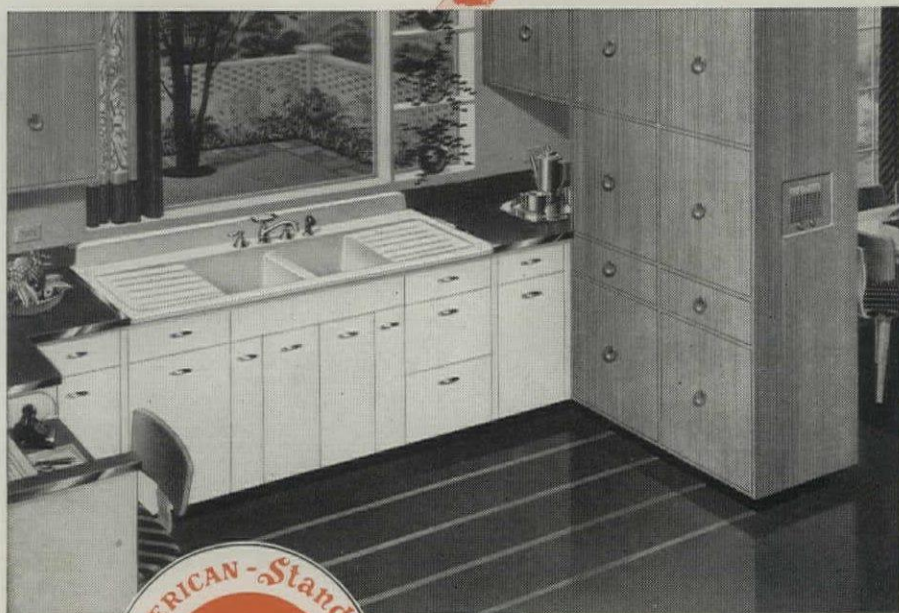
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■ You have access to the widest range of heating equipment and plumbing fixtures when you turn to American-Standard. In number of products . . . in variety of types and styles . . . no line is more complete. But large selection isn't all you get when you specify American-Standard. You also get the finest quality that money can buy. That's why more American homes have heating and plumbing by American-Standard than by any other single company. Your Heating and Plumbing Contractor will be glad to give you full information. **American Radiator & Standard Sanitary Corporation**, P. O. Box 1226, Pittsburgh 30, Pa.



▲ The living room above is as invitingly comfortable as it is modern. And adding immeasurably to its hospitality is the newest heating development by American-Standard, **BASEBOARD RADIANT PANELS**. Replacing ordinary baseboards, they are an inconspicuous source of radiant heat, and they distribute warmth evenly throughout the room. **Baseboard Radiant Panels** are available in two types—one for normal heating requirements and one for above-average needs.



◆ This practical kitchen, as cheerful as any housewife could wish for, is proof of the **ROYAL HOSTESS Sink's** versatility. The smart sink fits easily into continuous cabinet arrangements, and the new **Union Strip** by American-Standard forms a watertight seal between sink and adjacent counter tops. The **Royal Hostess** comes in models and sizes to fit virtually any kitchen plan . . . in white and many colors to harmonize with any decorating scheme. Made in one piece of rigid cast iron with a heavy coating of lustrous, acid-resisting enamel, it is built to give years of service.



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First in Heating and Plumbing

LOOK FOR THIS MARK OF MERIT—It identifies the world's largest line of Heating and Plumbing Products for every use . . . including Boilers, Warm Air Furnaces, Winter Air Conditioners, for all fuels—Water Heaters—Radiators, Convectors, Enclosures—Gas and Oil Burners—Heating Accessories—Bathtubs, Water Closets, Lavatories, Kitchen Sinks, Laundry Trays, Brass Trim—and specialized products for Hospitals, Hotels, Schools, Ships and Railroads.

(Continued from page 106)

FURNITURE FROM MACHINES

Gordon Logie. George Allen & Unwin, Ltd., Ruskin House, 40 Museum St., London, W.C.1, England, 1948. 150 pp., illus. 21s

Of interest primarily to furniture designers, this book, published in England, quite frankly purports to "explore the possibilities of the machine produc-

tion of furniture." It is concerned chiefly with actual production techniques, although some 40 pages are devoted to an evaluation of the essential qualities of good furniture. The balance of the book presents technical developments, machinery and methods for wood, metal, plywood, and plastics furniture manufacture.

L. S.

S.P.I. HANDBOOK

Society of the Plastics Industry, 295 Madison Ave., New York 17, N. Y. 1948. 450 pp., 6" x 9", illus., index. \$7.50

The first comprehensive handbook of the plastics industry with a wealth of data on materials, processes, design for molding, assembly, cementing, machinery — plenty for the industrial designer of plastic products but nothing for the architect.

J. R.

AN ALPHABET SOURCE BOOK

Oscar Ogg. Dover Publications, 1780 Broadway, New York 19, N. Y., 1947. 199 pp., 9" x 12". \$3.95

The enjoyment of fine calligraphy is a pleasure that has been shared by rather few designers. This book will bring that enjoyment to many, for its alphabets are full of vitality, springing from the author's thorough knowledge of his craft.

Like all good books on the subject, this one owes much to Johnston's *Classic Writing and Illuminating and Lettering*. (The debt to Johnston and other pioneers is freely acknowledged by the author.) The chief value of the book is its demonstration that letters skillfully drawn ("written" actually) with a wide pen are almost automatically good in design and consistently rich in detail.

Unfortunately, the subtleties of the best stone-cut letters are quite lost on the author. In fact, the handling of any materials other than ink and wide nib pen are slighted. Matters of scale and harmony with surroundings, so vital to good architectural work, are not touched upon. The text is lengthier than its content justifies and the design of the book (other than the plates) is flat. But the handsome big alphabets are a joy and inspiration.

J. R.

ARCHITECTURE IN IRELAND

Yearbook for 1946. *The Royal Institute of the Architects of Ireland*, 8 Merrion Square, Dublin, Ireland; distributed by W. S. Heinman & Co., 125 E. 23rd St., New York 10, N. Y., 1947. 86 pp., illus. \$1.75

Not without interest is this annual report from a country notable for its paradoxes in politics, culture, and economics. The contents range from condensed statements on the state of architecture today—contributed by J. J. P. Oud, Frank Lloyd Wright, and Walter Gropius—to a solemn examination of shell construction by Ove N. Arup. The few pictures of work in the country also span a surprisingly wide range.

C. M.

(Continued on page 112)

PECORA CALKING COMPOUND

Time-tested for 39 Years
Impervious to heat, cold, moisture, acid fumes

Permanently elastic, beneath its tough outer skin
Adheres to stone, glass, metal and wood

Rain or snow can't beat through building joints sealed tight with Pecora Calking Compound. Its permanency and adaptability, plus complete reliability, have won for Pecora the responsibility of protecting the more important projects of the foremost architects throughout the country.

See SWEET'S for suggested specifications, or write us for descriptive folders and detailed information.



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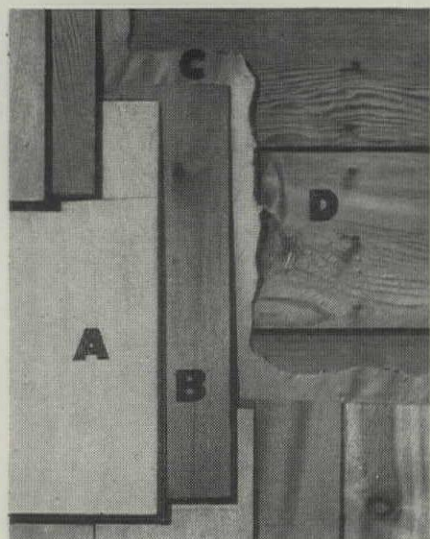
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MASTICS FOR DECORATIVE METAL TILE



- A. Outer course of Certigrade Shingles or shakes.
- B. Under course of low grade cedar shingles.
- C. Building paper.
- D. Solid or spaced sheathing.

Note: Weather exposure—12" for 16" shingles and 14" for 18" shingles. Top course is laid 1/4" lower than under course. Use two nails per shingle space 2" from butt and 1/4" from edge with a third nail in shingles wider than 8". Under course may be stapled.

WALLS OF CEDAR SHINGLES DOUBLE-COURSED

Years of research with shingle sidewall construction have developed a method of double-coursing that is economical, beautiful and long lasting. The maintenance cost is low, scale and proportion of the building improved, and a warm, tight, economical job assured.

You can obtain a complimentary blue print and folder on double-coursing application and other data.

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(Continued from page 110)

LIBRARY BUILDINGS FOR LIBRARY SERVICE

Papers Presented Before the Library Institute at the University of Chicago, August, 1946. Edited with an introduction by Herman H. Fussler. American Library Association, 50 E. Huron St., Chicago 11, Ill., 1947. 216 pp., illus. \$3.50

Although many of the papers in this book are directed at librarians — the client, rather than the architect — there is still much reference material which should make the volume useful to the designer. Chapters on the book stock, special materials, air treatment, and illumination might be especially valuable.

T. H. C.

GHOSTS ALONG THE MISSISSIPPI

Clarence John Laughlin. Charles Scribner's Sons, 597 Fifth Ave., New York 17, N. Y., 1948. 220 pp., illus. \$10.00

One hundred photographs that magically capture the substance and the spirit of the great Louisiana plantation houses of the 19th century — the pictures make clear the functional nature of these buildings and their close adaptation to climate and place. For this selective and well thought-out book Laughlin has written a prologue, and he faces each photograph with a page of rather interpretive text.

H. G.

CHARLESTON

A Gracious Heritage. Robert Molloy. D. Appleton-Century Co., 35 W. 32nd St., New York 1, N. Y., 1947. 300 pp.; drawings by E. H. Suydam. \$6.00

Something between a city history and notes of a witty visitor, this book imparts impressions of the character of Charleston. The appearance of the old city is recalled by the pleasant drawings of E. H. Suydam: architects and their works are consistently acknowledged as distinguishing factors in Charleston's urbane existence.

C. M.

RECAPTURED ELEGANCE

Furnishing the Colonial and Federal House. Nancy McClelland. J. B. Lippincott Co., 521 Fifth Ave., New York, N. Y., 1947. 173 pp., illus. \$3.75

This recent edition of a book already well known to decorators and owners of historic houses along the Atlantic seaboard has been somewhat enlarged to show new examples—with added notes about home accessories, tiles, wallpaper, textiles, color, and lighting. Strictly for traditionalists.

C. M.

FORM AND FUNCTION

Remarks on Art. Horatio Greenough. Edited by Harold A. Small. University of California Press, California Hall, Berkeley 4, Calif., 1947. 148 pp. \$2.75

Greenough, sculptor and critic, wrote in the middle of the nineteenth century a series of essays on American art and architecture that have received too little popular attention. The group of papers gathered together in this handsome book deal with esthetics, the basis of American architecture, criticism, fashion, etc. The point of view is so clear and con-

(Continued on page 114)

QUALITY!

SOLID CORE

FLUSH DOORS & PANELS

FLUSH DOORS are:

TEGO-BONDED

SOLID Hardwood LUMBER CORE THROUGHOUT

1/8" CROSSBANDED

Which guards against shadow lines appearing on face of door after finish is applied.

Fully guaranteed against warping or separation of Veneers.

Oak, Walnut, Mahogany Gum

PANELS are:

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STOCK SIZES—UP to and including 4' x 8'

Face Veneers center book matched

Oak, Walnut, Mahogany, Prima Vera and other fancy-faced cabinet woods.

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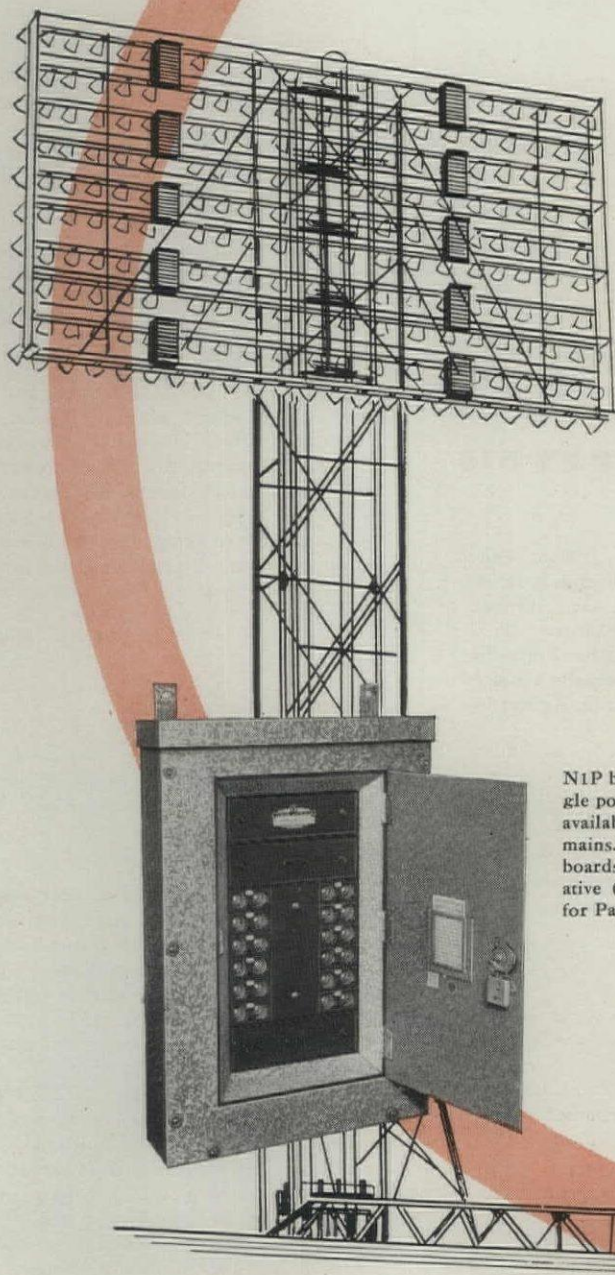
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LIGHTING EQUIPMENT AND PITCHERS are judged in much the same way...their control has to be perfect. And at Fenway Park, home of the Boston Red Sox, the lighting controls for night baseball games are providing the same kind of dependable performance that fans expect of a 20-game winner.

These lighting controls are **FA** N1P-3L Raintite Panelboards. Approximately 1300 circuits and floodlights are controlled by 46 of these efficient **FA** Panelboards. In addition, each panel is weather-protected with "raintite" enclosures to assure night after night and season after season of dependable performance.

This same type of perfect control is available in a variety of **FA** Panelboards for industrial plants, stores, offices or wherever light and power control has to be dependable, trouble-free... perfect, that is.

N1P branch circuit panelboards have single pole, plug fuse only branches and are available in 8 to 40 circuits, 3 and 4 wire mains. For more details about **FA** Panelboards, consult your nearest **FA** Representative (he's listed in Sweet's)...or write for Panelboard Bulletin No. 301.



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(Continued from page 112)

temporary that it is hard at times to believe the date line. Greenough said, "Beauty is the promise of function," long before Sullivan made his analysis of function and form. He said "organic" structures "may be called machines" long before Le Corbusier made the same discovery. There is a good bibliography and an index.

T. H. C.

THEORY OF LIMIT DESIGN

John A. Van Den Broek. John Wiley & Sons, Inc., 440 Fourth Ave., New York 16, N. Y., 1947. 148 pp. \$3.50

The author is treating a subject which is still in its controversial stage. Are we to base our safety factors on what happens to the materials as they approach

failure, or are we to continue with the present methods which are based on the behavior of the various structural members during ordinary working loads? That there is a change in behavior in structural members as the load increases has been well enough recognized. The common assumption that the stresses in the members are directly proportional to the loads as they increase is not true. It is to be expected, therefore, that some modifications to our present design method will be made in the near future and that "limit design" will have a marked influence upon the direction towards which those modifications will be made.

As the various codes are now written, this book will be of interest mostly to those who would want to pioneer in revising our present design methods, or those who would want to take advantage of lessons learned by limit design in structures not covered by codes. It will also be of interest to engineers in general who want to gain a deeper understanding of the actual stress flow as distinguished from theoretical assumptions.

There is some very interesting information given about aluminum and magnesium beams, ductility, reversal of stresses, and other items of general interest. It would seem, therefore, that the book would belong in the bookcase of progressive engineers who want to keep abreast of modern developments, and also educators who would have a special interest in this field.

FRED N. SEVERUD

A GRAB BAG

Practical Job Pointers. Nelson L. Burbank. Simmons-Boardman Publishing Corp., 30 Church St., New York, N. Y., 1947, Second Edition. 211 pp., illus., index. \$4.00

A grab bag of shortcuts, new methods of doing old jobs, and just ordinary details which have appeared in the *American Builder* over a period of about 20 years. The previous edition had 600 items, each illustrated with a linecut. The present edition reprints the first and adds a couple of hundred more items in separate chapters. Both sections are covered by a single index but there are two tables of contents. Very confusing at times, but it encourages browsing and it's fun to browse around in this collection of kinks and gadgets by so many building mechanics and just plain handy-men-about-the-house.

J. R.

MODERN TIMBER DESIGN

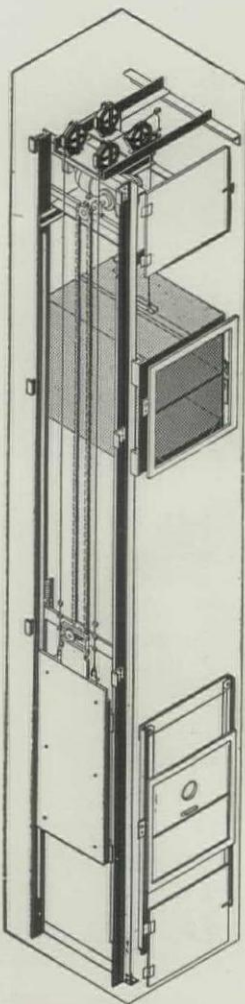
Howard J. Hansen. John Wiley & Sons, Inc., 440 Fourth Ave., New York 16, N. Y., 1948. 312 pp., illus. \$4.50

This book has also, like the *Handbook*, been prepared with emphasis on visual

(Continued on page 116)

ROTO-WAITER by Sedgwick

**A new kind of fully automatic
electric dumb waiter
that never overtravels**



The endless chain drive of the new Sedgwick Roto-Waiter makes it the perfect dumb waiter for stores, hospitals, hotels, restaurants, libraries, clubs, schools, banks, factories, residences, etc.—especially for two-stop installations.

The single direction motor helps cut costs by eliminating the need for special control equipment normally required when reversing motors are used—and, by reducing starting torque, it cuts current consumption.

And Sedgwick Roto-Waiters. . .

1. Never overtravel
2. Are completely factory-assembled-and-tested
3. Require only minimum clearances
4. Have an overload safety device for safe operation
5. Require no heavy load-bearing supports except at the bottom
6. Are easy to install

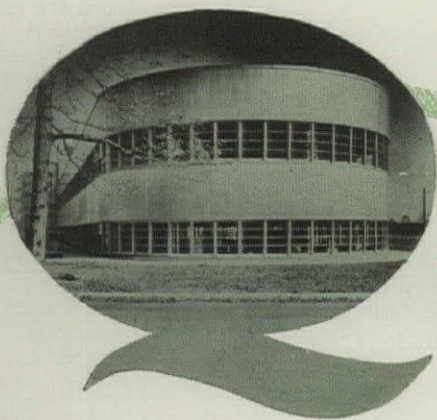
The table of dimensions shown below lists three standard counterweighted Roto-Waiters. In addition, Sedgwick makes an uncounterweighted Roto-Waiter—capacity 150 lbs., car size 24" x 24" x 36"—which is ideal when a dumb waiter is to be installed in limited space as for undercounter use.

STANDARD ROTO-WAITER DIMENSIONS

Size No.	2C	3C	5C
Capacity, lbs.	200	300	500
Car width, in.	24"	30"	36"
Car depth, in.	24"	30"	36"
Hoistway width, in.	33"	39"	45"
Hoistway depth, clear in.	27"	33"	39"
Hoistway depth, including doors, in.	29"	35"	41"

So if you are stymied by perplexing lifting and lowering problems involving the vertical movement of material and merchandise—tell us about them. And write for complete details and specifications of the new electric dumb waiter that *cannot* overtravel—the Sedgwick Roto-Waiter.

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ELECTRIC AND HAND POWER ELEVATORS AND DUMB WAITERS



Q-Panels available now

AND LOOK WHAT ARCHITECTS ARE DOING WITH THEM!

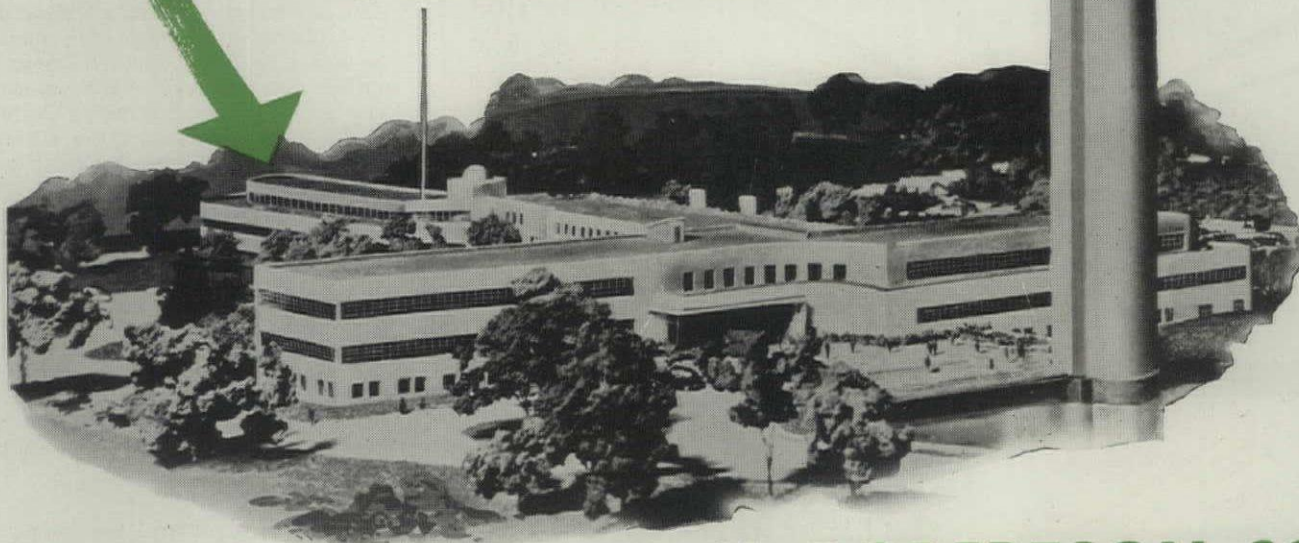
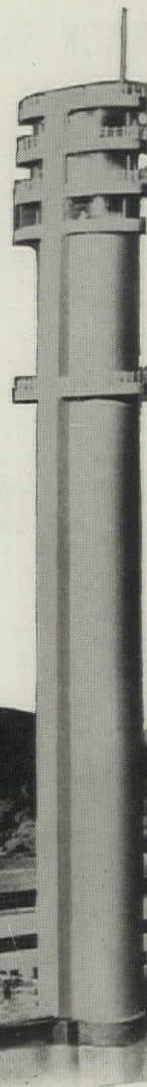
● The scale model below shows how Giffels & Vallet, Inc., L. Rossetti, Engineers and Architects, visualize the new electronics laboratories now under construction at Nutley, New Jersey, for the Federal Telecommunication Laboratories, Inc. The 300' tower is in itself a microwave experimental laboratory.

Like the completed section shown above, the finished project will be Robertson Q-Floors and Robertson Q-Panels throughout. The tower will be faced with specially designed aluminum fluted Q-Section.

The Q-Panels are 2' wide consisting of a fluted aluminum section and a flat steel plate enclosing 1½" of insulation. Q-Panels weigh less than 5 lbs. per square foot and can be erected so fast that a crew of only twenty-five men have put up an acre of wall in three days. Yet this advanced wall building panel has the thermal insulation value of 12" dry masonry. Fluted or flat surfaces offer great variety for architectural contrasts in light and shadow.

Wherever conventional, heavy masonry walls have been used in commercial and industrial buildings, Q-Panels can be used, and it's a lot easier to hang a wall than to pile it up. Q-Panels come to the job pre-engineered for speedy erection, and not the least of Q-Panel's advantages right now is the fact that you can get them in a reasonable time. In addition to the job described here, Robertson Q-Panels are currently being used in all parts of the country.

For more information, call your Robertson Representative or write the H. H. Robertson Co.



George A. Fuller Co., New York City, Contractors

H. H. ROBERTSON CO.

2405 Farmers Bank Building
Pittsburgh 22, Pennsylvania



Offices in 50 Principal Cities
World-Wide Building Service

(Continued from page 114)

instruction. The illustrations of the various manufacturing processes involved in fabrication of wood members and their connections have been very well presented. The material is more readable than in the *Handbook* and is of a more general character so that it should be of interest to anyone in the construction field who has to do with

wood structures. The sections dealing with plywood and glue are particularly interesting. Much of the information here is right up-to-date, relating the great strides that plywood has made due to its use in aircraft construction. This book is complete in itself. Although it is not as extensive from a technical standpoint as the *Handbook*, it gives all

the essential features. Between the two, I believe that most engineers would prefer *Modern Timber Design* to *Timber Engineers' Handbook*. Certainly this preference would be very marked with architects and contractors.

FRED N. SEVERUD

TIMBER ENGINEERS' HANDBOOK

Edited by Howard J. Hansen. John Wiley & Sons, Inc., 440 Fourth Ave., New York 16, N. Y., 1948. 882 pp., illus. \$10.00

This book is a solid, down-to-earth compilation of almost everything one would want to know about wood design. The illustrations shown are very instructive and have been executed with great attention to every little detail. These illustrations are, to my mind, the most valuable contribution that the book has to offer. They are so vivid and well done that they act as a pretty good substitute for a trip to the site.

Much of the information otherwise is generally available in other publications, but it is an advantage to have just one source to go to, insofar as wood is concerned. I think Mr. Hansen has done a very thorough job of putting together all the up-to-date information into such a source.

FRED N. SEVERUD

AZTEC SPLENDOR TAKES A BACK SEAT HERE!



The Aztecs were noted for the magnificence of their public buildings. But even Montezuma had nothing like this.

Notice how architect, Mario Pani, has blended primitive motif and modern design in the strikingly beautiful Mexico City Normal School.

And . . . for the interior . . . to complement this splendor, Mr. Pani chose Flexwood. The auditorium has Avodire Flexwood on the curved walls. Tigerwood covers the ceiling lighting

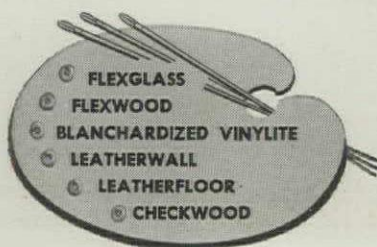
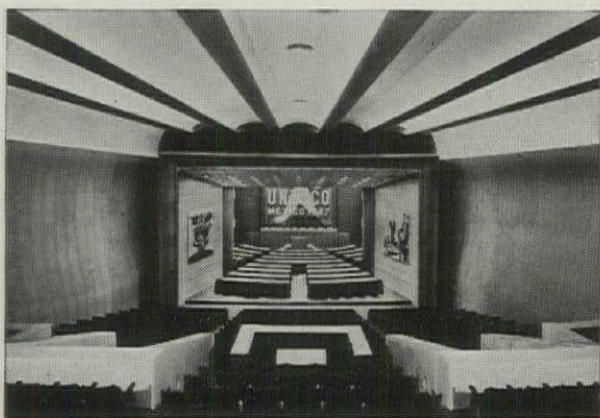
channels. The proscenium and the President's Stand are covered with Flat Cut Walnut Flexwood.

Here is an example of Flexwood's adaptability to modern design. Yet this versatile decorative material is equally at home in classic interiors.

Flexwood is genuine wood on a fabric backing. Easy to install, it saves in remodeling because time — and money-consuming structural work is held to a minimum.

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PLANNING INDUSTRIAL STRUCTURES

Clarence W. Dunham. McGraw-Hill Book Co., Inc., 330 W. 42nd St., New York 18, N. Y., 1948. 481 pp., 6" x 9", illus., tables, index. \$5.00

An excellent comprehensive text giving detailed information on engineering design of various industrial structures. The title is a misnomer, for planning as layout is barely touched upon. The author does, however, make a strong case for broad-gage thinking in terms of the productive use of the structure preliminary to detailed design. For the small economies so dear to the structural designer can be extravagant indeed if they add to production costs.

In addition to very thorough coverage of structural details in steel, concrete, wood, and various types of floor, wall, and roof construction, the book has chapters on ventilation, daylighting, and electric light and power. The chapters on soil investigation and foundations are excellent.

Written for structural engineers, the book would give any architect doing industrial work a rich background covering a wide experience in this field.

J. R.

(Continued on page 118)

When you specify reinforced concrete

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● In many modern buildings, architects and construction engineers have made extensive use of American Welded Wire Fabric. Supplied in rolls or sheets, the fabric furnishes continuous reinforcement of high strength steel members for wall, floor and roof construction.

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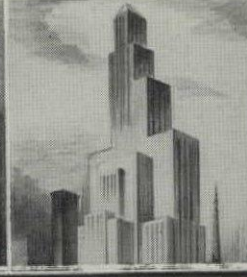
FACTORIES



SMALL HOMES



SCHOOLS



SKYSCRAPERS



HOSPITALS

(Continued from page 116)

**PLANNING—
THE ARCHITECT'S HANDBOOK**

E. and O. E. Published for The Architect and Building News by Gilbert Wood & Co., Ltd., 1947; distributed by Iliffe & Sons, Ltd., Dorset House, Stamford St., London, S.E.1., England. Obtainable from British Information Ser-

vice, 30 Rockefeller Plaza, New York, N. Y. 436 pp., 9 1/4" x 13 1/2", illus., index. 21s.

There is a great deal of information packed into the excellently clear illustrations and the rather discursive text of this reference book for architects. Thirty sections cover all sorts of buildings, from housing to holiday camps.

The section on farm buildings is particularly good (and it is *signed*, by Edwin Gunn, A.R.I.B.A.). The authors, E. and O. E., admit that their choice of *nom de plume* may be regarded as designedly adopted to disarm criticism of errors and omissions.

The book is actually an assemblage of details and data and discussion affecting planning. Perhaps its best feature is a series of well conceived diagrammatic analyses (in almost every section) of the various planning problems.

J. R.

**SOIL MECHANICS
IN ENGINEERING PRACTICE**

Karl Terzaghi and Ralph B. Peck. John Wiley & Sons, Inc., 440 Fourth Ave., New York 16, N. Y., 1948. 566 pp., illus. \$5.50

Any book that has Karl Terzaghi as the principal author is bound to be received with the greatest interest and respect by those interested in the subject of soil mechanics. Professor Terzaghi is recognized as one of the world's outstanding authorities on soils and as one whose judgment is always highly respected. The subject in itself does not lend itself to a very accurate analysis. Soil has its own individuality so that just as no two persons are alike, so also no two soils are identical. The benefits of recording the lifelong experience of an outstanding authority on the subject, therefore, become obvious. Not that it will be possible to just take this book and thereby solve all the problems in soil mechanics. Recent testing technique and the evaluation of tests have still not reached a level of thorough dependability. On account of the great variety of soils, it is also impossible to put in a book all the ramifications of soil behavior, but certainly the value of the information given is unquestionable and it should be required reading for anyone that puts structures on the earth.

FRED N. SEVERUD

**ARCHITECTURAL
CONSTRUCTION**

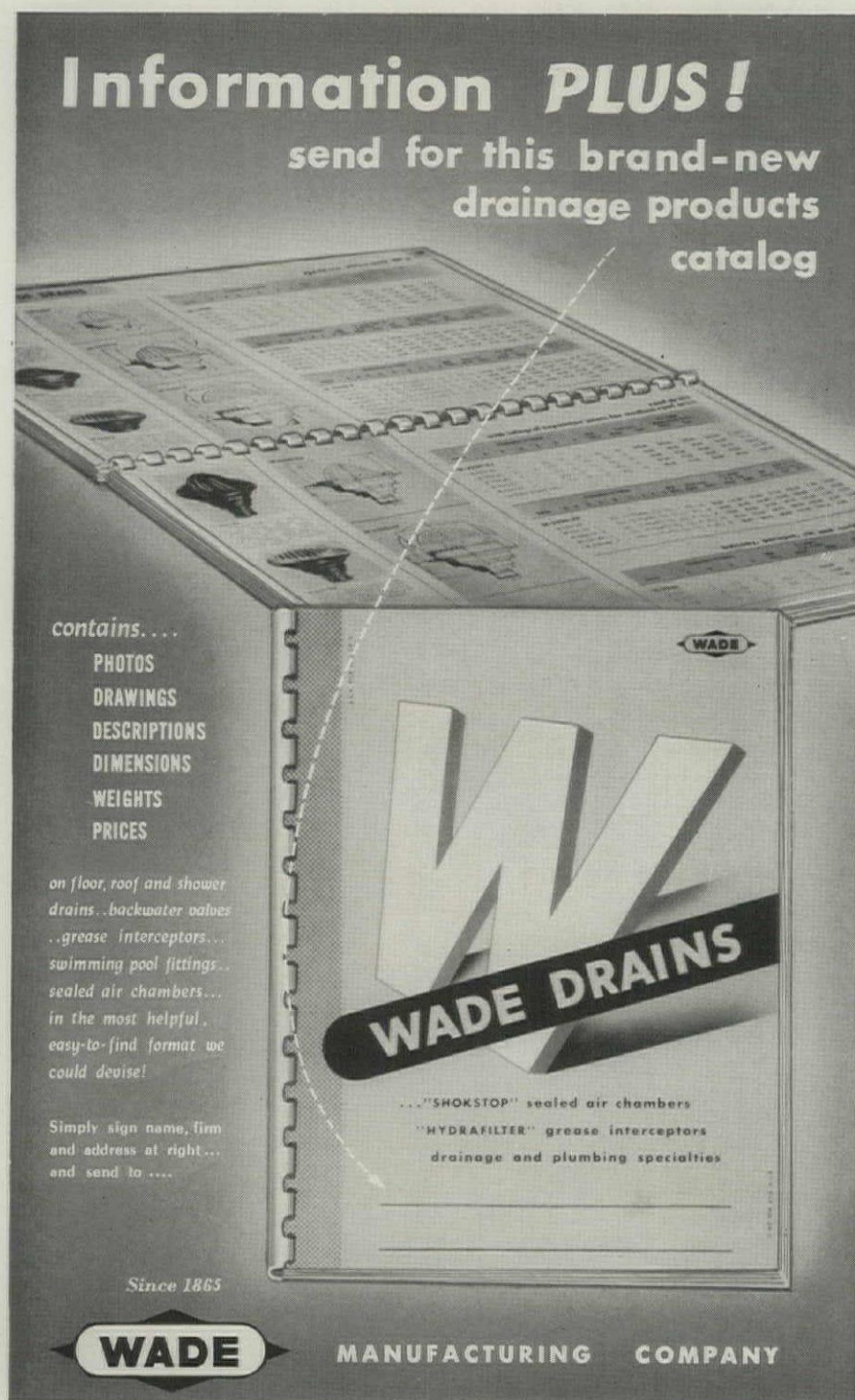
The Choice of Structural Design. Theodore Crane. John Wiley & Sons, Inc., 440 Fourth Ave., New York, N. Y.; Chapman & Hall, Ltd., London, England, 1947. 414 pp., illus. \$6.00

As indicated in the subtitle, this new text on architectural construction is organized on a step-by-step pattern of structural requirements based on codes, framing systems, wall assemblies, and foundations. This gives a direction to the subject which will make the apparently jumbled material of building construction more understandable to the student. The practicing architect,

(Continued on page 120)

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Reviews

(Continued from page 118)

squad chief, or draftsman will find this approach more to his taste than the usual compendium of data, usually presented without critical emphasis.

The emphasis here is on choice and the reasons governing choice: "a procedure for determining the type of building frame, foundation, floor, roof, and wall construction most suitable to meet the requirements of any particular structure." The examples illustrated (the book is particularly rich in illustrations) are fresh, recent pictures of good practice utilizing a great many details contributed by leading producers of metals, glass, terra cotta, cement, etc. This book brings the classroom into close relationship with architectural practice. It speaks well for knowledge at Yale University where the author is professor of architectural engineering.

J. R.

DATA BOOK FOR CIVIL ENGINEERS

Vol. III, Field Practice. Elwyn E. Seelye. John Wiley & Co., Inc., 440 Fourth Ave., New York, N. Y., 1947. 306 pp., 4 1/4" x 8", illus., tables, index. \$4.50

"Part I—Inspection" is a very convenient pocket book for field inspectors covering a great deal of ground, some of it very sketchily, some in meticulous detail. Material of primary concern in fireproof building construction is covered very well: soil tests, welding, concrete materials, and placing. Timber is woefully neglected. Good check lists are included for many kinds of work.

"Part II—Surveying" is strong on railroad curves and earthwork and weak on land surveying. Much of the text and many of the illustrations are extracted, quite properly, from standard handbooks on the various specialties. It's a bit of a grab bag with much good material but not much balance.

This is no fit companion for the excellent Vols. I and II. It drops with a dull thud.

J. R.

NOTICES

APPOINTMENTS

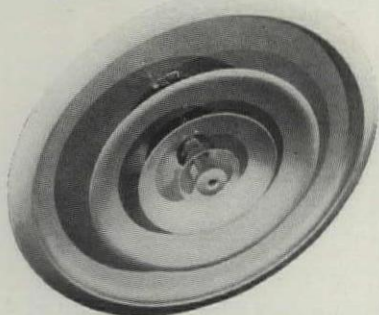
Western Reserve University has appointed HERMANN H. FIELD, formerly with Antonin Raymond & L. L. Rado, of New York, N. Y., the director of building plans for Cleveland College. Mr. Field will develop the overall plan for a new downtown college center in Cleveland and will be a member of the architectural faculty of Western Reserve.

(Continued on page 122)

The Best Laid Plans...



Shown below is the new Type C-1 Universal Anemostat. It is adjustable to provide any desired air flow pattern for heating, ventilating or cooling.



On the boards today, the ultra-modern commercial and industrial buildings of tomorrow are being designed to assure unsurpassed production. Incorporating all the newest advances in architectural design, they will add much to worker efficiency and comfort.

The best laid plans for newly designed commercial and industrial buildings include successful air-conditioning. To get it, more and more architects, engineers, and contractors are specifying Anemostat—the patented air-diffuser—which completes the air-conditioning process by providing scientifically correct distribution of the conditioned air to every part of the conditioned rooms.

The extreme changes proposed in building and

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structural design, the new ideas for interiors and equipment, all magnify the need for correctly engineered air-distribution as provided by Anemostat. Without it, the air-conditioning system is incomplete—drafts occur . . . stale air-pockets persist . . . temperature and humidity are unequalized.

The Anemostat eliminates these trouble-breeders by distributing conditioned air in pre-determined patterns, and precisely in accordance with prescribed-for-comfort air velocities. The result: **SUCCESSFUL** air-conditioning for true air-comfort!

Anemostat engineers are air-diffusion specialists. Backed by 25 years of experience, they can capably solve difficult air-diffusion problems. A consultation can be arranged today. There is no obligation.

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Boston University's Administration Building lobby. Architect, Cram & Ferguson; Terrazzo Contractor, De Paoli Mosaic Co.; both of Boston

For lasting beauty in Terrazzo ATLAS WHITE CEMENT

Here's a floor that withstands constant pounding and scuffing of feet, yet retains its colorful beauty. It's Terrazzo... made with a matrix of Atlas White Cement.

Atlas White Cement sets off the color values of aggregates or pigments used in Terrazzo, Stucco, Cement Paint and Architectural Concrete Slabs. Such a white matrix has the uniform clarity to complement the desired colors, whether in contrast or blend.

Atlas White complies with Federal and ASTM specifications for portland cement. It has the same advantages for concrete and is used in the same way. Atlas White concrete looks clean, fresh and colorful... and it cleans easily. Maintenance costs are low.

For further information on the uses of Atlas White Cement, see SWEET'S Catalog, Sections 4B/2 and 13B/8, or write to Atlas White Bureau, Universal Atlas Cement Company (United States Steel Corporation Subsidiary), Chrysler Building, New York 17, N. Y.

PA-T-13

FOR BEAUTY AND UTILITY
ATLAS WHITE CEMENT
FOR TERRAZZO, PAINT, SLABS, STUCCO



"THEATRE GUILD ON THE AIR"—Sponsored by U. S. Steel Subsidiaries
Sunday Evenings—ABC Network

(Continued from page 120)

RAPHAEL HUME, architect, has been invited to serve as consultant architect on the rebuilding of the University of Nymegen in Holland. The University is to be restored as a permanent memorial to the European dead of the American 82nd Airborne Division which liberated Holland.

The University of Miami has selected GEORGE FARKAS, industrial designer, to design the furniture and interiors for the new five million dollar University of Miami project in Coral Gables, Fla., which includes a students' housing project of one-, two-, and three-bedroom units.

DR. ERNEST M. FISHER, professor of urban land economics at Columbia University, has been appointed director of the University's newly established Institute for Urban Land Use and Housing Studies. A major purpose of the Institute, first of its kind organized on a nation-wide scale, will be to combine resources and techniques of several fields of study which can contribute to the understanding of housing problems.

Announcement has been made of the appointment of GEORGE E. DANFORTH as assistant to the director of the Department of Architecture at Illinois Institute of Technology.

A. J. DAIDONE has been designated acting chief architect, Bureau of Architecture, Department of Public Works, New York City. He succeeds A. Gordon Lorimer, who resigned to enter private practice.

The Department of Architecture, University of Texas, has been reorganized as a School of Architecture consisting of two departments, architecture and planning, and architectural engineering. JAMES J. POLLARD, national chairman of the Architectural Engineering section of the A.S.E.E., has joined the staff as professor of architectural engineering and chairman of the department. M. ROBERT LOUARD has been appointed visiting lecturer in design.

LEOPOLD ARNAUD, dean of the School of Architecture, Columbia University, has been named acting director of two new schools at Columbia, the School of Dramatic Arts and the School of Painting and Sculpture.

EXHIBITION

COMPREHENSIVE EXHIBITIONS OF STUDENT WORK AND METHODS OF INSTRUCTION at the Institute of Design, Chicago, opened recently at Harvard University and the Toledo Museum of Art. The exhibitions, consisting of over 125 photographs of all phases of work at the Institute of Design, are scheduled to tour the country. Those interested in

(Continued on page 124)

Pittsburgh Steeltex REINFORCING FOR STUCCO

SAFEGUARDS BEAUTY—REDUCES MAINTENANCE IN YOUR MODERNIZATION PROJECTS



Architect, William B. Wiener; Structural Engineer, E. M. Freeman and Associates; Contractor, Welch Construction Company

Economical, effective modernization of Palais Royal Department Store, Shreveport, La., protected by positive reinforcing of Pittsburgh Steeltex for Stucco.

The sleek, modern appearance of the Palais Royal Department Store at Shreveport, La. is more than skin deep. Back of it is the strength of Pittsburgh Steeltex Reinforcing for Stucco. This combination of welded wire fabric and a double ply backing guards against moisture penetration and minimizes stucco cracking—helps reduce maintenance costs.

On this job, 4" structural steel channels were first attached horizontally to the old structure. Then $\frac{3}{4}$ " prong channels were installed vertically on 16" centers to support the Steeltex. Next, Steeltex in rolls 49" wide and $110\frac{1}{2}'$ long (50 sq. yds. each) was attached horizontally to the pronged channels. Three coats of stucco were applied to the Steeltex. The result—the owners are delighted.

Pittsburgh Steeltex for Stucco has proven equally successful on other large projects and small jobs as well. It is especially designed as a base to receive and hold wet stucco and to

furnish proper reinforcement through embedment of welded wire fabric in stucco. The square mesh provides resistances to strains from any direction. Steeltex is made of galvanized, cold-drawn steel wire, spot-welded on 2" centers. This fabric is attached to the double-ply waterproof backing by crimped stitch wires. The absorbent face of the backing develops a suction bond with wet stucco. The waterproof side assists in proper setting and curing and prevents moisture penetration.

There are many applications for Steeltex for Stucco—all of them will prove to your advantage in modernizing small and large buildings and in new construction too. For more information on how Pittsburgh Steeltex can be used to give you strong reinforcing for economical construction, write for your copy of our technical bulletin DS 131. Address Pittsburgh Steel Products Company, 3232 Grant Building, Pittsburgh 30, Pennsylvania.

AVAILABLE NOW—Pittsburgh Steeltex for Stucco, Plaster, Veneer, Floors

Background photo shows Steeltex for Stucco, one-third actual size

Pittsburgh Steel Products Company

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● The new Wiley "Seminar" is designed especially to meet the particular requirements of planned schoolroom lighting.

The "Seminar" contains two 40-watt fluorescent lamps with starter or instant start certified HPF ballasts. It may be suspended or flush-to-ceiling, mounted singly or in continuous runs, to suit the architectural plan and light output requirements of individual classrooms.

The "Seminar" is a handsome fixture with POLY-LITE (Sandee) Side Panels that provides widespread down-light with uniform ceiling illumination. There are no curved or slanting sides to trap light or collect dust and dirt.

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Economical Maintenance*



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Dearborn at Bridge St.

Buffalo 7, New York

(Continued from page 122)

obtaining this exhibit should write the Institute of Design, 632 N. Dearborn St., Chicago 10, Ill.

SCHOLARSHIP

Award of the annual ION LEWIS TRAVELING SCHOLARSHIP IN ARCHITECTURE, administered jointly by the University of Oregon and the Oregon Chapter of A.I.A., will be made on or before August 1, 1948. Applications must be filed before June 1, 1948. Complete information may be obtained from the Secretary of the Managing Committee, Dean S. W. Little, School of Architecture and Allied Arts, University of Oregon, Eugene, Ore.

SUMMER TOUR

WORLD STUDYTOURS has announced its plans for a 1948 European Reconstruction Seminar, similar to that held last year, to enable specialists and advanced students in regional and community planning and housing and architectural fields to study specific reconstruction and planning programs in Europe. The five-and-one-half-week trip (July 16 to September 9) will cover England, Czechoslovakia, Poland, and Sweden. Hermann H. Field, director of building plans for Cleveland College, downtown center of Western Reserve University, will be leader of the travel seminar. Complete information can be obtained from World Study tours, Columbia University, New York 27, N. Y., or from Mr. Field at Cleveland College, 167 Public Square, Cleveland, Ohio.

NEW PRACTICES, PARTNERSHIPS

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JOSEPH BAILEY, 1307 Westwood Blvd., Los Angeles 24, Calif.

LESLIE H. KEMP, 24 King St., W., Toronto, Canada

NICHOLAS A. KABUSH, 318 Rookery Bldg., Spokane 8, Wash.

NORMAN E. KELLER (formerly with Deere & Co.), 925 24th St., Moline, Ill.

JOHN M. HIRSCH, 415 Vannest Ave., Trenton, N. J.

ERNEST R. GILBERT, associate with Marcellus Wright & Son, 1103 E. Main St., Richmond 19, Va.

A. STEWART WALKER, ALFRED EASTON POOR (Walker & Poor, consolidating the firms of Walker & Gillette and Alfred Easton Poor), 542 5th Ave., New York 19, N. Y.

BENJAMIN BALDWIN, 33 E. 75th St., New York 21, N. Y.

(Continued on page 126)



Save Time and Money with **CONCRETE FRAMES and FLOORS**

REINFORCED CONCRETE frames and floors effect substantial economies in construction—even in buildings of six stories or less. This method of construction simplifies the work of the masons, reduces the time required for handling forms and generally expedites completion of the job.

Reinforced concrete construction results in firesafe buildings with the strength and rigidity to resist all static and dynamic loads. Concrete frames and floors are ideally adapted to apartment buildings, hospitals, hotels and schools, for this

type of construction permits the reduction of the total height of the structure without reducing ceiling heights, gives the architect unusual freedom in locating columns and cuts building cost.

Architects and engineers are invited to make full use of our services to secure all the advantages of reinforced concrete construction. Write today for copies of two free reference manuals: "Continuity in Concrete Building Frames" and "Handbook of Frame Constants." Distributed only in the United States and Canada.

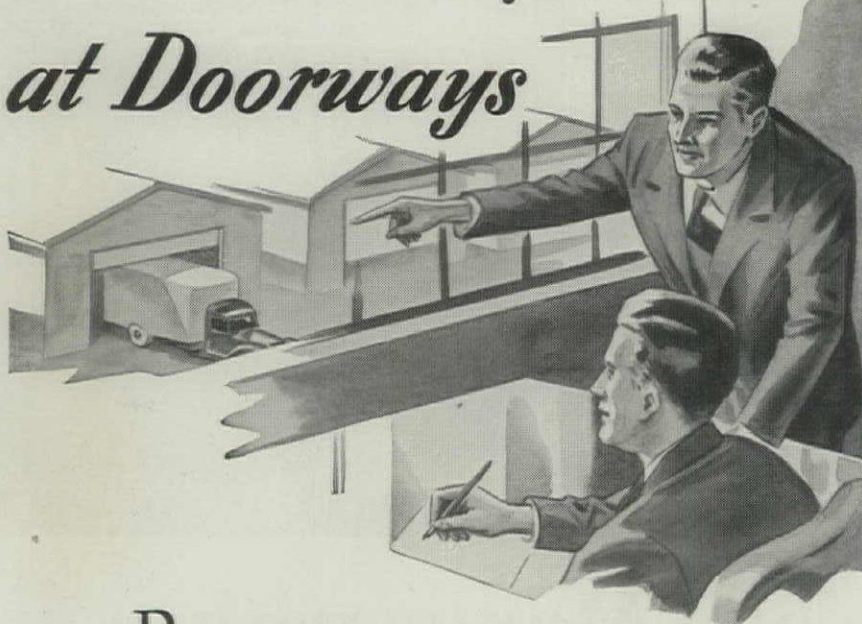
Photo shows section of the New York City Housing Authority's Brownsville housing project. Reinforced concrete frame and floors with wide shallow beams were used in the 27 six-story apartment buildings with three-story wings. Project includes 1,338 units to house over 5,000 residents. Frederick G. Frost, architect. Fred N. Severud, engineer.

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STOP Efficiency Loss at Doorways

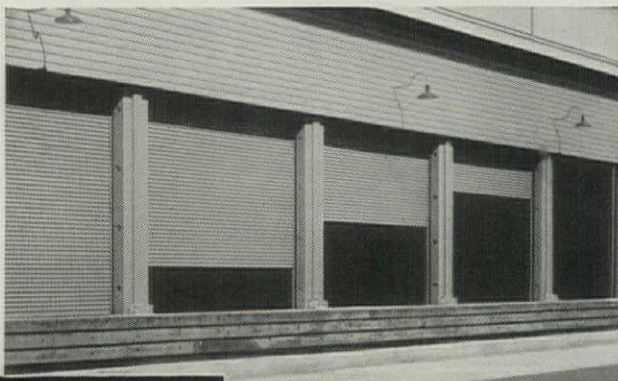


PLANT EFFICIENCY often bogs down at doorways. Costs pile up while vehicles wait for doors to be opened. Time and labor is lost when busy employees stop work to open or close doors. Heating and air-conditioning costs soar when doors aren't closed promptly.

You can guard against these profit leaks by specifying KINNEAR Motor Operated Rolling Doors. With a touch of a button, these doors open or close at a second's notice—from any number of convenient points. They rise straight upward and coil compactly above the lintel; all floor and wall space is *fully usable* at all times. The opened doors stay overhead, safe from damage by wind or vehicles. Their rugged, all-steel construction assures longer wear, lower maintenance, extra protection against fire, theft, and storm damage.

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Notices

(Continued from page 124)

JOHN GARTMAN, 299 W. 12th St., New York 14, N. Y.

ISAAC MOSCOWITZ and WILLIAM E. WILLNER have announced a new partner, HERBERT C. MILLKEY. The firm, now known as MOSCOWITZ, WILLNER, & MILLKEY, has offices at 1000 Peachtree St., N. E., Atlanta, Ga.

ROBERT INGLE HOYT has opened a new office at 231 La Arcada Bldg., Santa Barbara, Calif.

MARGARET MERZ has joined the staff of M. W. Fogg Co., 57 Rose St., New York 7, N. Y.

DONALD C. F. MILLER has announced a new practice with offices at Hametown-Richfield Rd., R.D. #1, Barberton, Ohio.

HERMAN J. EKLUND has renewed his architectural practice with offices at 1102-04 Broadway, Rockford, Ill., after work with several governmental projects during the war.

JAMES COLTON, association with ADELSON & COLTON, 116-55 Queens Blvd., Forest Hills, N. Y.

ELMER J. MANSON, 410 W. Saginaw, Lansing 15, Mich.

UEL C. RAMEY, HAROLD W. HIMES, ROBERT E. BUCHNER (RAMEY, HIMES & BUCHNER), 519 S. Broadway, Wichita, Kans.

ARTHUR D. JANSSEN, association with WILLIAM H. DASEKING, 58 Austin Ave., Atherton, Calif.

JACK M. LEVY, 151 Lexington Ave., New York 16, N. Y.

BEN L. ROSE ASSOCIATES, 1674 Broadway, New York 19, N. Y.

ARTHUR A. GRAVES, DAVID W. DYKEMAN, JR. (GRAVES & DYKEMAN), 518-519 Commerce Bldg., Everett, Wash.

JOSEPH STEIN, 110 Grand St., Waterbury, Conn.

ANTHONY THORMIN, ARTHUR WOLFE (formerly with ALBERT B. GARDNER), 672 S. Lafayette Park Pl., Los Angeles 5, Calif.

PAUL HARRIS, MARVIN FRANK (HARRIS & FRANK), 4122 Maple Ave., Dallas 4, Tex.

LESLIE WILLIAMS, CHARLES M. UPHAM, JR. (WILLIAMS & UPHAM), 292 Madison Ave., New York 17, N. Y.

GRISWOLD C. RAETZE, FREDERICK T. KLINE, 10621 Santa Monica Blvd., Los Angeles 25, Calif.

ERNEST J. SMITH, DENNIS H. CARTER, WALTER L. KATELNIKOFF (SMITH, CARTER, KATELNIKOFF), 289½ Garry St., Winnipeg, Canada.

KARL E. BLOMBERG, formerly with late firm of SLEE & BRYSON, 16 Court St., Brooklyn 2, N. Y.

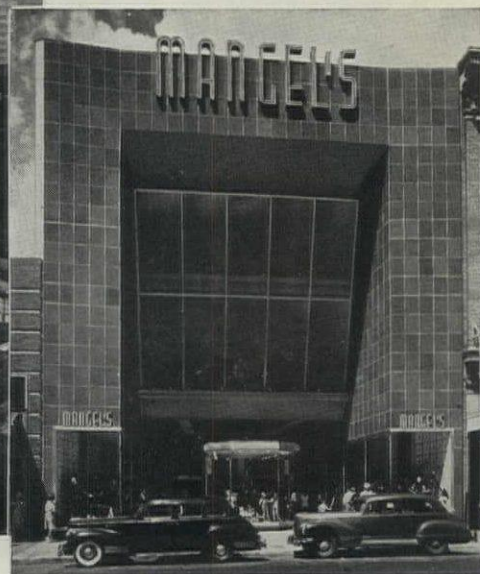
(Continued on page 128)



THE CITY NATIONAL BANK
Houston, Texas

The general color of the Terra Cotta is warm buff-grey harmonizing with the brick field. The lattice grills are buff-grey with reveals of deep red. All trim, spandrels, belt courses, parapet and coping, and lattice grills are of terra cotta.

Finn and Cummins, Architects
W. S. Bellows Construction Co., Builders



MANGEL'S, BIRMINGHAM, ALABAMA

The entire facade is Enduro Architectural Terra Cotta in a sparkling light blue matte glaze. The unit size of the ashlar is 24" x 32".

Ross-Frankel, Inc., Designers & Builders
New York, N. Y.

"Scope" ... in **ENDURO** ARCHITECTURAL TERRA COTTA

The esthetic potential of Enduro Architectural Terra Cotta, because of its plasticity of form, color and texture, is limited only by the designer's imagination.

As a practical surfacing material it has no equal. The fire-hardened ceramic glaze resists weather-stain and grime—even under mill-town conditions, simple soap-and-water washing restores original brilliancy of color.

For monumental, industrial and mercantile construction, for remodeling and modernizing, Enduro

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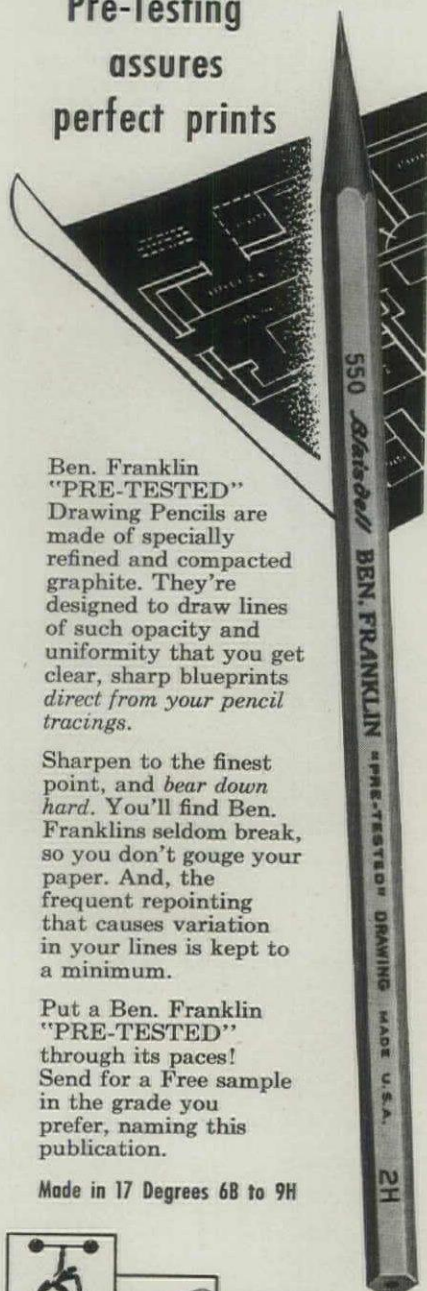
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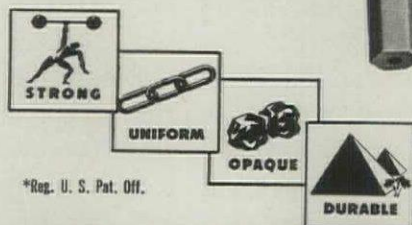


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ROSARIO CANDELA, PAUL RESNICK, 654 Madison Ave., New York 21, N. Y.

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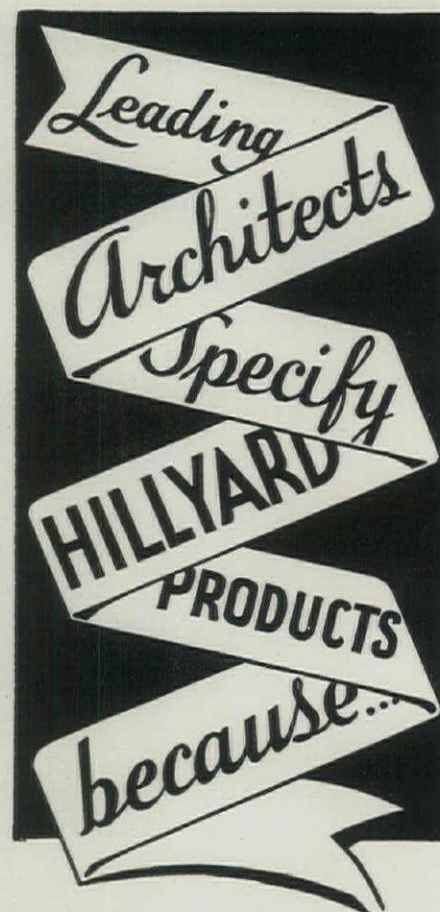
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(Continued on page 130)



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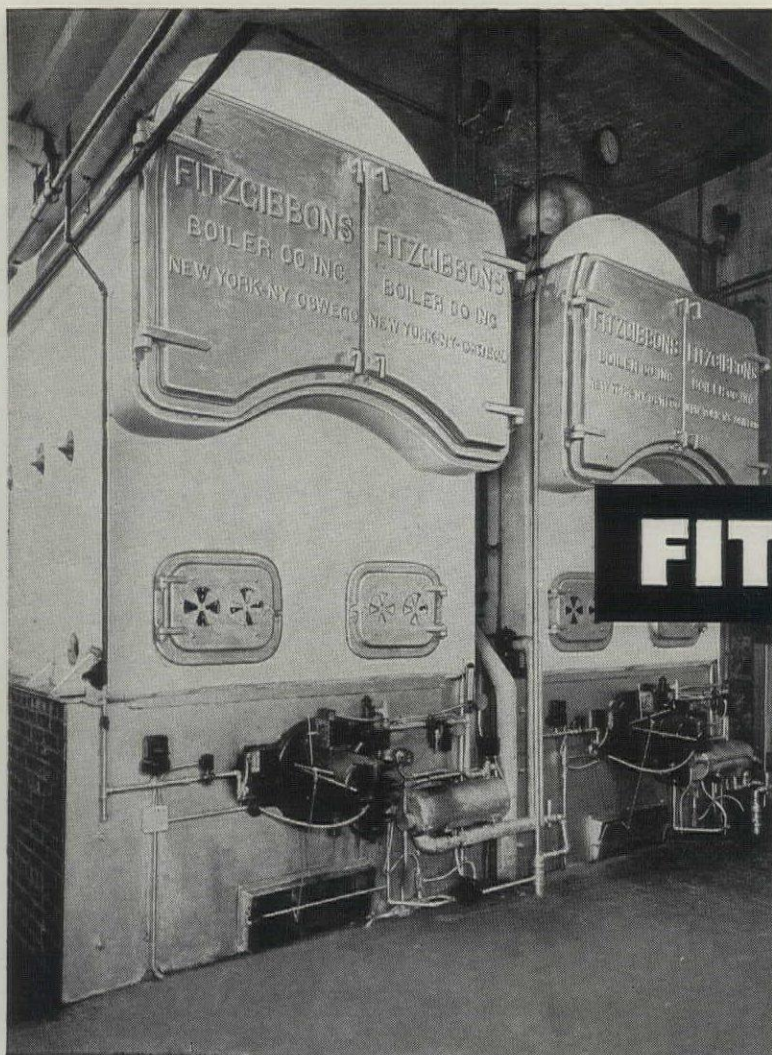
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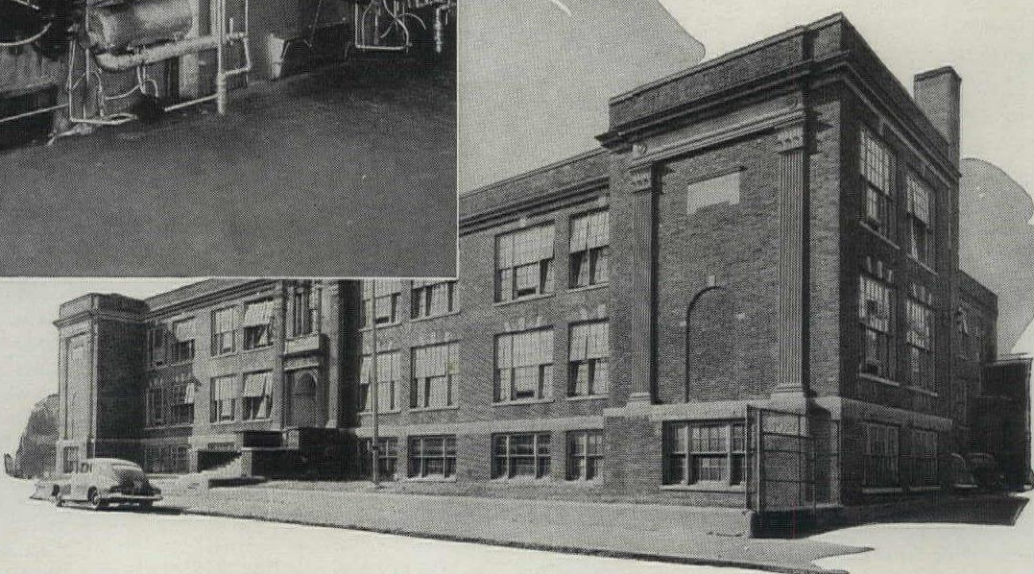
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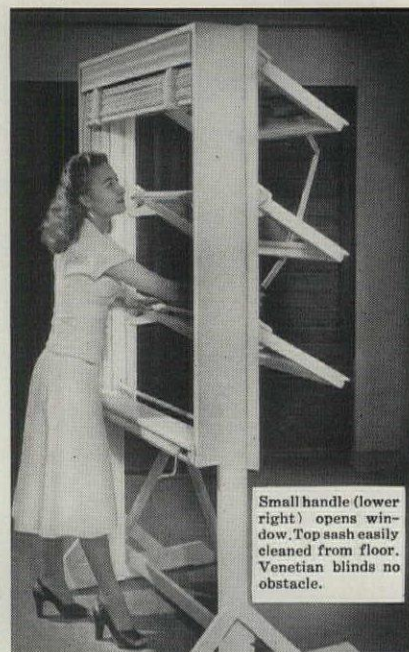
Robert Woods Kennedy, assistant professor of architecture at Massachusetts Institute of Technology, Cambridge, Mass., is among the 112 American and Canadian scholars and artists who have recently been awarded fellowships by the JOHN SIMON GUGGENHEIM MEMORIAL FOUNDATION to enable them to carry on specific research projects in their respective fields. Mr. Kennedy has been awarded the fellowship to assist him in the development of a new method of teaching architectural design and the preparation of a book describing his method.

Four others in the fields of fine arts and architecture have received fellowships. Horst Woldemar Janson, associate professor of art and archeology at Washington University, St. Louis, Mo., will prepare a book on the works of Donatello; Hugh Sinclair Morrison, professor of art at Dartmouth College, Hanover, N. H., will prepare a history of American architecture from the Colonial period to the present; Marvin Chauncey Ross, curator of decorative arts at the Walters Art Gallery, Baltimore, Md., will prepare a book on the French animal sculptor, A. L. Barye; Charles De Tolnay of the Institute for Advanced Study, Princeton, N. J., will prepare a monograph on the life and work of Michelangelo in the period 1534-1564.

Two photographers were also granted fellowships. Ansel Adams of Yosemite National Park, Calif., will prepare a book of photographs and text on the United States national parks and monuments, and James A. Fitzsimmons, of Los Angeles, Calif., will undertake experimental studies in the field of color photography.

(Continued on page 132)

AN "Open and Shut" CASE!



Small handle (lower right) opens window. Top sash easily cleaned from floor. Venetian blinds no obstacle.

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(Continued from page 130)

DEMOLISH THE RELICS

Demolition and replacement of buildings which have outlived their usefulness has been recommended by the A.I.A. Committee on Urban Planning, in a report to be voted upon at the national convention next month at Salt Lake City as a step toward permanent stabilization of the construction industry.

The architects say that continuity in production must be achieved to avoid the extreme fluctuations in the construction industry—to minimize boom and depression periods. Housing costs have been raised by this instability since the element of risk has justified the high prices for labor and materials and there has been a maximum volume of housing in periods of high prices.

"We should seek to develop procedures, both public and private, that will stimulate or inhibit the rate of construction so as to counteract, rather than aggravate, the violence of cyclical swings in the national economy," says the committee.

"A prerequisite for the permanent stabilization of the construction industry, however, is a definite program for the demolition and replacement of buildings that have outlived their usefulness."

As released today by Douglas W. Orr, of New Haven, president of the Institute, five major objectives for a national housing program were enunciated in the report. They were as follows:

1. To secure an adequate quantity of housing to serve the needs of all our citizens at a price they can afford to pay.
2. To secure an improved quality and design for all types of housing.
3. To secure continuity in the production of new homes and apartments.
4. To secure the elimination of slums and blighted areas.
5. To secure well planned communities and cities.

In considering the problem of quantity and cost, the committee approves methods designed to increase the productive capacity of the construction industry.

"We should oppose any artificial restrictions, whether on the part of capital or labor, that tend to hamper production or increase the cost of construction," the committee stated. "We should favor simplification of building codes and governmental aid for research in construction methods and materials.

"Some of the new methods that are being tried, such as prefabrication, may appear to result in a limitation in the employment of architects; our policy, in such cases, should be governed entirely by the needs of the public."

As far as quality and design are concerned, the committee is opposed to measures designed to secure "quantity of housing without regard to quality."



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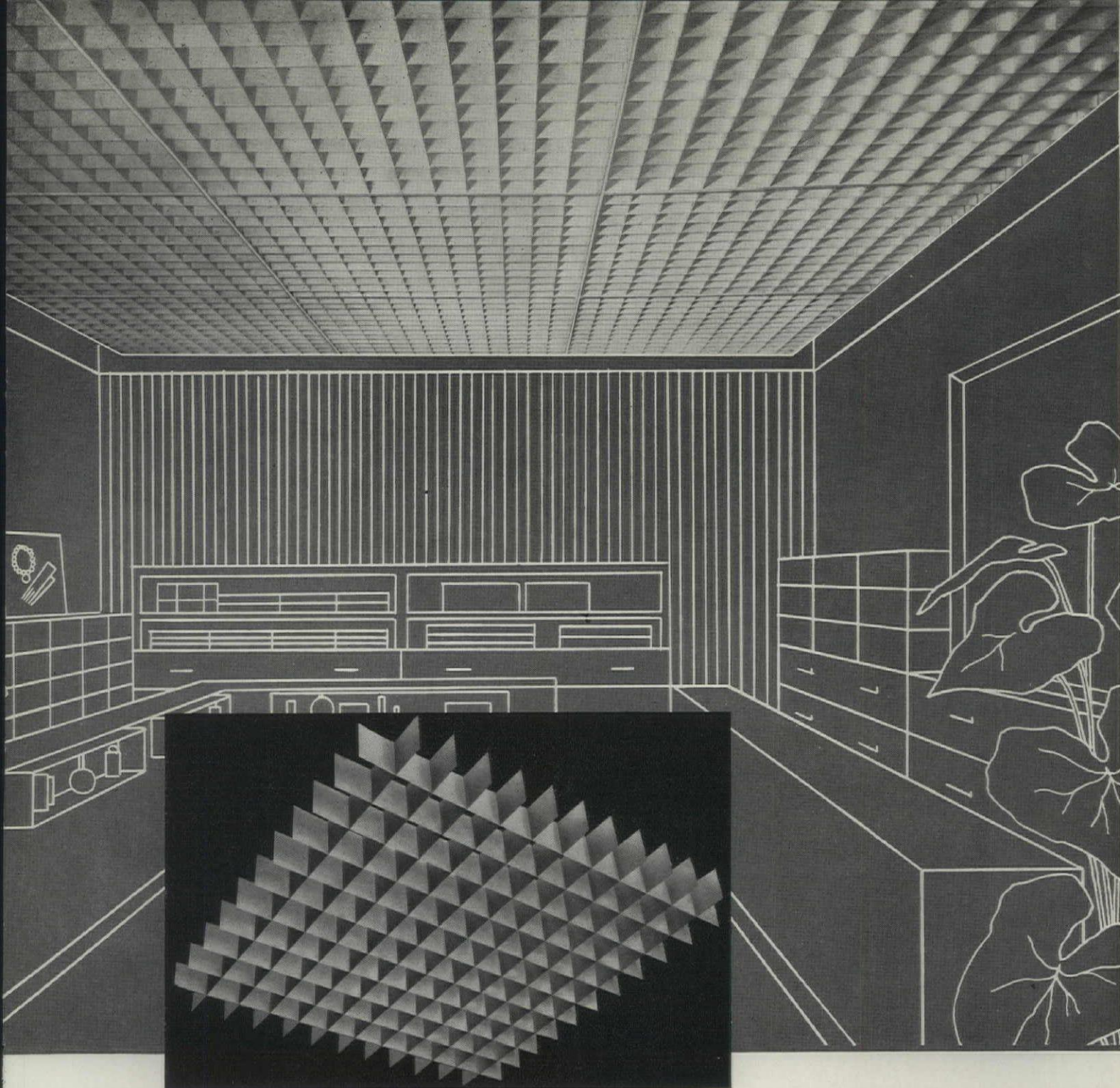
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COMPETITION

Twenty-two architectural colleges have indicated that they will submit entries in the student competition for the design of a model shopping center of the future, being conducted in connection with the STORE MODERNIZATION SHOW to be held at Grand Central Palace, New York, N. Y., July 6-10. Prizes of \$500, \$250, \$125, and two prizes of \$75 each will be awarded the designers of the best model shopping centers, which must include shops, supermarket, department store, newsreel theater, restaurant, nursery, relaxation area, and a street-level parking area.



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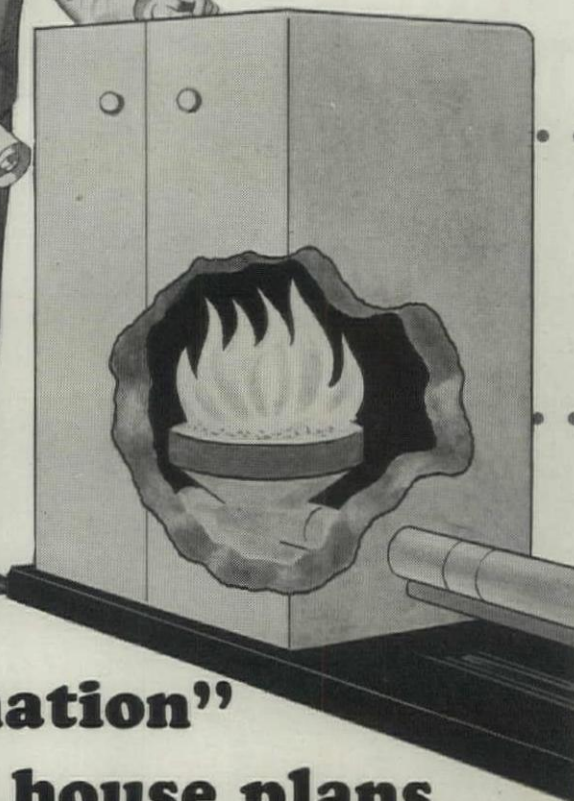
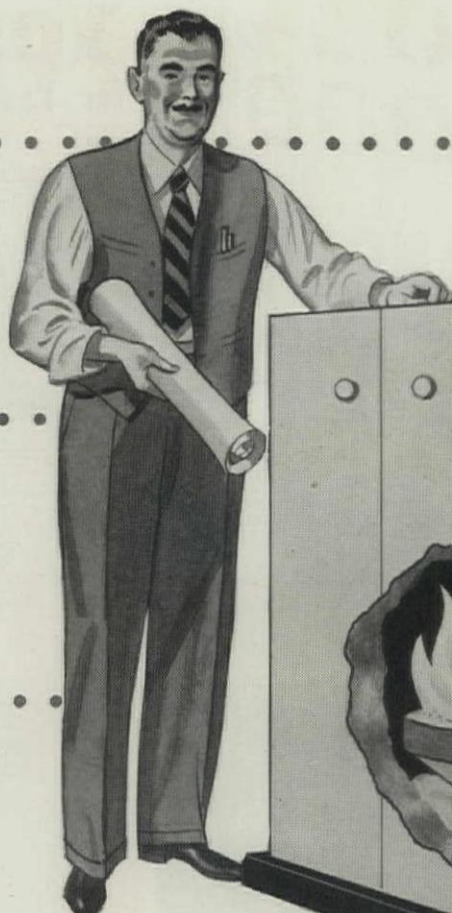
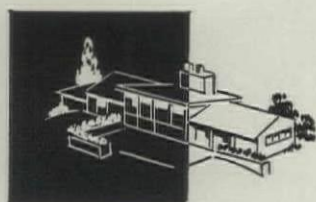
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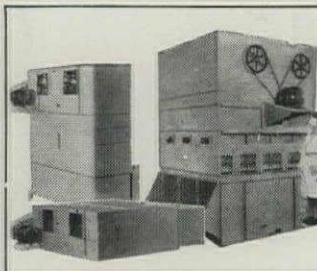
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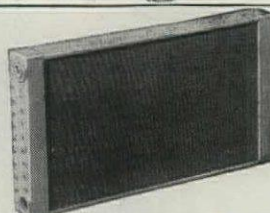
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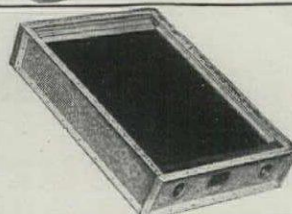
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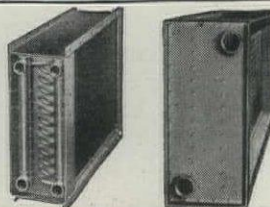
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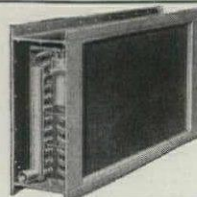
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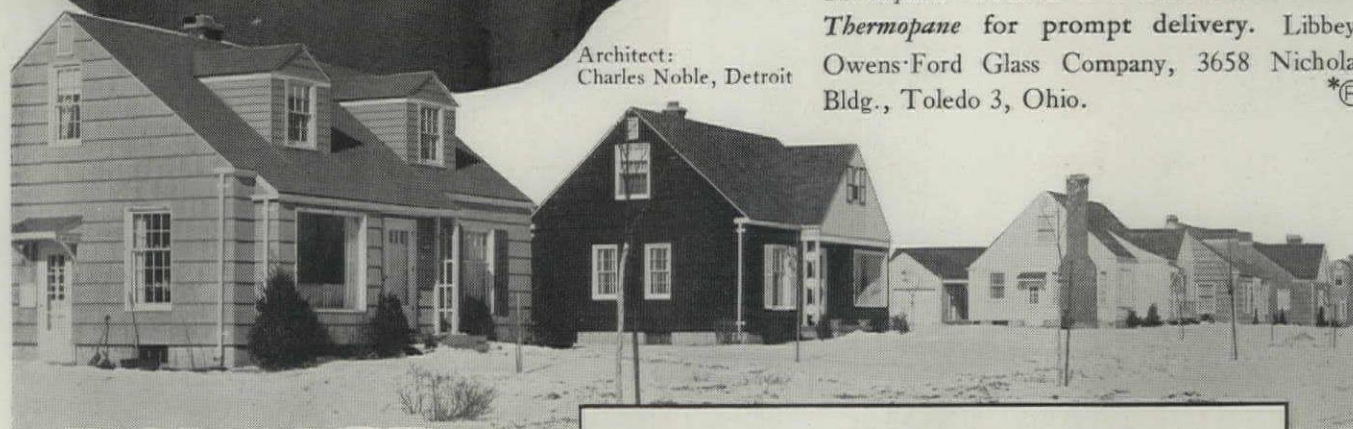
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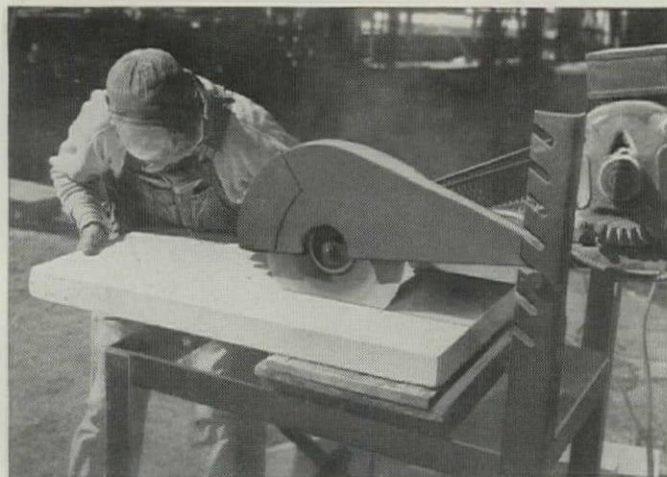
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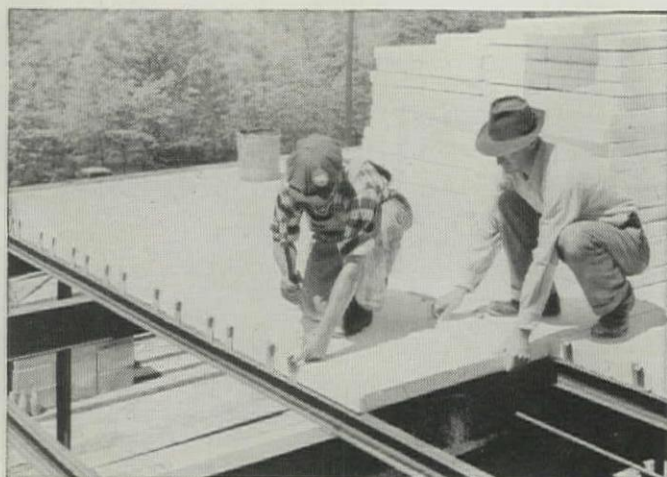
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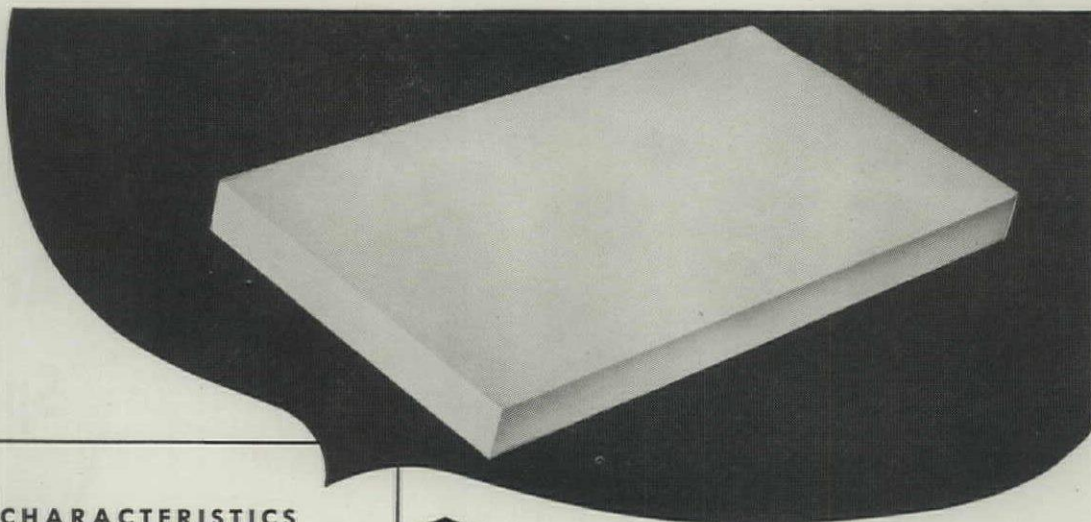


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WEIGHT

Density (lb. per cubic foot) approx. 20 lb.
 Weight per tile approx. 21 lb.
 Weight per square foot approx. 4.5 lb.

STRENGTH

Average modulus of rupture 175 lb. per sq. inch
 Average modulus of elasticity 160,000 lb. per sq. inch
 Average compressive strength 500 lb. per sq. inch

INSULATING VALUE (BTU/square foot/hour/°fahrenheit)

"K"—for inch thickness62
 "U"—for standard tile20
 "U"—for standard tile plus built-up roofing19

FIRE RESISTANCE

Kaylo Insulating Roof Tile units resist typical building fires, as defined in the standard A.S.T.M. fire curve, for more than one hour.

LIGHT REFLECTIVITY

Light reflection factor approx. 80%

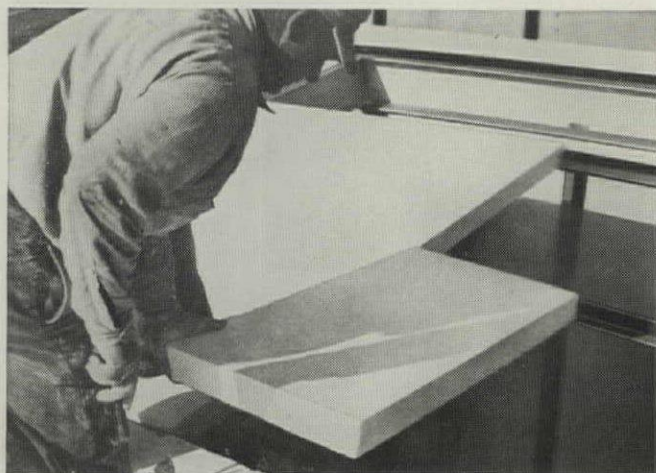


Check these advantages of **KAYLO** Roof Tile

- 1 Kaylo Roof Tile is **LIGHTWEIGHT**
- 2 Kaylo Roof Tile **INSULATES**
- 3 Kaylo Roof Tile is **FIREPROOF**
- 4 Kaylo Roof Tile is **STRUCTURALLY STRONG**
- 5 Kaylo Roof Tile is **EASY TO HANDLE**
- 6 Kaylo Roof Tile is **EASY TO CUT AND FIT**
- 7 Kaylo Roof Tile **REFLECTS LIGHT**
- 8 Kaylo Roof Tile *can be PAINTED*
- 9 Kaylo Roof Tile is **NOW IN SERVICE** on
many **OWENS-ILLINOIS** buildings
- 10 Kaylo Roof Tile *can be SPECIFIED NOW*
for early delivery

then

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LIGHT AND EASY to handle, Kaylo Insulating Roof Tile can be easily fitted into place on the job by one man.

KAYLO^{*}

*T. M. Reg. U. S. Pat. Off.

Insulating Roof Tile

AMERICAN STRUCTURAL PRODUCTS COMPANY
 subsidiary of OWENS-ILLINOIS GLASS COMPANY
 Dept. E-408, P.O. Box No. 1035
 Toledo 1, Ohio

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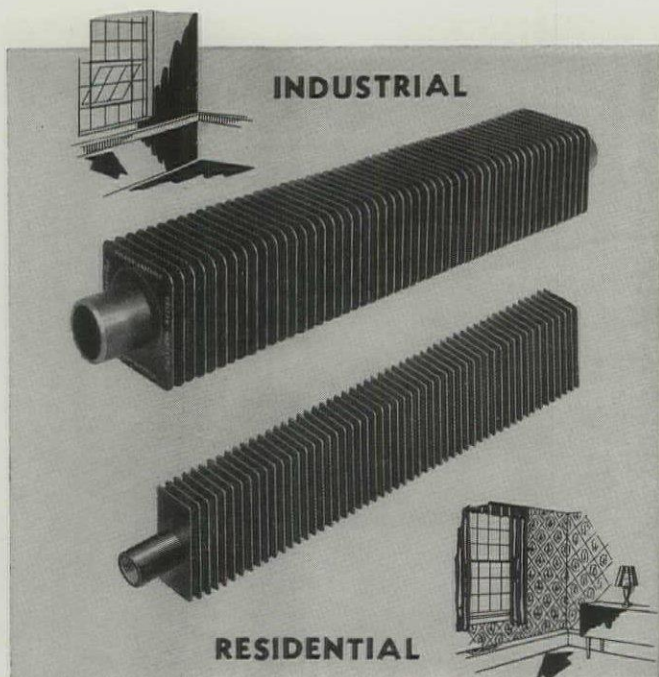
- ☐ Construction details
☐ Specifications and technical data
☐ Sample

Name _____

Firm _____

Street _____

City _____ Zone _____ State _____



SIMPLICITY... THE KEYNOTE OF Vulcan Radiation

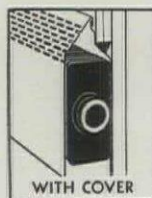
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Further information in Sweets 1948 Architectural File.



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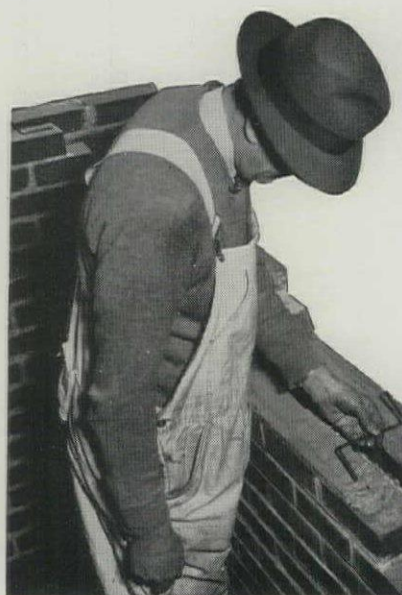
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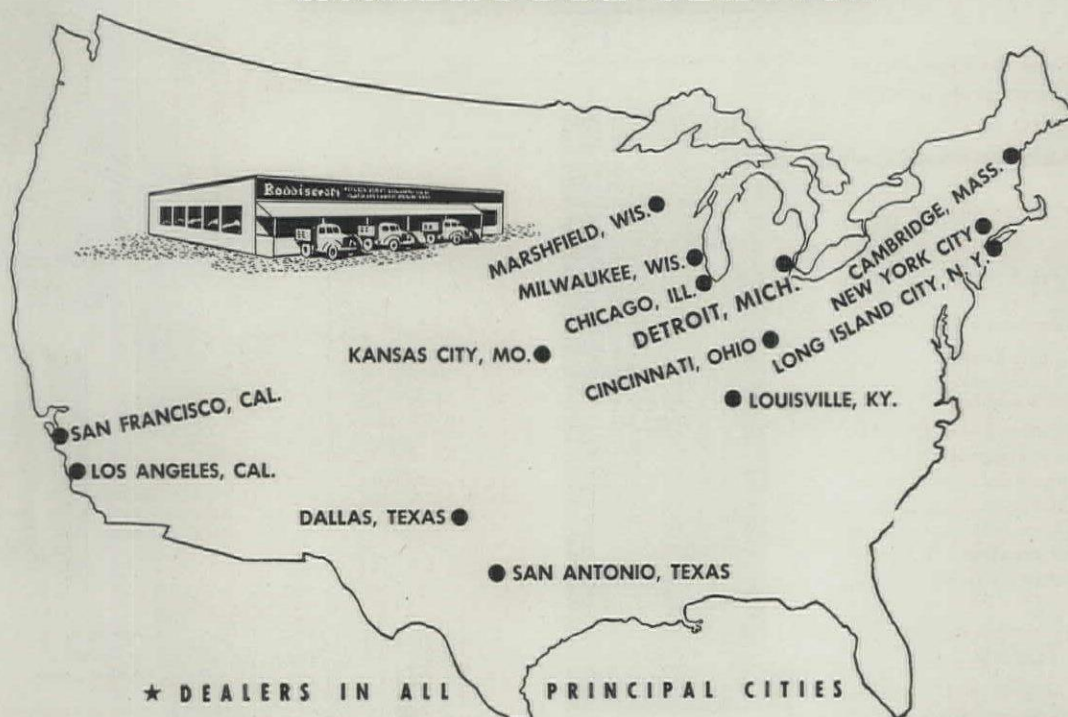
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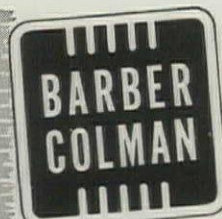
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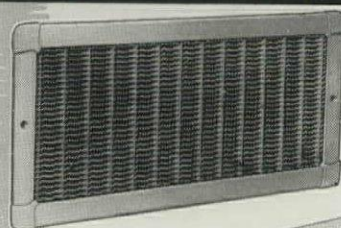


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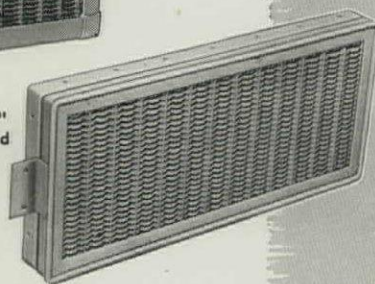
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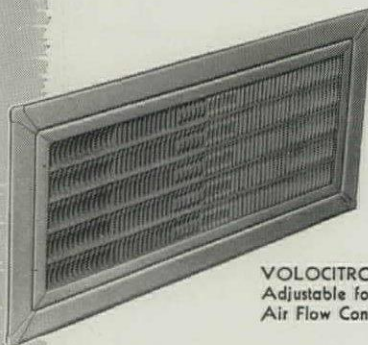


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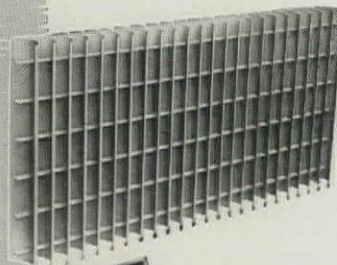
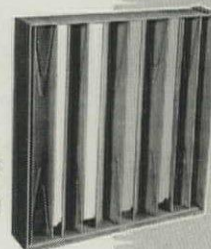
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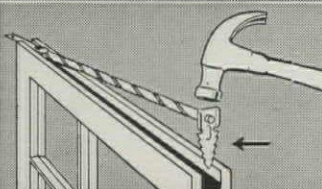
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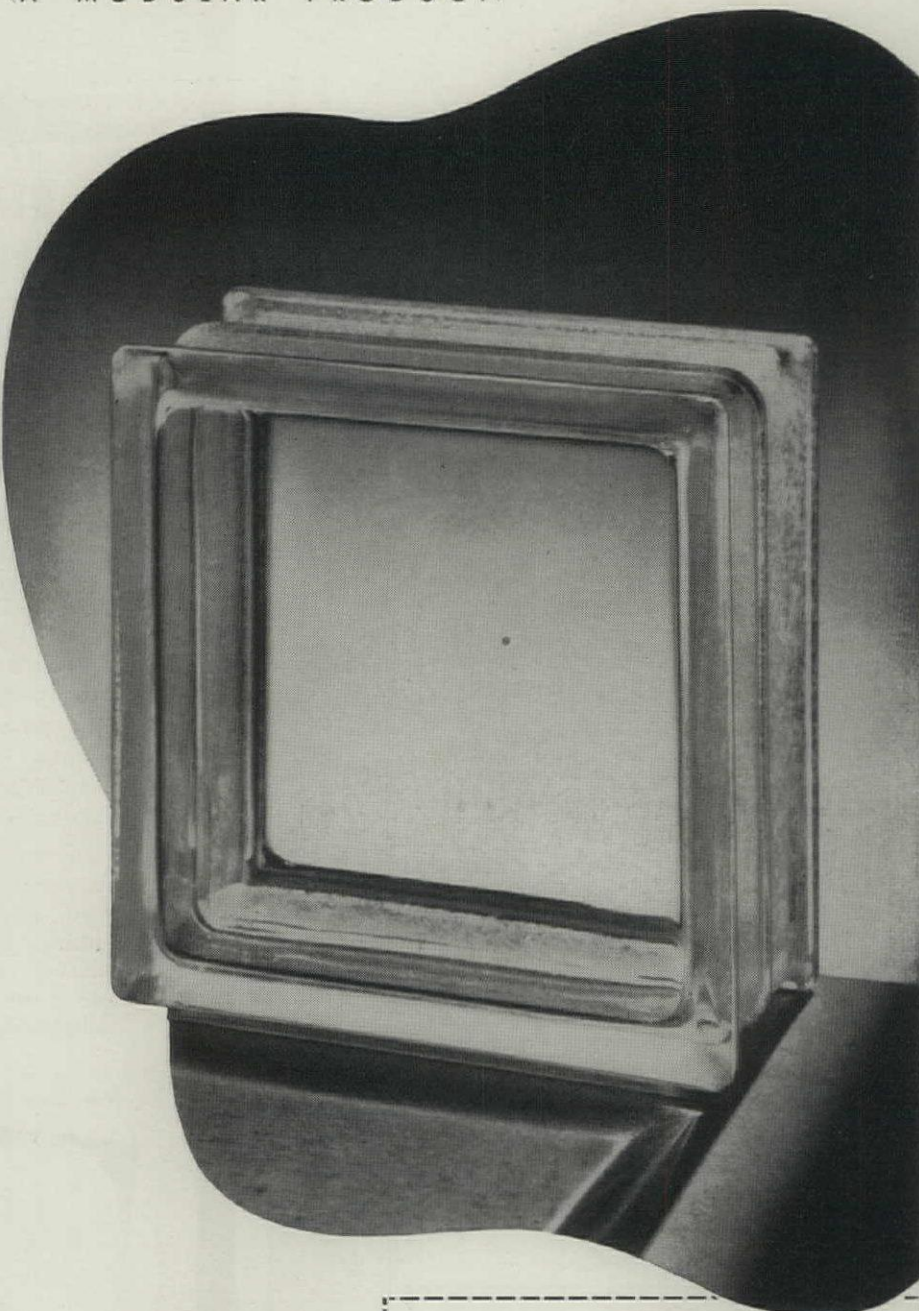
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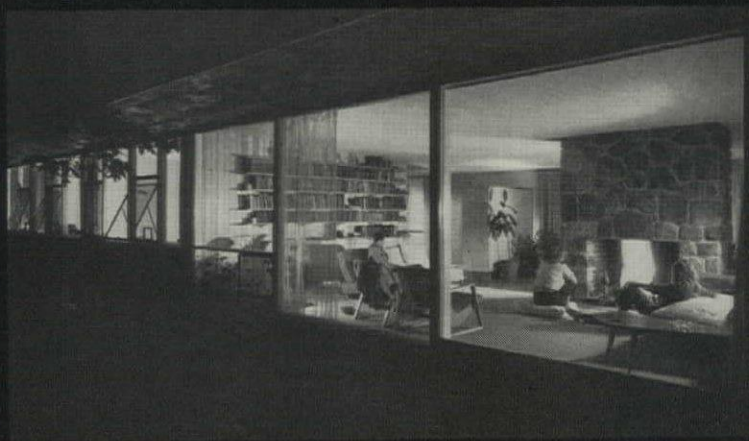
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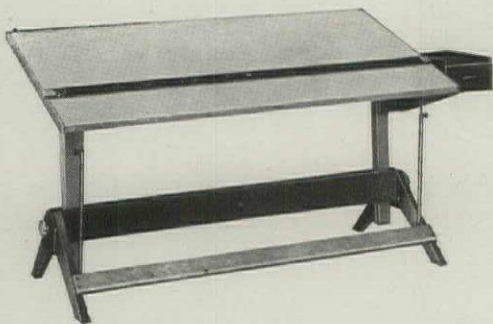
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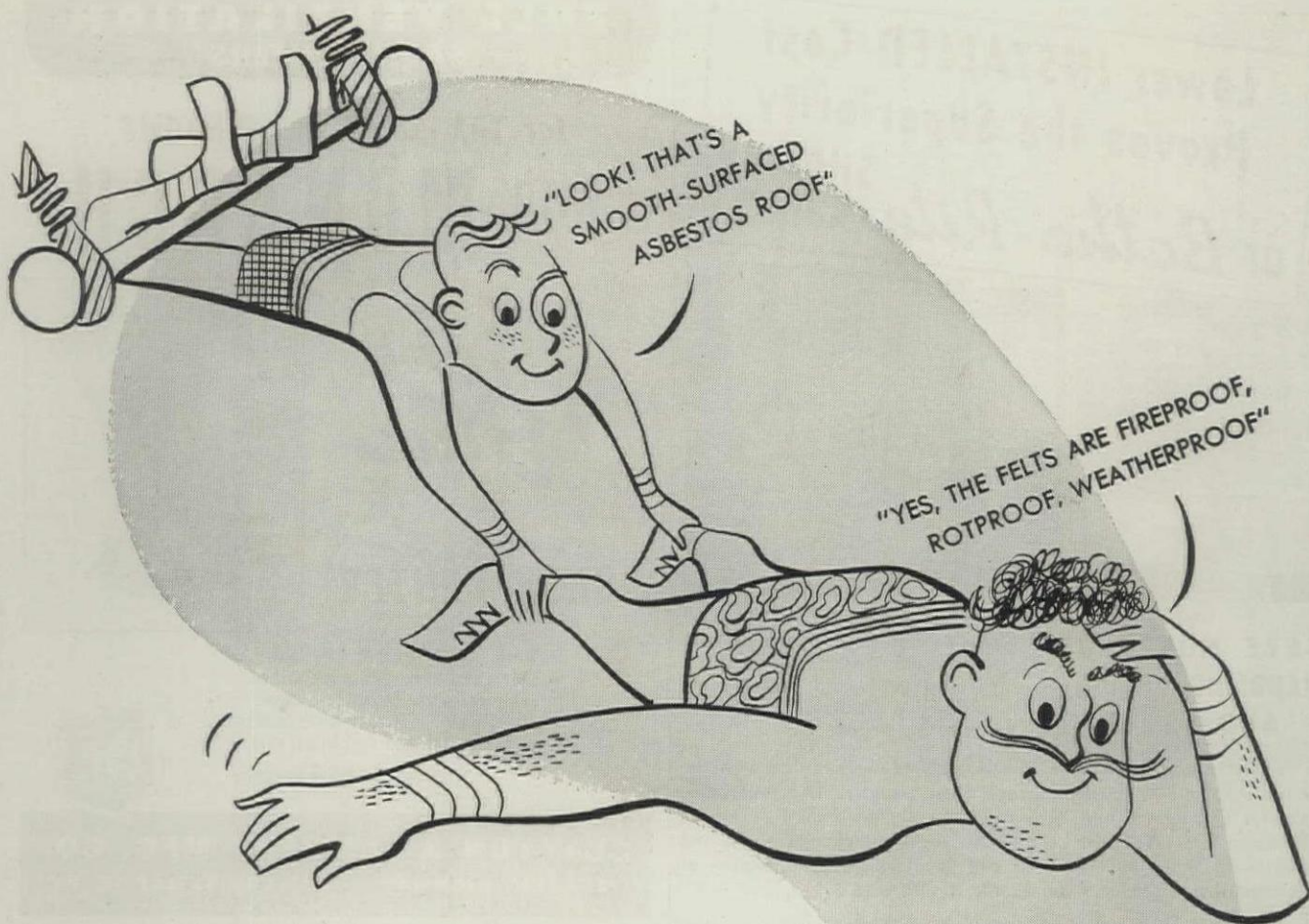
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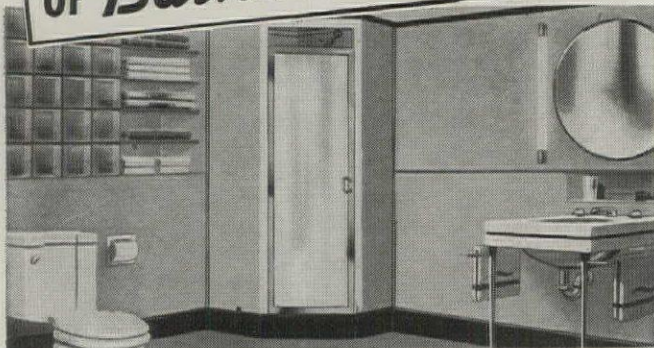
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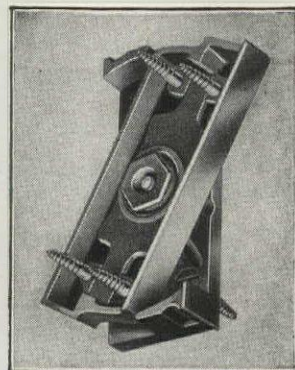
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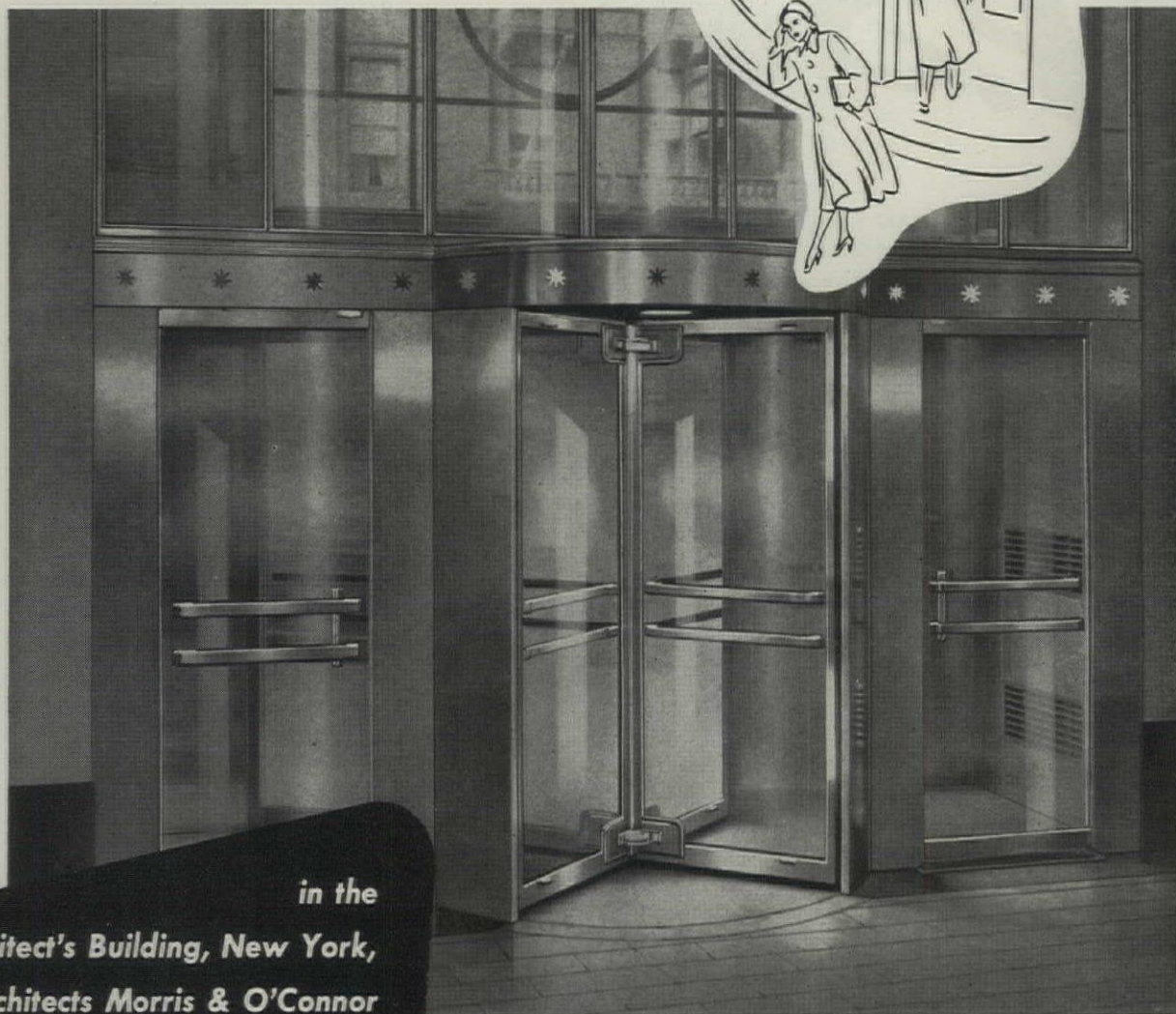
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using Revolving Doors!**

The Architects Building, 101 Park Ave., rises in majestic beauty 22 stories above New York's bustling business district. Soon after its completion, drafts through the entrances became a serious problem. If the swing doors were replaced, Architects Morris & O'Connor wanted to know, would revolving doors control the drafts? Would they handle the big traffic volume safely and smoothly? Would they improve lobby conditions? They would and they did! Now serving this busy business center are two revolving doors by International Van Kannel. The one shown above is an all-glass special design of hollow stainless steel. This experience is in no way unusual, for in the past 20 years, over 50 per cent of all revolving doors sold have replaced swing door entrances. If yours is an entrance problem, International's engineers will be glad to cooperate in working out an economical, "sure-fire" solution.

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P.S.

THIS ISSUE OF P/A — A CASE STUDY OF A CITY RATHER THAN AN ARCHITECT — really started back last year as a glint in the eye of Bob Elkington, active program chairman of the St. Louis A.I.A. Chapter. "Why don't you," he asked us, "let our Chapter work with you on a story about what's going on architecturally in St. Louis?" The idea appealed to us but it never jelled. Then we had an offer of collaboration on a historical study from several people in the National Park Service. When Eero Saarinen sent us a batch of preliminary studies of the winning Competition design, and George Howe told us we could use his report on the conduct of the Competition as well as the Jury Report, the whole issue began to make sense to us. We hope it does to you too.

Charlie Magruder, our managing editor, spent the last few weeks before the final judgment in St. Louis, gathering together material and writing copy on a hotel typewriter. When I blew in for the dinner at which the announcement was made, Charlie met me looking tired and drawn. "My God," he said, "this man George Howe has kept me up every night! I get no sleep!"

That afternoon I met George at a party for the jury. He drew me aside and muttered, "My God, that man Magruder is wearing me down. He keeps me up every night! I get no sleep!" I decided to let the matter rest there without any further investigation.

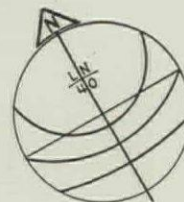
AT ONE OF THE NUMEROUS PARTIES GIVEN TO THE WINNING COMPETITORS — a luncheon tendered by the staff and senior students of Washington

University's architectural school — Dan Kiley drew an analogy which everyone liked. Dan is the landscape architect member of the Saarinen team. He lives in Franconia Notch, New Hampshire, and is an enthusiastic skier. He said that architectural design is much like skiing — especially the making of a ski turn. The successful turn comes when you are relaxed, when you are completely ready for it, and when your muscles are all coordinated to do the job smoothly and naturally. On the other hand, if you tighten up too soon and force the turn before you're really ready for it, you'll have trouble. In architecture, says Dan, there's a temptation to "freeze" a solution before every possibility has been studied freely and naturally, and from that point on to design tensely and arbitrarily. The multitude of studies made by the Saarinen team, in both the First and Second Stages of the Competition, were efforts to free-up, to relax, to get ready for the final statement. And the group certainly made the turn gracefully, right into the jury's lap.

THERE ARE AS MANY WAYS OF MAKING THE NORTH-POINT SYMBOL ON ARCHITECTURAL DRAWINGS AS THERE ARE DRAFTSMEN. Some offices have standards that they insist be followed, but occasionally the symbol is almost the signature of the man who made the drawing. The purpose of the north-point arrow has been to indicate compass orientation, but Professor Baumer, of Ohio State University, suggests a further use of the symbol. He asks, why shouldn't it also indicate solar orientation, and solar variations? It could just as well be a "representation of the projection of the celestial sphere, depicting for the latitude in question the path of the sun at the four critical times — summer solstice, winter solstice, and the equinoxes." This could be done quite simply, he believes, by using as

the symbol "the usual north-point arrow, plus a circle defining the plane of the horizon, plus the three arcs showing the projection of the path of the sun at its critical periods."

Now if some of you would work out a way to combine this symbol of Professor Baumer's, shown below, with a wind rose and a chart of mean temperatures . . .



WE WERE VERY HAPPY TO GET THE LETTERS ON THE SUBJECT OF COLLABORATION BETWEEN PRODUCERS OF MATERIALS AND DESIGNERS WITH MATERIALS from Dave Miller, Producers' Council president, and Walter Taylor, A.I.A. research and education director, which were reproduced on page 11 of the April issue. The matter of more efficient contact between manufacturers and architectural men seems most important to us. In fact, we're starting an ambitious survey to study in detail just how some six hundred materials and products got in the buildings they're in — why they were selected, at just what point in the design process, who was influential in the selection. The result of the study will form the basis for a manual which should (a) help the manufacturer's man contact the architect at the right time with the right information, and see the right people; and (b) help the architect by keeping poorly informed people out of his hair when they're of no use to him, and providing information he needs at the most useful time. Details of the survey have been carefully gone over by outstanding people in the field, and the project has the approval of the A.I.A. and the Producers' Council. We'll report on results later.

Thomas H. Elkington