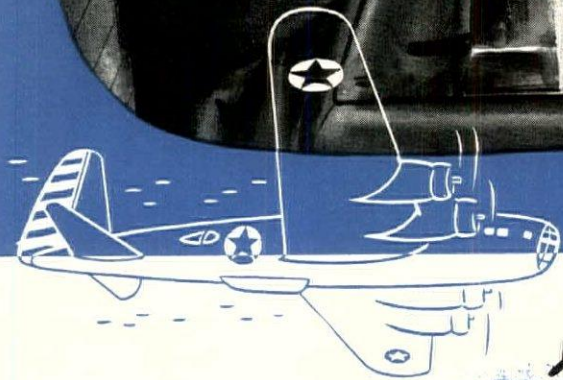


3

CHICAGO plans

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NEXT MONTH: The principal pictorial feature will be St. Joseph's Church, Canaan, Conn., Oliver Reagan, Architect. Contemporary in its handling, it had also to fit into the conventional New England atmosphere. There will be a profusely illustrated article on the housing situation in the Portland, Ore., area, by Walter Gordon. Readers may recall that "Kaiserville," more properly called "VanPort," will shortly be the region's second largest city. The architectural firm of Matern, Graff and Paul have been working in the prefabrication field, and have prepared an extensive report on their experience. Talbot Hamlin's second article in his series, "The Architecture of the Future," discusses the effects of new materials on design. There will also be a pre-war Clinic in Austin, Tex., Jessen and Millhouse, Architects; a war hospital in Humboldt, Tenn., Dent and Aydelott, Architects; the second installment of "Discussions on Urbanism," reporting the Columbia University seminars; and Selected Details.

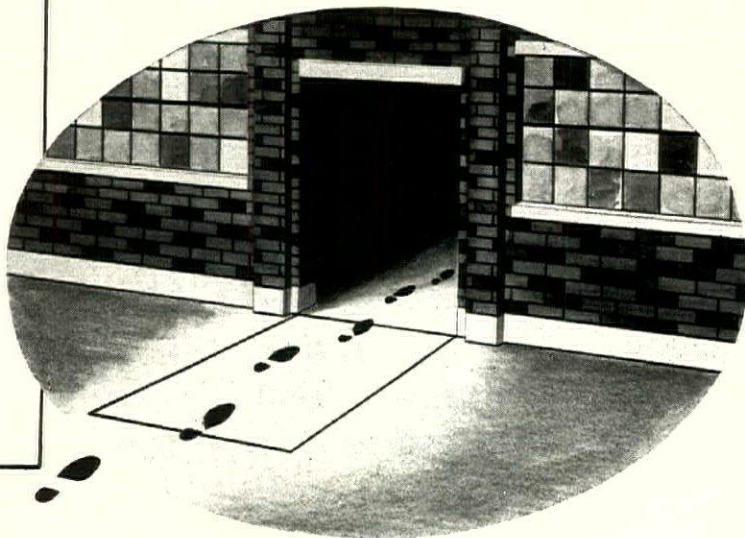
KENNETH REID, Editor; FRANK G. LOPEZ, Managing Editor; DON GRAF, Technical Editor; ALFRED E. GALL, Associate Editor; PHILIP H. HUBBARD, Publishing Director; ELMER A. BENNETT and MAURICE GAUTHIER, Drafting.

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Clues

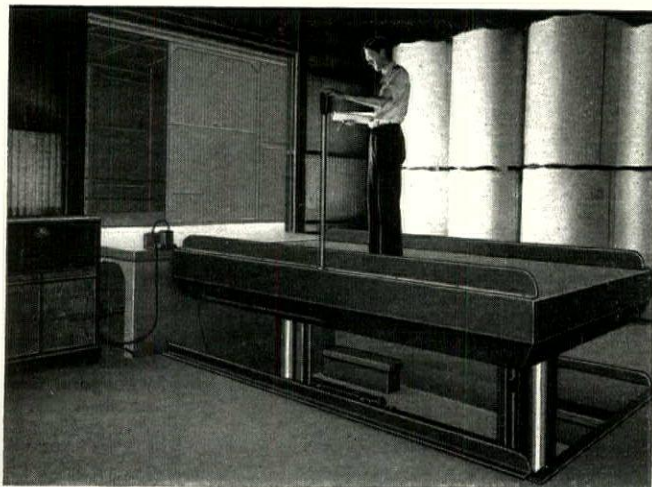
that solved the problems of
the **LOADING DOCK** and **RAMP**



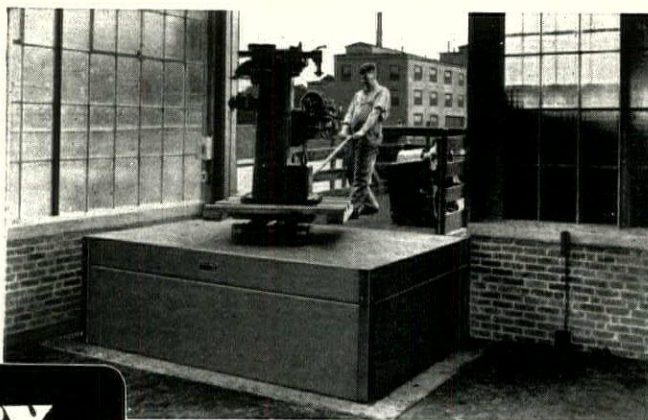
THE CRIME: The loading dock's "stairway," the RAMP has been stealing valuable plant space, causing accidents and "killing" time for many, many years. Industrial architects therefore tackled the job of "liquidating" this space-wasting enemy of loading efficiency.

THE CLUE: At first glance, architects observed (1) A loading dock 4 ft. high required a RAMP 33 ft. long, even if the plant used gasoline factory trucks (if battery equipment were used, it would be much longer to afford a more gradual slope). (2) A loading dock 10 ft. wide meant that 330 sq. ft. of space would be used up, either inside or outside the plant. Why not allow just enough space to hold a factory truck—then raise the load straight up. A "magic carpet" to eliminate loading worries! From here on, it was "elementary"—there was but ONE solution!

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(ABOVE)—Levelator installation at the Champion Paper and Fiber Co., Canton, N. C. It replaces a long ramp to save 400 sq. ft. of floor space. DUAL-EQUALIZED plungers are used because of the unusual length of the platform. Capacity: 15,000 lbs. Note Wheel Curbs and Bevel Toe-guard, two of the many safety features available.



(ABOVE)—The Levelator that eliminates BOTH Loading Dock and Ramp at the Van Norman Machine Tool Co., Springfield, Mass. A single plunger handles 20,000 lb. loads. Metal Skirting around platform is another Rotary safety feature. ↑

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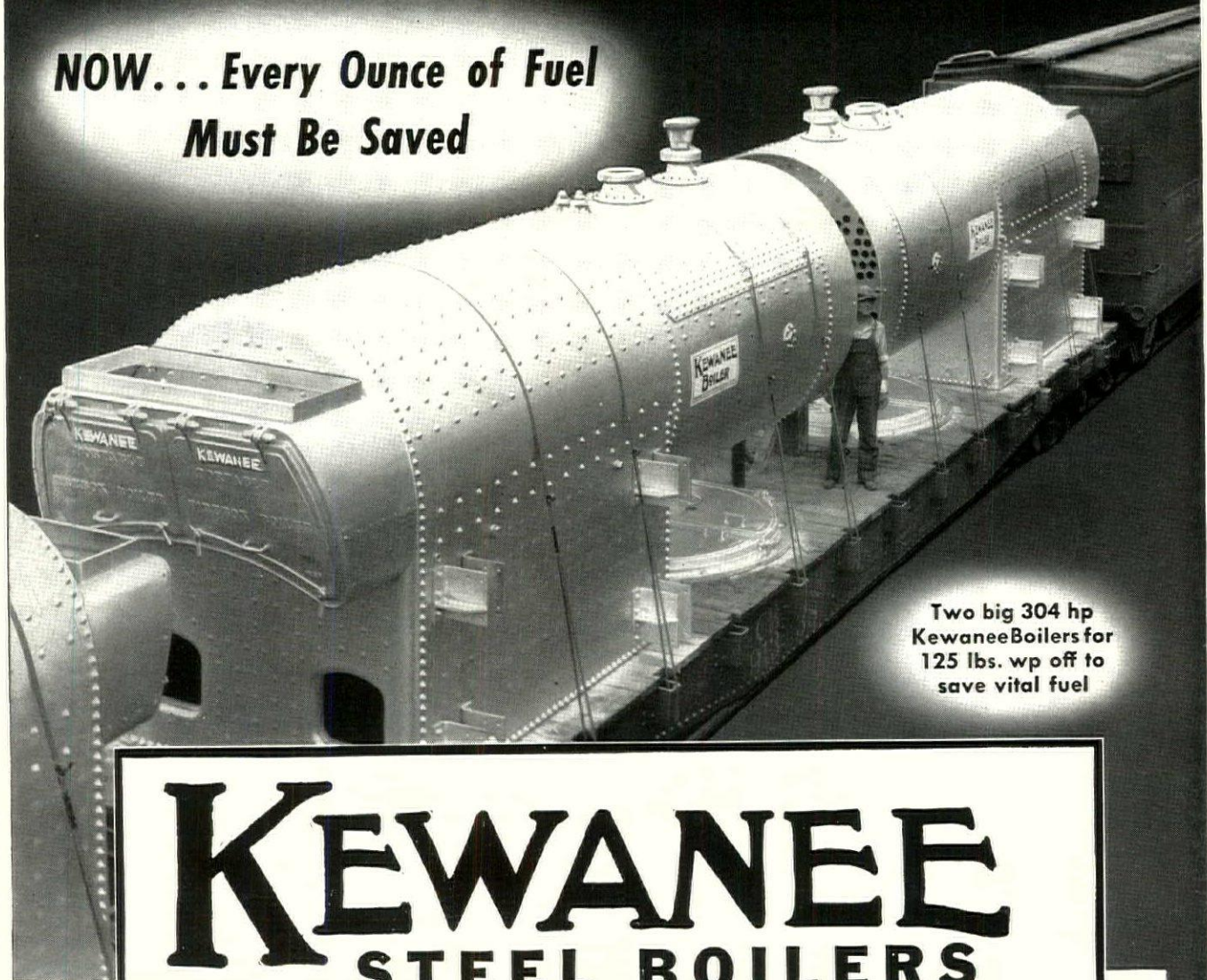
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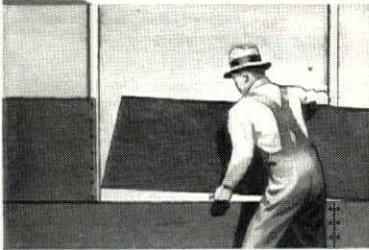


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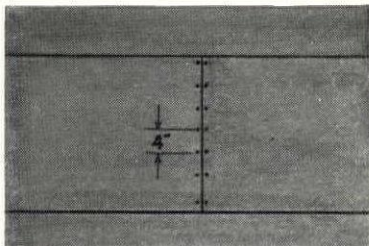
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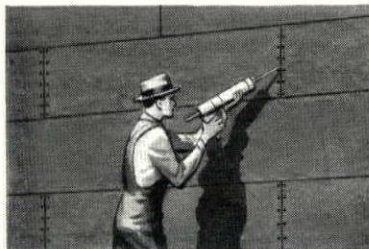
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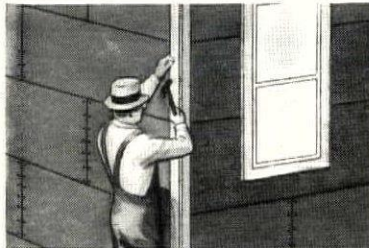
Applied horizontally. Manila side towards interior. Green surface outside.



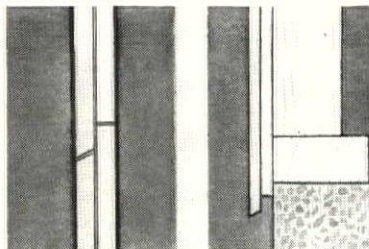
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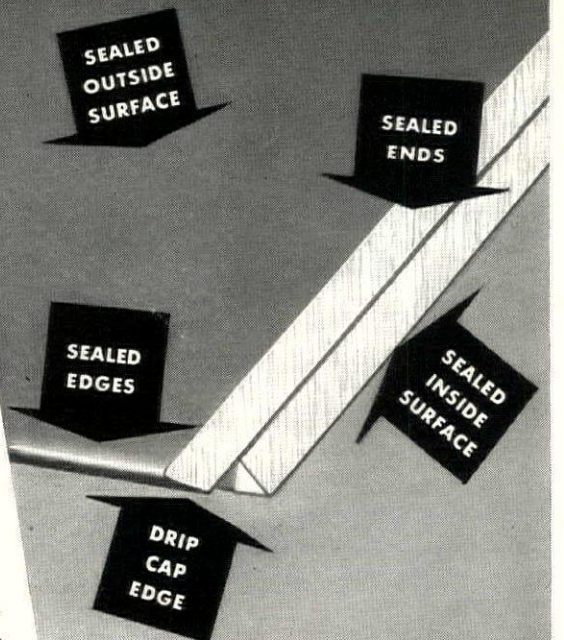
Detail of Horizontal Shiplap Joint.

Detail of drip cap edge at foundation.

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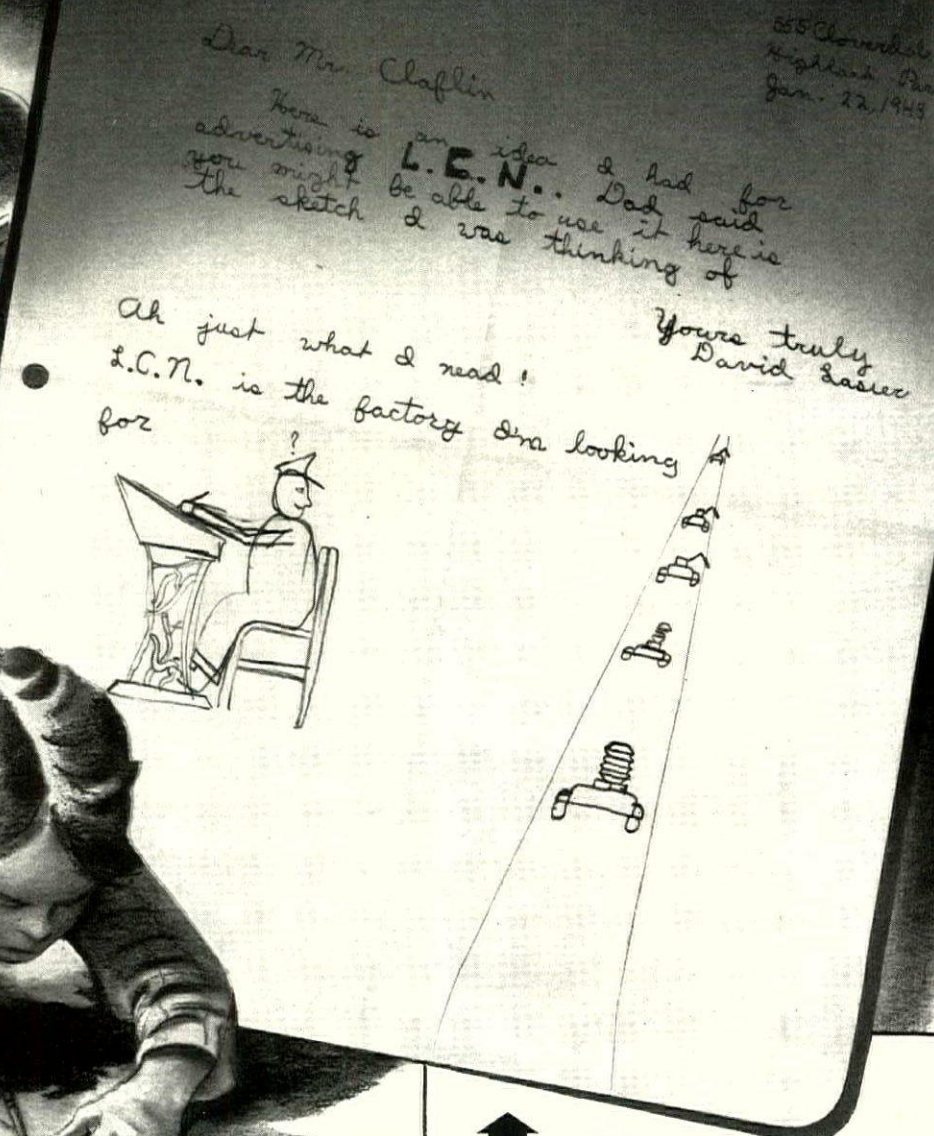
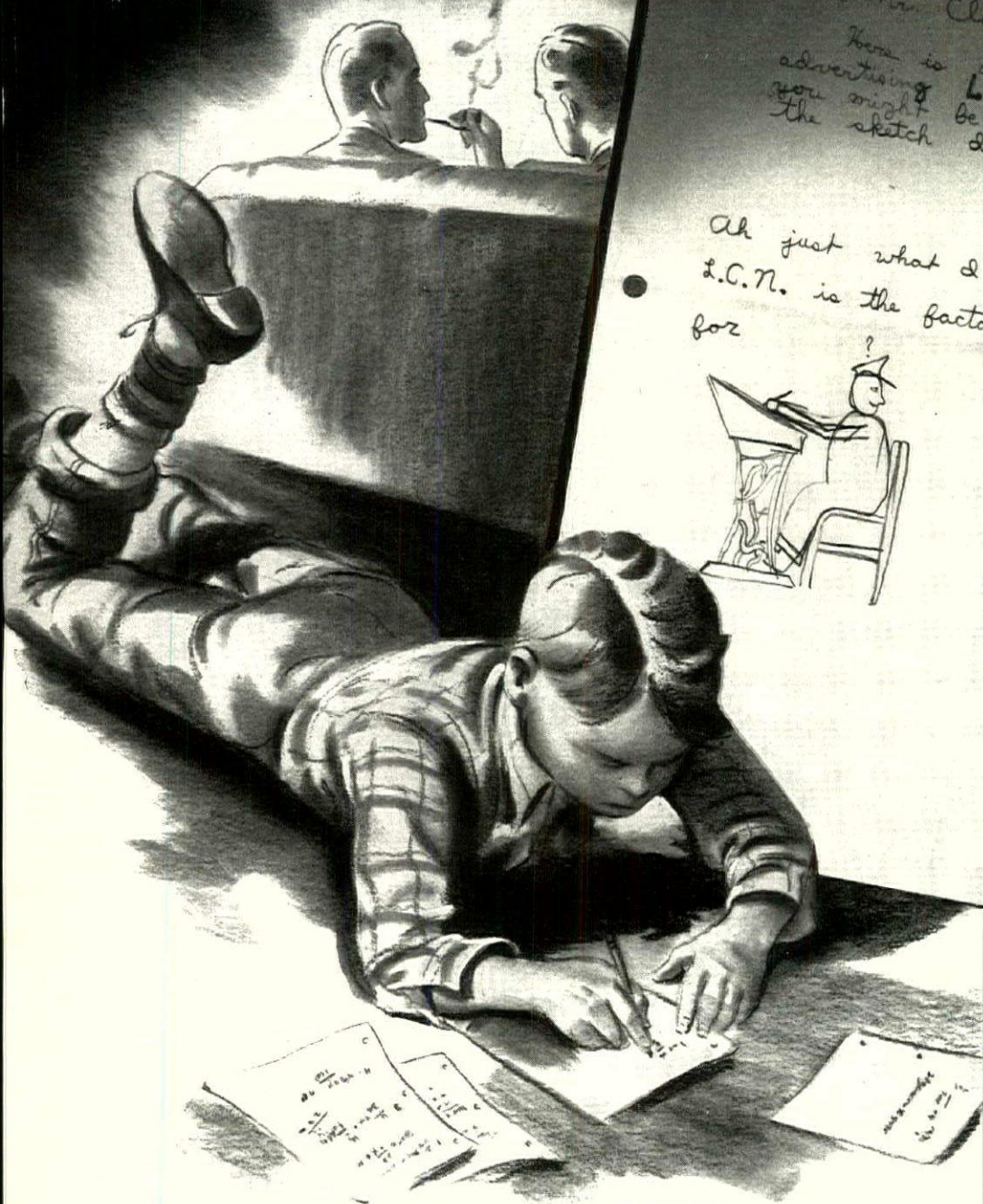
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AT RIGHT: Trucks in distance carrying door closers, which change to war parts as they approach, showing LCN's 100% conversion to war work.

AT LEFT: Army officer registering pleasure at LCN production performance.

Overhearing our conversation these days might cause almost anyone to drop his arithmetic and start to draw pictures. We at LCN are tremendously proud of our part in the war, and when the story can be told we predict that our friends will be, too.



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We of Adlake look upon the "E" pins we wear—and upon the Army-Navy "E" pennant which floats above our plant—as a challenge to strive still harder to hasten Victory. We know that every Adlake man in uniform is doing his dead-level best. We, his friends at home, will not let him down!



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Letters from Readers

Pass the Ammunition

Ralph C. Kempton, Ohio architect, comments on the editorial which appeared last November in NEW PENCIL POINTS.

You say "Pass the ammunition" and end up by asking "Where is the leadership?" to whom it can be passed? That, unfortunately, seems to cover the picture from some viewpoints very well indeed, except I do not agree with the use of the interrogative "where." There are leaders in our midst, good ones, too; so it might be more proper to ask, "Why aren't they doing the things that should be done?" and "If not now, when?" With the answers to these two interrogatives brought to light, then something can be done. In so generalizing, regarding the inactivity of our potential leadership, it must be recognized that there is always the faithful few trying not only to do their share, but the share of many others.

At first, I was disturbed by "which is an art of peace," believing that perhaps, for once, our claim of artistic qualifications might have been, shall we say, "just neglected." Even a most casual glance over much of our war building should convince even the most skeptical that some architecture, at least, could have been considered and used with very material benefit to the war effort.

I first learned to pronounce this word "architect" back in high school days, shortly after the turn of the century. My accumulation of information, knowledge, and understanding of the profession, what it does and what it stands for, came through the average contact and normal channels that existed in and around the Buckeye State. This was topped off by some traveling over Europe in 1919, and many visits to all the limits of our country since that time.

From the very first concept of practice, it was my understanding that the architect was the head man in every building operation in which he was a part. Never during all this period did it occur to me

that the architect's only job was to provide the embellishments; all of which is presented as the background for this statement and query. I cannot understand how, when, and where such an erroneous and almost disastrous, for the architect, concept of what architectural practice really is, as the public now holds, originated. Why was it allowed to go reverberating and growing over so many years?

As this concept has grown by every means of communication known to man, so must it be corrected by every such means—publicity, education, publicity, training, publicity, contacts, publicity, example, publicity—all pointed in a concentrated, all-out effort to bring about, both within and without, the changes necessary to place the architect in his proper niche in our present-day economic and social order.

Day dreaming will accomplish but little in this tremendous job, but action can accomplish about anything; for it seems that the age-old expression, "Where there is a will there is a way" is really something more than just a high sounding group of words. It seems that here again, as always, is where the faithful few must continue to carry on.

So, keep passing the ammunition and maybe a "block-buster" will land right in the middle of the target.

* * *

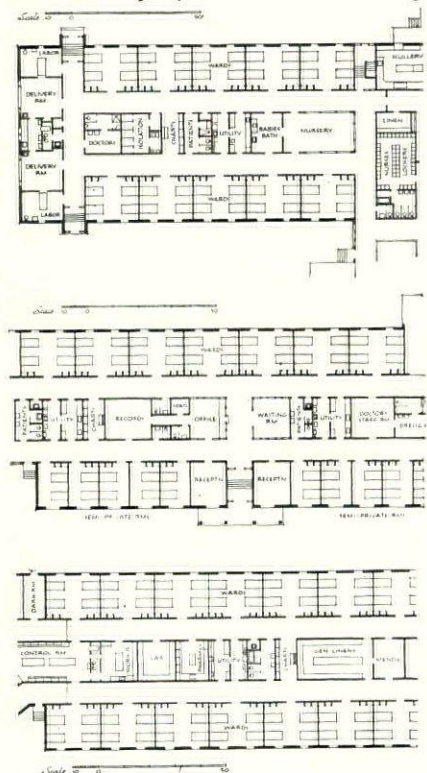
Hospital Planning

In your issue of November, 1942, you published the plans of an addition to the Sisters of Charity Hospital in Buffalo. Apparently these plans were inspired by the scheme published by Mr. Neergaard in HOSPITALS and THE MODERN HOSPITAL last spring.

As I gathered from him later, certain defects of these plans were pointed out and this led to a number of changes; abandonment of the method of reaching upper stories by spiral ramps, provision of openings through the central block to permit of natural cross ventilation and placing of Nurses' Stations on outside

wall. But the fundamental defect remains that in multi-story buildings all service rooms are dependent on forced ventilation and artificial lighting.

The Buffalo hospital which you published, being but one story in height, apparently dispenses with forced ventilation and depends for the lighting of the central block on transoms set in a monitor, with the bottom of the transom about 13 feet above the floor. In this plan, however, not only Utility Rooms, Toilets, and Chart Rooms throughout, but in the Maternity Section, the Nursery, Babies' Bath, and Babies' Isolation, all are placed in this central block. From study of the section it seems the unfortunate babies can receive sunlight only in summer when the sun is at the zenith. It is hard to conceive of a worse location for these rooms. Serving Pantries have perhaps been purposely omitted, though it is hard to see just how a hospital can function properly without them. Another fault of the plan is the inadequacy of toilet and bathing



Buffalo hospital plans. Top to bottom: East Unit, Central Unit, West Unit. Operating suite is between West and Central units.

facilities for patients. Eight toilets, one bath tub, and one shower are all that are shown for a total of 152 adult patients!

As there is no mention of artificial ventilation, it is to be presumed that none is provided, yet no possibility exists for a natural cross draft, except through the chart room in each wing and through the main entrance hall in the Semi-Private Wing, since the plan shows all the other sections of the central block enclosed. While the operating suite is hardly in accord with modern practice, its faults are not inherent in the so-called double cor-

(Continued on page 10)

HUBERT G. RIPLEY
(1869-1942)

EGERTON SWARTWOUT
(1870-1943)

The architectural profession in America recently suffered, almost unawares, a great double loss in the deaths, a few months apart, of two of its finest representative gentlemen; namely, Hubert G. Ripley, of Boston, who died on last December 15, and Egerton Swartwout, of New York, who followed him about two months later on February 18. Both had lived to a good old age; each in his way had left his mark upon his time. We are proud to have known them.

Of their accomplishments in architecture let abler critics write. By us they both are mourned as gentle, lovable, human beings—men who, wherever they went, touched the lives of those around them with the inspiration of their high philosophy and the warmth of their friendship. May they both rest in peace, somehow knowing that their living made life richer for the associates, companions, and friends they have left behind. K.R.



Mr. Lincoln . . .

WHERE WERE YOU ON THE NIGHT OF APRIL 14, 1865?

The answer to that question is written in the pages of history, for that was the night an assassin's bullet found its deadly mark. Were the Great Emancipator to take the stand in this — democracy's hour of trial — his testimony would serve to awaken every American to his duty to his country and to his future generations. For Lincoln was a man of great stature and he died for a great cause, the freedom of mankind and the preservation of democratic ideals. We are lesser mortals, true, yet none of us

is too small a public figure to play a role in today's searing drama. No sacrifice — in blood, sweat or income — can be too large, if it is a step towards winning this war and securing the peace. There is a job for each of us to do, whether it be on the battle front, the production front or the home front. To succeed we must be a nation of 130 million emancipators. We must not fail!

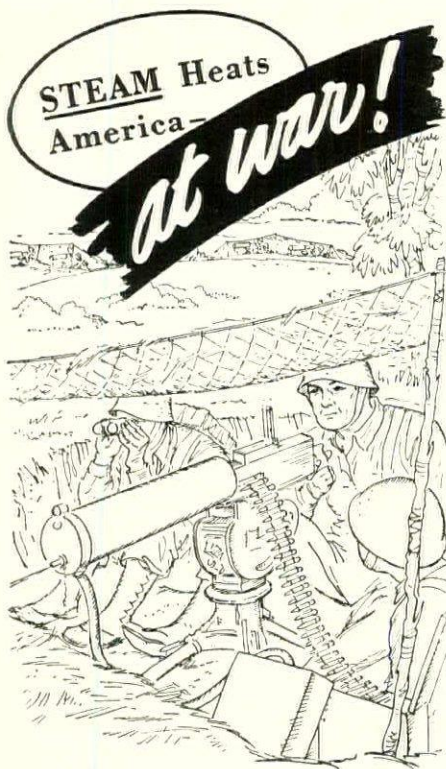
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(Continued from page 8)

ridor plan, which appears to the writer as the most vicious innovation in hospital planning produced since the last war.

To those experienced in hospital planning it is a matter of regret that such a plan as this should be published by a magazine of the authority of PENCIL POINTS, as there is grave danger those seeing it may infer that it is a desirable solution of the problem of hospital planning in time of war. CHARLES BUTLER, FAIA
 New York

* * *

That the January issue of NEW PENCIL POINTS was provocative is evidenced by the number of letters received by the Editors. The following letters are typical.

In Step

May I congratulate you most sincerely on the January issue of No. 1, NEW PENCIL POINTS. It represents a considerable step forward, which I trust you will want to see followed by many others.

For years, architectural magazines have remained far behind architectural thinking instead of being what I think they ought to be—in advance of architectural thinking, as a sort of vanguard since, after all, progress in writing and in drawing is somewhat less impeded than progress in carrying out plans and building.

Keep it up. You're on the right track.
 WILLIAM LESCAZE, AIA
 New York

Action on Unemployment

I have your NEW PENCIL POINTS for January, and my attention is directed to your article, "Action on Employment." . . . The title would have been more to the point if it had been titled, "Action on Unemployment." The indifference with which the government has viewed the situation can best be judged by studying the announcements for architectural positions in the Federal Civil Service. Salaries offered . . . are so low that one wonders what the recipients and the government consider a fair salary. . . .

On some defense projects, let under the architect-manager plan, the architect seems to have been primarily interested in obtaining architectural engineering personnel, willing to work for low salaries. The moral obligation to employ regionally-available architects seems not to have entered into the deal. . . . It is true that private industry is very hesitant to accept architectural men for "engineering" positions; some executives consider them as apprentices and would perhaps hire them at starvation wages rather than give men with architectural experience a chance of readjustment at fair wages.

It is my opinion that the AIA lacks the guts to do something for the architectural men. Sampson Naval Station was given to a New York City firm instead of to a firm from Rochester which would have employed regionally-available architects.

What we need is action, not excitement. The writer has had experience with Federal agencies and private concerns regarding the fitness of architects and archi-

(Continued on page 12)

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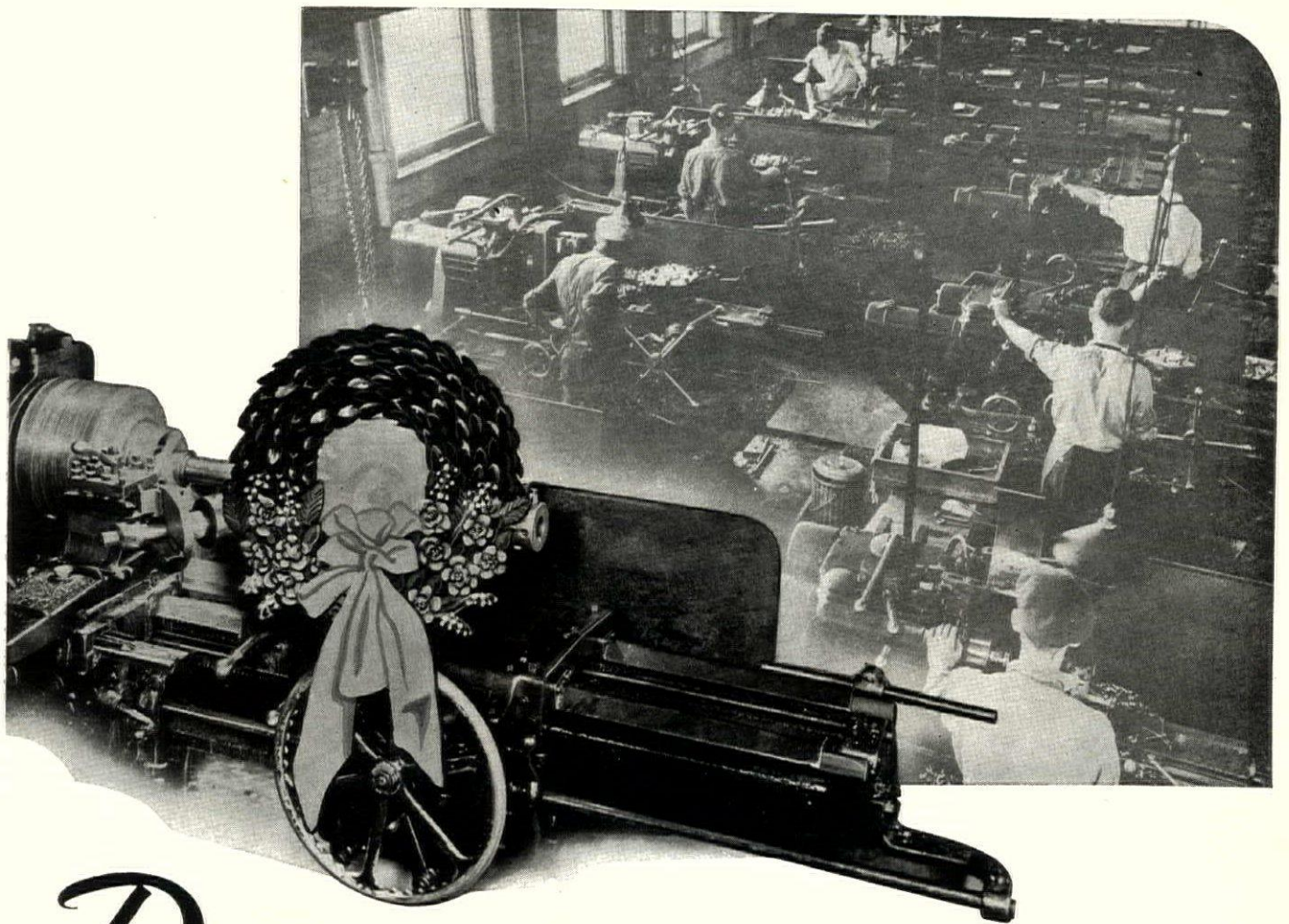
See Hillyard Specifications in Sweets 1942 Catalog, Sec. 17, page 35.



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and the need for maximum effective manpower on the other, we have redoubled our efforts to educate and protect our workers. We subscribe to and give our fullest support to the work of the National Safety Council.

As customer, prospect or friend, we urge that you, too, get behind this work. Enroll in the cause of the National Safety Council. Send a subscription to National Chairman Wm. A. Irwin, 71 Broadway, New York City, for the War Production Fund to Conserve Manpower. Do all you can to help America win this war on the home front.



THE YOUNGSTOWN SHEET AND TUBE COMPANY
YOUNGSTOWN, OHIO



(Continued from page 10)

tectural draftsmen for jobs ordinarily filled by engineers, and has come to the conclusion that apparently none of his colleagues are really wanted, and that their applications are categorically denied either for lack of "one year of experience" or for "insufficient education." The writer has also filed an application with the Glenn L. Martin firm of Baltimore, and up to this date has not received any inquiry as to his availability. One must have political pull, an English-sounding name, and an education bordering on that of the proverbial college professor . . . in order to get a job with the Federal government; or be an expert in his

particular line of "engineering" if he hopes to get a position of more permanent nature in private industry. If we must have Fascist regimentation let it be "Regional Regimentation" and we will have jobs. A. G. SENNEWALD, R.A.
Rochester, N. Y.

It seems to me that architectural organizations, AIA chapters, local professional societies, and so forth have generally not been wholly aggressive in tackling this problem of getting the architects placed where they can do a good job for the Government or in industry. We tried to stir up something last year when we put Mr. Vogel in Washington and assigned him to the job of selling the architects' services to the various departments down there. He made quite a bit of head-

way during the four months we could afford to keep him there.

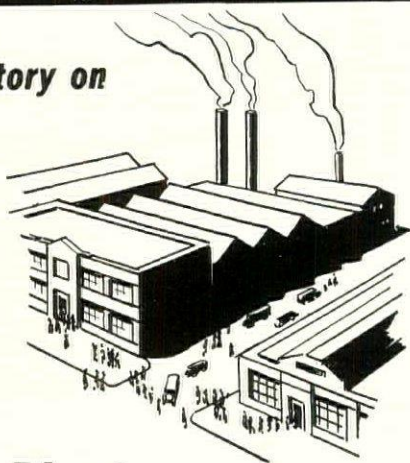
It has been my contention for a long time that the architect, by his training and background, is versatile enough to be able to fill satisfactorily a great variety of jobs, including work in manufacturing plants where he might function in some executive capacity, where his skill and coordination in handling materials and men would be called upon.

It seems to me that in every locality where there is a nucleus of an architectural organization or society there should be going on an active campaign to do just this sort of thing. It isn't enough to follow the traditional practice of architects who have habitually waited with dignity in their offices for clients to appear. This situation calls for aggressive selling. I don't know whether you belong to any group of architects up in Rochester or not but I suggest that, if you do, you might see what can be done to stir the group to some sort of action along the lines suggested.

You are quite right. Action is what is needed. It does no good to rail at the Government or at the status quo. There must be persistent activity by the architects themselves in every section of the country if a satisfactory solution to their troubles is to be found. K. R.

★ ★ ★ ★ ★ ★ ★ ★ ★ ★
They are working for Victory on

Tile-Tex floors—



in America's War Plants

Tile-Tex floors, the country over, are serving in the war effort. A composition of asphalt and asbestos, it stands the bombardment of service . . . and requires only a minimum of man-power to install and maintain. It is easily installed without interruption to adjoining areas.

Tile-Tex is used widely in Plant offices, rest rooms, chemical laboratories, dispensaries, and similar auxiliary spaces. *Tuff-Tex Greaseproof Industrial Flooring*, companion product to Tile-Tex, answers the severe problems of most actual manufacturing areas.

Either Tile-Tex or Tuff-Tex is available promptly in a wide range of colors and sizes. Write today for specification data and complete information about these two outstanding products, designed for the industrial floor user.

★ **The Tile-Tex Company**

101 Park Avenue, New York City • Chicago Heights, Illinois

Progressive Policy

I have been a subscriber to PENCIL POINTS since it started, and I have always liked it. I like the progressive policy of the NEW PENCIL POINTS; but I don't like the cover designs a bit, and I am surprised at the amount of space given the Chester E. Nagel house in the January number. I cannot understand why a publication as important as yours would have a series of covers that are ugly; they are restless, and the last one (*January issue—Editor*) looks like some kind of a disease.

No doubt the Nagel house is good, but twelve pages of photographs, showing everything but the stool in the bathroom, are too much. The stone masonry is restless and amateurish. A rough stone wall in a bedroom may be "simple" and "genuine" if one likes it and if one wants a good place to scratch one's back. A curved stone wall is not as economical as a straight wall, and a straight wall is strong enough unless one wants a curved wall. Is screen wire enough to protect one from falling off a high porch without some type of railing? In a country where it rains, a frame house without protection at the eaves is not very practical.

The statements made by the architect on the first page of this story get my goat, not because he said them but because you published them. All good design is based upon the proper consideration of fundamentals, and they were not discovered or used for the first time in this case.

CHARLES I. BARBER, AIA
Barber & McMurray, Knoxville, Tenn.

The January issue was frankly intended to be to a certain degree shocking. . . . We felt that it was necessary at this time to stir architects up and wake them from their lethargy brought on by the discouraging conditions with which they have been faced for a long time. Perhaps the shock was too violent but, at any rate, we did get the attention. . . .

I had a feeling that we were in some sort of rut. . . . During the past ten years PENCIL POINTS has been practically subsidized by the
(Continued on page 14)

Metamorphosis of a Plowshare

FROM plowshares to complete farm buildings is but a logical process of evolution in the development of steel. It illustrates how the scope and usefulness of this versatile metal have been expanded to meet man's needs.

Stran-Steel is today accomplishing things with steel which were impossible a few short years ago. Under the stimulus of important war assignments, new practices and techniques have been devised . . . new systems worked out . . . new methods brought to light. Stran-Steel's engineering achievements promise a new medium of expression to the architects and designers of tomorrow.

STRAN STEEL

DIVISION OF GREAT LAKES STEEL CORPORATION
1130 PENOBSCOT BUILDING, DETROIT, MICHIGAN



UNIT OF NATIONAL STEEL CORPORATION

(Continued from page 12)

other publications of the Reinhold Publishing Corp. . . . This situation could not be expected to continue indefinitely and we were forced to strive for a position of leadership in the field.

. . . This leadership can only be obtained by positive, aggressive policies . . . We finally decided to take a stand in favor of what we believe to be the progressive, forward-looking development as opposed to the conservative eclecticism of the past. Naturally, some of the examples of so-called modern design thinking are full of imperfections and crudities. They represent, however, a sincere effort to get back to fundamentals of architecture which have too often been forgotten or ignored in the enthusiasms, engendered by our education, for this or that period style.

There will be for a number of years to

come in America a great many buildings based on the historical periods. . . . Nevertheless, as architects, I think that Americans can do more creative thinking than is represented by these imitations and adaptations of the past. I am definitely not an internationalist and regard the so-called international style as just another piece of period thinking, with certain mannerisms that are being copied just as stupidly as anything else. I do think that we are developing here in America a truly indigenous approach based on the architectural solution of the plan plus straight-forward building construction out of the most economical materials available. The work done by the men in different sections of the country varies widely according to the climatic and geographic conditions and the materials available locally. I think that out of it all will come some day something we can well be proud of as having been developed by Amer-

icans for Americans.

I won't attempt to argue with you about the merits or faults of the Nagel house. . . . Mr. Nagel could probably produce what seem to him reasonable arguments supporting his decisions. Every designer bases his designs on his own point of view and presumably takes into consideration all of the pertinent factors involved. No two men, given the same conditions, will produce the same result. There is room in the world for all of them.

K. R.

NRPB Fight

The National Resources Planning Board, which has been making postwar studies of broad significance, was cut off without a penny recently when the House Appropriations Committee, in approving an appropriations bill for independent offices for the 1944 fiscal year, recommended nothing for the NRPB. The Editors of NEW PENCIL POINTS believe the work of this organization should be continued, and Kenneth Reid, Editor, sent the following letter to members of both the Senate and House Committee on Appropriations urging the committee members to provide funds for the continuance of the NRPB or some similar planning agency which would accumulate basic information and propose steps for the development and conservation of our national resources.

The recent action of the House Committee on Appropriations in cutting off the funds for the National Resources Planning Board is, in my opinion and in the opinion of the great majority of the twenty thousand readers of the architectural magazine I edit, a dangerous threat to the future welfare of our country. The NRPB has done a most valuable job during the years of its existence in accumulating basic information and proposing steps for the development and conservation of our national resources. It is also doing an important job in coordinating the work of state and local agencies concerned with postwar planning.

You must know that the coming of peace can have an economic impact greater than that resulting from the advent of war. You must know also that means of dealing with the problems of economic reconstruction cannot be improvised on short notice at the conclusion of the war. You must know that it is urgent to have plans in preparation now for both the long-range development of our national resources and for the combination of a part of this program with the pressing needs of the transition period.

I hope that you and your associates will reconsider the matter, but if you still insist on breaking up the present planning organization, I hope that you will lose no time in providing a competent substitute. If you fail in this you are trifling with our national welfare.

In the Armed Forces

Since the publication in the January issue of the names of architects in the uniformed services, the Editors have learned of the following men who have joined the services: Lt. Walter F. Noyes, Jr. (New Hampshire); Lt. (jg) Marshall H. Walker, USNR, (Louisiana); and Delbert F. Long (California).

CUT FUEL BILLS STOP DRAFTS AND LEAKS



The Supreme Court Building in Washington, D. C., is one of an impressive list of Federal Buildings throughout the country calked with Pecora.

ALL BUILDINGS NEED PECORA WEATHER PROTECTION

Fuel is critical. Do not waste it. Every pound of coal, every gallon of oil, that is wasted because of improperly sealed building joints, imposes a needless burden on vital transportation facilities. Calk all exterior window and door frames, point up all masonry joints, with Pecora Calking Compound. More important buildings have been calked with Pecora than with any other material. It will not dry out, crack or chip when properly applied. Its reliability has been tested through the years under all weather conditions—since 1908.

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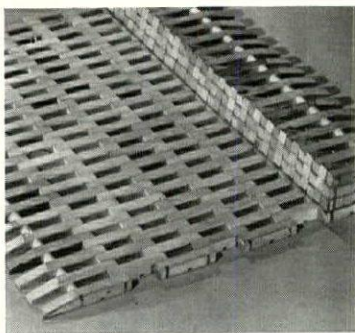
Business Address _____

(The columns of this section are open to any manufacturer who has a new product of interest to the architectural profession. Manufacturers who wish to have their product shown should send a glossy photograph, together with information covering the function, characteristics, installation, cost of the product, and a description of what AIA literature is available.)

GLASS

Securit is a translucent glass which diffuses light and provides decorative themes in home, office, industry. The glass is said to have unusual resistance to impact and sudden temperature changes. Under a blow heavy enough to fracture the product it will disintegrate into a powdery substance. Libbey-Owens-Ford Glass Co., Toledo, Ohio.

WOOD LINK MAT

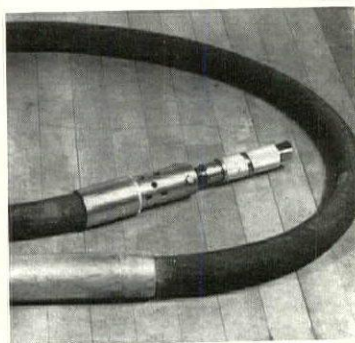


This mat is light in weight, can be rolled or folded up for easy handling. Ends are beveled to reduce danger of tripping. The mat is 1" thick, comes in stock sizes: 18x32", 24x38", 30x44", but can be had in special sizes of any length and up to 36" in width. American Mat Corp., 1792 Adams St., Toledo, Ohio.

LAMINATED PLASTIC

Durashield is a laminated plastic substitute for brass, copper, or bronze nameplates, tool checks, and similar marking plates on metal equipment. It can be die-cut, stamped, drilled, is fire resistant. Center sheet is opaque cellulose acetate plastic; on each side is laminated a transparent plastic. Plastic Fabricators, Inc., 500 Sansome St., San Francisco.

CONCRETE VIBRATOR



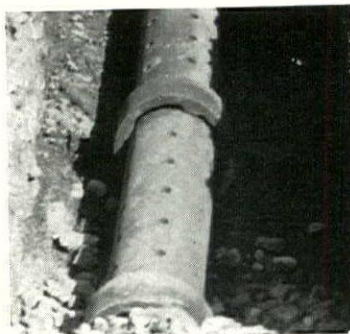
Model PV238 concrete vibrator from Mall Tool Co., 7740 S. Chicago Ave., Chicago, has a line strainer, safety throttle, is designed for concrete of 3" slump and over for walls, columns, floors, and roof slabs, as well as mass concrete. Parts are easily renewable in the field. Capacity: 15-20 cubic yards of concrete per hour.

FIBERBOARD LOCKERS



Pressed hard fiberboard lockers, from Sanymetal Products Co. Inc., 1705 Urbana Road, Cleveland, Ohio. Four types: single and double tier (single front, and back to back). Assembled at the factory. Units are moisture resisting, slow-burning. Rabbeted connections reinforced on the inside by use of angle braces. Olive green finish.

PIPE



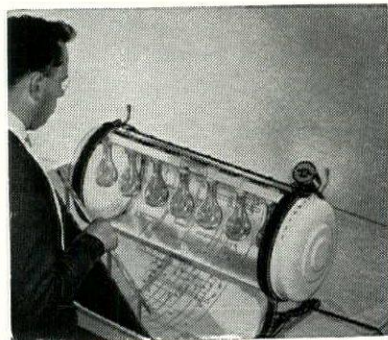
Bowerston Shale Co., Bowerston, Ohio, has designed a line of pipes and collars for drainage use. Cost of the smaller sizes in perforated end pipe is said to be about that of the ordinary bell and spigot type (not perforated). Plain end pipe with Tru-Line collars (not perforated) costs about \$2 a ton cheaper than bell and spigot type.

WOOD SEPTIC TANK



War model septic tank, made of 1 1/4" tank grade lumber (cypress, redwood, cedar, and white pine), equipped with 1/2" round adjustable steel hoops. Mineral asphalt coating protects tank from action of moisture and soil. Capacities: 300-1,000 gallons. Carey Associated Industries, 715 Seeley Road, Syracuse, N. Y.

PRINT MAKER

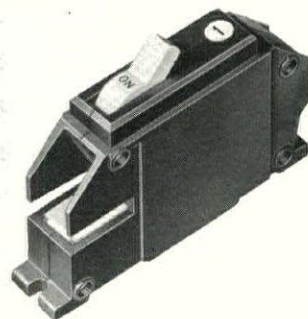


Victoray makes professional blue prints or black and white prints in three minutes. Cost of prints about 1c a sq. ft. Printing can be done in daylight by inexperienced person. Lamps good for 1200 hours of printing. Renewal cost \$1.60 for set of 8 lamps. (1250 watts, AC or DC, 110-120 volts.) Victoray Corp., Battle Creek, Mich.

INDUSTRIAL PAINT

Protectite is an anti-corrosion and heat-resisting industrial paint which provides a dense, pliable, and waterproof coating said to be free from objectionable pinholes. The paint is furnished, ready for use, in black and battleship gray colors. It can be applied by gun, brush, or dipping, by unskilled workmen. J. Merrill Richards, 25 Huntington Ave., Boston.

CIRCUIT BREAKER



The new Type AC Thermag circuit breaker, from Frank Adam Electric Co., St. Louis, combines the time-delay action of the thermal trip with the magnetic trip. On short circuit, the magnetic element causes faster tripping of the circuit breaker. Capacities: 50 amps, or less, 120 volts AC, single or double pole.

BRICK AGER

New brick construction on old buildings is said to melt into the surrounding wall after being covered with a Brick Aging solution developed by Louis Melind Co., 362 W. Chicago Ave., Chicago. The solution may be applied by spray or large whitewash brush, or may be mixed with the mortar when the brick is laid and the new brick dipped in solution.

WARTIME EFFICIENCY

can be increased,
foot fatigue reduced
with this resilient floor covering

Colorful Johns-Manville Asphalt Tile Floors
also provide a cheerful, morale-building
place in which to work

FOOT FATIGUE *cannot* be overlooked today—because of its tendency to slow down work. That's why more and more companies engaged in war work are installing resilient J-M Asphalt Tile Flooring . . . in offices, cafeterias, employee recreation rooms, and even out in the plant where workers, especially women, must stand on their feet all day.

J-M Asphalt Tile floors are durable, easy to clean, require little if any maintenance, and contain no critical materials. They cost less than any other type of quality resilient floor covering on the market!

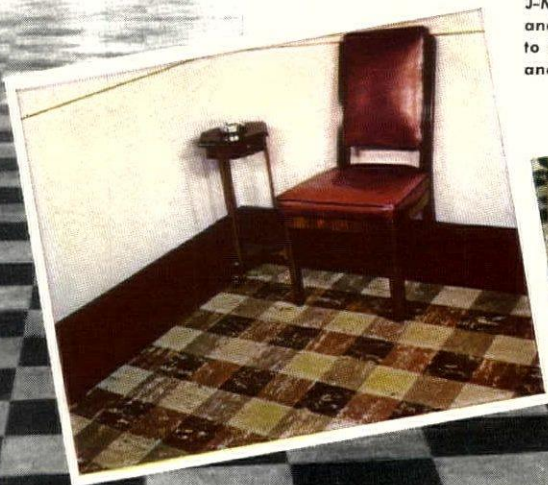
For Full-Color Brochure of Facts and Design Suggestions, write Johns-Manville, 22 E. 40th St., New York.



JOHNS-MANVILLE

Asphalt Tile FLOORING

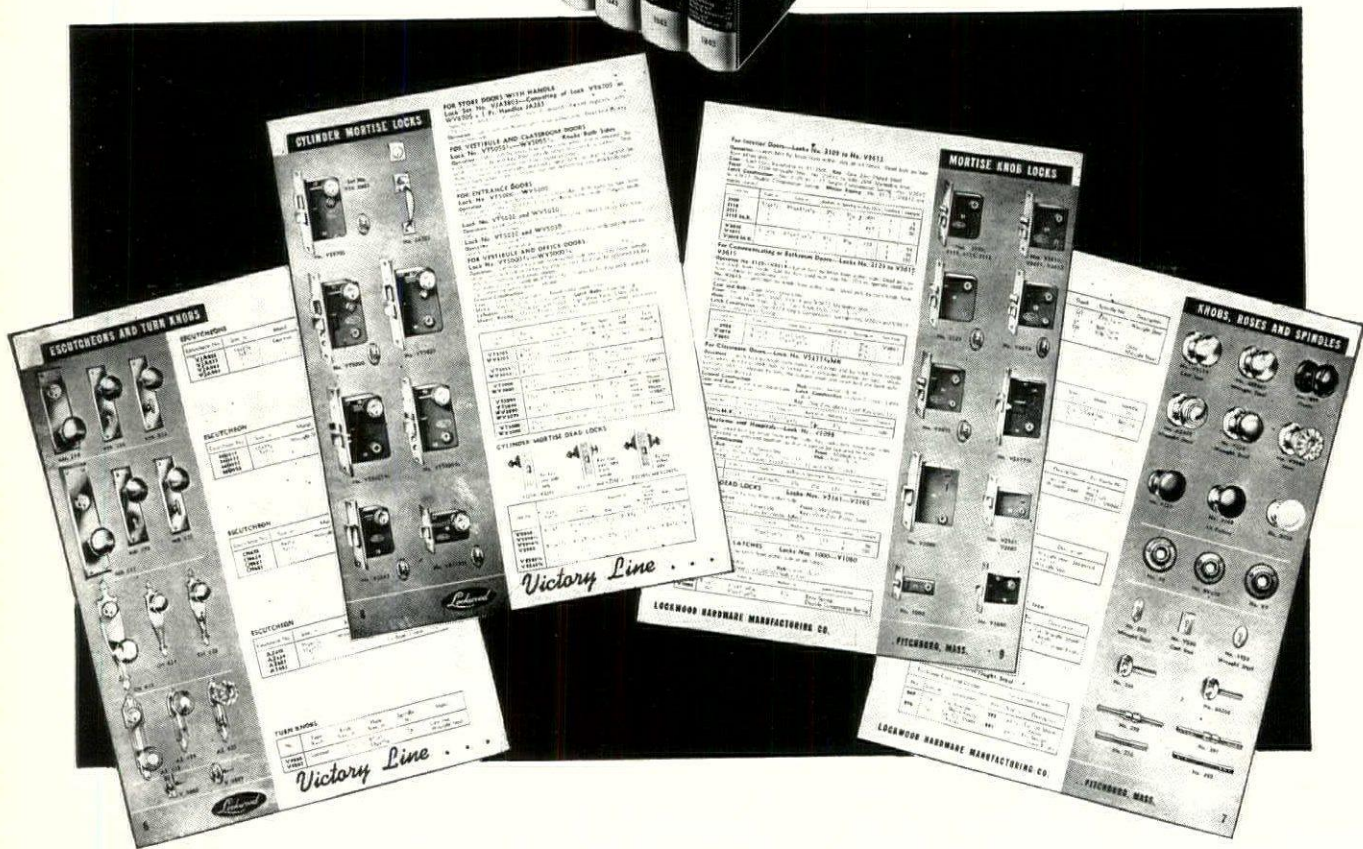
J-M Asphalt Tile Floors—J-M Acoustical Materials and J-M Movable Transite Partitions are helping to speed up war production in offices and plants everywhere.



SWEET'S
1943 CATALOG



LOCKWOOD'S LATEST
FEATURES



LOCKWOOD'S "VICTORY" HARDWARE *in line with WPB Simplification Program*

SWEET'S CATALOG 1943 will contain 12 pages of Lockwood Builders' Hardware.

The manufacture of builders' hardware involves the use of critical materials, needed for war equipment and ammunition for our armed forces. For this reason, certain items in this catalog may be withdrawn as the war progresses. But



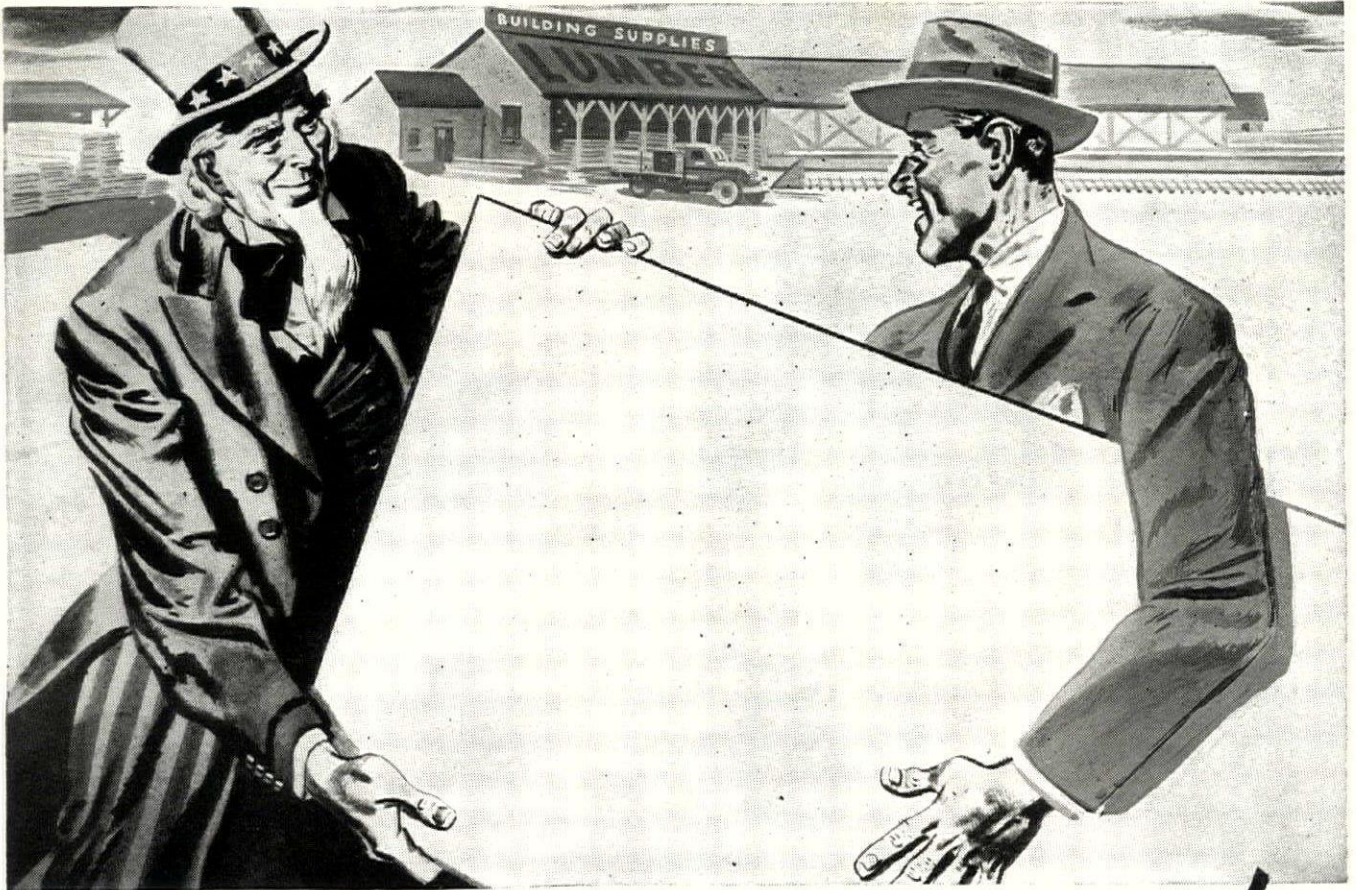
the Section does give you the Lockwood line as up-to-date as is possible at this time.

The Lockwood Builders' Hardware Dealer is well equipped to assist you in specifying permissible Lockwood Hardware, and you can count upon Lockwood to handle your requirements as promptly as your priority rating permits.

BA

LOCKWOOD HARDWARE MFG. CO., Fitchburg, Mass. *Division of Independent Lock Company*





UNCLE SAM ASKED FOR A MIRACLE!

Amazing new "Stonewall" board replaces gone-to-war building materials

● Uncle Sam was in a spot. Plywood, fiber-board, sheet metal had gone to war. A new building material was needed. Not only for government but for other essential building.

So Ruberoid engineers went to work and came up with an amazing new material that could immediately swing into mass production—and at low cost . . . STONEWALL Asbestos-Cement Board.

Stonewall is today's BIG NEWS in building materials:

1. **It's Available**—You can really get it.
2. **Ruberoid Quality**—In many respects surpasses materials it replaces.
3. **All-purpose Material**—Uses almost unlimited. Can be sawed or scored, nailed and drilled.
4. **Low Price**—Does not upset estimates.

Stonewall, on pure performance, has already earned widespread acceptance as *the* preferred board for a vast number of uses . . . on farms, in factories, for war housing . . . inside and outside walls, ceilings, partitions . . . from chicken coops to government office buildings.

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Low Cost
- ✓ Fireproof
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Ratproof
Rustproof
- ✓ Dapple Grey
Needs No
Painting
- ✓ Can Be Nailed
Sawed, Drilled
- ✓ Easy To Clean
Can Be Hosed
- ✓ Smooth, Flexible
- ✓ And It's
Available

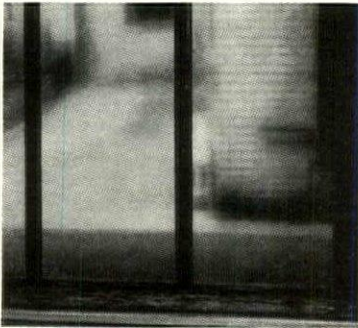


STONEWALL

A Product of The RUBEROID Co.

(Continued from page 16)

SHATTERPROOF GLAZING



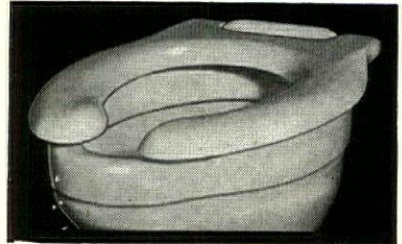
Lumapane is a laminated plastic glass with a reinforcement filler of wire screen

mesh, said to provide a shatterproof window pane. It is crystal clear, 0.03 inches thick, has withstood tests made under vacuum shock conditions. This plastic glass may be repaired with cellulose tape. Celanese Celluloid Corp., 180 Madison Ave., New York.

HEATER-VENTILATOR

Vertivent is a combination forced air and blackout air control unit for industrial plants. The tempering section consists of face, by-pass and recirculating dampers, dual heating coils, fan, motor, and the housing. Exposed parts are galvanized steel. The hood prevents light escape-ment. C.F.M. capacities: 5,000-15,000. Young Radiator Co., Racine, Wisconsin.

TOILET SEAT



Self-raising wood toilet seats made by Sperzel Sanitary Seat Co., Minneapolis, Minn. Seat stands perpendicular to bowl when not in use, making every bowl serve dual purpose of urinal and bowl. Fits any standard bowl with 5 1/2" post hole centers.

MAINTAINING HEALTH STANDARDS IN THE NATION'S SCHOOLS

Spencer Vacuum is the accepted standard for cleaning modern schools. It picks up more of the dirt and dust, works faster and costs less in the long run. Easily operated by men or women — without previous experience, Spencer Vacuum is helping to maintain pre-war standards of cleanliness in more than 2500 schools.

POST-WAR PLANS
will include Spencer Vacuum Cleaning because it protects health, equipment, decorations, saves on cost of sweeping compounds, floor oil and wax, and because it cleans everything from the auditorium to chalk trays, boiler tubes, and air filters. Ask for the Spencer School Bulletin.

245A



SPENCER VACUUM

HARTFORD

CLEANING

THE SPENCER TURBINE COMPANY, HARTFORD, CONN.

GLASS REFLECTORS

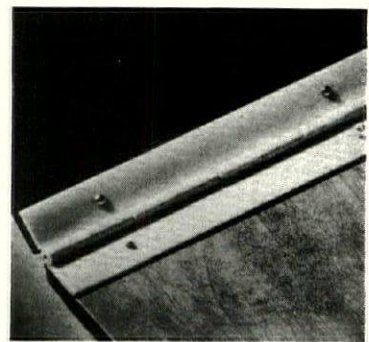


Westinghouse Lighting Division, Cleveland, is making yard lights for plants and using mirror glass reflectors with silver backing and cast iron hoods. Substitution of glass releases aluminum for war uses. Mirror glass reflects more light.

DRAWING BOARD TOPS

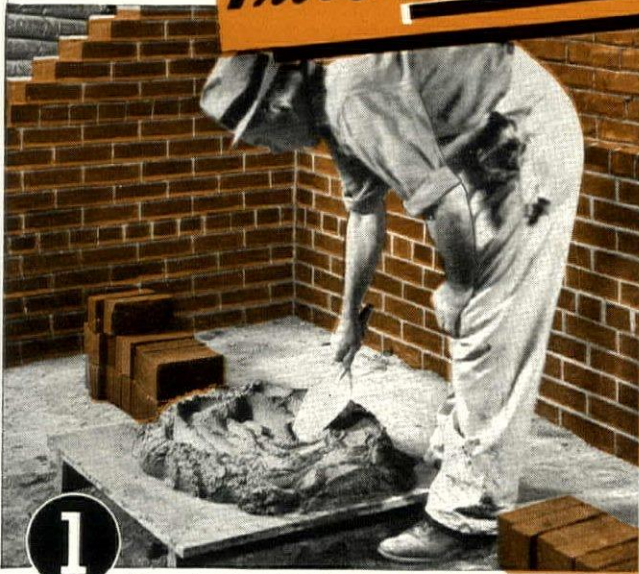
No-Ink drawing board tops can be used to cover worn-out drawing boards and provide more efficient drawing space. It is washable, eliminates the need of manila paper, has a smooth surface. Can be installed in five minutes. Sizes from 24x36" to 42x84". W. H. Long Co., 425 N. Clark St., Chicago.

TENITE HINGES



Piano-type hinges of Tenite, extruded in continuous lengths, offer new design possibilities to makers of lightweight portable equipment. Hinges may be cut to any desired length and easily assembled to other materials with adhesives, rivets, screws. Lustrous surface is rustproof, dirt-resistant. Plastic Process Co., 828 N. Highland Ave., Hollywood, Calif.

MAKE THIS TEST -
Prove **BRIXMENT** *is* **BEST!**



1 Mix a batch of 1-3 Brixment mortar (above) and a batch of 50-50 cement-lime mortar made with the same proportion of sand (right). Get any competent bricklayer to test



2 them on the board—to spread them on the wall—to lay up a few brick with each of the two mortars. Then ask him *which* has the best workability.

BRIXMENT Assures **More Economical Brickwork**

Aside from the cost of the brick itself, the most expensive item in masonry construction is the bricklayer's time.

Therefore the most economical mortar you can buy is the one that enables the bricklayer to lay the most brick per day. You cannot afford to give your bricklayer any mortar which causes unnecessary work, such as constant retempering, stooping to the board to replace mortar that failed to stick when he threw up the head-joint, etc.

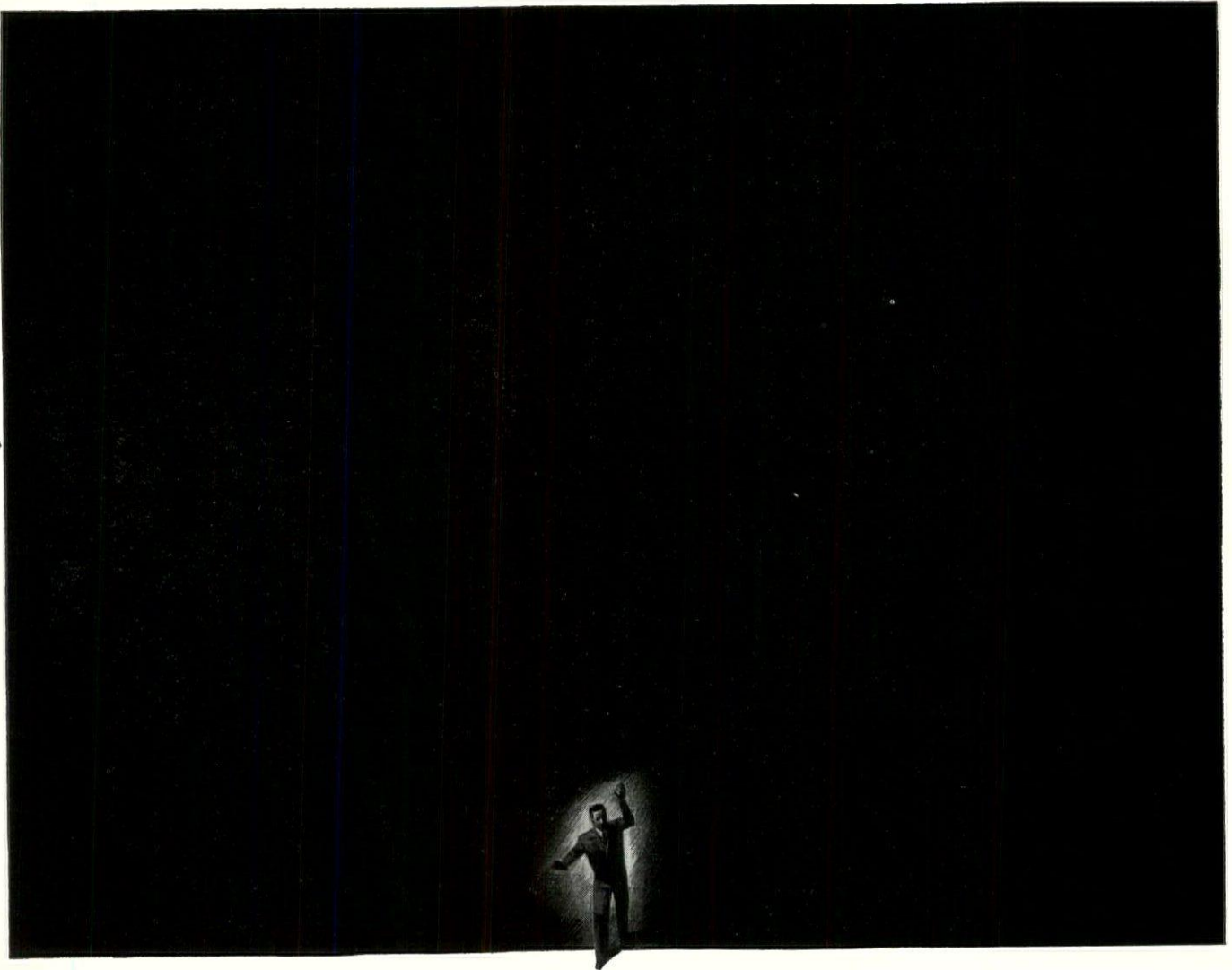
To secure economical brickwork, the mortar must

have excellent workability.

The plasticity of Brixment mortar is *ideal*. It approaches that of straight lime putty. It enables the bricklayer to do faster, neater brickwork, with the brick well bedded and the joints well filled.

This is the principal reason why Brixment reduces the cost of brickwork. But in addition, less labor and supervision are required in mixing. No soaking or slaking. No mortar is wasted. And Brixment mortar makes a neater job that costs less to clean down.

BRIXMENT



You can't afford to be in the dark!

War production, swift and unceasing, calls for unfailing *power* and *light*. You can't afford to be in the dark for a moment, and naturally, you can't afford to be in the dark about the value of conserving the Exide Emergency Batteries you have specified for your clients.

Proper care of any Exide Battery is simplicity itself, and Exide Emergency Batteries are no exception. Four simple steps will add to the lives of these already long-lasting batteries . . . and save metals and materials for America's fight. Suggest that your clients put these rules into effect, and you're meeting a real war-time responsibility.

THESE ARE IMPORTANT CONSERVATION RULES

- 1** Keep adding approved water at regular intervals. Most local water is safe. Ask us if yours is safe.
- 2** Keep the top of the battery and battery container clean and dry at all times. This will assure maximum protection of the inner parts.
- 3** Keep the battery fully charged—but avoid excessive over-charge. A storage battery will last longer when charged at its proper voltage.
- 4** Record water additions, voltage and gravity readings. Don't trust your memory. Write down a complete record of your battery's life history. Compare readings.

If you wish more detailed information, or have a special battery maintenance problem, don't hesitate to write to Exide. We want you to get the long-life built into every Exide Battery. Ask for booklet Form 3225.

THE ELECTRIC STORAGE BATTERY CO.
Philadelphia

*The World's Largest Manufacturers of Storage Batteries
for Every Purpose*

Exide Batteries of Canada, Limited, Toronto

Exide

EMERGENCY BATTERIES

ELECTED

Mount Vernon, N. Y.—O. J. Gette was recently elected president of the Westchester County (N. Y.) Society of Architects. Other officers elected at the annual meeting were: Louis Levine, vice president; Frederick H. Voss, secretary; Angelo M. Riccio, treasurer.

PLANNER

Grand Rapids, Mich. — Kenneth C. Welch, architect, has been appointed a member of the Grand Rapids City Planning Department by Mayor George W. Welsh.

JOINS WPB

Moline, Ill. — Gerald E. Otis, vice president of Herman Nelson Corp. here, manufacturers of heating, ventilating, and air conditioning equipment, has been appointed as an Industry Specialist in the Plumbing and Heating Branch of the War Production Board.

DIED

New York — Frederick O. Lewis, architectural member of the firm of Lewis & Leonard died on February 7, aged sixty-three. He worked for many years in the Albert Kahn office, started his own private practice in Boston in 1922, and formed the present firm in New York in 1925. In recent years Mr. Lewis was recognized as an authority on specification writing.

LECTURER

Chicago — José Luis Sert, author of "Can Our Cities Survive?" will lecture at the School of Design, 247 Ontario St., Chicago, on Urbanism vs. Suburbanism, on Monday, March 22. His lecture, with lantern slides, will deal with the problems of rebuilding cities on a new basis of postwar activity, handling the four urban functions: dwelling, recreation, work, transportation.

HONORARY MEMBER

Cleveland — I. T. Frary, membership secretary of the Cleveland Museum of Art, was recently elected to honorary membership in the American Institute of Architects. Mr. Frary has written several books of architectural character and has done work in architectural photography. Some of his pictures are in the Metropolitan Museum

CONSTRUCTION ORDER AMENDED

WPB LIMITS NEW CONSTRUCTION TO \$200

Washington—An amendment to Conservation Order L-41, made effective recently by WPB, reduces to \$200 the new construction which may be undertaken, without specific authority, by a number of manufacturing enterprises which are not essential to the war program. Moreover, the amendment applies to private dwellings and commercial structures. Heretofore, owners of industrial establishments were permitted to carry on construction up to \$5,000 in one year.

The order, as amended, acts to shut off the flow of materials from normal peacetime construction and route them to essential war jobs. It provides that no construction may be begun or carried on unless it is specifically authorized by the WPB or unless the estimated cost of the project is limited to stated amounts.

These amounts limit construction to \$200 for residential and some specifically-mentioned types; \$1,000 for multiple residential; \$1,000 for agricultural; \$5,000 for industrial; and \$1,000 for "other restricted" construction not otherwise specified.

In prohibiting unauthorized construction, WPB acted to restrict anyone who might complete a structure started in violation of Order L-41, or anyone who might participate in the job, such as architects, engineers, and the like.

In specifying industrial structures whose exemption under L-41 is reduced to \$200, the amendment embraces all structures which have as their principal function the manufacture, processing, or assembling of any of the following: athletic supplies, sporting goods, toys or games; books, magazines, newspapers, greeting cards or other printed or engraved matter; candy or chewing gum; jewelry, watches, traveling bags, brushes, razors, pipes and like articles for personal use or adornment; furniture, silverware, china, household electrical appliances, draperies, and all similar articles; bev-

CONGRESS BEGINS WORK ON POSTWAR PLANNING

Bills on Planning Commissions, Housing Programs Already in Congressional Hopper

Washington—Bills concerning postwar planning commissions, the development of housing programs, and the expansion of civil aeronautics are already in the hopper of the 78th Congress. Summarized herewith are bills that are of interest to the architectural profession:

S. Res. 13. To authorize a subcommittee of the Committee on Education and Labor to (1) study the work of all branches of the National Housing Agency; (2) recommend a plan for the disposition of emergency housing at the termination of the war emergency; (3) prepare a comprehensive plan for the construction of all housing after the war.

S.J. Res. 22. To appoint a joint committee of the Congress to make a study of war and postwar problems. (Reintroduction of S.J. Res. 131 which received a favorable committee report in the 77th Congress.)

S. 436. Consenting to the taxation of lands held by the United States within the various states.

S. 524. Establish a National Housing Agency. (Now operating under executive order.)

H.Con.Res. 2. To establish a joint committee on planning and reconstruction. (Reintroduction of H.Con.Res. 84 of the 77th Congress.)

H.J. Res. 28. To create a postwar planning commission.

H.J. Res. 36. To establish a national commission for postwar reconstruction. (Reintroduction of H.J. Res. 291 of the 77th Congress.)

H.R. 892. To provide for the construction and operation by the Government of a system of new military superhighways and airports for national defense in time of war or insurrection.

H.R. 900. To establish a Division of Fine Arts in the Office of Education. (Fine arts to include music, art, dramatic art, and speech.)

H.R. 1012. To amend the Civil Aeronautics Act of 1938 as amended. The bill would direct the CAB to report to Congress "concerning the probable technological and commercial developments in

(Continued on page 24, column 1)

(Continued on page 25, column 1)

HEADS DETROIT ARCHITECTS

Detroit — L. Robert Blakeslee was recently re-elected president of the Detroit Division of the Michigan Society of Architects. Mr. Blakeslee is professor of architectural engineering at the University of Detroit. Other officers elected include: Eberle M. Smith, vice president; Buford L. Pickens, secretary; Paul R. Sewell, treasurer; Talmage C. Hughes, executive secretary; Lyle S. Cole, director.

ALUMINUM PRICES DOWN

Pittsburgh — Roy A. Hunt, president of Aluminum Company of America, announced recently that, as a result of a renegotiation agreement entered into with the Government, Alcoa has made effective on March 1, a new and lower schedule of prices for semi-fabricated and fabricated aluminum.

As illustrated by this new schedule for semi-fabricated and fabricated aluminum and by the four previous reduc-

tions in the price of aluminum ingot the price has been reduced from 20 cents in 1939 to its present level of 15 cents a pound.

CANADIAN BUILDING CODE

Ottawa, Can.—The National Building Code of Canada was recently completed and issued under the sponsorship of the National Research Council of Canada. The code sets down the recommended regulations on construction requirements,

fire protection, and health and sanitation.

All regulations dealing with a particular subject are collected in a single chapter, which method of arrangement avoids repetition and makes the code more compact. It is intended that the Code will be suitable for adoption in whole by municipalities desiring to use a building code.

Copies priced at \$1 may be had from the National Research Council, Ottawa, Canada.

CALIFORNIA HOUSES EXHIBIT OPENS AT MUSEUM

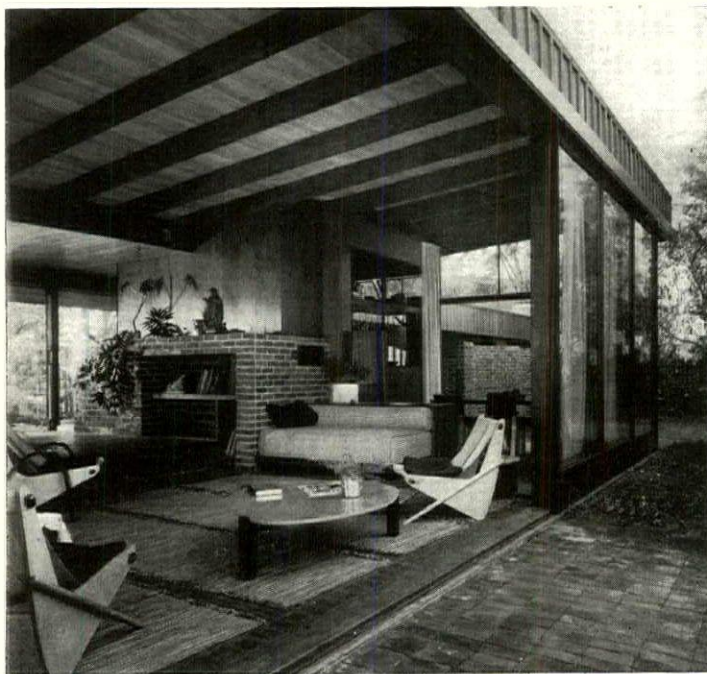
New York—So that people in the East may have an opportunity to become more familiar with the characteristic architecture which is so indigenous to Western climate and living habits, the Museum of Modern Art has opened an architectural exhibition, *Five California Houses Under \$7,500*. The exhibition includes the works of John Ekin Dinwiddie and Albert Henry Hill, Hervey Parke Clark, Harwell Hamilton Harris, Richard J. Neutra, and William Wilson Wurster. Each architect is represented by one house, shown in plans and photos.

Neutra has substituted a newer house for the one originally shown when the exhibit was on display in California. It is called "The Last

of an Era House," designed and built during 1942 of non-critical materials. He also designed the landscaping and furniture with an eye to ease of maintenance which was felt to be of utmost importance during the war.

Playful leisure between foliage, flowers, and pools—a dimmed reflection of little-burdened California peace—flavor this house. The most old-fashioned, non-critical materials are used for furniture, walls, floors: sturdy redwood and hard brick—materials which after the war may, believes Neutra, be highly original in midst of the products of a 194-X building industry.

The exhibition, which opened at the Museum of Modern Art on March 17, will continue until April 18.



POSTWAR PLANNING

(Continued from page 23)

air commerce which may be anticipated during the immediate postwar period."

H.R. 1112. To transfer the functions of the board of directors of the HOLC to the Administrator of the FHA.

H.R. 1245. To establish a National War Memorial Auditorium Commission to provide for construction and maintenance of a National War Memorial Auditorium.

H.R. 1726. To amend the National Housing Act to increase its authorization and to extend it to July, 1944. (Similar to S. 677.)

H.R. 1898. "First Postwar Planning Act of 1943." Identical with H.R. 7782 which was introduced last year by Representative Beiter of New York. (See PENCIL POINTS News Supplement, January, 1943, page 16.)

Congress to Plan Security

The burden of planning now against the postwar period let-

down is up to Congress, according to the President. As a result, the Senate recently created a special committee on postwar policy and planning. The committee will have authority to investigate all matters relating to postwar economic problems, will gather information, plans, and suggestions, and report its findings to Congress.

The President said that about \$7 million of public works had been listed to take up the unemployment slack after the war. It was necessary, he pointed out, to complete engineering, specifications, etc. before. It was up to Congress to decide which of the projects would be built.

Postwar Housing in New York

Slum clearance and housing redevelopment would be speeded up, particularly in New York City, if the New York State Legislature passes bills introduced by Senators Hampton and Desmond, and Assemblyman Mitchell. Sen-

ator Desmond's bill would authorize an increase of \$150,000,000 in the State Housing Debt; two-thirds of the amount would be loaned to the New York City Housing Authority for postwar rehousing.

Another bill would amend the Multiple Dwelling Law to require that all newly-constructed dwellings over 40 feet in height be fireproof.

Senator Hampton and Assemblyman Mitchell have sponsored a bill which would give greater incentive to insurance companies and banks to invest in so-called "urban redevelopment" projects. The measure would strengthen the present Urban Redevelopment Act under which insurance companies may use funds for slum clearance and housing.

It is reported that the Metropolitan Life Insurance Co. will build a "white-collar" housing project on New York's lower East Side after the war. The insurance company, it is reported, has begun to assemble the plot.

ENVISIONS BEAUTIFUL POSTWAR NEW YORK

New York—A New York City with lower buildings of more simple design, and extensive landscaping that will lend a flexibility not provided by present-day architecture, was predicted by Harvey Wiley Corbett, FAIA, at a recent joint meeting of the New York Chapter AIA, The Producers' Council, American Society of Landscape Architects, and the Architectural League of New York. As one of four speakers who discussed construction plans for the postwar era, Mr. Corbett predicted that postwar New York would see greater use of prefabricated materials which would lead to less rigid construction.

Other speakers included Frederick M. Babcock, chairman of The Producers' Council committee on postwar planning; Thomas S. Holden, former president of the New York Building Congress; and Edgar Williams, president of the New York Chapter AIA.

\$200 LIMIT

(Continued from page 23)

erages (except milk); musical instruments; stationery or office supplies; toiletries or cosmetic products, and all sorts of wearing apparel, except that for the Army or Navy. Any industrial construction with a productive floor area of less than 10,000 square feet is also included.

An exemption is allowed for construction which is necessary to restore or replace residential or multiple resi-

dential structures damaged or destroyed by disaster, provided that the estimated cost is less than \$5,000. A revised definition of what constitutes maintenance and repair of a building is also contained in the amendment. The new definition specifically designates that where a single job is partly maintenance and repair and partly new construction, the whole project will be considered new construction and subject to the dollar limitations on new construction.

The amendment brings into

the foreground these other principal changes in the regulation of construction: (1) provision for emergency work on damaged structures for the protection of the structure and the public; (2) forbids not only the beginning of construction in violation of L-41 but forbids carrying on or participating in the work; (3) construction cost as defined in the order has been narrowed to exclude financing and insurance charges as elements of cost; (4) the exemption of certain types of agricultural

construction is permitted to reflect the United States Department of Agriculture rationing program.

HARDWARE LINES CUT

Washington—A recent WPB order cut to 2,200 the number of builders' hardware items which manufacturers will be permitted to make. The current number of items is 3,500, to which number it was cut last December from a previous total of 27,000.

WPB PERMITS USE OF CORKBOARD INSULATION

Lancaster, Pa.—The Armstrong Cork Co. has announced that it has been advised by WPB that all restrictions on the use of corkboard insulation have been removed. WPB Order No. M-8A, as amended February 20, now permits cork to be used for roof insulation, for the insulation of air conditioning equipment, and all other non-war purposes previously banned under the mandatory priority control placed in effect by the WPB in June, 1941.

The new order does not end the allocation system. Despite large consumption for vital war needs, reserve supplies of cork have steadily increased so that it is now pos-

sible to make corkboard insulation immediately available for civilian as well as military needs.

CONSTRUCTION EQUIPMENT SIMPLIFIED BY WPB

Washington—Simplification measures recently imposed on the manufacture of portable construction mixers, truck mixer-agitators, and contractors' dewatering and supply pumps by the Director General for Operations will effect an overall 74 percent reduction in the number of models and sizes hitherto manufactured. The measures are estimated to increase production, bring about some saving in critical materials, and liquidate approximately 4,350 tons of slow-moving inventory.

WPB ALLOWS \$1,066,990,976 FOR WAR CONSTRUCTION

Washington—Since last October 22, the WPB has approved construction projects costing \$1,066,990,976 which were found essential to the war effort. Proposed projects costing \$82,137,313 were not approved. As a result of WPB policy of keeping non-essential construction to a minimum, stop orders on projects already under way have effected \$1,306,352,395 worth of contracts.

THREE STATES GET HOUSING CONTRACTS

Boston—The Federal Housing Authority in Boston recently awarded contracts for war housing projects in Connecticut, Rhode Island, and Vermont to the following firms:

Home Guild, Inc., New York—150 dormitories at Windsor Locks, Conn.; Wharton Construction Co., Belleville, N. J. alterations at Newport, R. I.; A. Barbaresi & Son, Inc., Mount Vernon, N. Y.—dormitory units at Southington, Conn.; Thomas D. Zibelli, Inc., Mount Vernon, N. Y.—housing project at Meriden, Conn.

FWA PLANNING POSTWAR PROJECTS

Washington—FWA Administrator Fleming revealed recently that detailed plans and specifications for roads and bridges in 22 states, to cost \$170,000,000, constitute an engineering task now underway for postwar public construction.

CANVAS-CELLOPHANE HOUSE WITHSTANDS RIGORS OF WINTER

Maximum lightness has been achieved by Hubert H. Stevens, Jr., New York, who designed this insulated experimental canvas house in which he has already spent two Connecticut winters. Only a light skeleton of wood is used. Designed as a year-round shelter, the canvas house cost less than \$200, and Mr. Stevens estimates that it should have a life expectancy of five years.

Heat loss is said to be extremely low through the cellophane windows which are double-glazed. The cellophane,



no thicker than cigarette pack-age wrappings, is applied with

glue to the inside and outside of the light, sliding window

sections. (Photos from George Van Anda.)

WPB-NHA JOINT WAR HOUSING POLICY

Washington—The joint declaration of policy of the WPB and NHA regarding war housing, which became effective February 10, was further implemented recently with the revision of Preference Rating Order P-55. The amendments to the order brought these principal changes:

(a) Preference rating orders will be addressed to "owners" in the future rather than to "builders"; (b) Only critical materials which have been specifically approved may be used in war housing structures; (c) The owner is ordered to comply with his agreement in connection with the maintenance of occupancy standards.

Where formerly a builder

could use any material which he could obtain without a preference rating, he is now restricted to only that critical material which is authorized by WPB. Critical material in excess of allowances may not be used, regardless of whether taken from stock, or made available by gift or loan.

Occupancy standards apply not only to the first owner but

also to all subsequent owners of the property, with the only exception occurring in cases of foreclosure. These standards provide that all war housing must now be rented to war workers as defined by NHA, WPB, and WMC. Privately-financed housing must be rented for at least four months, at the end of which time it may be sold to the war worker.

AIA CONVENTION

Washington—The American Institute of Architects will hold its seventy-fifth annual meeting at the Netherlands Plaza Hotel, Cincinnati, May 26-28 inclusive. Sessions will be devoted strictly to business affairs, to the status of the profession in the war effort, and to its future in the post-war era. Tours, large-scale entertainment, ceremonies, and other non-essential features will be omitted.

In addition to the offices of president, vice president, secretary, and treasurer which will be filled by election, regional directors for the following districts will be elected: Illinois-Wisconsin District, New England District, and New York District.

Postwar Reconstruction

Albert C. Schweizer, of Washington, D. C., has been appointed vice chairman of this AIA Committee to replace Horace W. Peaslee, who resigned. Other members added to the committee are: George H. Gray, New Haven; Alfred Kastner, Washington,

D. C.; Oscar T. Lang, Minneapolis; Hugo Leipziger, Austin, Tex.; Grosvenor Atterbury, John Taylor Boyd, Jr., and William Lescaze, all of New York.

NEW AISC SECRETARY

New York — Robert B. Thomas has been elected secretary of the American Institute of Steel Construction to succeed V. G. Iden who has joined the staff of the Bureau of National Affairs, Washington, D. C.

HOMES TO ORDER

Pittsburgh—The postwar prefabricated home will be built around home furnishings at two thirds the cost of a comfortable modern residence, Donald L. Hadley, Westinghouse consulting designer, recently told the Pittsburgh section of the American Ceramics Society. Such a home may be planned step by step from scale models of the piano, refrigerator, and other furnishings. It will be possible to select the home in concrete, plymetal, plywood, or enameled steel directly from the manufacturer or his agents.

BRITISH PLAN POSTWAR WPA?

London—A 12-year government postwar building and town-planning program, calling for employment of over 1¼ million men, was outlined in a White Paper issued recently. The shortage of skilled labor is expected to be met by government training of adults. The government hopes to train 200,000 men during the first few years after the war.

Government proposals are based on the recommendation of the British Ministry of Works and Planning (MOWP) which asks for early demobilization of men with previous building experience. To train skilled labor, MOWP estimates that between five and six thousand instructors will be needed immediately after the war.

POSTWAR LECTURE SERIES

Detroit — The Detroit Art Commission and the Citizens Housing and Planning Council have arranged a series of lectures on postwar Detroit. Alex Linn Trout, special lecturer on housing and planning at Wayne University and an NRPB consultant, who opened the series on March 2, discussed the present status of planning in Detroit.

José Luis Sert, noted author, is scheduled to discuss urbanism and suburbanism on March 18, while George F. Emery will discuss Detroit's master plan at the March 23 session. Mr. Emery is City Planner-Secretary of the Detroit City Plan Commission.


ARTISTS FOR VICTORY


New York—At its first annual meeting held recently at the Architectural League of New York, Artists for Victory, Inc. reelected the following officers for the coming year: Hobart Nichols, president; J. Scott Williams, Hugo Gellert, Francis Keally, Bianca Todd, and Paul Manship, vice presidents; Arthur Crisp, treasurer; Allyn Cox, secretary. A. F. Brinckhoff was elected corresponding secretary. Chairman of the committee on architecture is Julian Clarence Levi.

The organization is composed of numerous constituent societies representing all branches of the arts.

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STEEL BOOKINGS DOWN

New York—Reflecting the stringent efforts of WPB to conserve the use of steel for immediate and direct war purposes, the bookings of fabricated structural steel for January declined to 57,865 tons, according to reports received by the American Institute of Steel Construction. This figure compares with 183,387 tons in the corresponding month of 1942. The backlog tonnage available for fabrication within the next four months is 489,320 according to AISC reports.

HOUSING PROGRESS

Washington—More than 50,000 government-financed housing units for war workers were placed under construction during January, FPHA Commissioner Herbert Emmerich announced recently. This was more than three times the average monthly rate of construction initiated during the fourth quarter of 1942.

By use of standardized plans, substitute materials, and other construction economies, the consumption of critical

war materials in projects developed by the FPHA has been reduced sharply, Mr. Emmerich said. Because the publicly-financed war housing now being programmed is primarily of temporary construction, the economies in use of critical material accomplished under the FPHA program are further emphasized.

MATERIALS PROCEDURES CLARIFIED BY NHA

Washington — Procedures clarifying the application of materials conservation requirements to all privately-financed war housing have been established by the National Housing Agency. These procedures implement the joint policy declaration of the WPB and the NHA (See PENCIL POINTS News Supplement, January, page 16) requiring that the use of critical materials conform with the official War Housing Construction Standards and War Housing Critical List, and that local housing construction quotas found by the NHA to be in excess of needs be revised or cancelled where practicable.

HOUSING IS INADEQUATE

New York—In a report calling on Federal agencies to revise their programs so that war workers could be assured a place to live, the National Committee of Housing Associations has characterized the present government war housing plan as "inadequate" since it fails to provide "systematic and efficient use of all available unused structures in congested production centers."

NEWMAN HEADS NAOMM

Washington—Sidney J. Newman, president of Newman Bros. Inc., Cincinnati, Ohio, was re-elected president for the fifth consecutive year of the National Association of Ornamental Metal Manufacturers. Re-elected vice-presidents were Henry J. Neils, Flour City Ornamental Iron Co., Minneapolis, and B. W. Stonebraker, Roanoke Iron Works, Roanoke, Va.

ARMY COLLEGE TRAINING

Washington — The Army's specified training program in American colleges and universities will provide technical instruction for approximately 150,000 young soldiers each year, Brig. Gen. J. N. Dalton, Assistant Chief of Staff for Personnel, said recently. The basic study course includes English, mathematics, physics, chemistry, history, and geography. Men accepted for the program must be high school graduates and have completed their basic training at Army replacement camps. They will be given an oppor-

tunity to apply their talents along technical or professional lines so that they may be more valuable to the Army.

Army-Navy Education

Washington—Tests are being prepared by the War and Navy Departments to assess the educational growth of its personnel during the period of service in the armed forces. Results will be certified upon request to schools and colleges for evaluation of educational achievement represented by the test scores. It is expected that the program will help the service men to obtain postwar academic credit.

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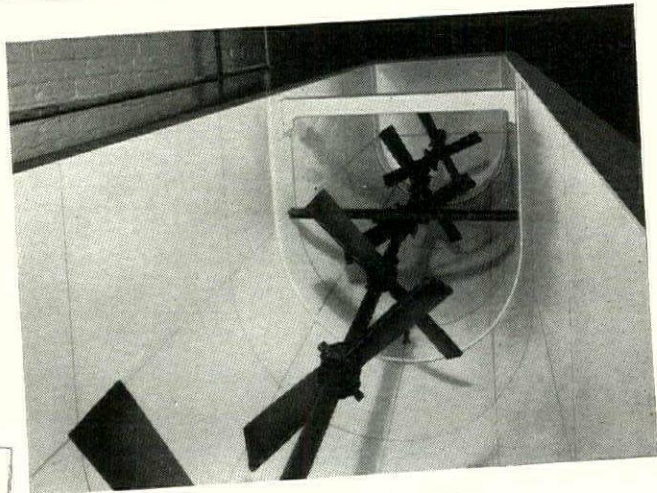


NEWS ABOUT GLASS from "Pittsburgh"



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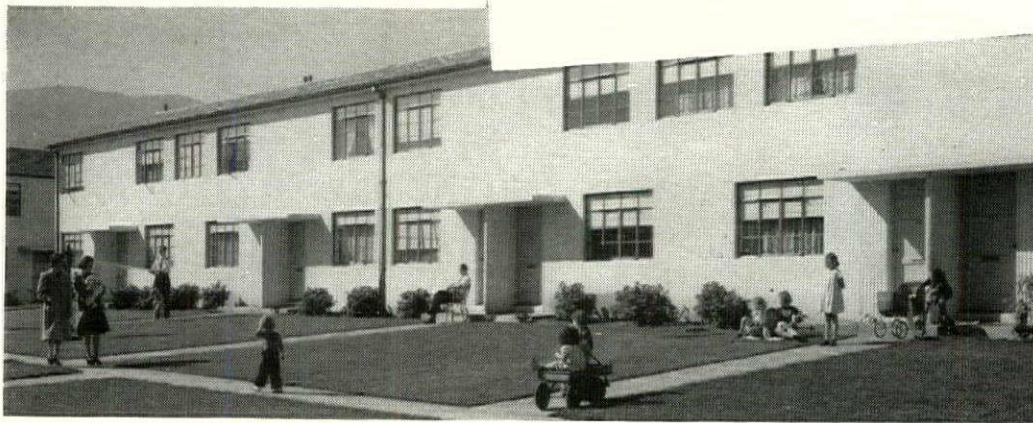


OUTSTANDING HOUSING PROJECT

by the San Francisco Housing Authority is typical of the many developments where Pennvernon Window Glass is used to provide good lighting, good vision and good looks. Architects for housing projects are providing generous window areas to assure light, airy apartments that contribute to enjoyable living.

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by "Pittsburgh" are impervious to acids, alkalis, chemicals, liquids of almost any sort. Glass tanks by "Pittsburgh" are strong, non-porous, sanitary, non-absorptive. They can be made of opaque Carrara Structural Glass, or transparent plate glass. These glass tanks are among the newest developments of Pittsburgh Plate Glass Company and offer new possibilities to architects in industrial, public building or commercial work.



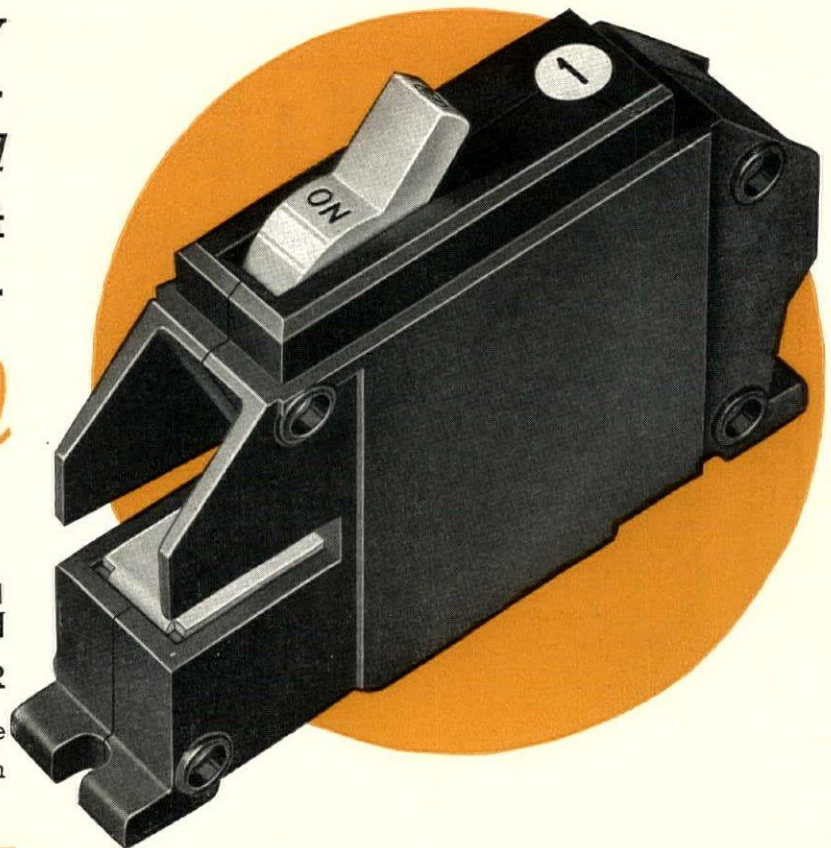
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6. Signal Button on double pole for trip indicator
7. Magnetic Arc Quencher
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In meeting and passing the tests of Underwriters' Laboratories, Inc., for interruption of a current of 5,000 R. M. S. Amps., at rated voltage and at 45-50% P. F., oscillograms show that a 15 Amp. **FA** Type AC THERMAG Circuit Breaker opened the circuit in .25 of a cycle.

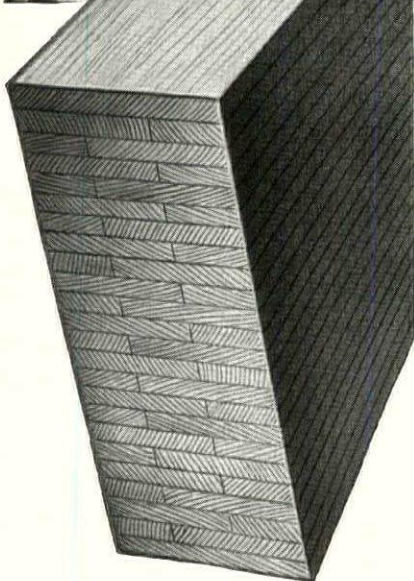
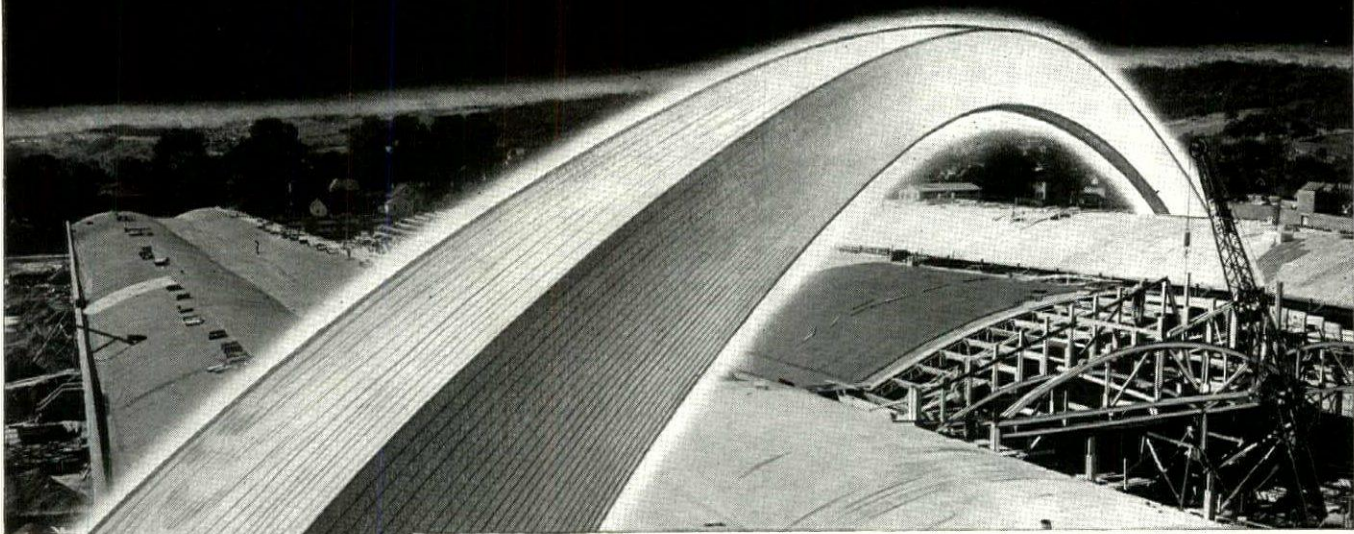
When tripped, the handle on the single pole breaker automatically returns to the OFF position, thus indicating the current interruption . . . On the double pole breaker, a red signal button is protruded from the face of the breaker on which the trouble has occurred.

FA THERMAG Circuit Breakers are now furnished in all **FA** standard and narrow column type panelboards, and in dust-tight panelboards at no additional cost . . . Capacities: 50 Amps. or less, 120 volts AC, single or double pole (individual trip). Sturdy construction renders **FA** THERMAG Circuit Breakers, assembled in **FA** Panelboards, ideal for industrial use.

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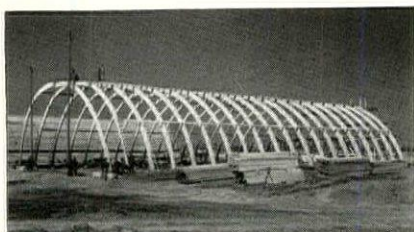
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The Invisible Client

We would like to believe that there will come a time when every architect, in serving the interests of his flesh-and-blood individual client, will keep clearly in mind his simultaneous responsibility to the neighborhood and community of which his project is to be a part.

Lip service to this idea has been general for as long as we can remember. Many architects have been conscientious on this point, as the good professional man should be, and have considered the public consequences of their architectural deeds before perpetrating them. But we need only a casual look around, in almost any city, to see many buildings in the design of which the principle has been ignored. And they can't all be blamed on the client.

The approach of the average American architect to his job has been and still is undergoing a transformation. His horizon is expanding. Not so many years ago the great bulk of architectural practice consisted of individual projects, most of them involving each a single building. A smaller number called for the design of a related group having a single functional purpose. Even though some attention was paid in the educational years to larger-scale planning considerations, only a comparatively small number of architects ever found opportunity in their practices to attack the problem of a whole integrated community or even a substantial portion of one. A very few men, most of them interested particularly in the problems of housing, gave serious study to the matter of large-scale planning. These men were the pioneers in this country of the modern trends of community design.

Housing done during the last world war gave impetus to the growth of understanding in this field. Unfortunately, most of the lessons learned by that experience were lost or ignored during the anarchic building boom of the twenties. During that period, the thing to do was to give the client what he wanted. If one architect had scruples, a more tractable one would be found.

During the depression years, when public housing again became a matter of concern, there was a good deal of fumbling with the problem of site-planning of large groups, some of which contained community elements other than the housing itself. Understanding of community relationships began to be acquired all over again, not without painful experience.

The needs of war housing brought problems of greater magnitude, involving whole communities of hundreds and even thousands of houses. These projects had to have shops and stores, schools, community centers, and other facilities necessary to serve the people. More and more architects were concerned in their design and more and more interest developed in the essentially architectural art and science of civic design. Out of it all is emerging the new type of architect, socially minded and more aware of his duty as designer of the broader human environment. So far so good, but there is much more progress to be made.

After the war, many urban communities will be ripe for extensive building and rebuilding. Plans are being made now: many more will have to be made. Many architects will be engaged with their collaborators in making the broad plans: many more will be making the designs for new buildings of all kinds to fit into the general scheme. Now is the time for every architect not needed in the war itself to be preparing himself for practice in a world where his invisible client, the community, is going to be more demanding than ever before. Now is the time to learn to understand the neighborhood, the town, the city, the region and all their inter-relationships which have significant bearing upon every individual building project within them. Now is the time to begin to restore the full and glorious meaning of the word "Architect."

A handwritten signature in black ink, reading "Kenneth Reid". The signature is written in a cursive, flowing style with a long horizontal stroke at the end.



**Cities should be
places to live in**

by Henry S. Churchill

City planning has a long and honorable history in this country. One of the earliest and most beautiful plans is that of Savannah, laid out by a surveyor under the direction of Gen. Oglethorpe. Then, of course, there is L'Enfant's Washington, a plan more honored in the breach than the observance. The great period of expansion brought nothing but the rectilinear pattern of the surveyor laying out blocks for easy title description, all right-angled, all uniform, regardless of topography, use or humanity . . . Then came the American Renaissance, the era launched by the World's Fair of 1893, and the city plans of McKim, Mead and White, Nolen, and above all, Dan Burnham, who summed up his age in the phrase, "Let us make no little plans."

It is this tradition that most architects think of, instinctively, because of their training, when they think at all about city planning: The tradition of the grand boulevard, the Avenue, the axis and the vista, the monumental facade, beyond which extend the wastelands of the slums. Others have recollections of the garden city, roads that are twisted and confused in the name of the picturesque, disorder as a reaction from the dully ordered. And still others, too many others, think of it only as something for highway engineers and traffic experts—how to get people expeditiously from some place they don't want to be to some other place to which they don't want to go.

Today, however, city planning is something else again, and it should be a major concern of architects, although academically it is not "architecture" as we used to hear it defined, "the art of building beautifully." But I prefer to think of the architect as one who does more than build, as one who brings order out of chaos. City planning today is his opportunity to plan for gracious and beautiful living for multitudes. It is a noble mandate. Acceptance of it will require re-education and the acquisition of new disciplines. And an humbleness of spirit.

City planning today and tomorrow concerns itself with making our cities better places in which to live and in which to work; with rehabilitating them physically, economically, and spiritually. They—and when I say they, I mean all our big cities, without exception, and many smaller ones—are in a bad way. Blight and decay ring the business centers, obsolescent structures block improvements, unreal real property assessments, fictitious values, antiquated tax systems prevent action; and the blight, the overcrowding, the slums, the lack of facilities for decent living and decent family raising drive those who can go, out to the greener pastures of the suburbs.

To unravel all these things, it is not enough to provide for more parking space, to "ease the tax burden," or to build a few housing projects or clear a few slums. It is a task in the establishing of relationships: The just balance between the physical plan of the city, the fiscal plan of the city, the people of the city. And these reach out into the region, the nation and, eventually, the world.

This may sound formidable or foolish, depending on your point of view, but it is neither if you simplify to the three things basic to a city, three things without any one of which there is no city. These are land and buildings and people. Heretofore no planner, certainly no grand-scale planner, ever gave a thought to people. Formerly, we thought that if we just put buildings on land, there would always be more than enough people to use them, that the more buildings we built, the more people there would be, the more crowded, the greater the profit, "infinite riches in a little room." That time is over. We are faced with the painful facts that our cities are overbuilt, that our use of land was absurd and is criminal, that our superb technique of building has produced unbalanced population concentrations with

the result that much of our city is overcrowded unbearably, and much of it is blighted, and much of it is unused. New methods, indeed new conceptions, of land control must come into being. Above all, finance and fiscal practice must catch up with the possibilities of the new technology.

We must devise new patterns of land use, based on these salient facts:

That our rate of population growth is rapidly approaching stabilization, and no great city ever has grown except by immigration. This means quite simply, that we can plan for definite densities, definite uses. We can no longer speculate and we don't have to guess.

That it is, therefore, perfectly possible to have enough light, air, and normal recreation space for every man, woman and child, if only the land is properly planned for use. This is a factor of density, of land use, and has nothing to do with whether you build high buildings or low buildings.

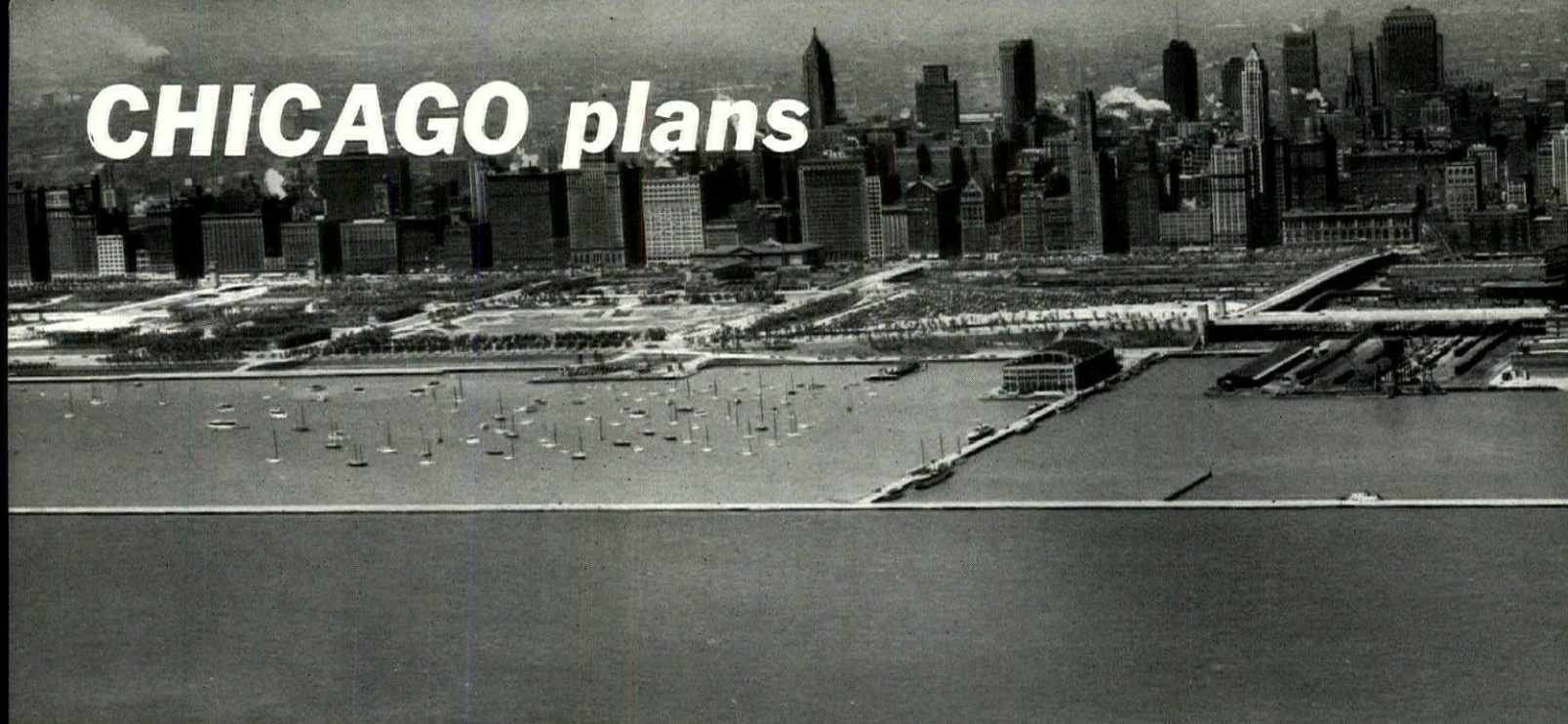
That the airplane is the biggest single influence for change in the city pattern since the invention of gunpowder. Gunpowder overthrew the walls of the feudal city and related it to the countryside; the automobile made the city part of the greater area we call the region; the airplane makes it part of the world. I want to emphasize that no prophecy of its influence can be considered beyond reason. We cannot plan too greatly for it. William Blake observed that, "Everything that can be believed is an image of truth." The airplane, with its load of deadly explosives, will remake our cities into freer and wider patterns, and it will at the same time bind them closer together. It will create, in due time, new great cities, and many of the great of today will dwindle and, perhaps, vanish, because the airplane will pass them by.

The architect, the city planner, cannot ignore these things. He must prepare for them. He must see that the cargo-plane, with its mile-long runway, its low angle of take-off, spells the end of the skyscraper. The threat of bombs will bring to an end the overcrowded slum—open spaces, with trees to help camouflage the buildings, will prevail. These spaces will provide the parking spaces, the recreation areas so sorely needed. Area-wise, cities will get bigger, not smaller, and new conceptions of municipal-regional government and taxation will come into being.

Then, too, patterns of life are changing and these must be considered in planning. Longevity is increasing, that is, there are more old people; and there will be more leisure. Mobility will increase, and so will the rate of obsolescence of structures. These all imply far-reaching changes in the city pattern, in the place of schools, museums, concerts, parks, the location of industry and business, the method of owning land, of financing, of the design of structures. It indicates a fluid, bright, almost an evanescent, pattern freer than anything we know today.

There are those who will say that this is all nonsense, star-gazing, not of the moment and so impractical . . . Perhaps so, but I have seen two-lunger automobiles become the Flying Fortress and I have seen the radio come into being, and skim-milk and soy beans become the most fantastic and beautiful materials. Our children will see the greater wonders of the mature use of these and other things. It is our essence, as architects, to be imaginative, to conceive the inconceivable. It is not to be done by day-dreaming, but by the hardest kind of factual studies, and informed devotion—for nothing less can make the image of truth an image of beauty. That is, as I see it, the architect's part in city planning.

CHICAGO plans

An aerial photograph of Chicago, showing the dense city skyline with numerous skyscrapers in the background. In the foreground, the Lake Michigan waterfront is visible, featuring a marina with many sailboats, a long pier, and some industrial structures. The water is calm, and the sky is clear.

Can a modern city control its destiny? Can it, by taking thought, so guide its future as to arrest the congestion and decay that seem to come with time to every urban community, and produce in their stead a healthy, orderly growth, properly protected against blight? "Yes!" answers the Chicago Plan Commission to each of these questions—and it brings forth in support of its opinion an impressively thorough and logical set of documented studies recording its Land Use Survey and providing a well-integrated framework for what will eventually be its new comprehensive Master Plan. This vast and far-reaching scheme for the rehabilitation and redevelopment of the great metropolitan center of the American "heartland" would require volumes for its complete presentation. Enough can be shown here, however, to indicate the scope and direction of thought that has been applied to the problems faced by Chicago—problems differing only in scale from those of other and lesser communities.

It is no great trick for a modern planner to sit down and work out a hypothetical plan for an ideal city, large or small, to be built on unencumbered virgin land for a citizenry conveniently tailored to fit. This sort of thing is done every day, so to speak. As an exercise in civic design it is no doubt educational and may be genuinely helpful in establishing goals to shoot for.

But it is a far different thing to set out to redesign an existing city—with its complexity of vested interests in land, buildings, business and industry; its diversity of social and economic levels; its frozen assets of public and private financial investment; its more or less fixed transportation network; its actual and incipient slums; its broken-down tax network; its political and legal organization; its established relationships with adjacent communities and with the surrounding region—and, in the presence of these factors, to develop a practical and acceptable plan that will solve its major problems of physical, financial, and spiritual rehabilitation. This is, in effect, what the Chicago Plan Commission has essayed to do, and—though it has gone too far to suit some critics and not far enough to suit others—it has evolved what appears to be the main outline of a workable and promising Master Plan to be carried out over the next generation or so.

This Master Plan is not merely a paper plan, but one which has included provision for implementary legal measures for bringing about its accomplishment, among which are the Illinois Neighborhood Redevelopment Law, the 1940 Zoning Law, methods to effectuate acquisition of tax-delinquent properties, and the revised Building Code. Neither has the plan neglected to take into account the city's economic base of industry and trade which supports it or the needs of the different social and economic groups which form its population. These matters have been studied with extreme care and have guided all de-

isions as to physical disposition. The Chicago planners have conceived their jobs as representing a partnership of private and public interest for the purposes of the common good—which means more livable neighborhoods, a more efficient municipal plant, greater stability of real property investments, and more recreation areas for the people.

Thanks to its evolving Plan, Chicago is ready for its future; ready for the post-war transition when materials and labor will again be available for needed construction; ready for the years beyond, when its long range development by private enterprise and public authority can take place in steady, orderly conformity to established objectives. It is providing a guide for the coordinated growth of housing, new express highways, new commercial and industrial districts, parks and recreation areas, and public buildings into an eventually well-organized whole. It has avoided the type of so-called planning program that calls simply for a huge program of public works and has instead provided the organized framework within which private initiative can function freely to execute the bulk of the program, reasonably secure in the knowledge that its investments will be safeguarded against the hazards of unplanned and uncontrolled growth. Public authority can likewise know, if the plan is adopted and followed, that its expenditures for added facilities for transportation, recreation, education, and other civic functions will be permanently useful and economically sound, so far as their physical location is concerned. Thus it is made possible to avoid the waste, duplication, and chaos of a system where thousands of individuals are working in ignorance of each other's plans and to develop the city toward a far more efficient and livable urban structure.

Ever since the days of Dan Burnham, whose memorable injunction, "Make no little plans!" remains a thrilling challenge to planners everywhere, we have looked to Chicago for spectacular activity in this field. When he gave the city the 1909 plan that bears his name he set a style for the large-scale, broad-visioned attack on urban planning that has inspired many later attempts at civic design. Chicago, perhaps because of Burnham's work, has since enjoyed a lively public interest in city-planning, which has resulted in greater public support for planning enterprises than has been found in most other cities. No small part of this is due to the indoctrination of the young people of Chicago from 1912 onward by means of the so-called "Wacker Manual" used in the public schools to explain and sell to the people the Chicago Plan and its ideals. Benefiting from this far-sighted policy of public education, the Plan Commission of that day gained great prestige and enthusiastic support at the polls for the bond issues needed for its projects. From 1909 to 1929, bond issues of over \$240,000,000 were successfully floated and nearly \$58,000,000 more was raised by special assessments. With these funds, many major physical changes were made in the city—the Outer Drive and the Lake-front development, the double-deck Michigan



Avenue Bridge, the double-deck Wacker Drive, the Roosevelt Road Viaduct, the straightening of the Chicago River channel, the widening of many thoroughfares, the acquisition of the Forest Preserves, and the improvement of many parks.

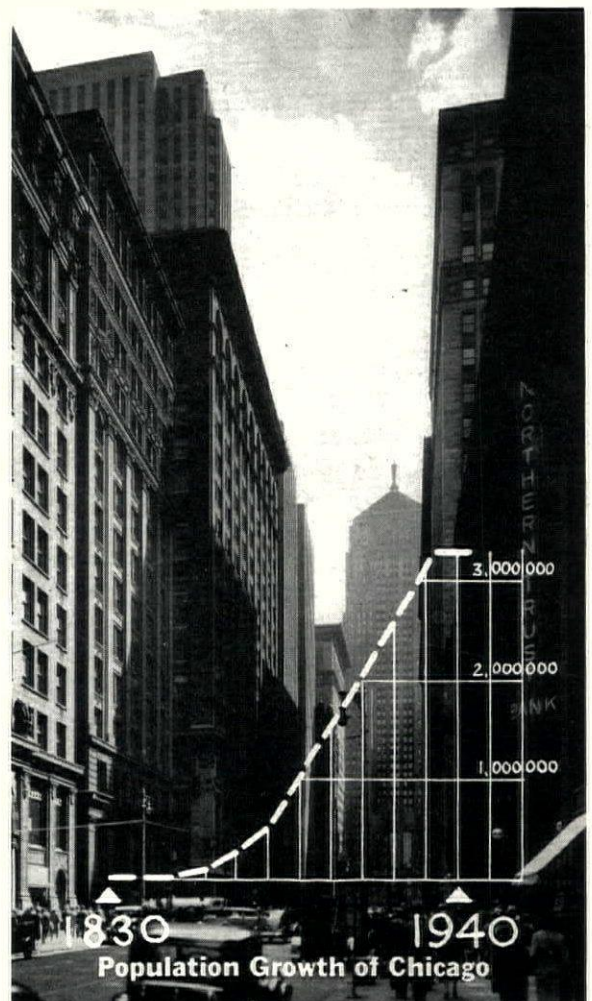
In 1929 came the ending of boom-time and the entry of depression. The work of the Plan Commission lagged for lack of funds; but the first five years of depression may have served a useful purpose after all, for they helped to turn attention to a problem not dealt with in the Burnham Plan—the spread of blight and deterioration through the residential areas and the consequent loss of value and threat to the city's tax income. Something had to be done to reclaim the waste lands of the slum and halt the flight to the suburbs. The focus was changed to reduce emphasis on the magnificence of the grand plan and to consider instead the conception of the city as a pleasant and orderly place in which to live and work.

Contemplation of the problem made it clear that as a basis for any satisfactory solution there would be needed rather complete and detailed factual knowledge of existing conditions—physical condition of buildings, distribution of types of land-use, rent-levels, population densities, etc. Accordingly, the W.P.A. project known as the Chicago Land Use Survey was undertaken during 1939, sponsored by the city and under the technical direction of the Chicago Plan Commission. This great study recorded and tabulated the housing characteristics of 990,000 dwelling units spread over 20,000 square blocks of the city. It also recorded the location and type of industrial and commercial areas and gave an exact picture from which conclusions could be drawn and a program for action formulated.

This survey completed, the Plan Commission was called upon once more to formulate a new Master Plan that would meet the changed

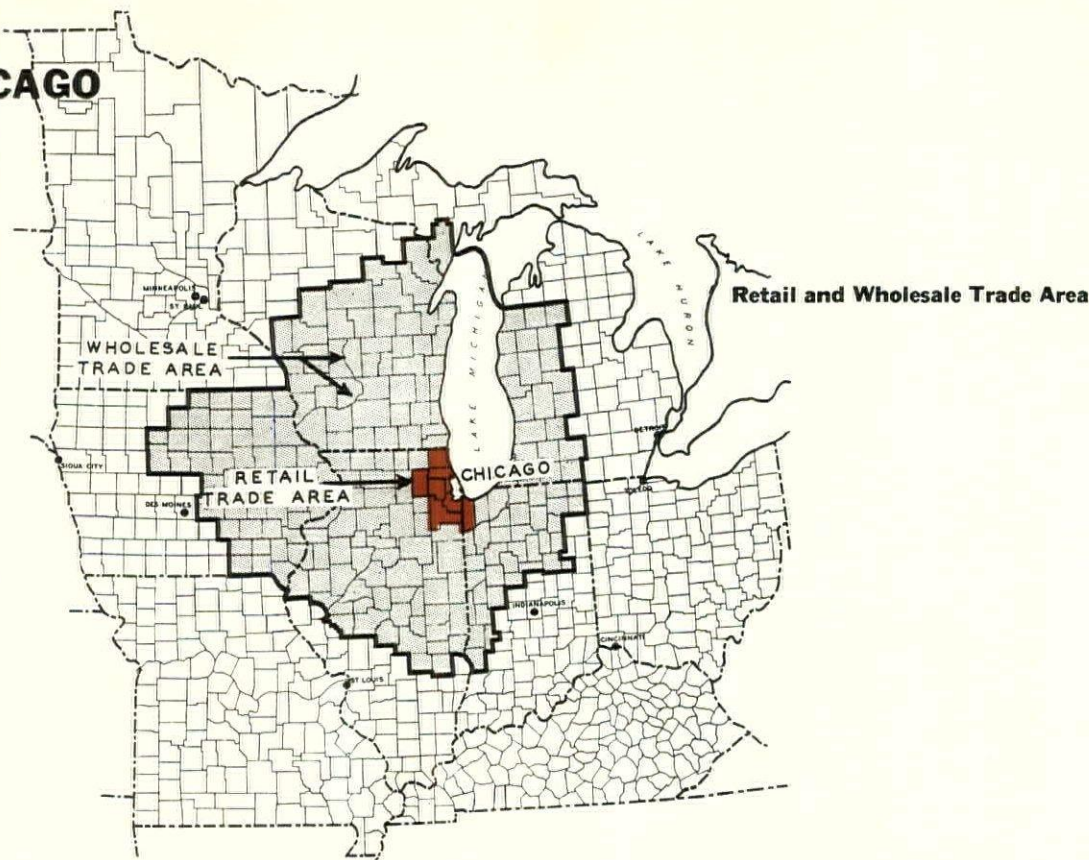
NUMBER OF FAMILIES AND SIZES OF FAMILIES IN CHICAGO			
Year	Population	Number of Families	Average Size of Families
1850	29,963	5,350 (1)	5.60 (1)
1870	298,977	59,497	5.03
1880	503,185	96,992	5.19
1890	1,099,850	220,320	4.99
1900	1,698,575	359,960	4.72
1910	2,185,283	473,061	4.62
1920	2,701,705	623,912	4.49
1930	3,376,438	842,578	4.00
1940	3,396,808	949,727 (2)	3.57

(1) Estimated on basis of the average size of family in Cook County in 1850.
 (2) Number of occupied dwelling units, which is about equivalent to the number of families.



View of La Salle Street, Chicago Architectural Photographing Co. Top photo, Chicago Aerial Survey Co.

CHICAGO



conditions. Its budget was substantially increased and its staff augmented. With this encouragement it proceeded with its Master Plan studies, the high points of which are recorded in the pages to follow.

A city exists for its people, but the people make the city in the first place and remain in it or move away because of economic factors. It must contain the commercial and industrial opportunities for the support of its population or it cannot long endure.

Chicago lies at the center of the richest natural resources in America and is the hub of our national transportation system, both of which circumstances give it every reason for prosperous existence. Its industry and trade provide employment for a primary group of workers who, in turn, support those engaged in retail business, professions, and public service. Eight thousand industrial establishments, thousands of wholesale trading and financial institutions give it a well-balanced economic base of great strength and stability. In heavy industry, Chicago is first in the nation and is second in total volume of manufactured goods. As a wholesale trade center it serves an area extending over large sections of five middle western States, including two thirds of Illinois and Wisconsin, nearly half of Michigan's southern peninsula, the northwestern half of Indiana, and the western half of Iowa. These facts are pertinent to any study of the community's need for new and redeveloped areas, community centers, parks, schools, express highways, and transit systems.

The impact of the war will undoubtedly affect permanently many phases of the area's industrial economy. Many of the newly established modern war plants which ring the city are expected to continue at a high level of operation after the War, and it seems reasonable to suppose that the relative industrial position of Chicago will then be even more favorable than at present. These new plants may be expected to continue in use and, by conversion, take the place of many old and obsolescent plants nearer the center of the city, thus intensifying the industrial decentralization trend already established.

This development may enable the more rational utilization of land. With heavy manufacturing dispersed to the outskirts, where sites measured in hundreds of acres are available, the near-in industrial tracts may be redeveloped for light manufacturing and for residential use. Many workers already live near the outlying plants. Others will prefer to continue living in their accustomed neighborhoods, from which they will travel outward to their work counter to the inbound stream of office and other downtown employees. The mass transportation

facilities would, therefore, incline to develop a more efficient two-way rush hour loading.

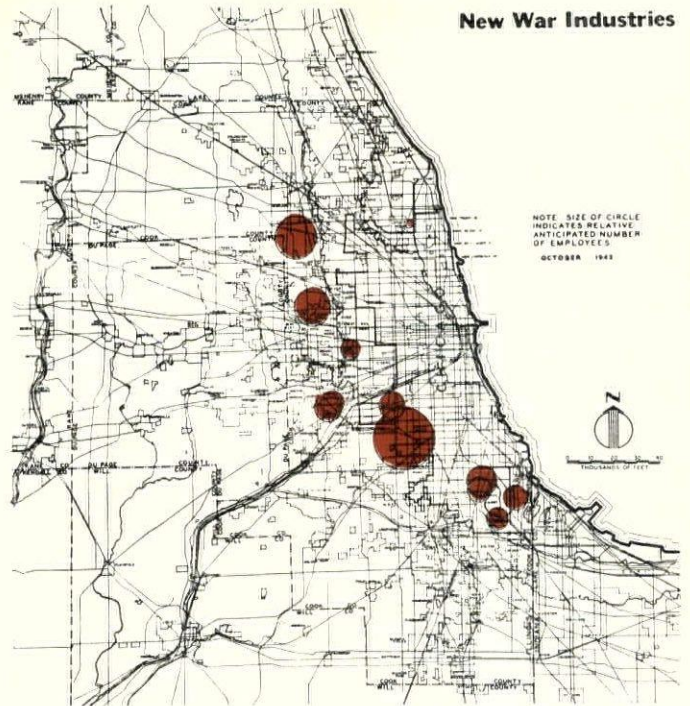
All of these considerations have been in the minds of the Chicago planners as they have proceeded with their Master Plan studies for land use, surface and air transportation, rebuilding of blighted sections, conservation of still useful housing, development of new residential subdivisions, provision of schools and parks and playgrounds, solutions of traffic congestion, provision of new industrial sites, and the many other problems of the great city. In the pages that follow, these efforts will be sketched out sufficiently well to give an idea of the preparations being made for the long-range future growth of the city. The example of Chicago's planning effort is presented here, not because it is believed to represent perfection—for it has its faults and may be validly criticized in some of its details—but because it may serve to dramatize the necessity for all cities to set up master plans to guide future growth into directions that will serve the best interests of all the people and replace confusion with order. For it is only through order that civic economic health may be regained. That desirable order can only be reached by thinking things out in advance—in other words, by planning.

If every American city could arrive at the end of the War with a comprehensive idea of its development program for the next twenty-five to fifty years, there would be no necessity for any makeshift work programs to be improvised from day to day. The path would be clear for democratic individual enterprise to do the bulk of the job that must be done in bridging the gap from War to peace and going on thereafter to make real the possibility of civilized urban living.

In 1940, when the studies for the new Master Plan were initiated, Theodore T. McCrosky, then Director of the Master Plan Division of the New York City Planning Commission, was brought to Chicago to be Executive Director of the enlarged Commission of 26 members which already included on its staff Hugh Young as Chief Engineer and Eugene Taylor as Office Manager.

Of the Commission members, 12 are ex-officio while 14 were appointed by the Mayor. Its powers are only advisory but its effectiveness, resting upon the established prestige in Chicago of the idea of City Planning, is considerable. The backing of the people is enthusiastic for projects that promise the improvement of the city.

After the granting of war leave to Mr. McCrosky, who is now a Lieutenant Commander in the United States Naval Reserve,



Perhaps the most significant development of the War period is the establishment of a chain of very large new manufacturing plants around the periphery of Chicago—some within the city limits—some just beyond its borders. These may be expected to continue in use after the War, when they will be converted to peacetime production.

H. Evert Kincaid became Acting Director of the Plan Commission Staff. He has a wide background of experience in city-planning, in part obtained while associated with Harland Bartholomew of St. Louis, and for six years he has had charge of land-planning for the Federal Housing Administration in the ten-state region centering in Chicago. Chief Engineer Young, in addition to designing and supervising the execution of important engineering projects, has directed many zoning and land-use studies, including the Chicago Land Use Survey.

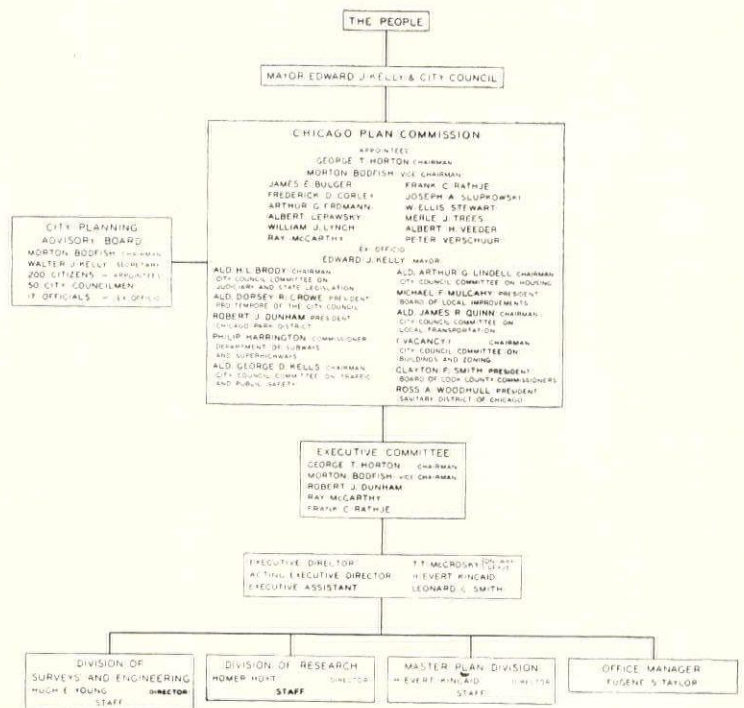
In addition to the staff of architects, engineers, and land-planners who have carried on the invaluable work of developing the physical plans for Chicago, a staff of economists, geographers, and sociologists were assembled to study economic trends and the social and economic patterns of the city's structure. This Research Division is under the Direction of Dr. Homer Hoyt who made the intensive analysis of the growth of Chicago during its first century, published as "One Hundred Years of Land Values in Chicago." Dr. Hoyt also, as the principal housing economist of the FHA for six years prior to joining the Chicago Plan Commission, made studies of the economic background and neighborhood structures of numerous American cities.

Eugene Taylor, the Office Manager, has been with the Commission since 1911 and his continuity of service and familiarity with the city council committees and other agencies of the city government have enabled him to keep the newer members of the Commission informed about earlier work on the plan. Leonard C. Smith, Assistant to the Executive Director, has experience as an administrator and special knowledge in the field of practical real estate appraisal. He has helped shape the policies of the staff and contributed notably to its public relations work through the written word.

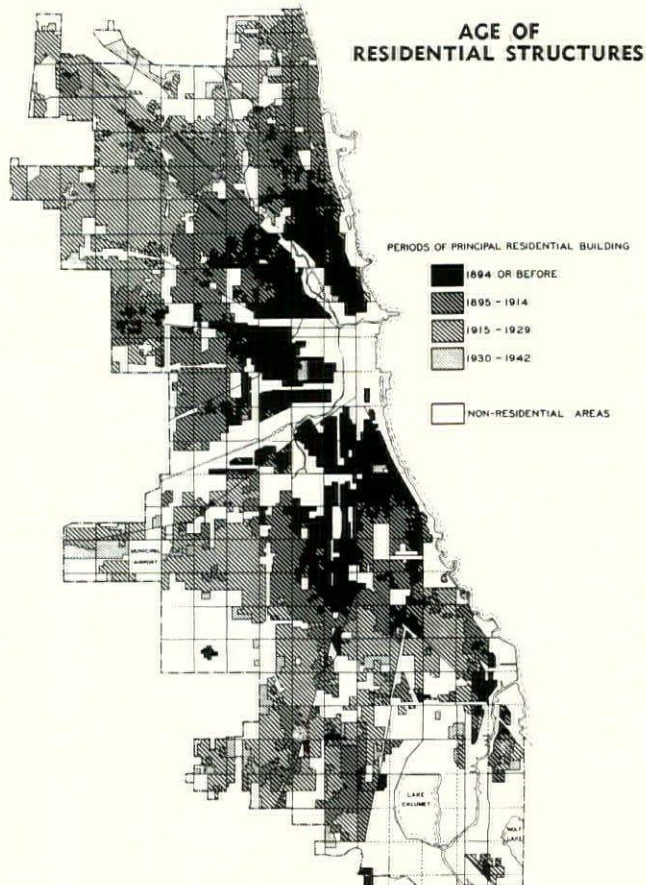
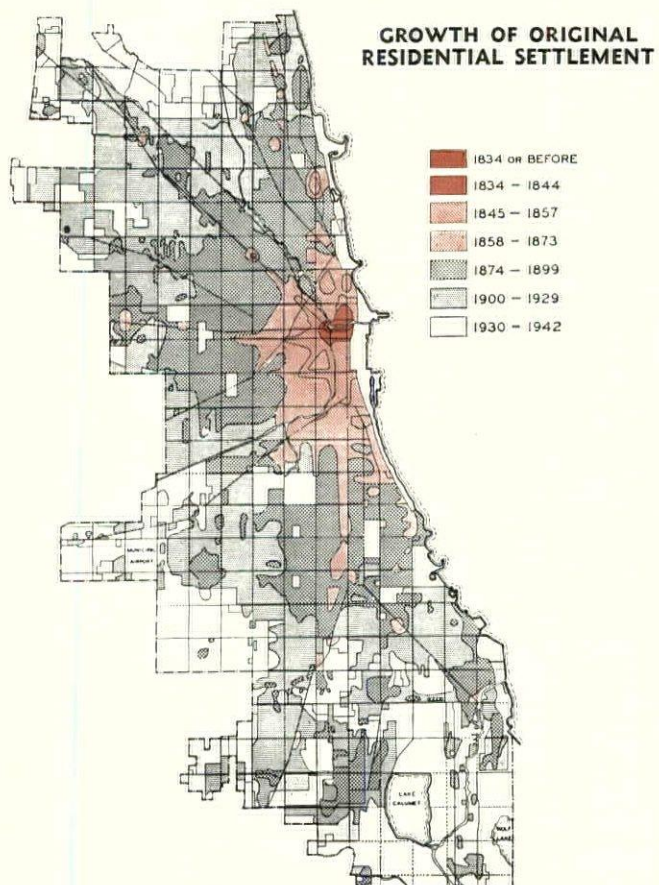
Mayor Edward J. Kelly and members of the City Council have encouraged the work of the Plan Commission. Various committees of the Council have collaborated in studies of special problems.

In correlating the planning for corporate Chicago with that of the metropolitan area, the Commission has enjoyed the sympathetic and helpful cooperation of the Chicago Regional Planning Association, under the leadership of Robert Kingery, General Manager. In its liaison with commercial and industrial groups, it has been effectively assisted by the Chicago Association of Commerce through Chief Executive Officer Leverett S. Lyon. In connection with land-planning and housing matters, the Federal Housing Administration's State offices and Land Planning Consultant have been of great advisory assistance.

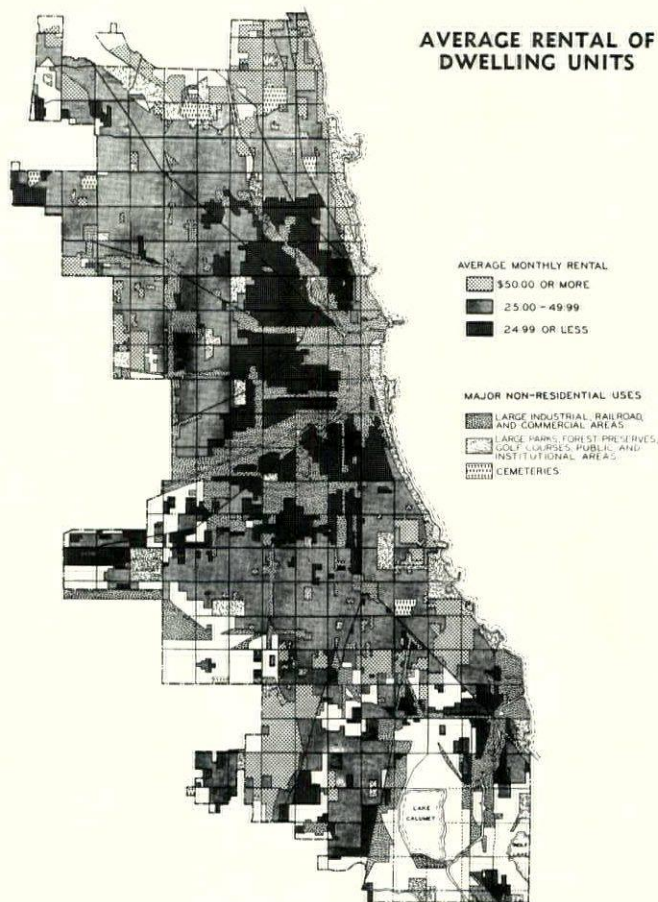
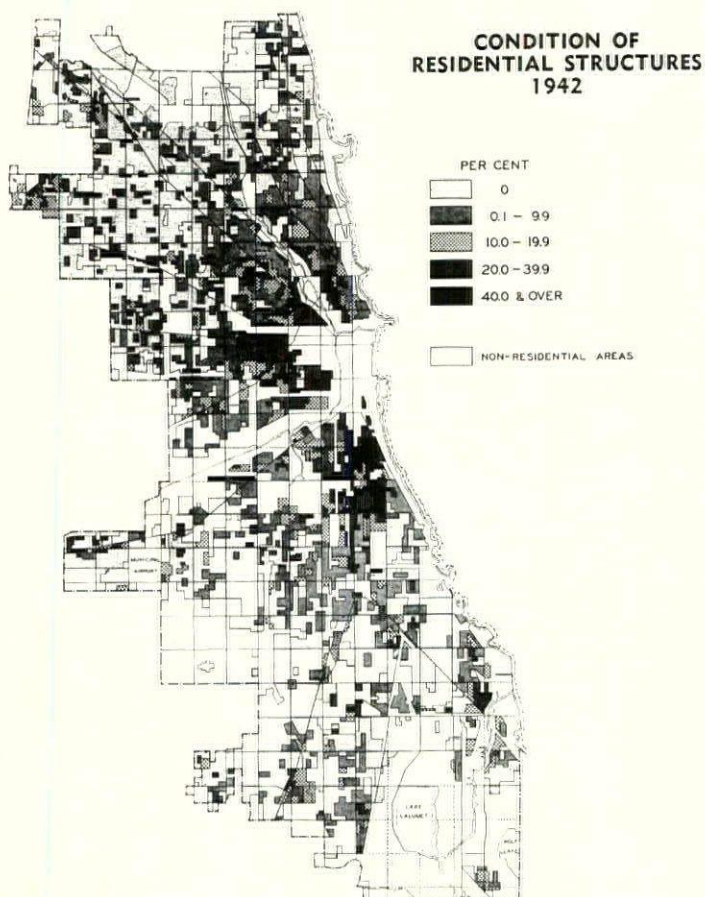
Organization — Chicago Plan Commission



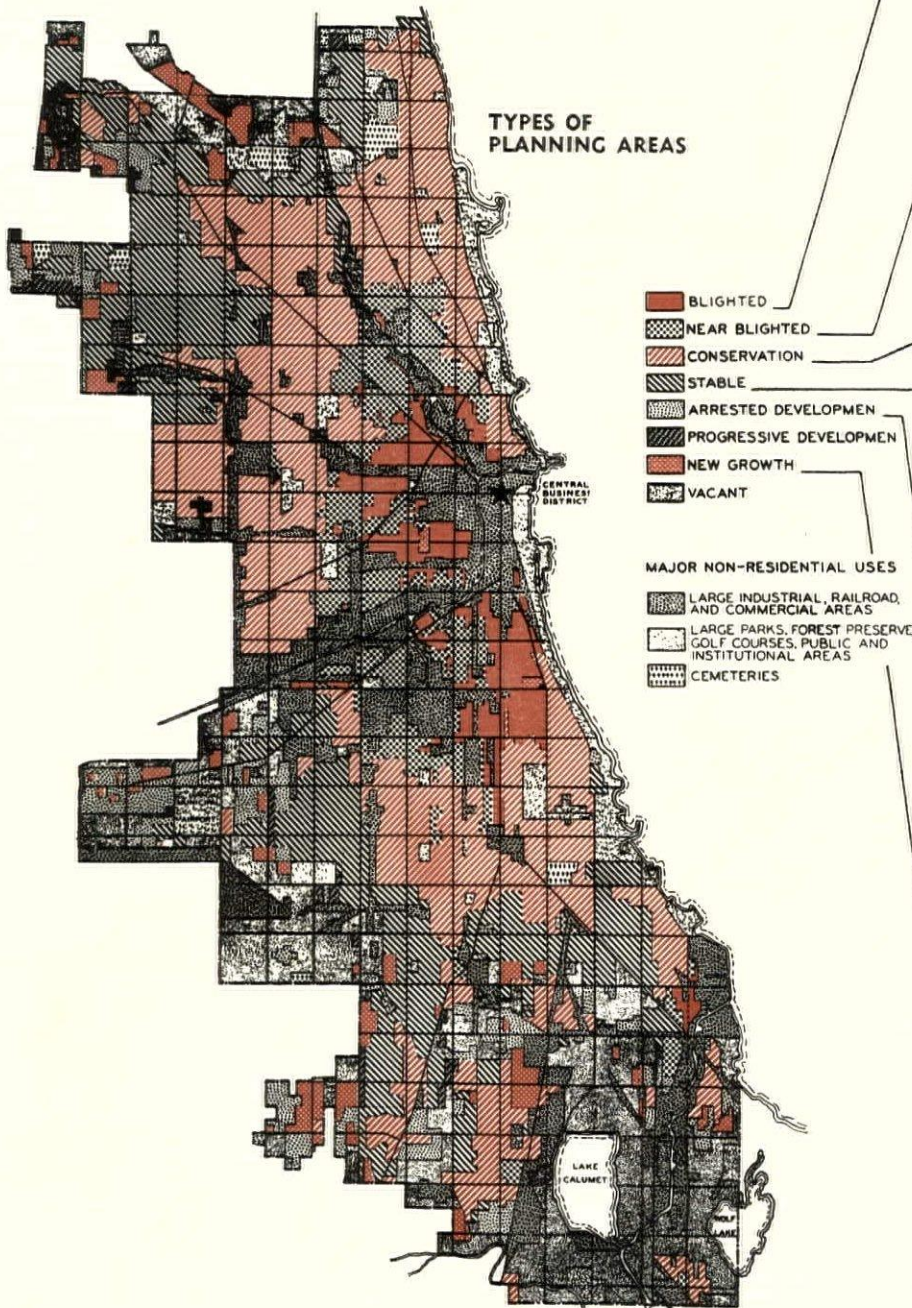
CHICAGO - Population and Land Use



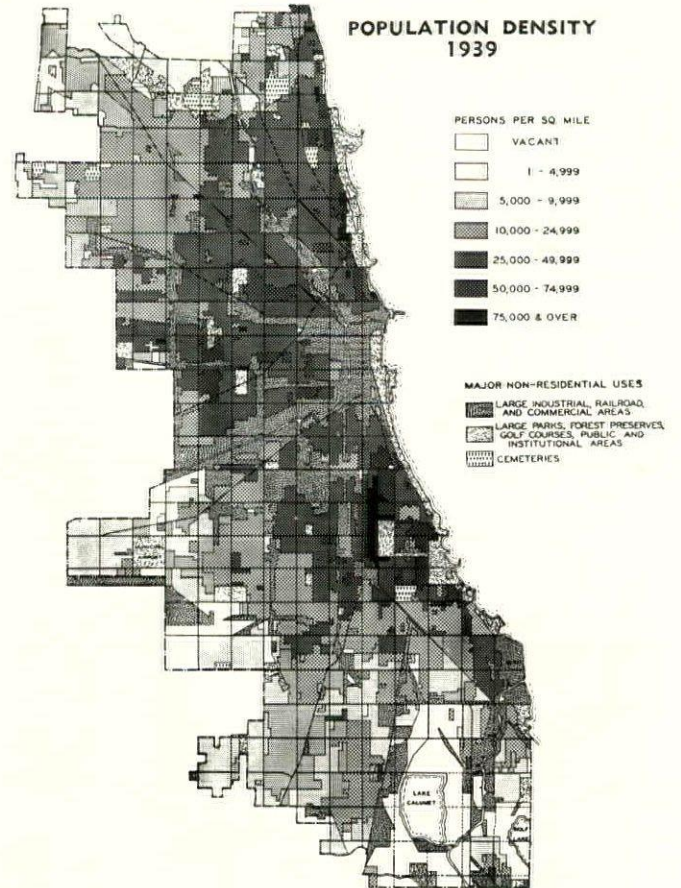
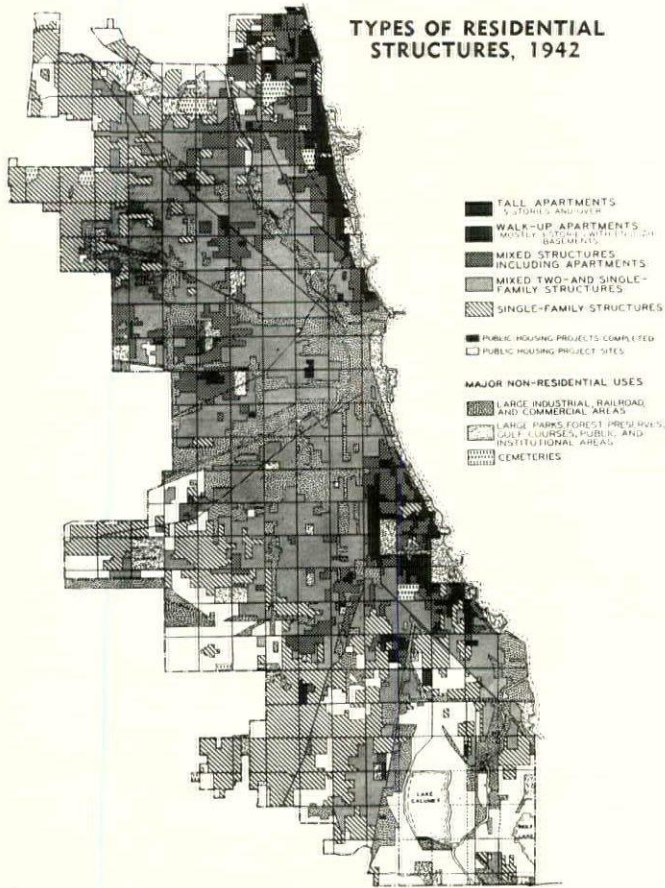
The results of the Land Use Survey were developed by the Chicago Plan Commission into a series of analytical maps which give a graphic picture of existing conditions and trends. The Age of Residential Structures, at the right above, is related, as might be supposed, to the history of Growth of the Original Residential Settlement. Below, the Condition of Residential Structures in 1942 indicates the percent in need of major repairs or unfit for use. Areas in which the majority of buildings are over fifty years old and also physically substandard, and in which twenty percent of structures need major repairs or are unfit for use, are classified as blighted. Lowest rents prevail in blighted areas.



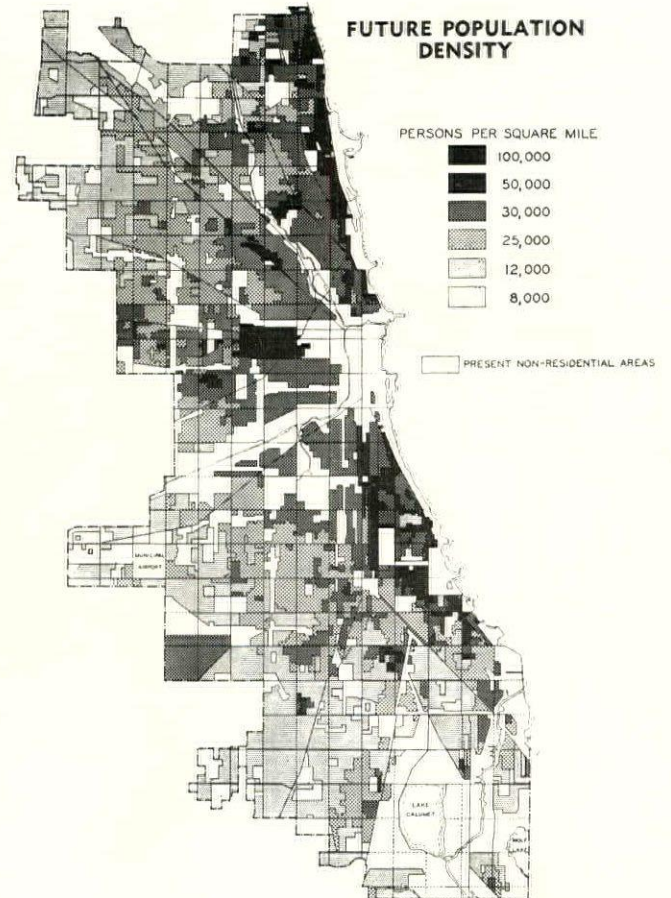
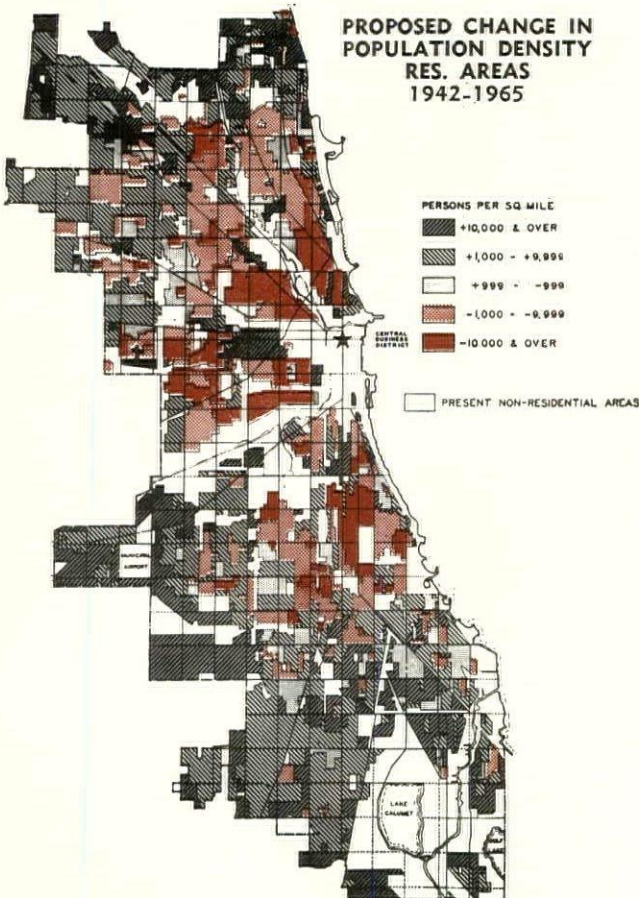
Careful analysis of available statistical information, including that provided by the Land Use Survey, led to the classification in eight categories of the residential sections of Chicago. This classification defines clearly the areas in greatest need of planning attention. The problem of rebuilding for the next generation is to clear away the blighted area with its 242,000 old and dilapidated structures and to thin out from the conservation area some 108,000 dwelling units more than fifty years old. If these 350,000 superannuated homes are cleared away there will remain 640,000 homes that will still be sound in 1965. To house a population of 3,600,000, which is the estimated total expected in 1965, and to allow for vacancies, there will be needed about 550,000 new dwelling units. This would call for the construction of 20,000 homes a year for twenty-five years. It is the hope of the Chicago Plan Commission that through the functioning of private enterprise under the Illinois Neighborhood Redevelopment Law this new building will be largely privately executed. At the same time, the owners of property in the conservation areas will be encouraged to repair and improve their buildings. The city will convert some local streets into park and play space.



CHICAGO - Population and Land Use



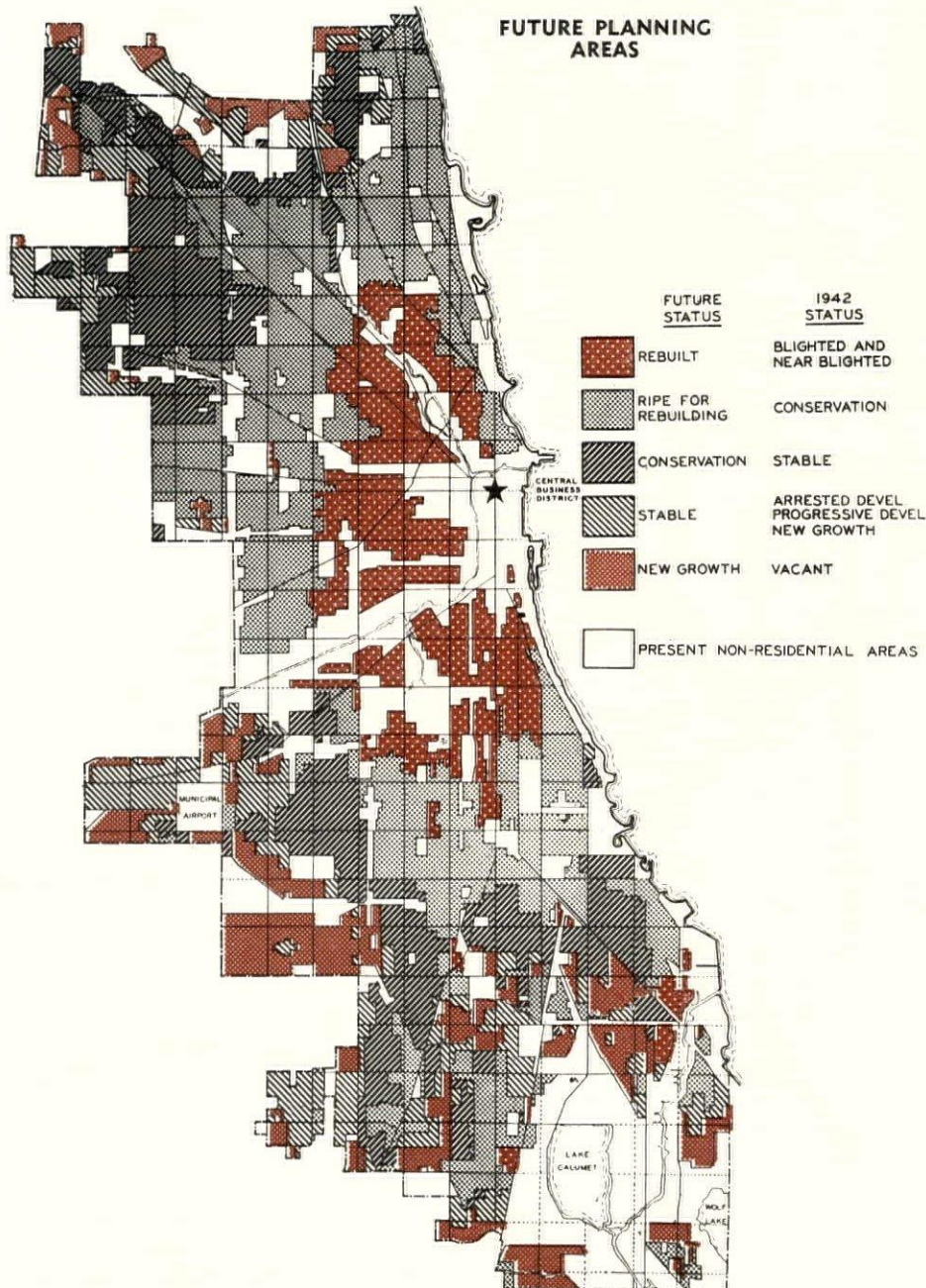
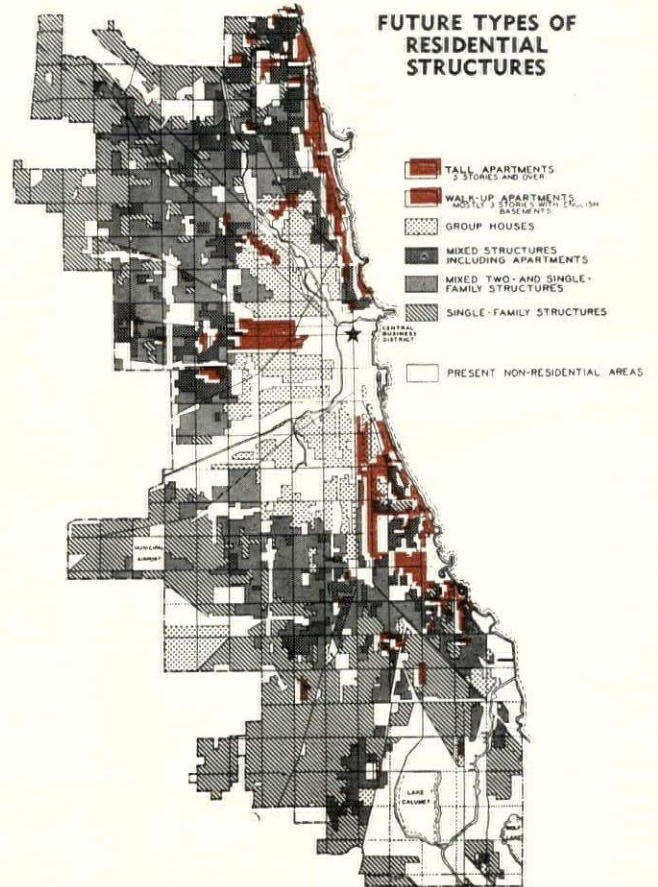
These four additional statistical maps show changes in population densities to be brought about by carrying out the Commission's plan. Present types of residential structures produce present population density pattern, as shown above. Future types as shown opposite will cause changes in population density and produce future distribution of population indicated in maps below. The Plan Commission has been conservative in estimating future population increases and has not indulged in grandiose dreams of future numerical greatness.



Under this far-seeing, long-range program of the Plan Commission, Chicago will eventually arrive at a condition such as is shown by the two maps on this page. The future disposition of housing types has been carefully calculated to care for the requirements of the probable number of families in each rental level.

A great part of the present blighted area will have been rebuilt with group houses or two-story garden apartments, while around the periphery of the city the extent of land occupied by single family homes will be, it is expected, greatly increased.

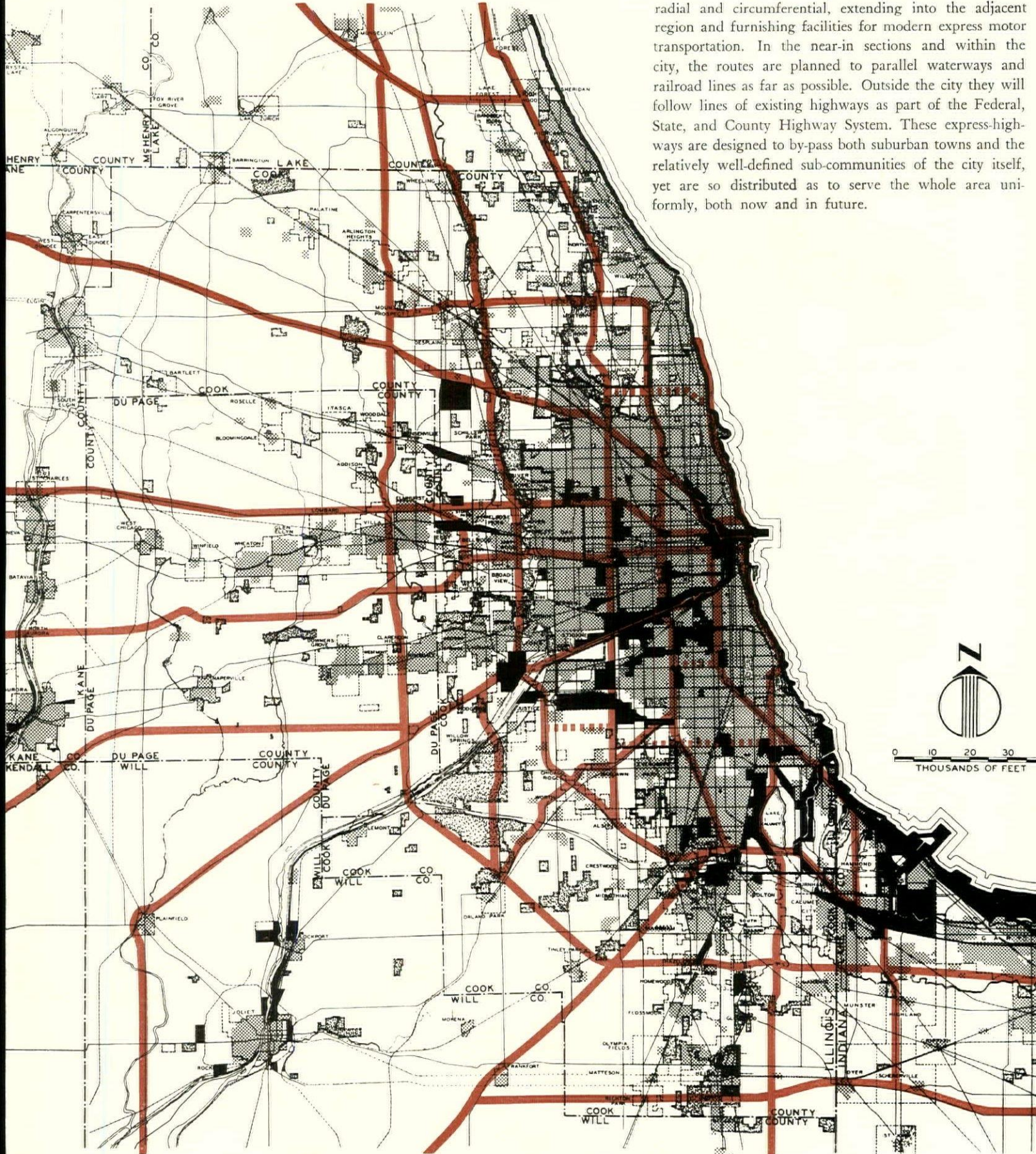
Conservation areas of today will by 1965 be ripe for rebuilding, while the portions of the city now classed as stable will be twenty-two years older and ready for conservation measures. Meanwhile, new growth will have filled in much of the vacant territory. Population densities will have been increased in these vacant areas, due to the building of new homes, but will have been reduced in conservation areas. Neighborhoods will have become provided with properly related community centers and protected against future deterioration of the sort that has caused much of the present distress.



CHICAGO - Highways

Regional Plan of Express Highways (Tentative)

Most spectacular, perhaps, of the proposals of the Chicago Master Plan is for a vast system of express-highways, radial and circumferential, extending into the adjacent region and furnishing facilities for modern express motor transportation. In the near-in sections and within the city, the routes are planned to parallel waterways and railroad lines as far as possible. Outside the city they will follow lines of existing highways as part of the Federal, State, and County Highway System. These express-highways are designed to by-pass both suburban towns and the relatively well-defined sub-communities of the city itself, yet are so distributed as to serve the whole area uniformly, both now and in future.

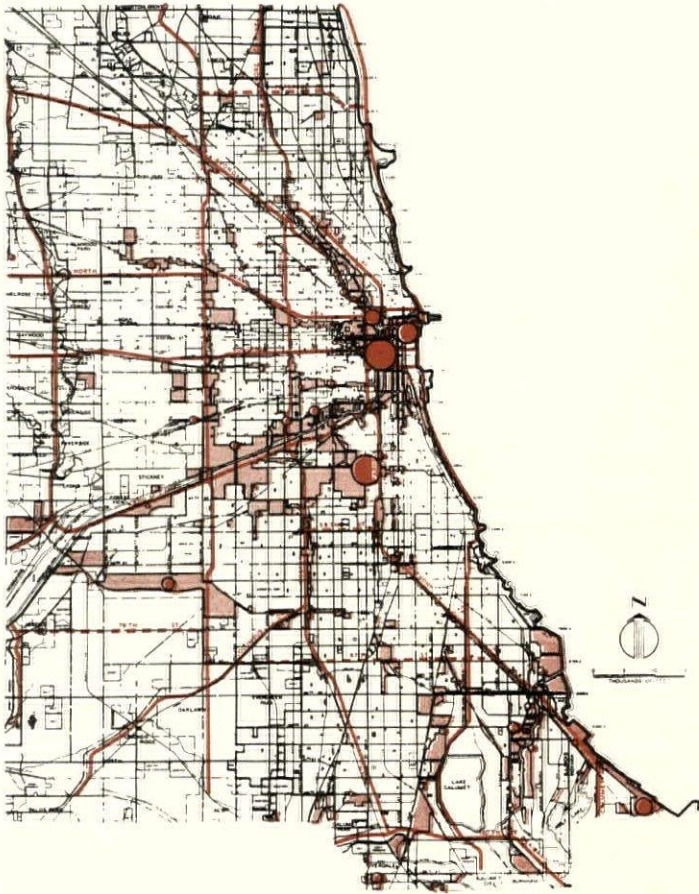


LEGEND

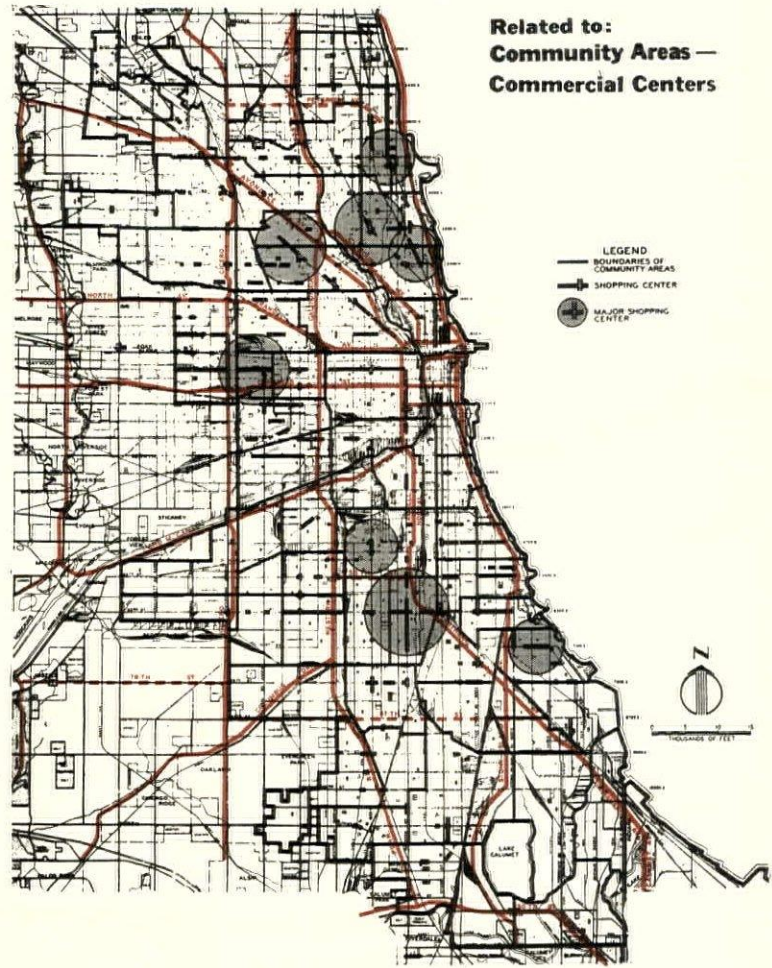
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|---|-------------------------------------|---|------------------|
|  | SETTLED AREAS |  | INDUSTRIAL AREAS |
|  | PARKS FOREST-PRESERVES GOLF COURSES |  | EXPRESS HIGHWAYS |

Express Highways

Related to:
Industrial Areas — Freight Terminals

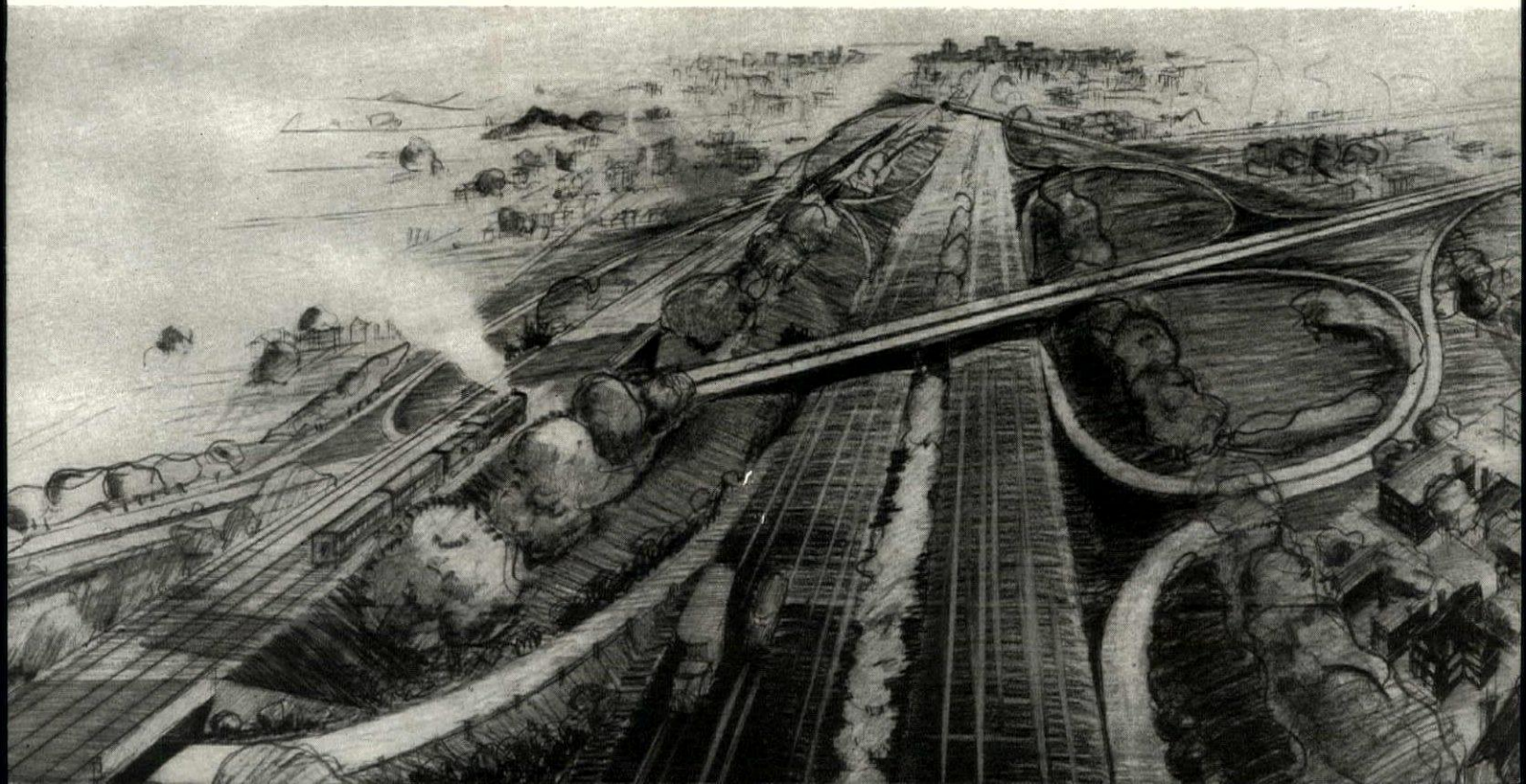


Related to:
Community Areas —
Commercial Centers



The express-highway system (tentative) is shown as related to the industrial areas and commercial centers it will have to serve. On the next page it is shown in relation to the major street system to which it will be connected by suitable interchange facilities as needed. Eight lanes, four in each direction, will be the standard roadway of express routes, except in outlying areas where they may be reduced to six lanes. In general, they will be, according to plan, of the depressed type, three or four feet below normal grade. The embankments will be landscaped, which will serve to screen adjoining properties to some extent from the traffic noises. The Chicago Regional Planning Association, The Cook County Highway Department, the Cook County Highway Authority, the Chicago Department of Subways and Super-Highways, and the Chicago Park District are coordinating their efforts with the Plan Commission in the development of this huge project. Underlying the entire thoroughfare planning program is the presumption that the volume of surface travel will not be substantially reduced by the competition of air transport in the near future.

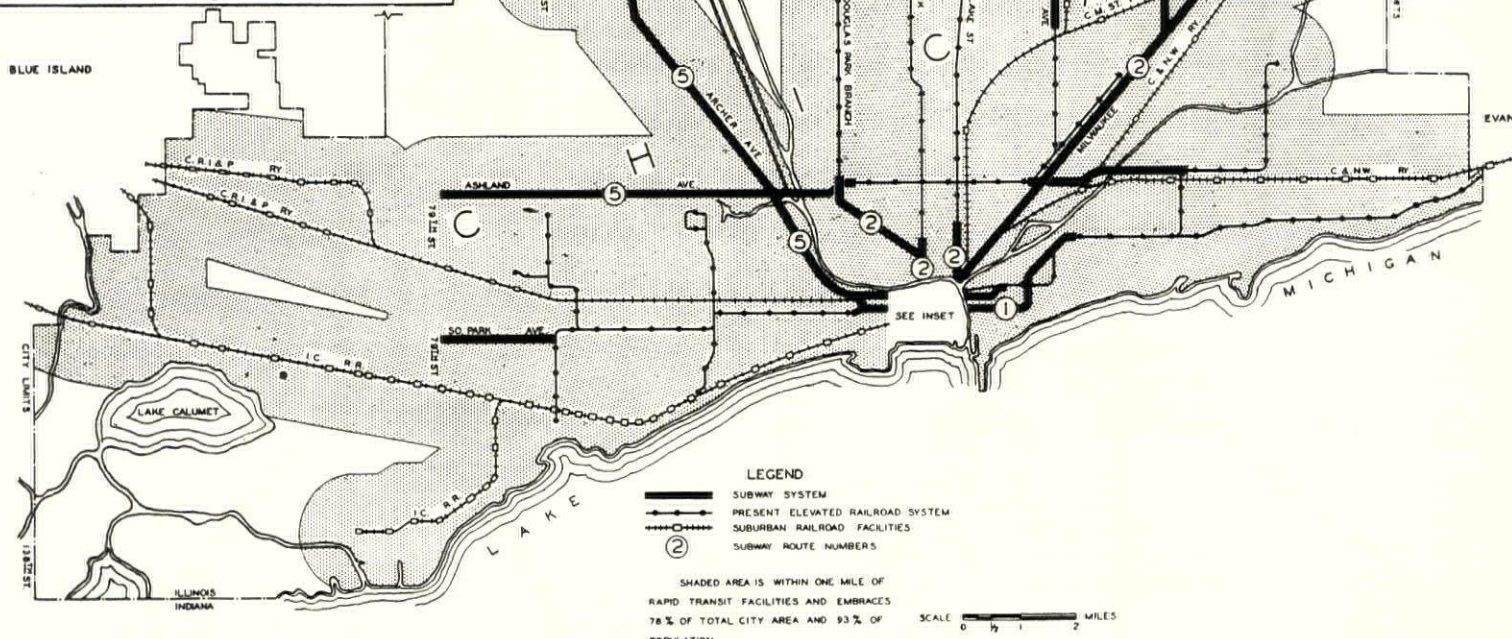
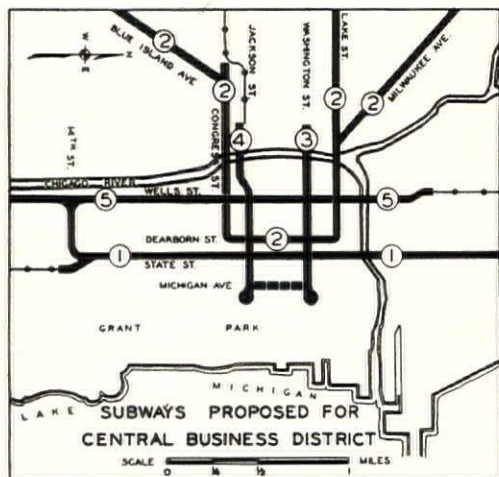
Express Highway Parallel to Railroad



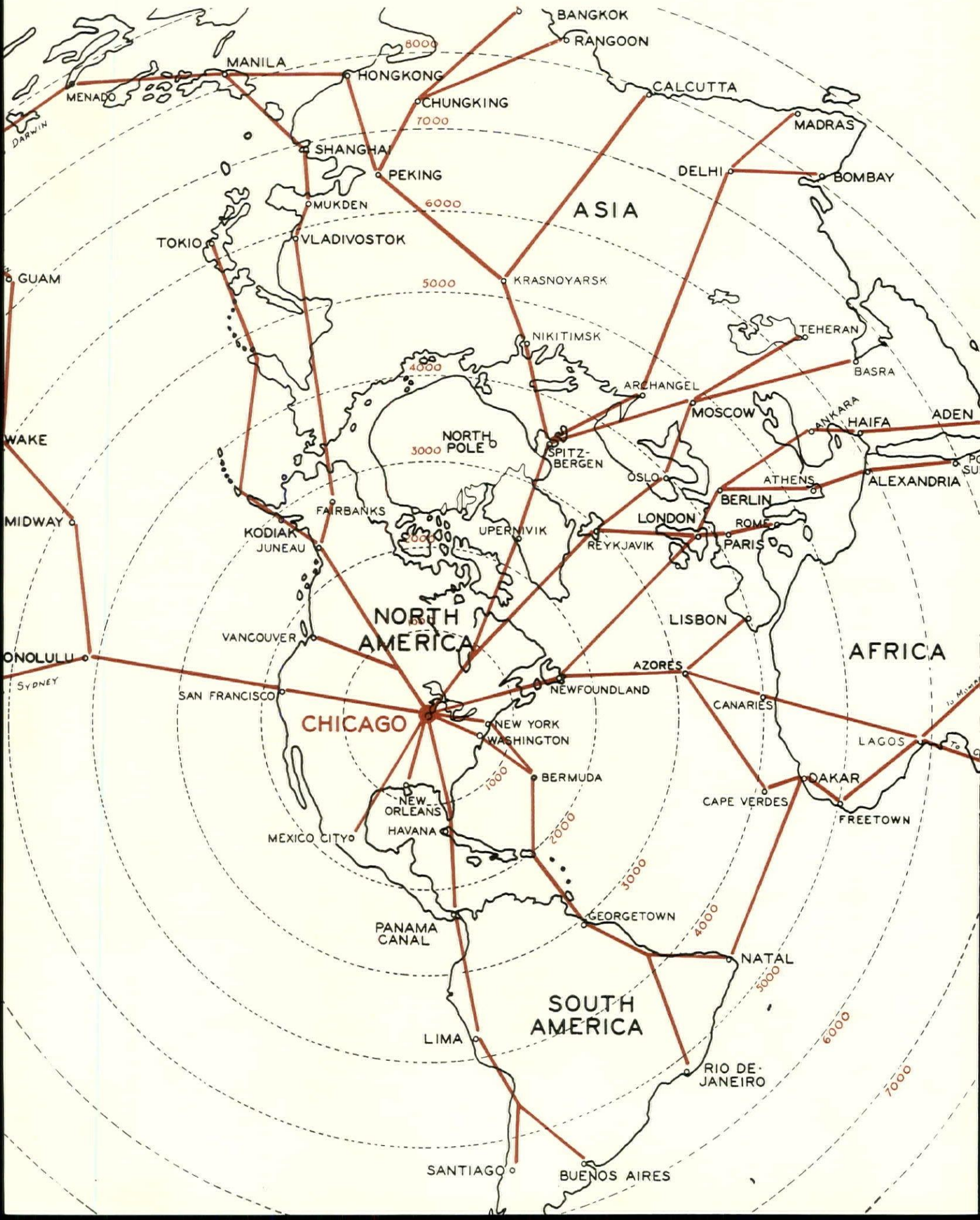


The "perfect mile" of the great outer drive as it passes through Lincoln Park is an already functioning part of the projected express-highway system. This modern traffic artery, extending northward along the lake shore, is used daily in peacetime by thousands of Chicago motorists as an efficient means of traveling to and from the center of the city. (Photo, Chicago Park District.)

Plans for a greatly extended system of subways to care for foreseeable mass transportation needs have been developed by the Department of Subways and Superhighways. This is an essential part of the scheme for the modernized city. (Drawings by Dept. of Subways and Superhighways.)



CHICAGO – Future Air Transport Facilities



No city planner today can afford to overlook the necessity of providing for the future accommodation of air transportation as a part of his city's long-range program. Even though it is impossible to forecast exactly the types of air conveyances that will be in use after the War, it is still possible to gauge with plausible accuracy the probable increase in air traffic. A special committee jointly representing the Chicago Plan Commission, the Chicago Association of Commerce, and the Chicago Regional Planning Association studied the situation and issued a report in November, 1941 in which it forecast, as accurately as possible, the needs of the city and region in the form of air terminals and airports—major and minor—up to 1950. These needs are calculated on the basis of a probable air passenger growth for Chicago from 625,000 in 1940 to 2,300,000 in 1945 and 4,800,000 in 1950.

The needs as charted call for three major air terminals within from three to ten miles of the Loop, including the present one. One of the two new terminals may be built on the northwest side of the city, and the third has been tentatively proposed on the lake front, or even on an island to be built in the lake.

A second set of four major inner-belt airports, from twenty to forty miles from the Loop, will be needed and may be developed by improving existing fields, as indicated on the upper diagram herewith.

It is further proposed to establish an outer-ring of five similar fields from forty to sixty miles from the center, as shown in the second diagram. All of these major airports should be publicly owned and properly serviced and equipped, by the appropriate authorities.

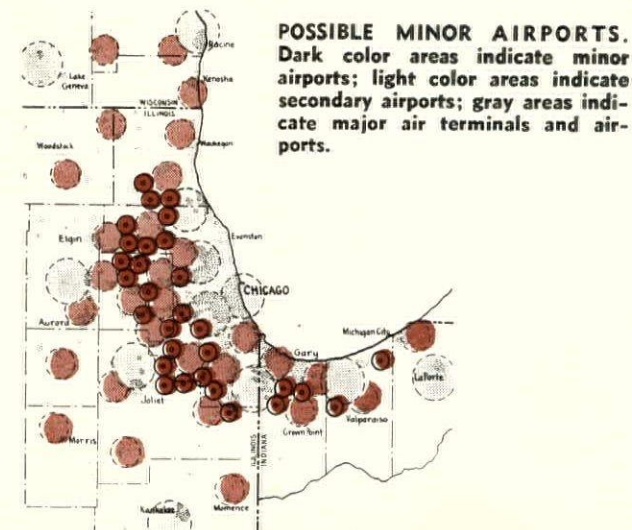
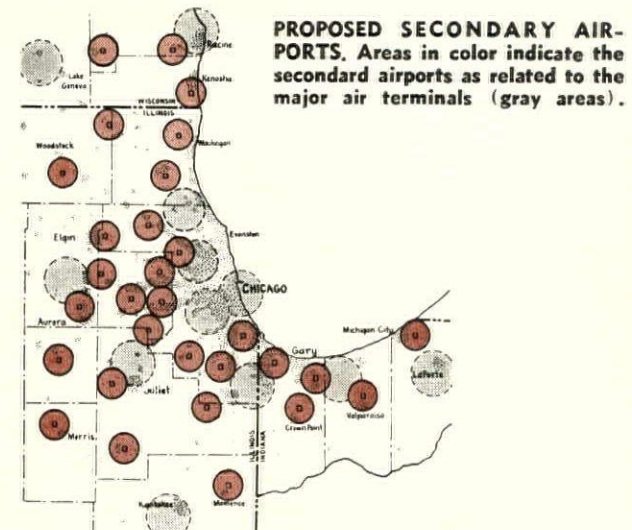
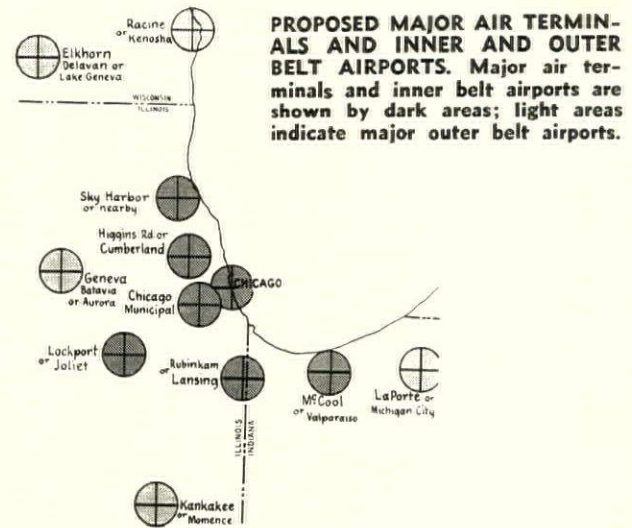
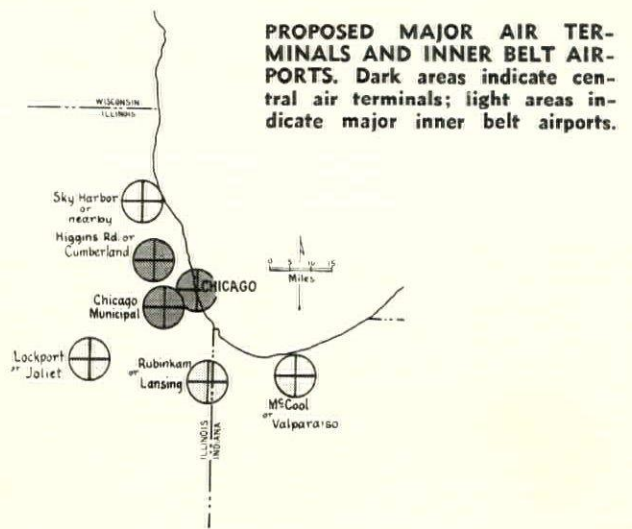
Thirty secondary airports are called for by the long-range program to serve commercial and private non-scheduled flights. These will be the focal point of all private night flying and will generally be the headquarters for all experienced private flyers.

Finally, there should be eventually thirty minor airports, as shown tentatively in the lower diagram, in the lower diagram owned and operated but regulated in location to insure non-interference with the larger ports. These will be used primarily for pilot training and for private flying. Some of them may be used for glider ports. Figures as to length of runways, clear approach areas, etc. are given in the 1941 report, but so rapidly is the design of aircraft changing that they will undoubtedly be modified to some extent.

With the exception of the twelve publicly owned fields, the entire program is considered to be flexible and fewer airports will be established if the growth of aviation is less than anticipated.

World Air Travel and Chicago

A Chicagoan's view of the world places Chicago at its center, as a matter of local pride. From the Chicago City Plan Commission's point of view, however, there is reason for regarding the picture in this way when considering the city's future development as an air terminal. From this diagram it is evident that, after the War, air travel and transport between Chicago and other parts of the world will naturally enjoy a tremendous increase. It is obvious that plans should be made now for the accommodation of the much greater number of planes expected to arrive in and leave the city daily and that these accommodations should be planned for construction as needed over an extended period of years.



CHICAGO - Residential Development

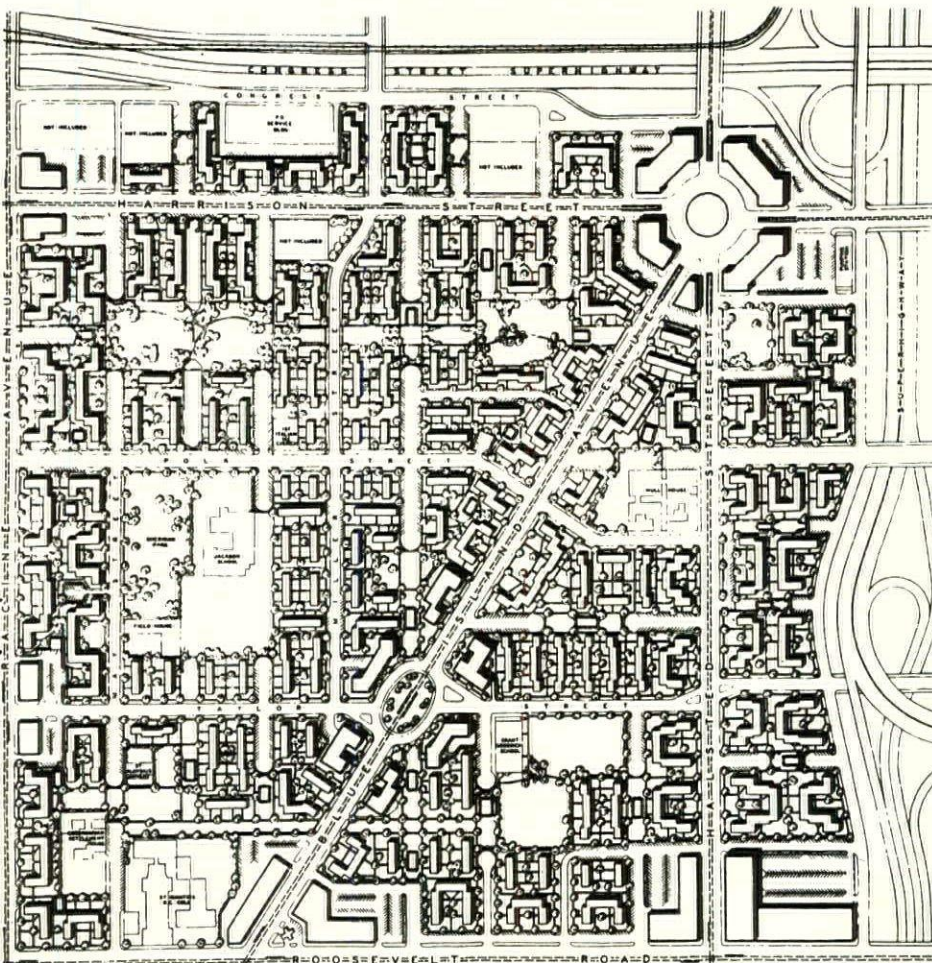
Rebuilding the Blighted Districts



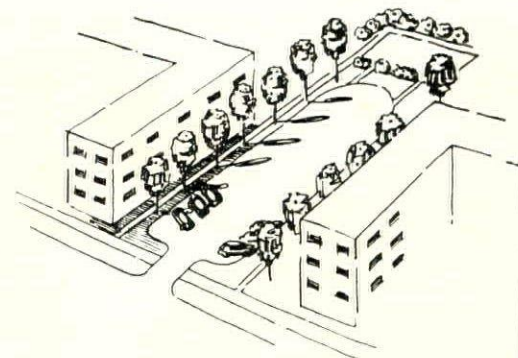
One of the principal fields for action by the Chicago Plan Commission has been to find ways in which the blighted residential areas of the city can be transformed into convenient, comfortable, quiet, safe and healthy neighborhoods, protected by all resources of modern planning against any future recurrence of blight. As a sample of what could be done an area on the near West Side was chosen and illustrative plans prepared to indicate a manner of redevelopment. This thickly settled and rather completely blighted section is susceptible of complete rebuilding by private initiative, operating under the Illinois Neighborhood Redevelopment Corporation Law which permits of the application of condemnation proceedings.

The scheme for redevelopment of this area is shown on this page. The street system would be reorganized and a number of the minor streets converted into park and playground areas with generous off-street parking bays. The new housing might be in the form of group and row houses or low apartment buildings. Interior parks and playgrounds surrounding the schools would be accessible to the neighborhood residents.

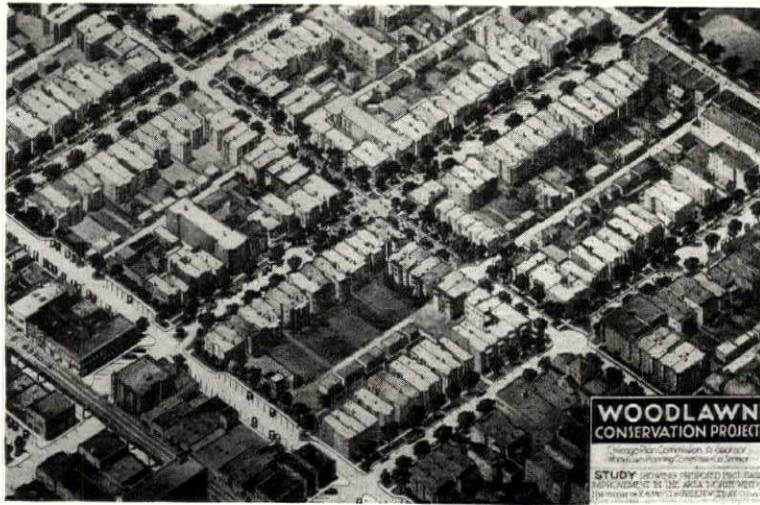
The planning technique demonstrated here would be applied, it is expected, to large portions of the blighted area of Chicago. By making these areas as attractive as this sample would obviously be, it is reasonable to expect that many families now living in the suburbs would be drawn again toward the center of the economic activity that gives them their livelihood. They would thus be enabled to live comfortably near their work while enjoying, at the same time, the benefits of light, air, and safety, in search of which they originally moved to the outskirts. (Photo at left above, Chicago Aerial Survey Co.)



By blocking off some existing streets, convenient parking bays can be provided in redeveloped neighborhoods.



Remodeling the Conservation Areas

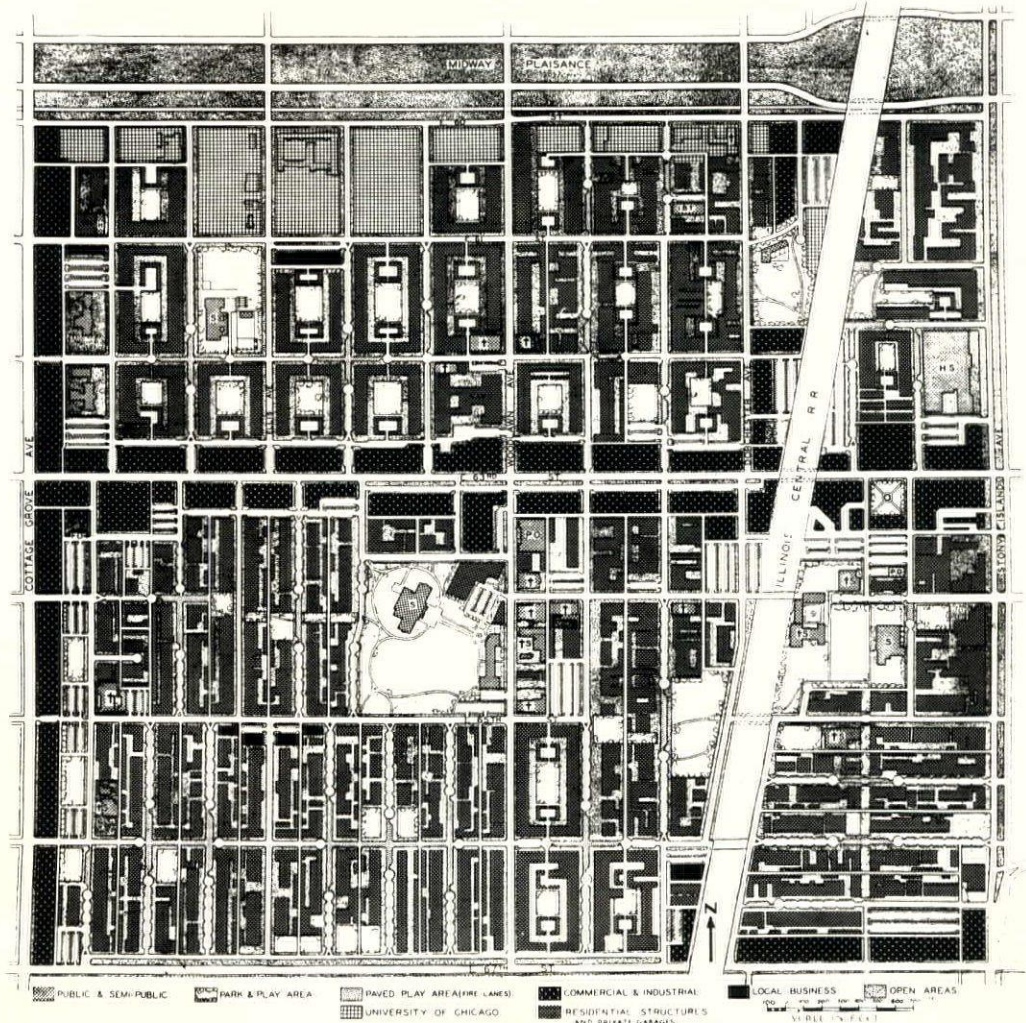


As another part of its program for preparing for rehabilitation of residential areas, the Chicago Plan Commission undertook, in 1940, to study a one-mile square section of one of the so-called "Conservation" areas, "Woodlawn," with a view to developing a technique that would be a guide to other "conservation" communities. After assembling complete data about this area, a plan was evolved for its improvement by stages.

In the first stage the changes would be mostly within public streets, some of which would be dead-ended to provide paved play areas and parking bays. The streets left for through-traffic would be widened. Only blighted private property would be acquired to add to the parking and play space at this stage, but owners of still serviceable property would naturally be expected and encouraged to rehabilitate interiors and exteriors to participate in the general improvement.

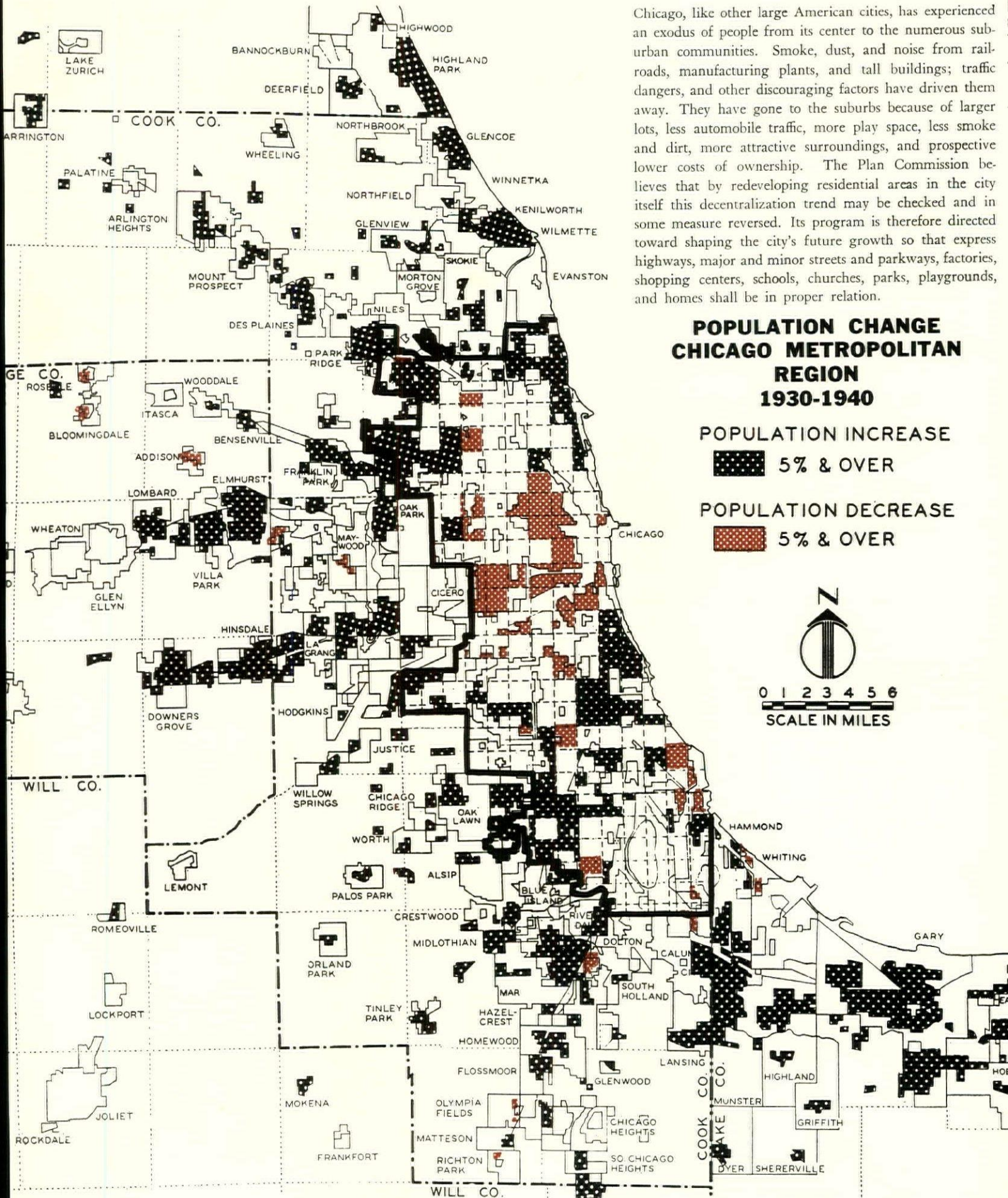
To accomplish the second stage, the property owners within each block would be persuaded to enter agreements, permitting the elimination of alleys and alley buildings and the opening up of block interiors for common play space. Garage compounds would replace individual garages. The perspectives above are studies of several blocks as they would look at the end of each stage.

This plan shows further details of the proposed treatment of the Woodlawn Conservation Area. Note the closed-off streets, which provide parking and play space. Integrated schools and parks form neighborhood centers, with nearby churches sharing openness. Business property segregated along widened through-traffic streets.



CHICAGO - Residential Development

Building New Neighborhoods



Chicago, like other large American cities, has experienced an exodus of people from its center to the numerous suburban communities. Smoke, dust, and noise from railroads, manufacturing plants, and tall buildings; traffic dangers, and other discouraging factors have driven them away. They have gone to the suburbs because of larger lots, less automobile traffic, more play space, less smoke and dirt, more attractive surroundings, and prospective lower costs of ownership. The Plan Commission believes that by redeveloping residential areas in the city itself this decentralization trend may be checked and in some measure reversed. Its program is therefore directed toward shaping the city's future growth so that express highways, major and minor streets and parkways, factories, shopping centers, schools, churches, parks, playgrounds, and homes shall be in proper relation.

POPULATION CHANGE CHICAGO METROPOLITAN REGION 1930-1940

POPULATION INCREASE

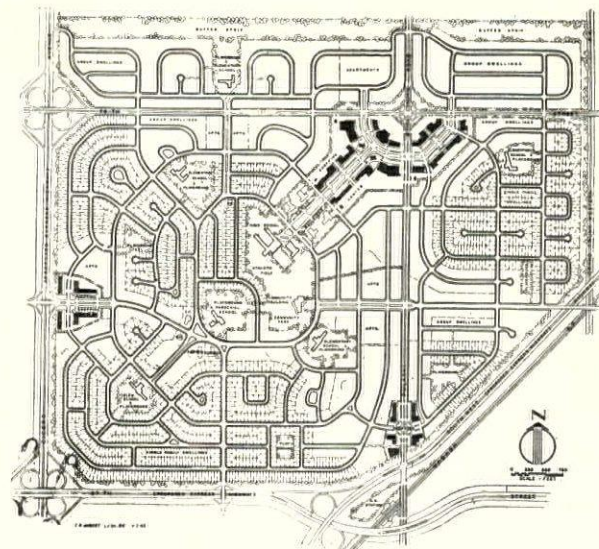
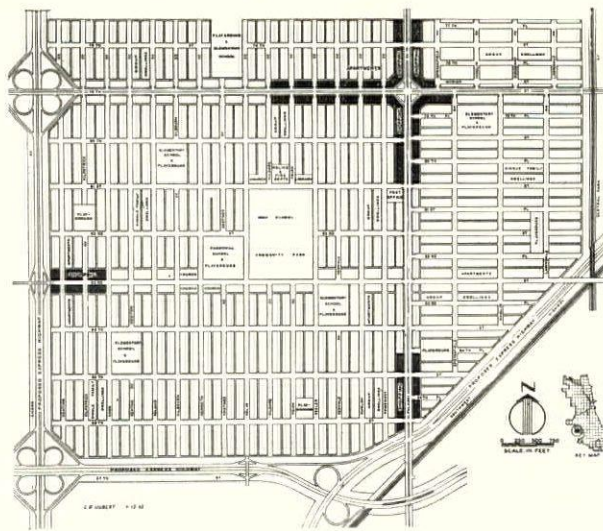
5% & OVER

POPULATION DECREASE

5% & OVER

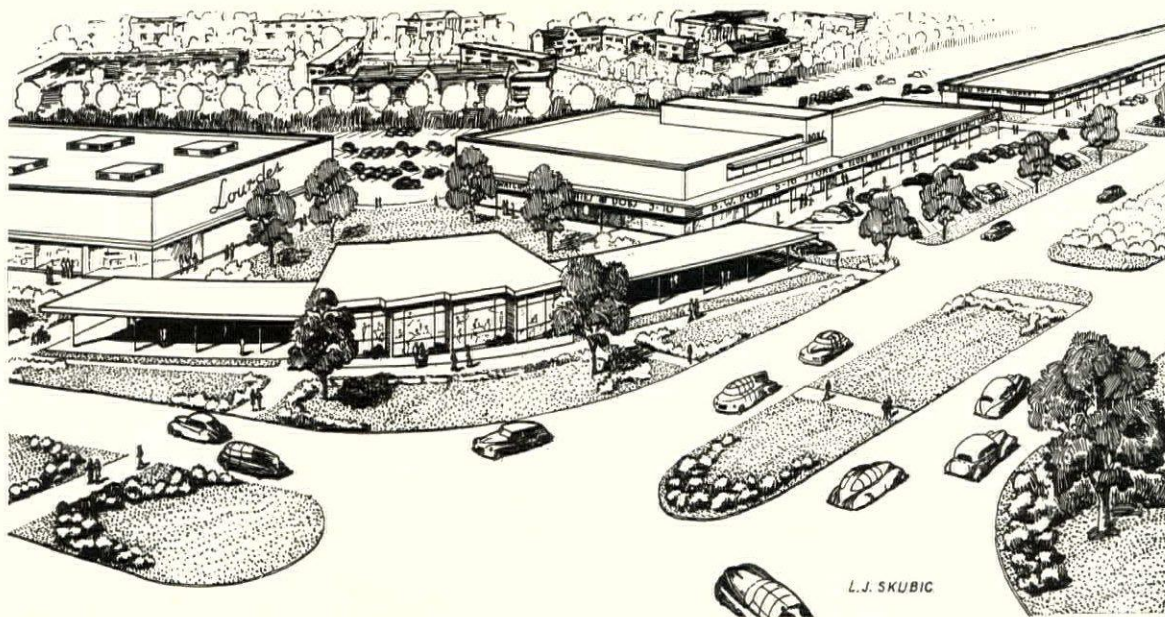
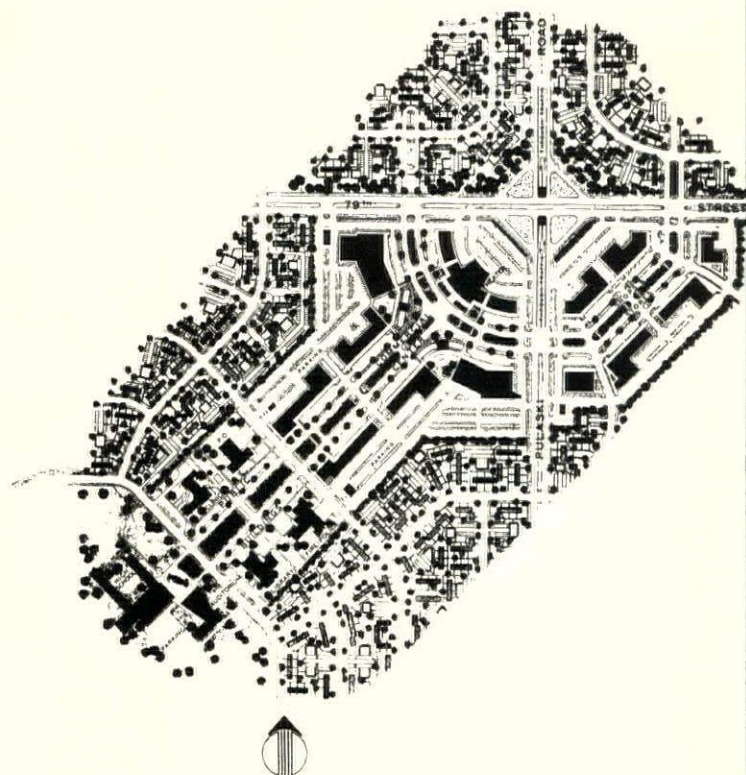


0 1 2 3 4 5 6
SCALE IN MILES



Believing strongly in the virtues of modern neighborhood planning, the Chicago Plan Commission is urging that the present rigid laws regulating land sub-division should be changed. To illustrate the advantages of the modern approach as opposed to the old rectilinear block arrangement it has made studies of the same (now vacant) area treated in both ways. At the left, above, is shown how this area might develop if laid out to conform with the existing sub-division code. At its right is the same area planned for a community of about 26,000 people, organized into five neighborhoods of individual character. The second plan has many advantages over the first. It has over five miles less of streets, which is not only an initial economy but permits better use of the land. In the center of each neighborhood is the elementary school and playground and the streets are designed for circulation within and between neighborhoods so that school children would need to cross a minimum number of lines of merely local traffic. The high school, which serves all five neighborhoods, lies at the center of the community with its adjacent athletic field and a community building situated in a park. A group of public buildings and retail shops are placed between the high school and the junction of two important through streets, where they can serve the entire community. (This group is shown at larger scale to the right and suggested in perspective below.)

A community development of this sort, it is contended, would represent less land improvement cost for the developer and less cost to the home owner or rental occupant than the gridiron type and would result in greater economic and social stability for the community and for the city of Chicago.

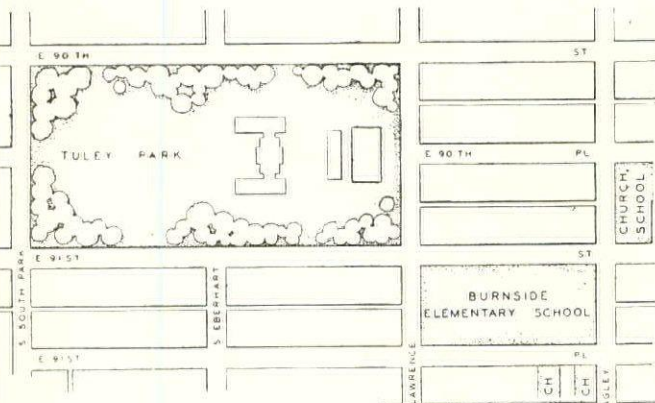
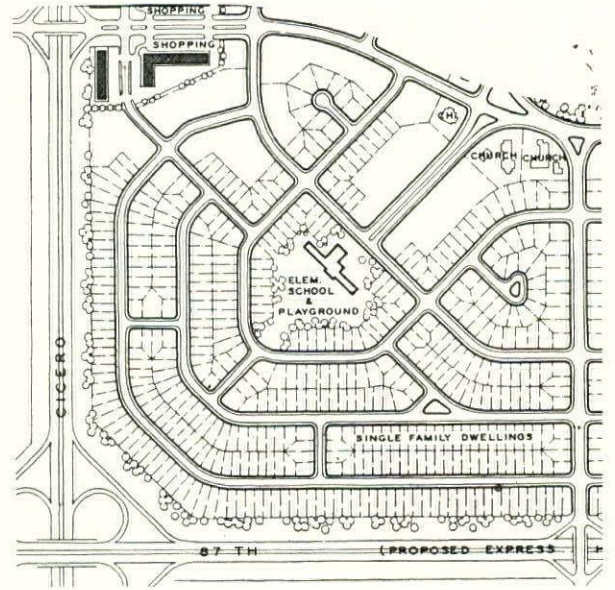


CHICAGO - Community Elements

The Chicago Plan Commission has made many other studies for treating the problems of land sub-division for different community purposes. At the right, is its suggestion for a planned neighborhood unit built around the elementary school and playground, insulated by park strips from express highways and heavy traffic and provided with a local shopping district. This is the sort of thing recommended to replace the obsolescent type of gridiron plan that prevails in the city today.

Across the page is a recommended super-block type for a single family area with interior-block park playground including church site.

A third recommended type shown at the right, below, is a super-block planned for apartment or group housing. Here, too, an interior park, together with plenty of off-street parking bays, has been formed by vacating some existing streets.

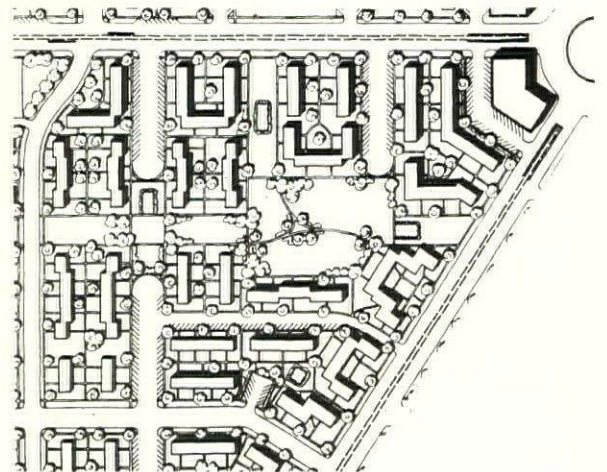
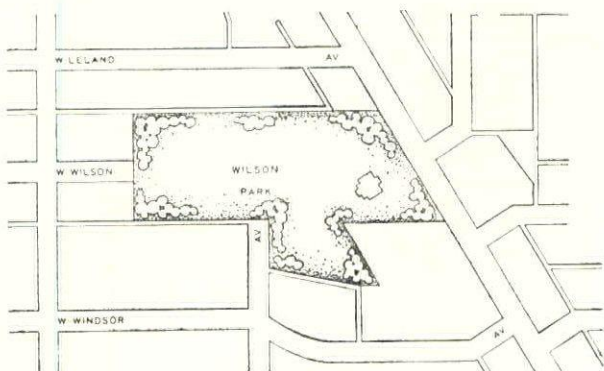


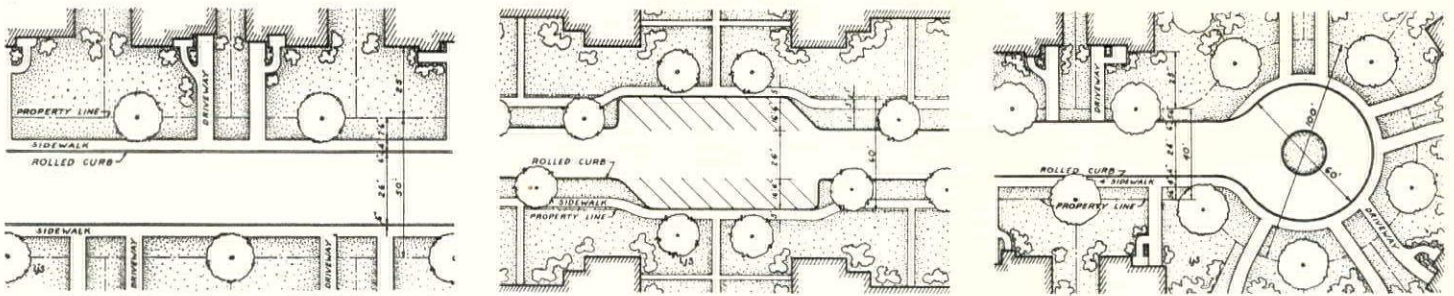
*Today, traffic separates people from schools and parks.
Compare with the school in a trafficless neighborhood →*

With interior park in a one-family house area →

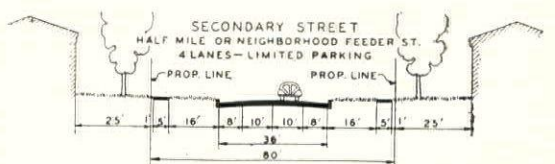
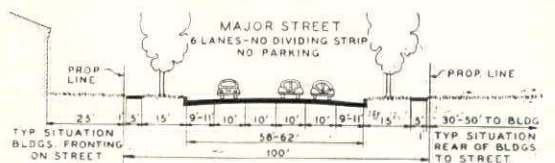
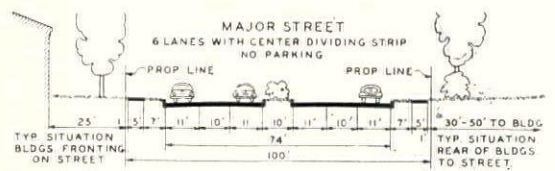
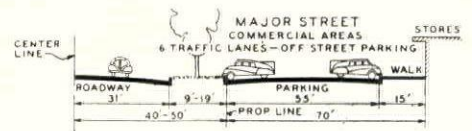
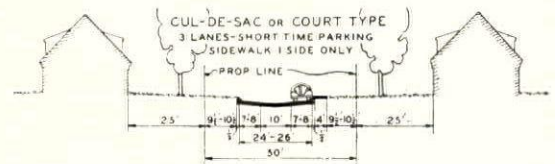
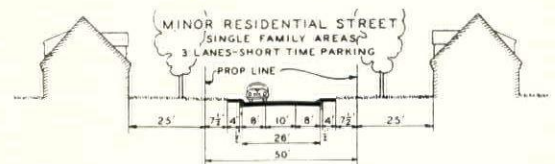
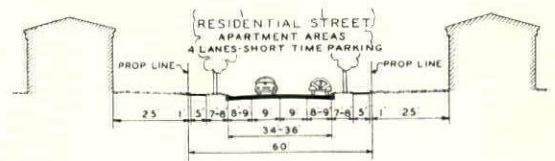
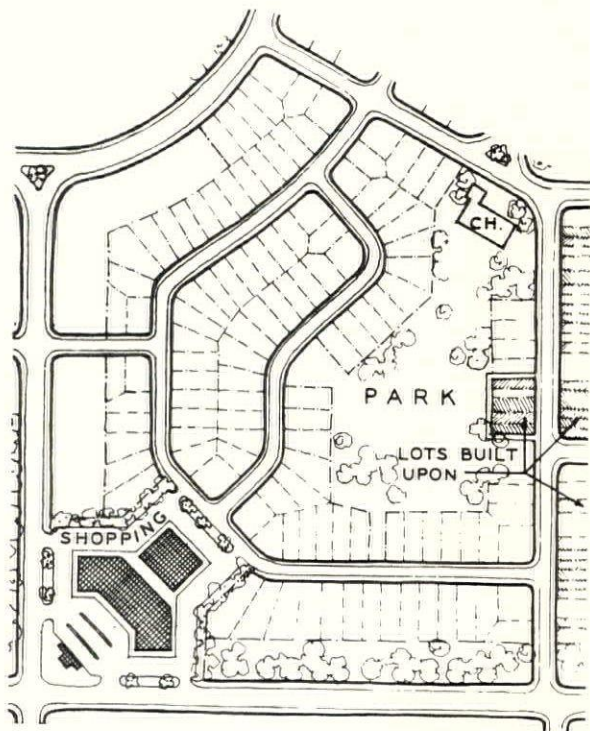
Or the park inside a multi-family building superblock →

Wilson Park, one of the few interior-block parks in Chicago, is the nearest existing approach to an effective economical relationship between park and homes. It is still short of the Plan Commission's ideal.



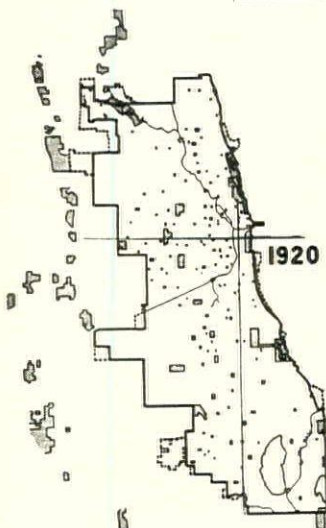
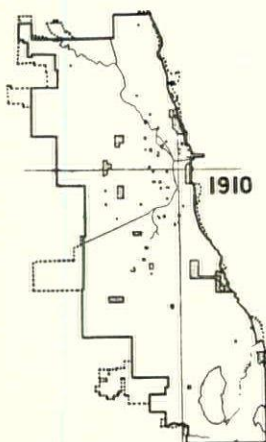
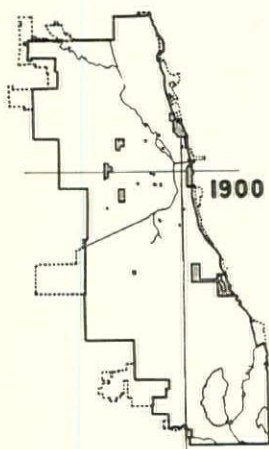


Above, are shown street details recommended by the Chicago Plan Commission. At the right, are its recommended right-of-way and pavement widths, sidewalk locations, and setback dimensions for major and minor streets.



It is hoped and expected by the Plan Commission that private developers will be quick to see the advantages to themselves and to the community of following these and other recommendations during the future years of rehabilitation and new building. The post war program will have to be carried out for the most part by private enterprise, operating, it is hoped, within the general framework of the Master Plan. Over eighteen square miles of vacant privately owned land in sub-divided and unsub-divided tracts remain in Chicago as suitable locations for new residential growth. Many of these vacant areas are in close proximity to new large war industries that employ thousands of workers. It seems probable that these war industries will be converted to peace-time use, which makes the adjacent vacant areas potentially desirable for the building of well-designed new residential neighborhoods.

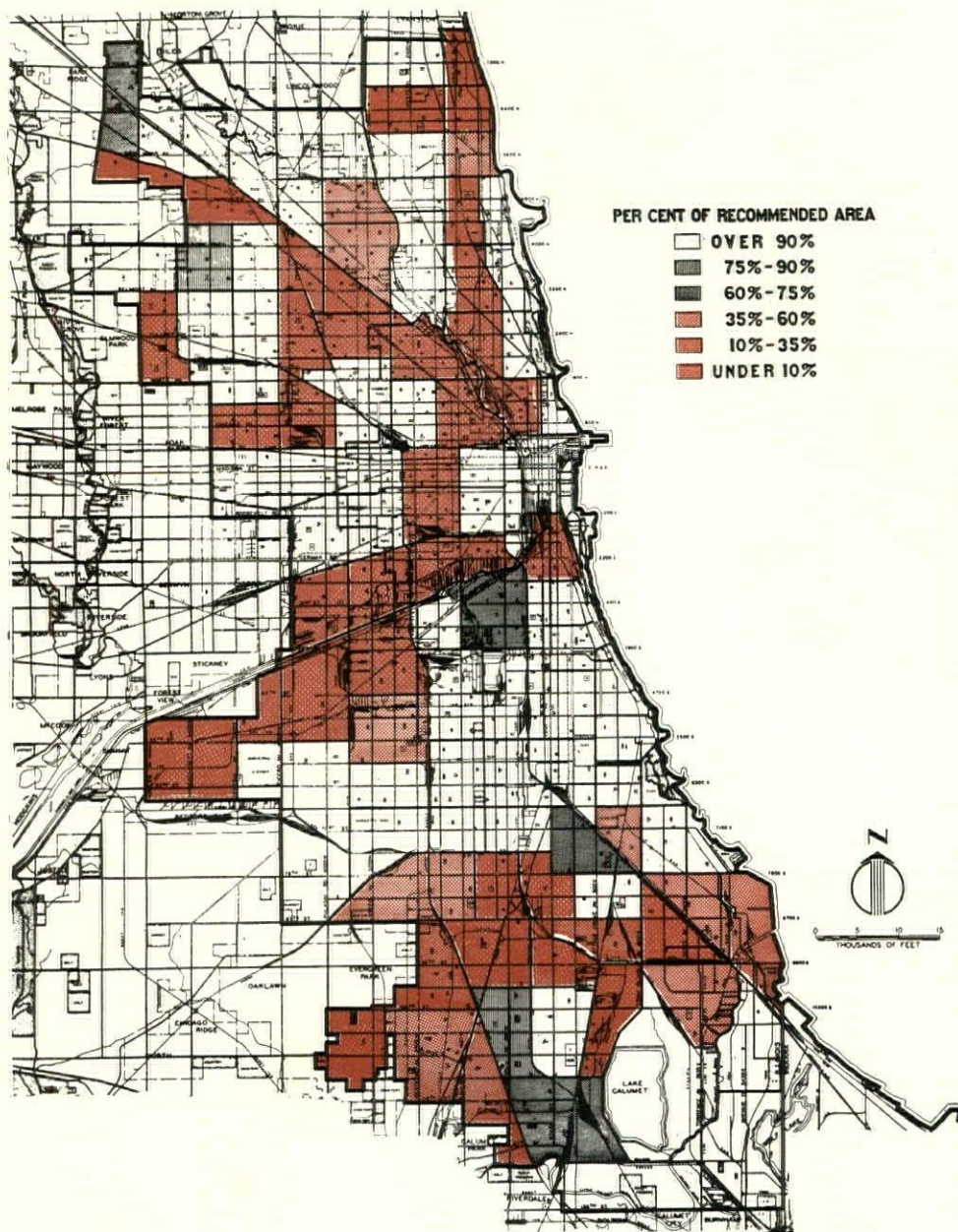
CHICAGO - Recreation

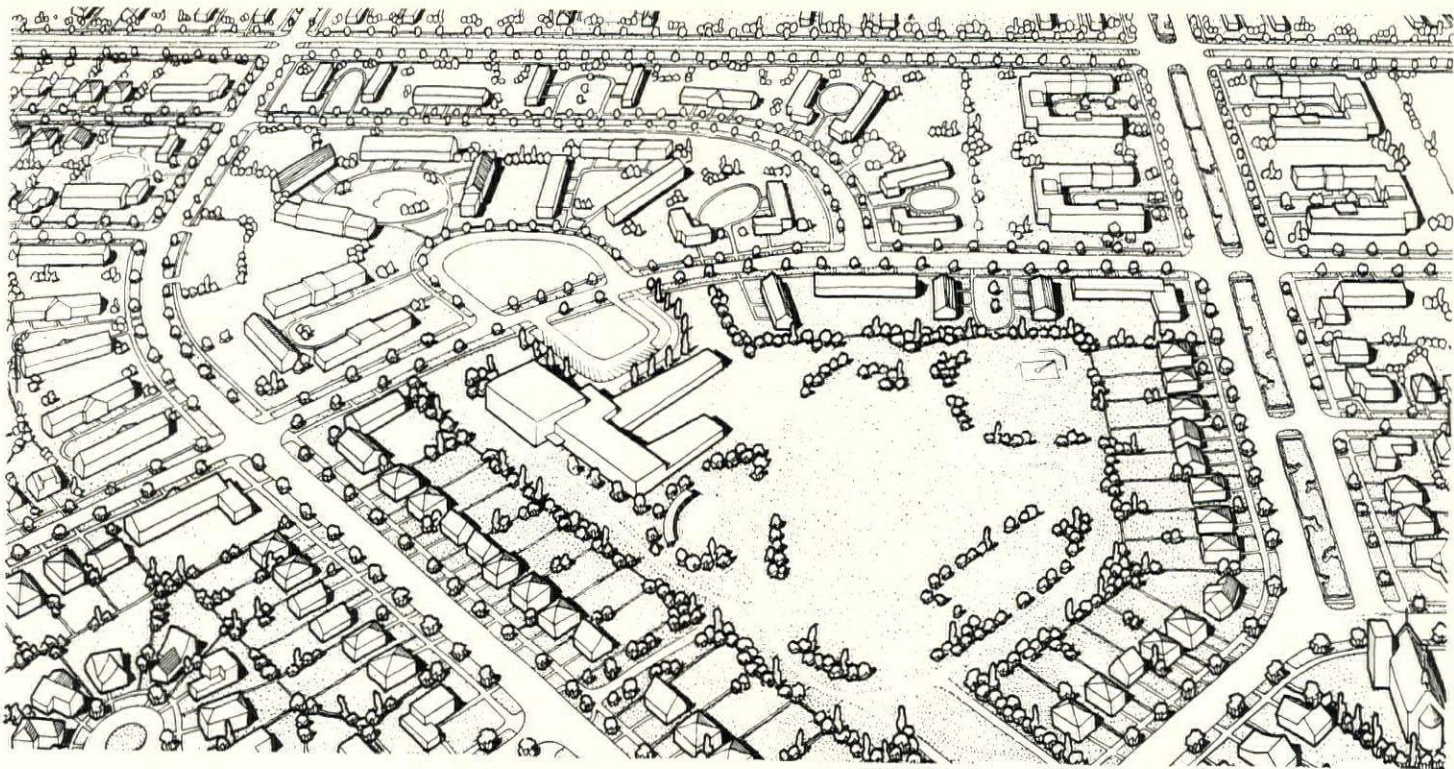


Though there has been tremendous growth in the system of large and small parks, playgrounds, and recreation areas in greater Chicago since the beginning of this century, studies of the Chicago Plan Commission have indicated deficiencies in a number of districts within the city. Its plans for development during the next 25-40 years include provision for a variety of types of recreation facilities which will eventually take care of these deficient areas. In laying out its program, its objective has been to adapt the services not only to the present needs of the population, but to future demands for at least a generation in advance, taking into consideration probable shifts in population during this period. By developing suitable green and open recreation space in more thickly populated sections, the city can promote the return toward the center of some of the population that has already moved out to the suburbs.

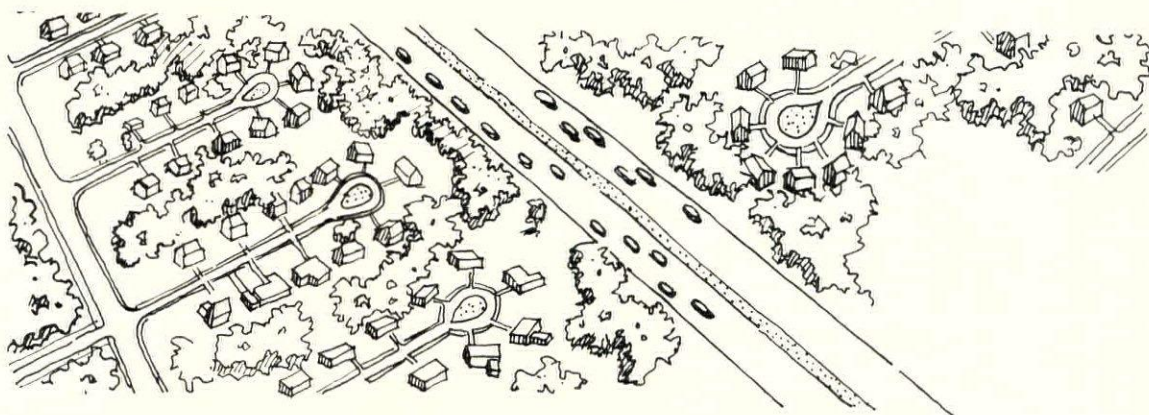
As a basis for the apportionment of facilities, the standards tabulated on page 57 are serving as a guide. Types of areas to be provided include the "tot lot" for small children, playgrounds for children of elementary school age, play fields for games and sports, and small parks for quiet relaxation. Large parks and forest preserves which provide recreation and relaxation opportunities are already fairly plentifully provided in the present system. These larger areas may be enjoyed by people from all parts of the city and the Commission's plans for increased transportation facilities will permit their use on an increasing scale.

The matter of open green areas is also very much in the minds of the Plan Commission in all its studies for rebuilding blighted residential sections and creating new neighborhoods.

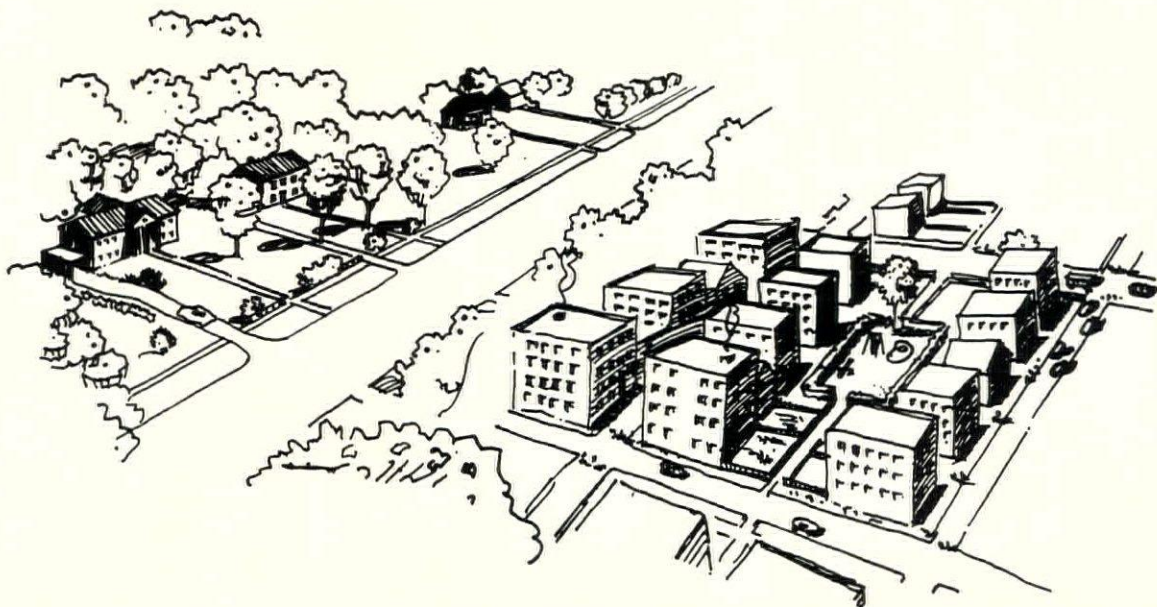




At or near the center of a well-planned, modern neighborhood should be located the elementary school with adequate play and recreation space. Access to the school is safe because heavy, through traffic runs on the major streets which form the neighborhood boundaries and, as indicated below, the neighborhood's minor streets and cul-de-sacs carry only local traffic.

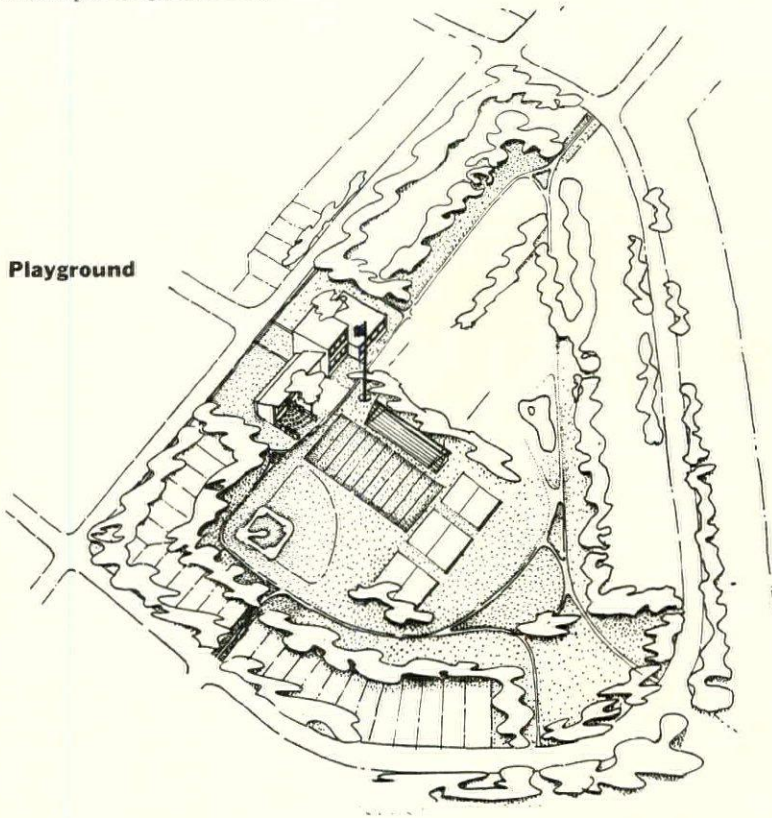


Below is illustrated the difference in recreational needs of low density and high density housing areas. The individual yards in single family developments provide adequate play space for small children. In apartment or group house areas, tot lots should be provided, reasonably visible from the buildings.



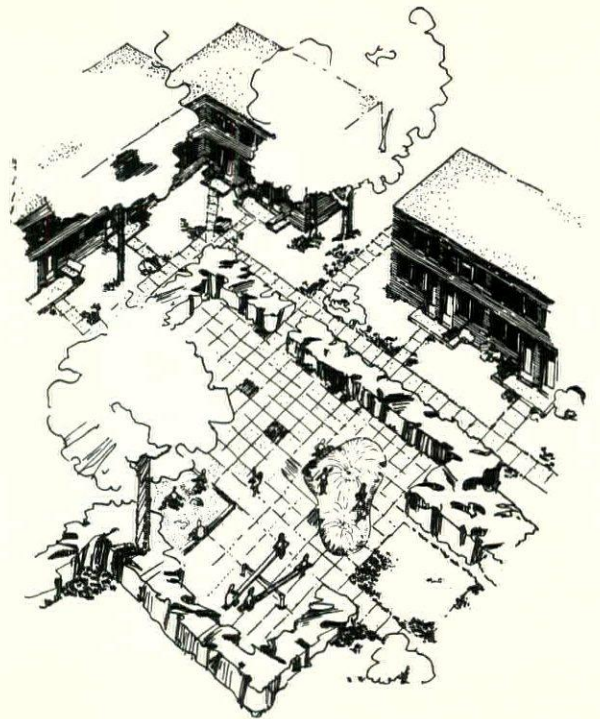
CHICAGO - Recreation

Playgrounds for young children should be safely and easily accessible from all parts of the neighborhoods for which they are provided. Whenever possible, they should adjoin the elementary school so that the two together can be a center for local activities. In newly-developed areas the school and playground may be integrated within a landscaped neighborhood park.



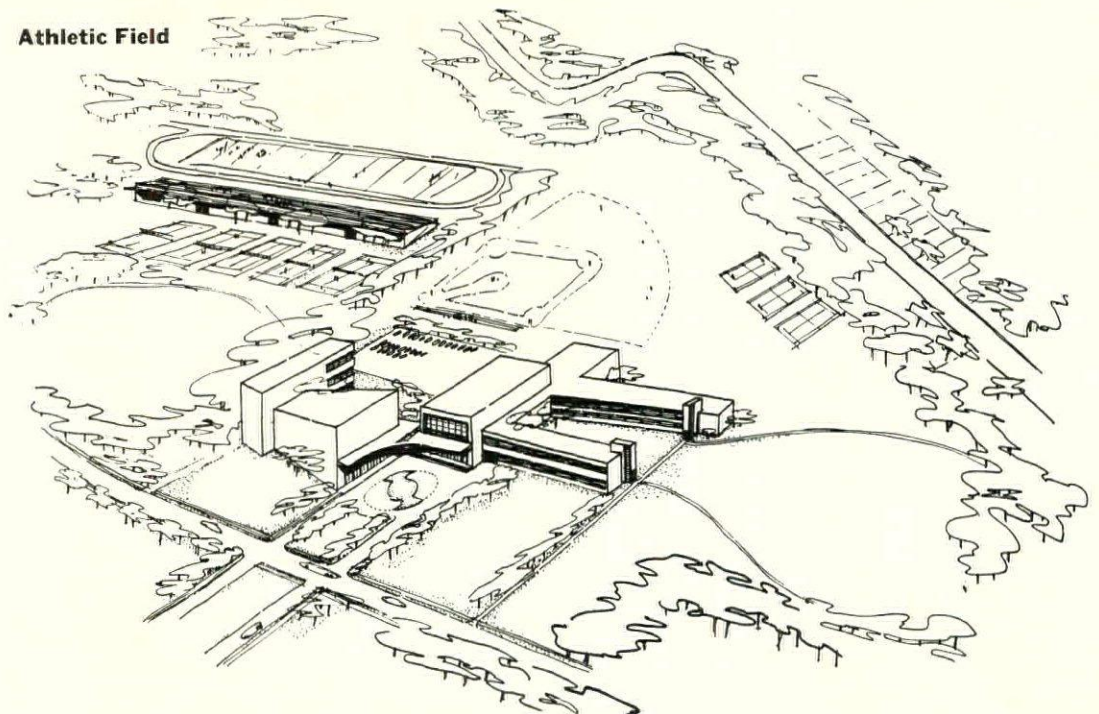
Playground

Tot Lot



Play lots for children of pre-school age are needed in city residential areas, particularly near rental apartment groups of both public and private ownership. They would generally be maintained by the agencies which operate the projects, except where they form part of a large park area. They should be fenced in on all sides, equipped with play apparatus, and suitably sheltered by trees and shrubs.

Athletic Field

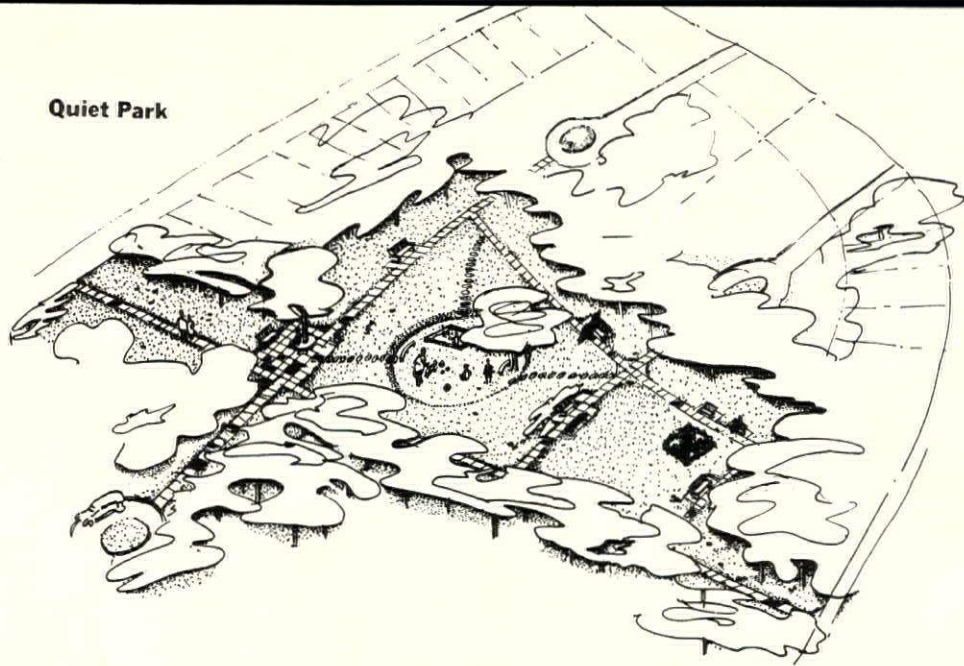


There should be, according to the recommendations of the Chicago Plan Commission, a playfield within convenient distance of every home. Within the city they should be spaced frequently enough so that each can take care of not more than 20,000 people with about an acre of space for each 800 people. The playfield may usually be conjoined with the high school, where it will include athletic fields for school and community use. A section may be set aside for passive recreation and it is also desirable that a field house be provided for indoor sports.

Small, quiet parks are recommended for relaxation, especially for older people and for young mothers with small children. While they may include small playgrounds or tot lots, they are primarily designed as places for people to sit in restful, quiet surroundings.

Large parks such as Lincoln Park, shown below, provide for recreation activities of many kinds. They serve the entire city and attract both residents and visitors. (Photo, Chicago Aerial Survey Co.)

Quiet Park



Large Park



MINIMUM STANDARDS FOR RECREATION AREAS

ACTIVE RECREATION

1. Tot Lots

Age Group: 1 to 5 years
Size: 40 sq. ft. per child. Minimum 2400 sq. ft.
Service Area: Within block
Distribution: One per block (in areas of intense development)
Location: Close to center of block

2. Playgrounds

Age Group: 5 to 14 years
Size: A. 500 sq. ft. per child if child population is 200. Min. 2.3 acres.
 B. 253 sq. ft. per child if child population is 600. Min. 3.5 acres.
 C. 227 sq. ft. per child if child population is 1200. Min. 6.2 acres.
Service Area: Radius of $\frac{1}{4}$ to $\frac{3}{8}$ miles. **Distribution:** 1 per neighborhood.
Location: Near school; near center of unit or in larger park.

3. Athletic Fields

Age Group: 12 to 24 years
Size: 100 sq. ft. per person (12-24); minimum 20 acres
Service Area: Radius of $\frac{3}{4}$ to $1\frac{1}{2}$ miles. **Distribution:** One per community.
Location: Near center of each community, preferably near high school.

PASSIVE RECREATION

1. Quiet Parks

Age group: All ages
Size: 10 sq. ft. per person. Minimum 2 acres.
Service Area: Radius of $\frac{1}{4}$ to $\frac{3}{8}$ mile.
Distribution: One per neighborhood.
Location: Near center of neighborhood unit.

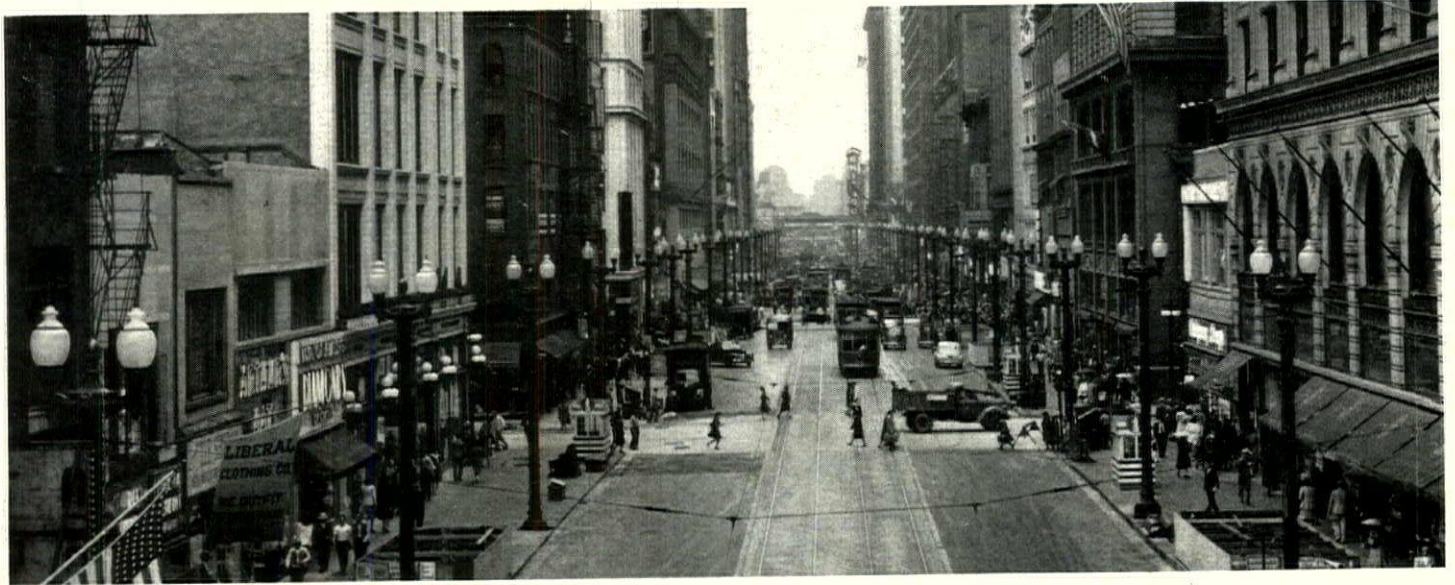
2. Large Parks

Age Group: All ages.
Size: Determined by natural features—usually 100 acres or more.
Service Area: Entire city.
Distribution: Determined by natural features.
Location: Determined by natural features.

3. Forest Preserves:

Large areas of natural beauty on the outskirts of the city to serve all age groups. These areas are preserved in as near primeval condition as possible. Location, size, and distribution are determined by character and availability.

CHICAGO - Central Business District

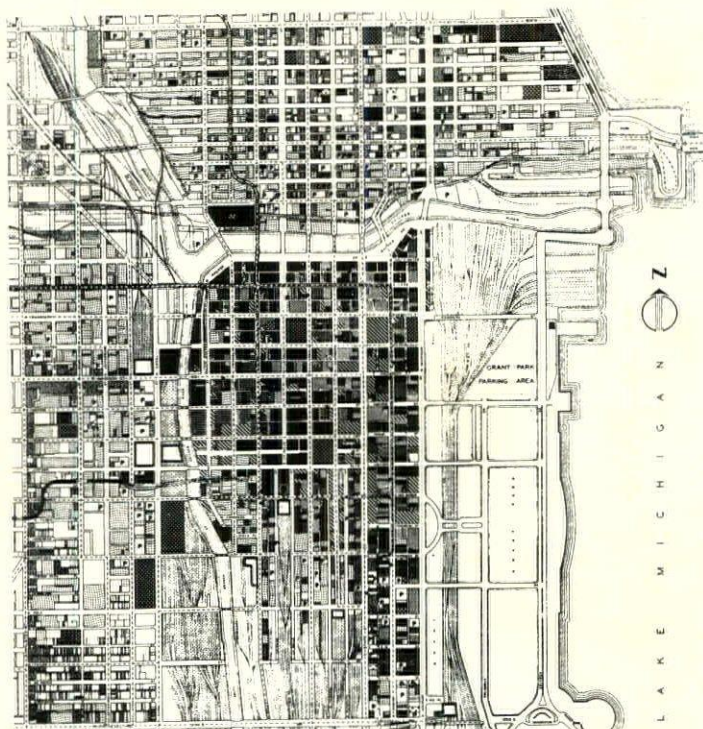


At the center of Chicago lies a congested and busy shopping and office development, "The Loop," in which there are no parks or evidence of leisure space inland from the Grant Park lake front area. A heavy daily inflow of people into this district has brought intensified problems of traffic disposition and control. Much attention has been given in the past to attempts to handle the problems of moving traffic and parked vehicles by applying the palliatives of widened streets and better traffic direction. The essential solution, however, is to develop adequate storage terminals for the thousands of automobiles which must be accommodated all day while their owners are at business. (Photo above from *Chicago Daily News*.)

A careful study by the Chicago Plan Commission has disclosed that the present accommodations operated by private individuals or com-

panies in this district can accommodate only 12,000 automobiles, as compared with the 23,000 that should be provided for. As an important part of its plans for redeveloping the district, therefore, there are included proposals for enough additional privately operated but possibly municipally owned parking terminals to care for the required number. A number of obsolete and obsolescent buildings will eventually be torn down and replaced by these improvements. Location of the proposed new accommodations may be seen on the map shown below and on the facing page, which also shows the Commission's recommendations for other changes in land use, including the development of a civic center and an adjacent helicopter field. An important part of the projected program is the inclusion of additional green areas to bring sunshine and air within the now-congested Loop.

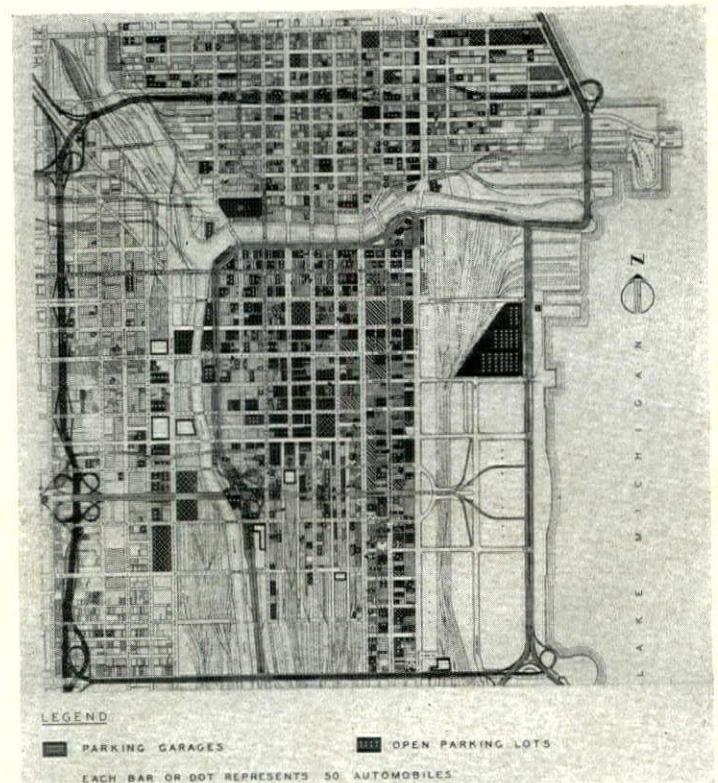
Building Age and Height



LEGEND

- VACANT AREAS.
- ▨ BUILDING OVER 50 YEARS OVER 6 STORIES
- ▧ BUILDING OVER 50 YEARS UNDER 6 STORIES
- ▩ BUILDINGS UNDER 50 YEARS UNDER 6 STORIES

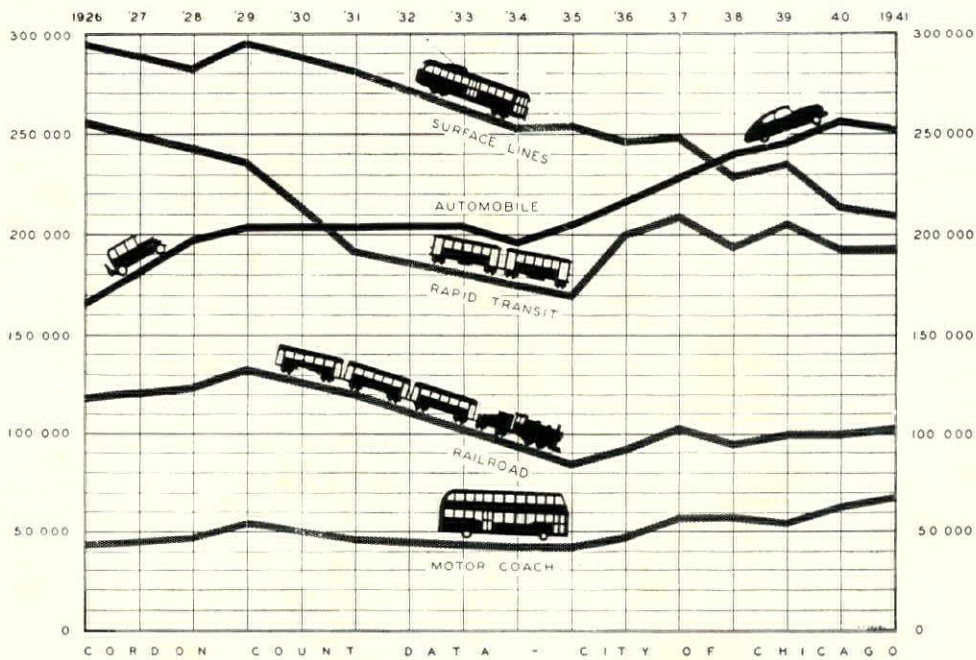
Parking Facilities



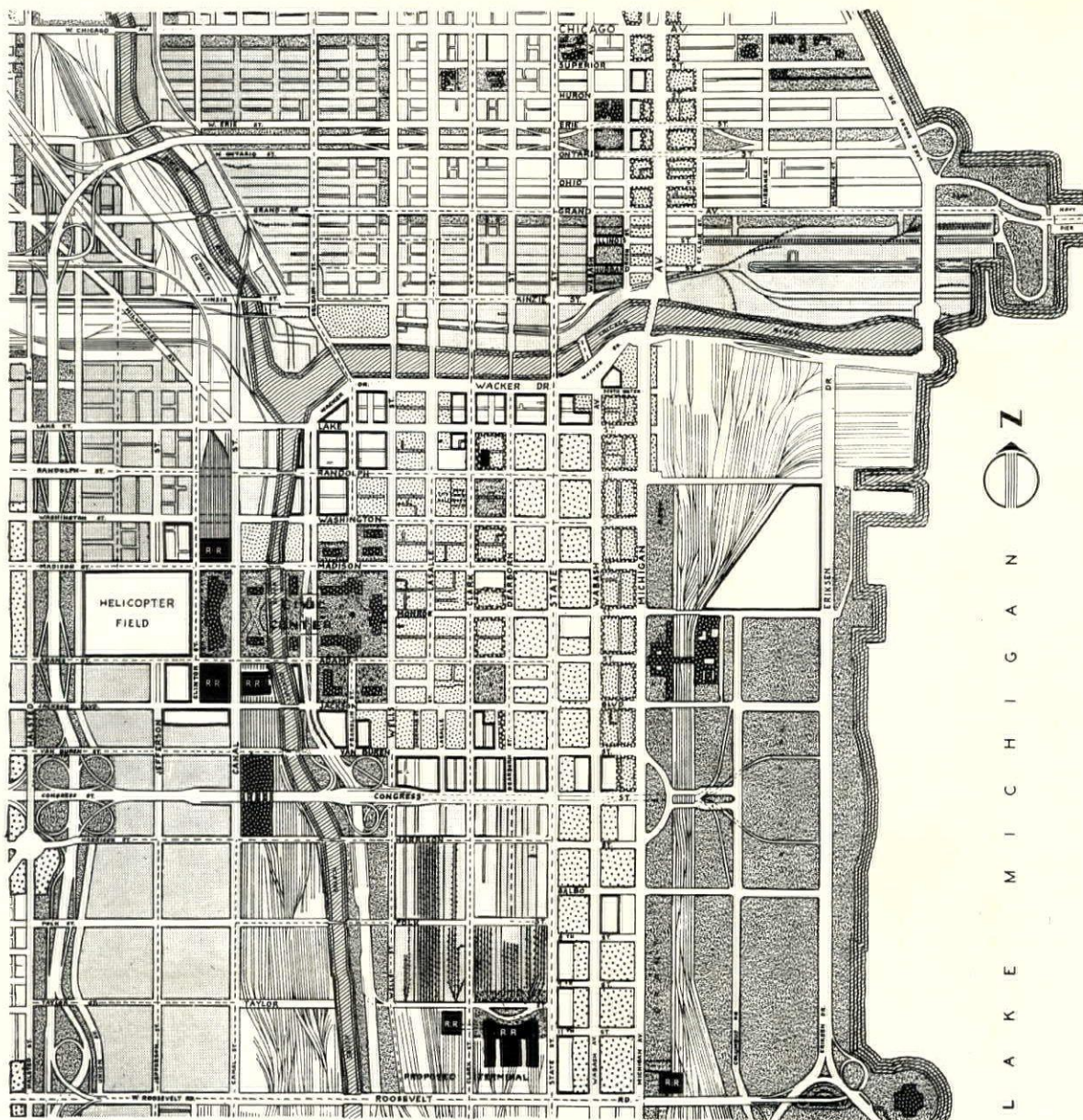
LEGEND

- PARKING GARAGES
 - ▨ OPEN PARKING LOTS
- EACH BAR OR DOT REPRESENTS 50 AUTOMOBILES

Into the "Loop" arrive daily during peacetime over 800,000 people. The chart shows graphically the means of transportation they have used and the changes through the years in the proportional importance of these means. The automobile, which has shown a persistent upward trend, will probably continue at a high level after the War. This indicates that the parking problem will continue to be an important one for adequate attention by the planner, just as it is in the central business district of any American city.



Future Land Use



LEGEND

- OFFICE BLDGS.
- HOTELS & RESIDENTIAL
- MIXED OFFICE & COMMERCIAL
- OPEN PARKING AREAS
- INDUSTRIAL
- COMMERCIAL
- PARKS
- PUBLIC BLDGS.
- RAILROAD TERMINALS

CHICAGO - Industry

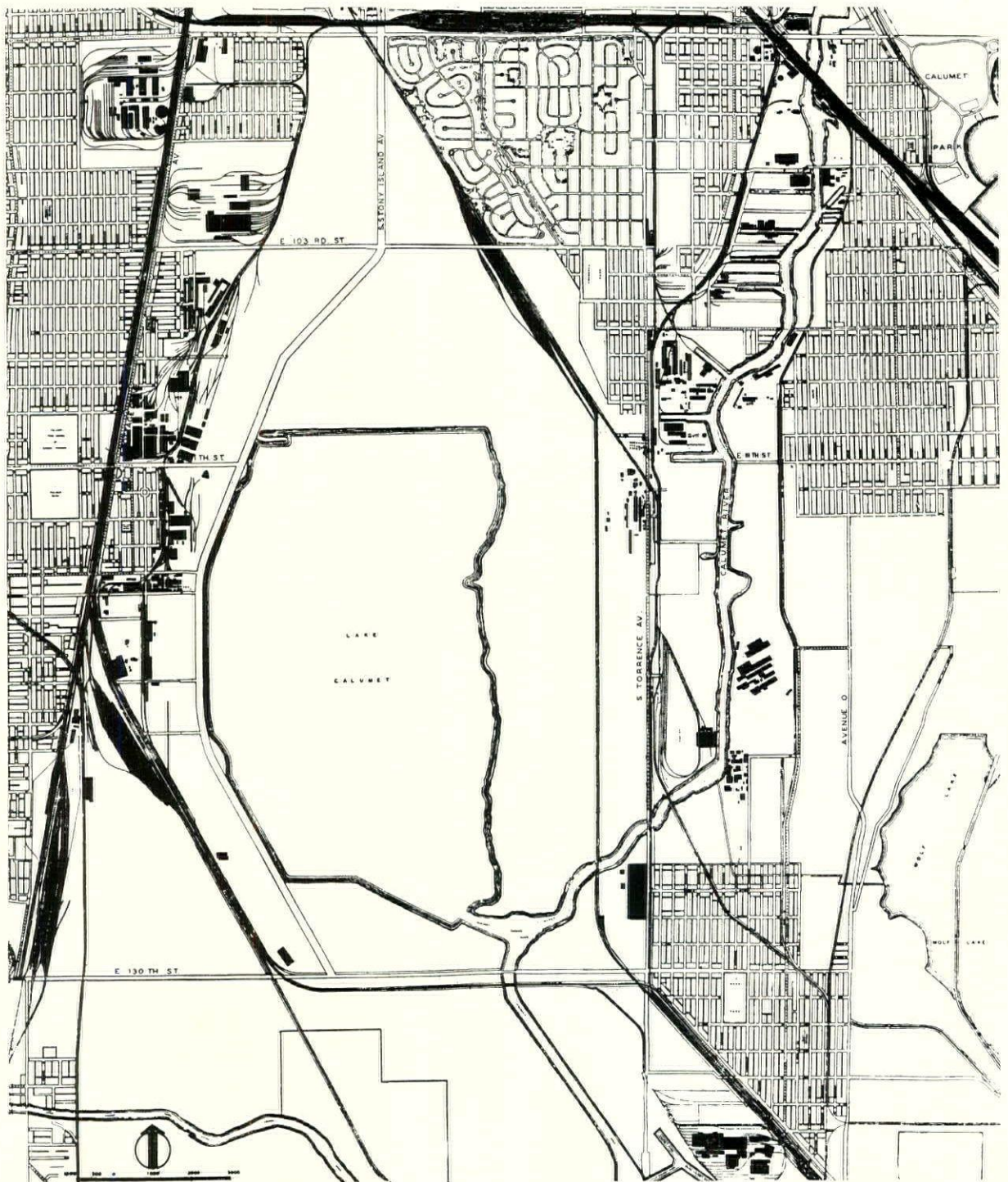
For many years, the so-called Calumet District, extending from 95th Street and Michigan Avenue south and east to the city limits, has been regarded as potentially perhaps the greatest opportunity for planned industrial development to be found in any large American city. It is already one of the major industrial areas in the country and still has thousands of acres of vacant land available for large scale industrial and residential development. The Burnham Plan of 1909 recommended its development as an industrial center and ever since that time it has been the subject of much study. The present Chicago Plan Commission, after a careful survey of the resources and future prospects of the district has made several preliminary schemes for consideration as part of the Master Plan.

All of the proposals call for a harbor in Lake Calumet, 21 or 27 feet in depth, to be produced by dredging and filling. Slips to provide con-

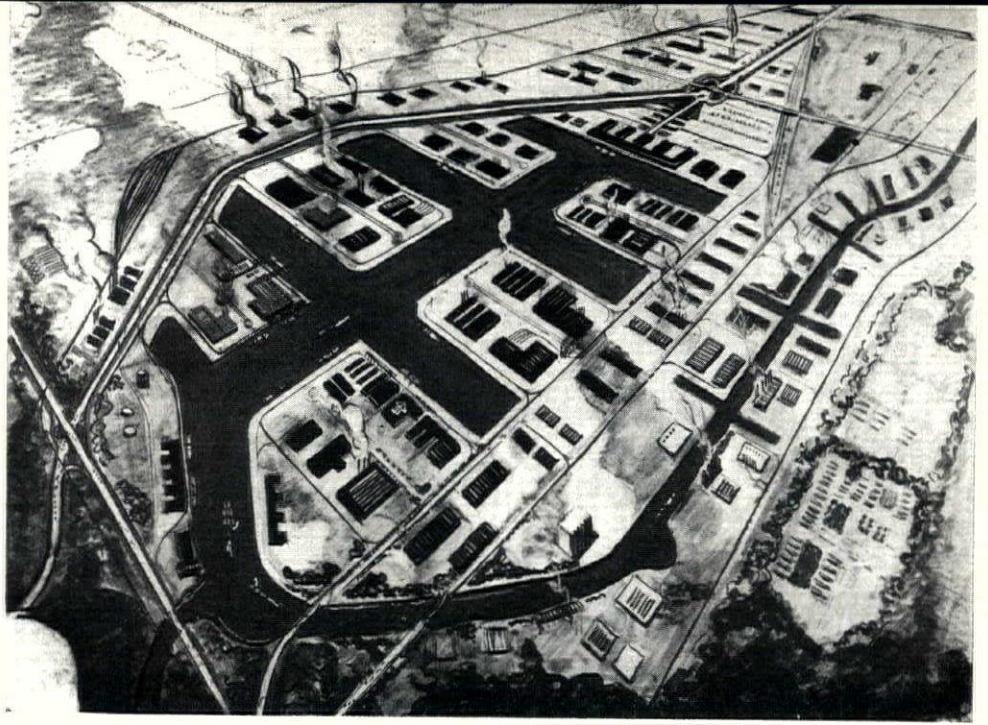
venient water access to the new industrial sites are arranged differently in the several plans but each has an adequately wide main channel or a turning basin to permit maneuvering of vessels. Ships could enter through the Calumet River from Lake Michigan or smaller craft from the Mississippi through the Calumet Sag Channel. If the St. Lawrence Seaway Project should ever go through, the harbor, dredged to 27 feet deep, could be used by most of the world's merchant marine.

In addition to industrial sites and rail and highway facilities, the studies of the Plan Commission have provided for a Commercial and Service Center and several well-planned modern residential neighborhoods with park areas as well as for the further development of existing residential subdivisions. Green areas, as may be seen from the facing page, will be provided wherever possible to protect the residential zones from the noise and dirt of industry.

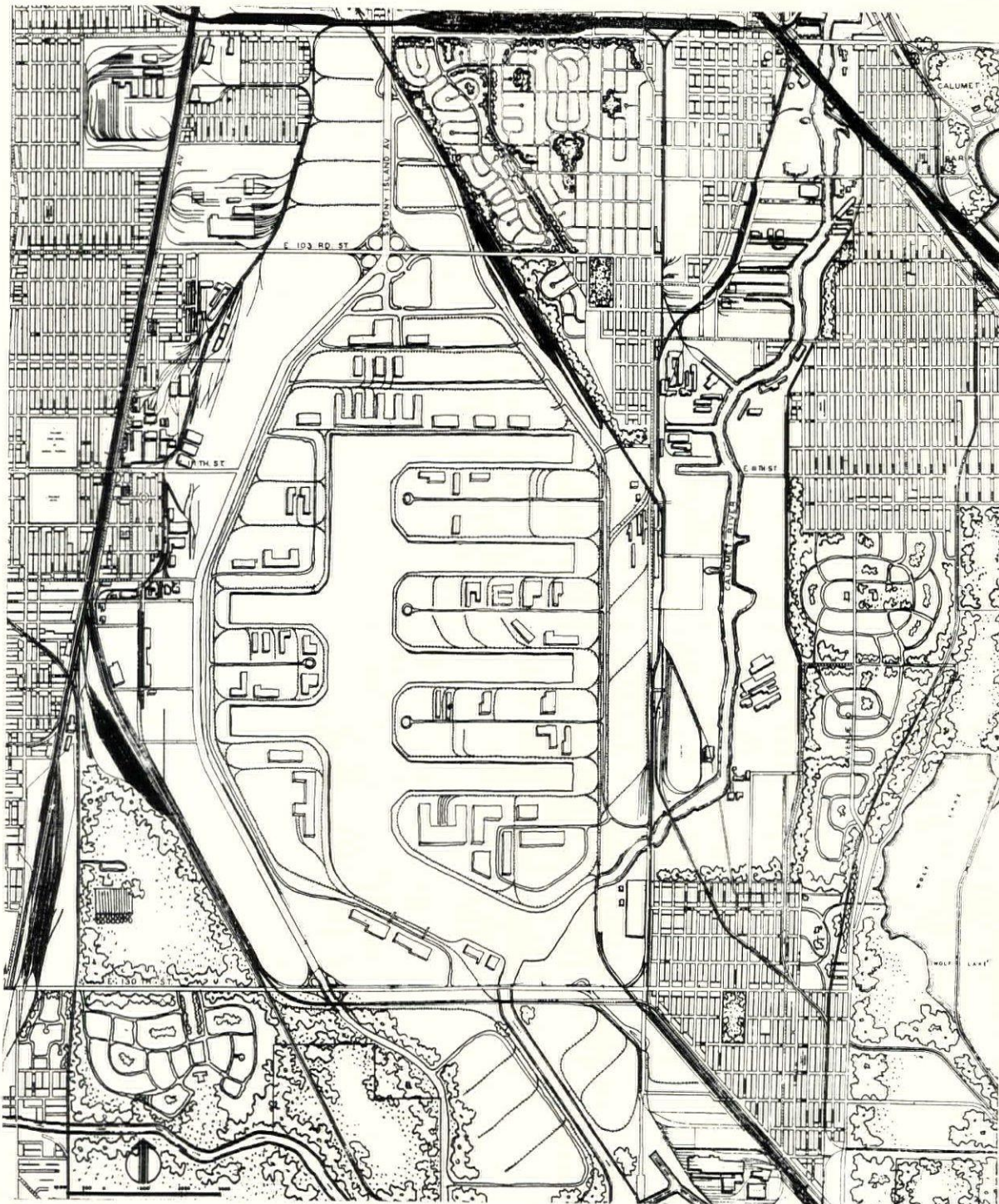
Calumet District — Existing Industrial Buildings



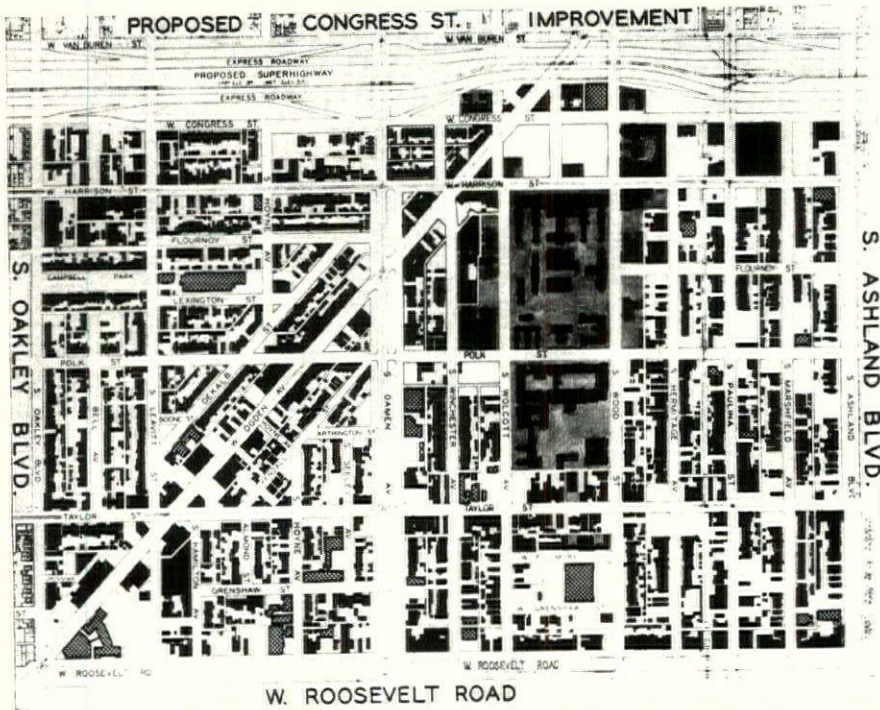
The scheme shown here for the development of the Calumet District is one of four proposals worked out by the present Chicago Plan Commission. By dredging and filling, the present area of the lake would be made available for hundreds of acres of new industrial sites with water access as well as full rail transportation facilities. The proposed Lake Calumet Harbor would be accessible to all the Great Lakes ships, to motor ships operating from the Atlantic Seaboard through the New York State Barge Canal, to small ocean freighters of the maximum size now permitted by the locks of the St. Lawrence river, and to barges and tow boats of the type used on the Mississippi.



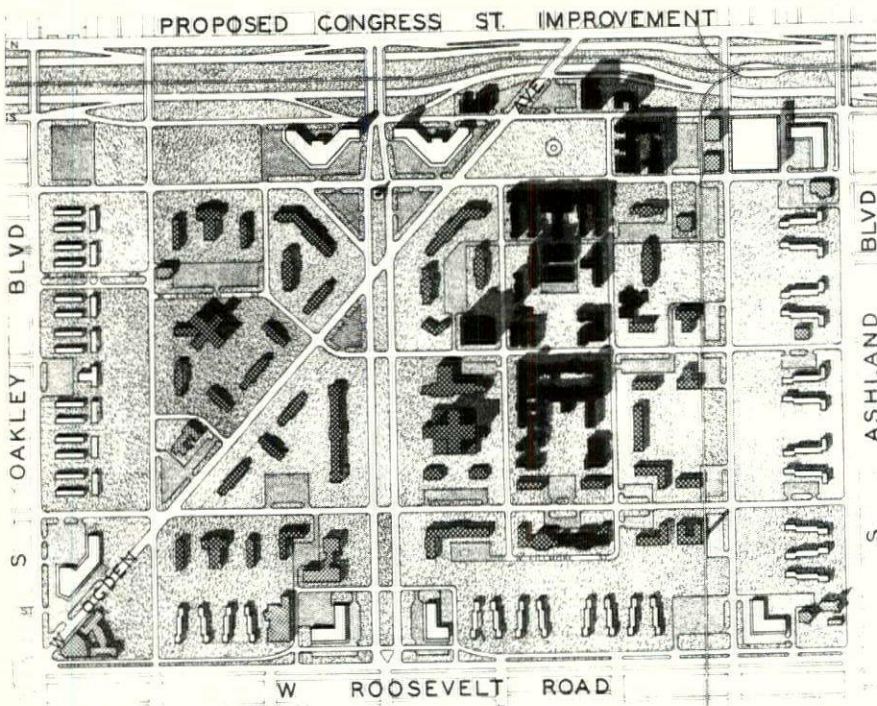
Calumet District — Development Plan



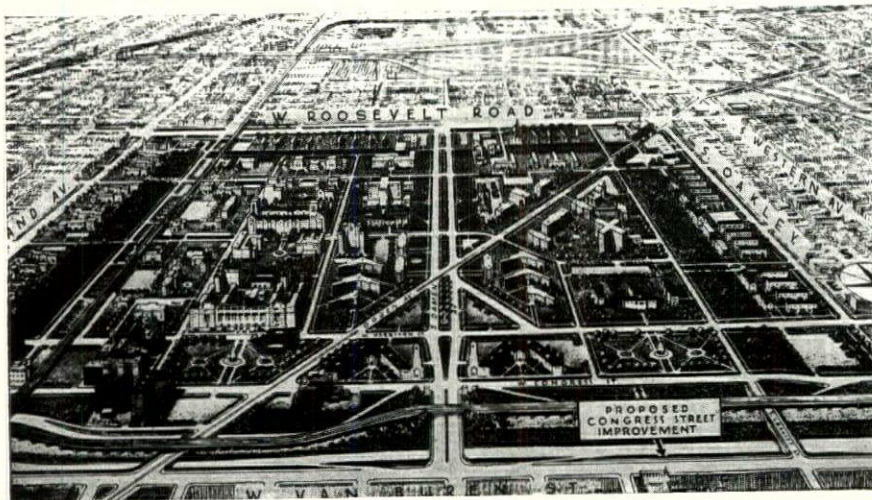
CHICAGO - Medical Center



The Medical Center Commission, created in 1941 and fostered by the Chicago Plan Commission, is empowered to take all necessary steps for the rehabilitation of the half square mile area surrounding the present medical center. This section is now largely blighted, which makes a thoroughgoing replanning economically advisable. The existing distribution of buildings is shown at the left.



Here is shown in plan the eventual development proposed by the Medical Center Commission and the Plan Commission. Heavy shading indicates Cook County Hospital and Illinois University Medical buildings. New hospital units and laboratories for medical research will be added from time to time and residential accommodations for the personnel are shown ranged around the margin of what will some day be a beautifully landscaped public institutional park.



A perspective of the rehabilitated area as it will eventually appear, looking south from the Congress Street super-highway, shows something of the character visualized for the huge, future medical center.

CHICAGO Plans—Today for Tomorrow

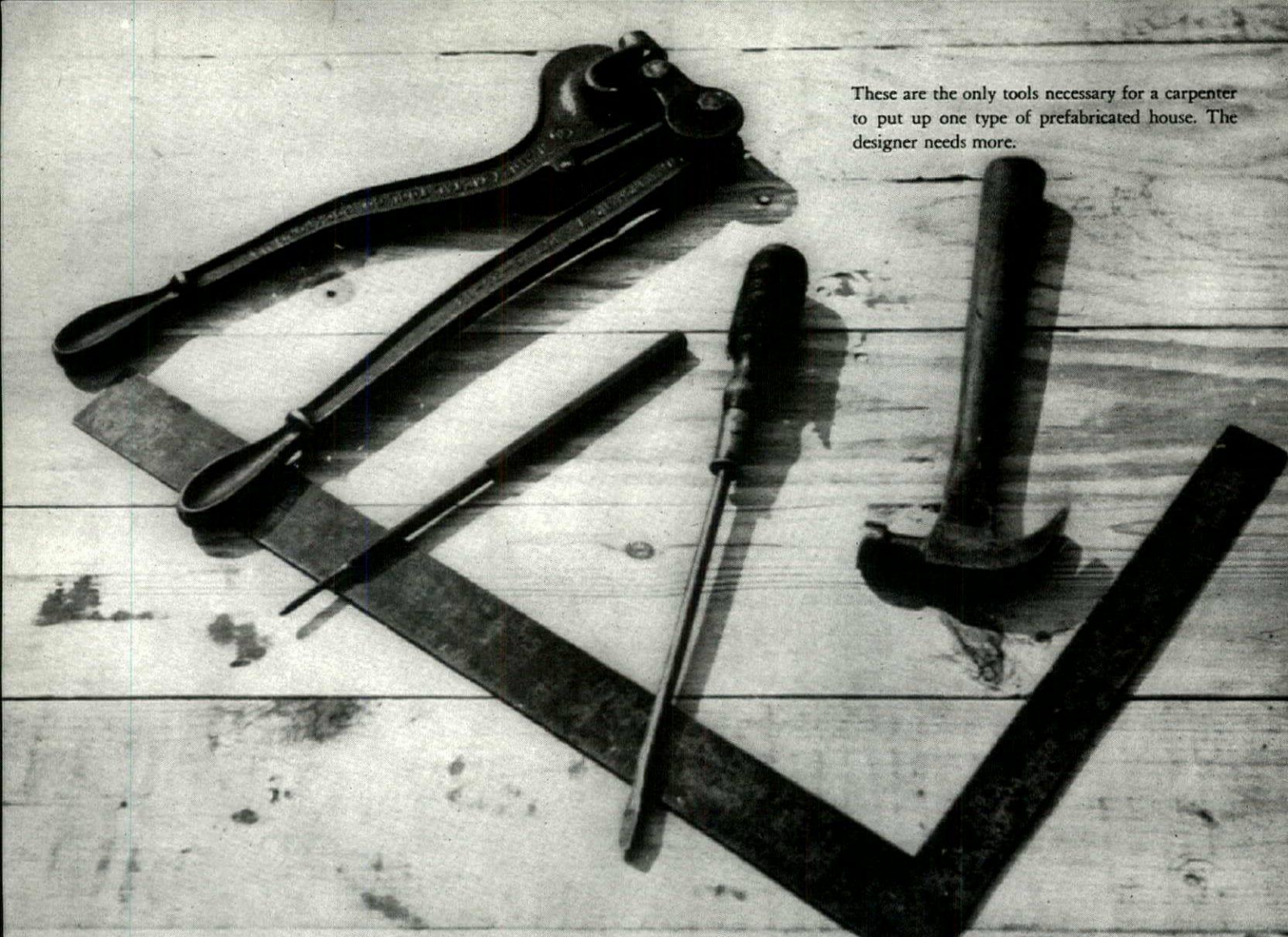
From top to bottom, the Ida B. Wells project for Negro residents and the Trumbull Park Project—both of the Chicago Housing Authority—and two private housing projects, Chatham Park and the Marine Drive Apartments. These are examples of modern housing, planned to meet the needs of typical tenants for increased livability and appeal.

Conclusions

By getting the preparation of its Master Plan well under way during the past two years, the Chicago Plan Commission has put its city in an immeasurably better condition to face the future with confidence. There is little doubt in most minds that we shall win the War and that after the War there will necessarily be a long, concentrated period of rebuilding great sections of our cities under both public and private auspices. If this great building activity were undertaken without a modern comprehensive city plan to guide its direction we should certainly succeed only in producing again the stifling conditions that have already led us to slums and economic distress.

The job of urban rehabilitation is too great to be handled by either public or private enterprise alone. It is urgent that the job shall be done, even if only in order to provide economic activity and employment to the large numbers of people who will be released from the war effort. By establishing *now* the form which its share of the Public Works Program will take and by encouraging private interests to plan *now* for its vastly greater share of participation in the redevelopment of the city, the Plan Commission has set a challenging goal. The magnitude of its aims make the Master Plan it is developing worthy of the ideal expressed in Dan Burnham's famous statement. It has truly "magic to stir men's blood," and only by stirring men's blood can it become realized.





These are the only tools necessary for a carpenter to put up one type of prefabricated house. The designer needs more.

The Architecture of the Future

by Talbot F. Hamlin

Part 1—Postwar Design: Architecture of Democracy

Today, architectural practice is in large measure non-existent; when the war ends it will resume in an unprecedented flood. Is it not time for the architect to think seriously of what forms that flood will take, of how the architect may use his creative power to fulfill the needs society will present, of the materials and structural methods with which his designs will be built, and of how his particular talents can be brought to bear? Even if there is no place in a wartime economy for many architects, surely this is no excuse for their failure to use their best imagination, their most stringent powers of analysis, their creative efforts now, with the aim of being better prepared and more thoughtfully aware, so that their work, when the time comes, will be more realistic, in the sense that it is based on the actual needs of people, and more idealistic, in the sense that it is more consciously devoted to the public welfare. If this is an aim, then we must examine not only revolutions in industrial techniques, but the much more subtle problems of the relation of design to human life.

This attitude will condition the looks of buildings as well as their plans, for, however much present-day social and economic pressures and the necessity of building with a minimum of materials and money have tended to minimize esthetic ideals, it is nevertheless true that architecture *is* a matter of "looks" as well as of other more obvious utilities. I say more obvious utilities, for "looks" also have their own utility in human happiness, however unconsciously this may be felt.

This is a war for democracy. I can see no more important connotation of democracy than the stimulation of the rich, conscious life of individuals. It is, therefore, on the individual that our architecture after a victorious war must be founded, and all matters of collective controls—economic, cultural, or industrial—must exist solely as means to the enhancement of individual living. From this will be developed the one great criterion of success or failure in architectural

design. This will be the controlling idea which must override all preconceived attitudes toward styles, toward novelty *per se*; this will be the great standard by which we may judge such industrial aids as prefabrication and the furnishing of new materials.

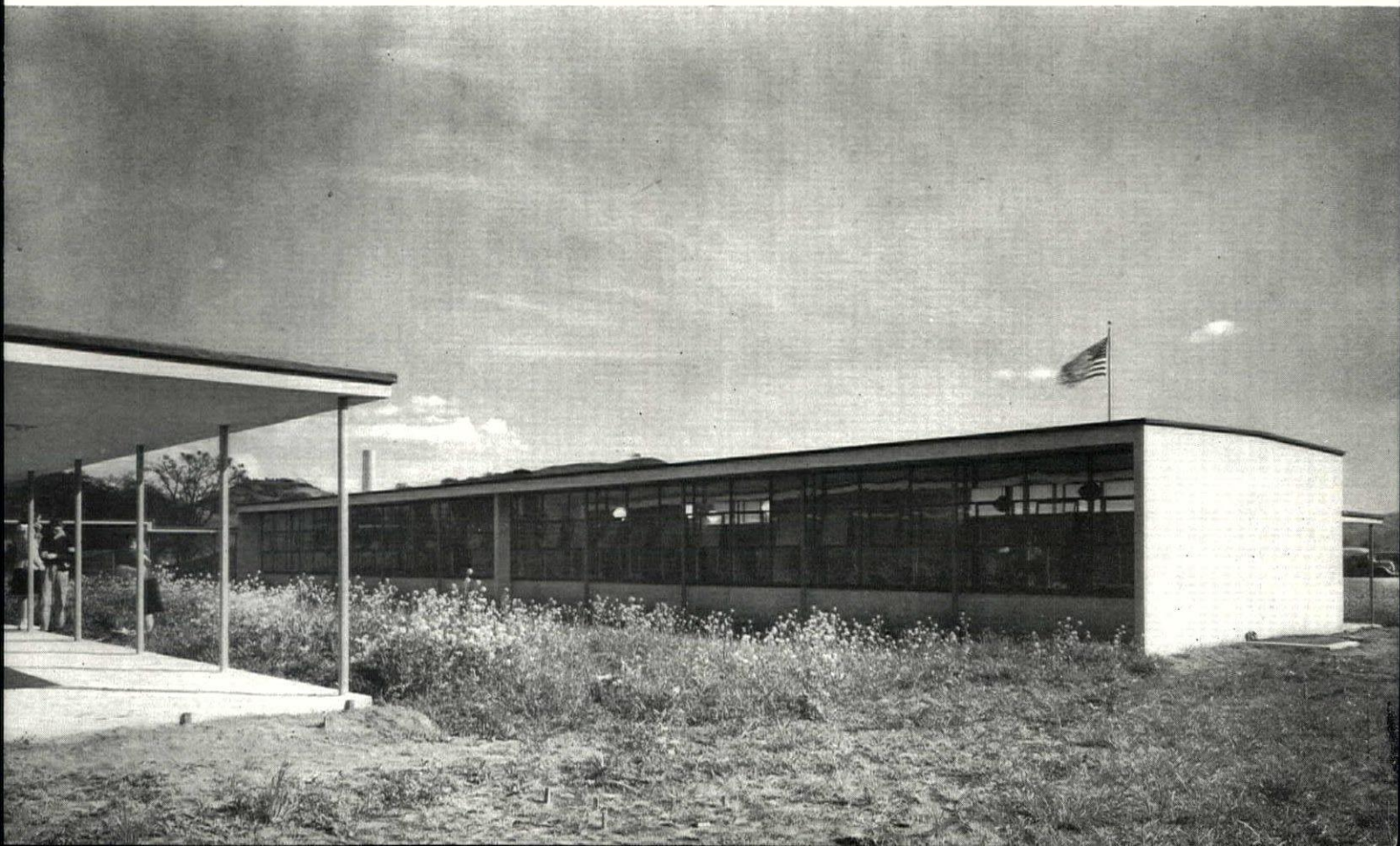
This ideal should affect pre-eminently the problem of housing and community form. That community or that housing group will be most successful in which each inhabitant has the greatest opportunity to develop his own individuality, in which each feels himself a "person" and not merely a member of a class. This same attitude should apply to residential developments for all economic levels.

But there is another element in democracy which must also have its effect. Not only is each individual in a democratic society allowed to be himself; each individual, each self, is an integral part of the co-operative working whole which is society. His selfness must not be allowed to interfere with the selfness of others. Just as in law there is a continual search for the limits between anarchy and co-operation, so in architectural communities there must be a continual search for basic community harmony as well as for individual expression.

To understand the architecture which the future should bring, we must therefore understand people—their extraordinary variety, their creative differences—and yet we must also understand their basic desire, when unspoiled by outside pressures, to help one another and live together as fellow beings. We must understand and respect the fact that there are people who like urban conditions, those who like small communities, those who like the solitude of country living. We must understand that even in a single urban community there are people who like the privacy of individual houses, and others who prefer the ease and freedom of the co-operative services of an apartment hotel. There are people gregarious, and people solitary. It is no impossible task for the community planner and the architect, working together, to take care of all these types, to give to each the kind of environment in which it can flower in the most creative and, at the same time, most socially-useful ways.

If this is true, then one of the greatest sins against the spirit of postwar architecture would be standardized monotony. Standardization of house unit or of apartment layout may, to a certain degree, become inevitable, owing to the industrial development of prefabrication, in whole or more probably in part. But of the monotonous rows of identical buildings, spaced at approximately equal distances, which have been too often the results of much governmental housing in the past, there should be an end. The average man—the congressman, for instance, who is sometimes voluble on the subject—is right in objecting to the soul-killing dullness of any such community conception. Such groups have neither the quality of homes for individual families, with all their differences of background and ideal, all their differences in the way their leisure time is employed, nor the gracious harmony which may result when individual standardization is accepted for the sake of the greater beauty of the whole. They are barracks essentially, and the idea of the barrack *must* be the submersion of the individual within a class. We must get rid of the "low-cost housing complex" and, whatever the cost of the buildings we are working for, we must build not for an "income level," but for the people.

Classroom wing, Acalanes Union High School, Calif., Franklin and Kump, Architects. Prefabricated only in the sense that standard materials were used, with interior partitions movable to accommodate varying class sizes, this school is an example of flexibility in design and an architectural expression of the most suitable materials available at the time. (Esther Born photograph.)



This will affect, first of all, the question of community scale. Whether or not a group makes an attractive geometrical pattern, as you see it from a plane six thousand feet in the air, is, to a person who lives in the community, a completely meaningless consideration. It has been said that air travel has brought a new dimension into architectural design. Yet, even if the man of the future comes home from work in his private helicopter, he will be conscious of the air view for but a few moments—a microscopic fraction of his day. What will really count to him and to his family is the appearance of the community as one walks around it on the ground. His wife—cooking, keeping house, shopping—and his children—going to and from school, playing out of doors in the sun and shadow—are conscious of, and their visual life is conditioned by, the views out of their windows and what they see in their community in the course of their normal activities. They will realize whether or not there is in the community some place—around a social center, a group of shops, the town hall—where they may meet their friends in an atmosphere that is beautiful and serene and open, where they can feel, “This belongs to me; it is important to me and I am important to it.”

If this is true, then I feel we must reconstitute our whole concept of housing communities. Any community, it seems to me, will in the future consist of several different types of shelter. There will be different building heights; there will be many different types of layout. The young married couple without children, or the older couple whose children have gone out on their own, may perhaps prefer to live high above the ground in a tall apartment—perhaps with a co-operative restaurant within the building. The family with children will want to find either an apartment of sufficient size, closely related to play space outdoors and with sufficient indoor area so that little John and his electric train are not always underfoot, or perhaps a row house with its own back yard. Every housing group of any size should contain all these elements, and the idea of forcing families of all sizes and kinds into buildings of one type will appear the ridiculous denial of individuality which it is. The kind of implied segregation which has followed the development of certain very large and very monotonous USHA developments in the past is, I believe, a danger to society and one of the reasons why there has been so much hostility on the part of many estimable people toward the whole housing movement.

This new attitude must necessarily develop entirely new types of building.

If scarcity of land in certain locations forces buildings of great height, we may see new kinds of roof use, new kinds of stepped silhouette, to give greater numbers of apartment dwellers the benefit of outside play and sitting space. We may find combination buildings in which tower types with small units may be combined with lower, spreading wings of perhaps only two or three stories more closely related to the ground. Above all else, to realize these ideals, we must

Castle Village, New York City, George Fred Pelham, Architect. Built for the real estate market in the late thirties, these apartments are so planned that nearly every unit has a view of the Hudson River. The site helped the designer by causing abandonment of straight alignment. But their monotony and extremely intensive use of land—forced by real estate requirements—may tend to transform them into another group of “Park Avenue Slums,” as the deluxe development along New York’s Park Avenue has been nicknamed. (Sozio photograph.)

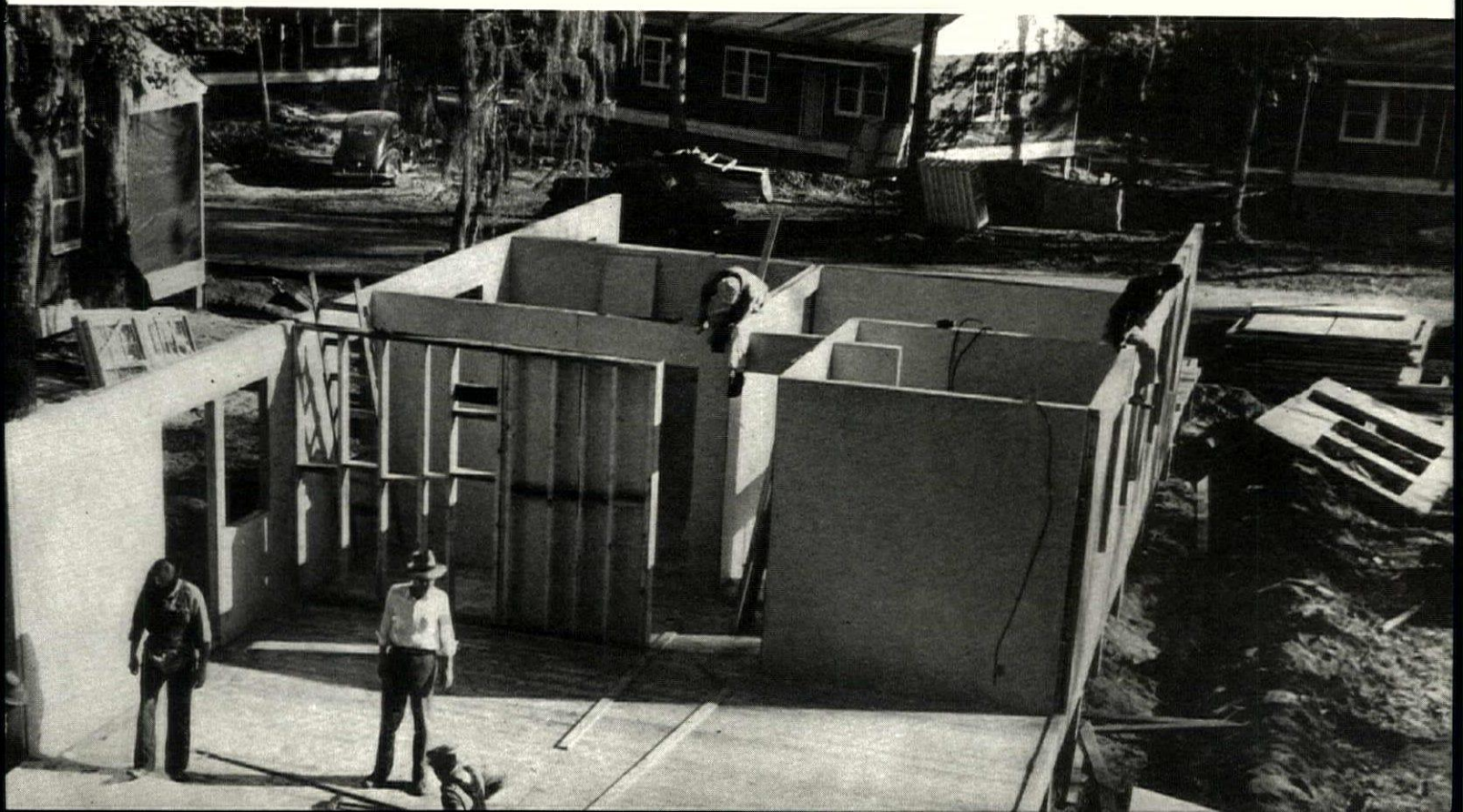




Typical Vanport Apartments, Vanport, Oregon; Wolff and Phillips, Architects. Commonly called "Kaiserville" because it was built for Kaiser workers, designed and built in a hurry, this war housing project is a vast array of repeated units. Perhaps there wasn't time for adequate study. But contrast it with the photo below. (Leonard Delano photograph.)



Above, a prefabricated multi-family dwelling, Sussex Gardens, Rye, New York, built by American Houses; Holden, McLaughlin and Associates, Architects. Aside from esthetic questions, the structure provides individuality and charm. Below, progress photo of a typical panel construction for prefabricated houses. Is not emphasis on the "gadget phase" of prefabrication some years behind the times? This is not architecture; even the jerry-builder takes into account his buyers' tastes—at least superficially. (Photo above, Rodney McCay Morgan; below, courtesy Upson Co.)



see that the central bodies—either governmental or financial—which will control this new building are completely divorced from that hankering for standardization in type which produced the so-called “Park Avenue slums” in the high-cost market and the flat monotony of Terrace Village in Pittsburgh in low-cost housing. And we must have in architects a complete departure from that kind of past-bound thinking which sees in the words “apartment house”, “row house”, or “housing development” a series of conventional pictures, all cut-and-dried and merely waiting to be modified here and there to fit a new site.

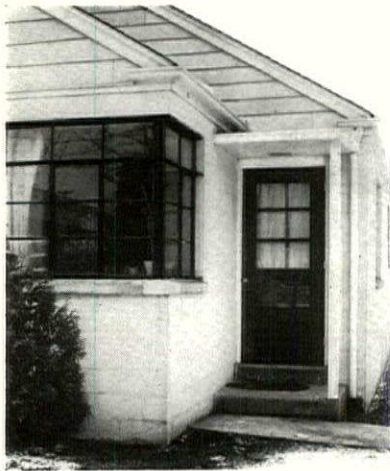
Perhaps the most expressive example in contemporary architecture of the kind of development we should be able to expect is furnished by the revolution in school design which has been so noticeable in the Middle West and the Far West in the last ten years. The best of the new schools are human, intimate, designed for children for whose use they are built. One feels that the unit of measure which has controlled them is the measure of the child personality. Just so, we may hope for communities in the postwar period which are as definitely to be measured by the wants and needs, the desires and ideals, of adult individuals.

Somewhat the same kind of freedom of form, generated by humanity of ideal, has distinguished large numbers of one-story houses along the West Coast. There, too, graciousness and beauty and a kind of winning naturalness have followed when the real needs of persons have been allowed completely to dominate conventions of lot usage or house shape and the applied clichés of styles. The best of them are buildings designed not to be photographed but to be lived in. May not an architecture of a victorious democracy be expected to proceed much further along this path, as more and more people gain the right and the ability to live the lives they want, and as more architects learn what people really are and feel?

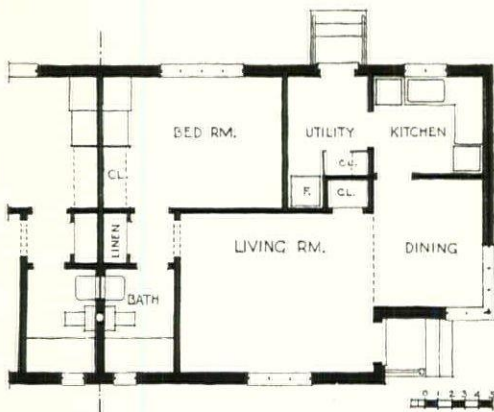
The freedom of form inherent in this conception entails no denial of the industrialization or rationalization of building itself. Industry is a tool; the greater the flexibility and power of this tool, the more easily will human wants be satisfied. It is only an unimaginative use of industrialized building which produces the monotony of repeated units. The reason for the stupid ugliness of many prefabricated war housing groups lies not in the machinery of fabrication but in lack of creative thought. Let us not forget that the same tool can produce the dynamic interest of William Wurster's Vallejo houses and Franklin and Kump's demountable schools. Let us not forget, either, that the personality—the human quality—of a community can be gained by careful, imaginative, and realistic site planning, by curved streets and varied setbacks, by studies of street, playground, or yard views, by architectural planting.

Moreover, these new tools have already increased enormously the alphabet of architectural forms. The increasing presence, for example, of curved lines in industrial buildings—owing to the use of laminated wood frames, lamella roofs, or various types of shell concrete construction—is an outstanding quality of today's most “practical” buildings. This is perhaps one of the most significant form trends in recent architecture. We may look forward confidently to a broadening of the esthetic imagination, so that it will cease to design merely in terms of T-square and triangle. This has been foreshadowed in much of the best recent work of Frank Lloyd Wright, where complete freedom from conventional thinking in plan, exterior, and interior has recaptured something of the three-dimensional poetry of the Pantheon.

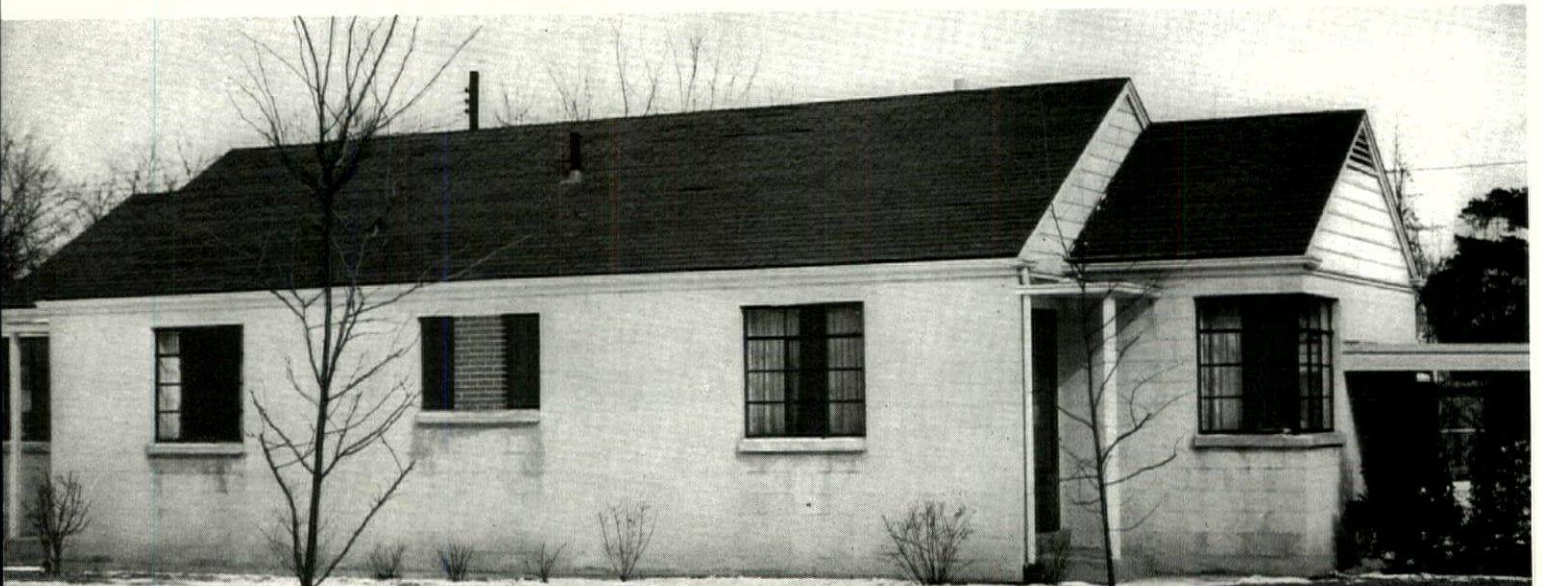
The architecture of the future, then, will be a democratic architecture, because its conceptions will be based on individuals rather than on class. It will demand of its architects the greatest human imagination—the ability to pierce through the inarticulateness of the average American and perceive his real ideals and desires. It will have a harmony and human graciousness which bear to the 20th Century the same relationship that the beauty of such towns as Nantucket or Marshall, Michigan, bore to the early 19th Century. It will be regional, because American culture is a complex harmony with many regional strains, and because of the variety of climates and of local materials. It will be an architecture freer from style clichés than any architecture in our lifetime, and as such it will develop inevitably a rich and expressive style of its own—American because built for us.

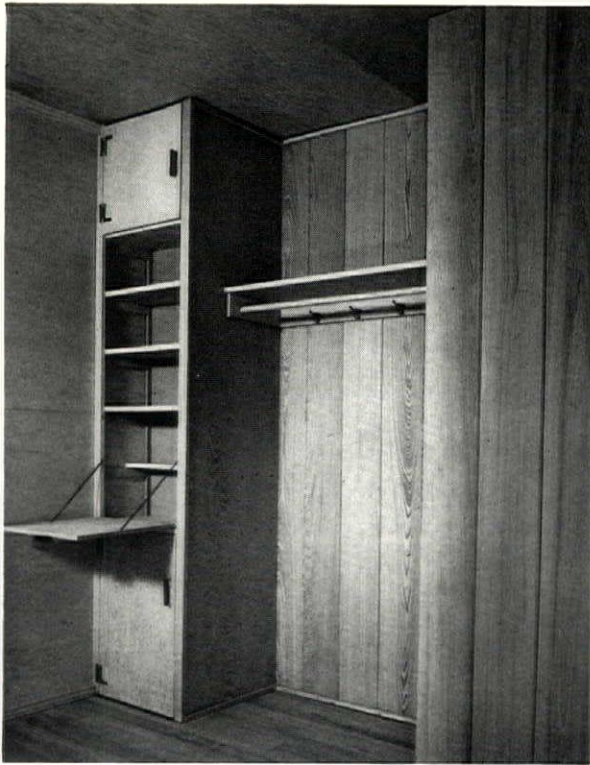


Corner entrance, Court Apartments, Yellow Springs, Ohio; Max Mercer, Architect.



Half plan of one building. There are two buildings on the plot, with two apartments in each; the plot did not provide room for four separate buildings, nor did the demand and the potential income justify their construction.





Interiors show the "egg-crate" construction of the wall panels, and provision of built-in furniture.

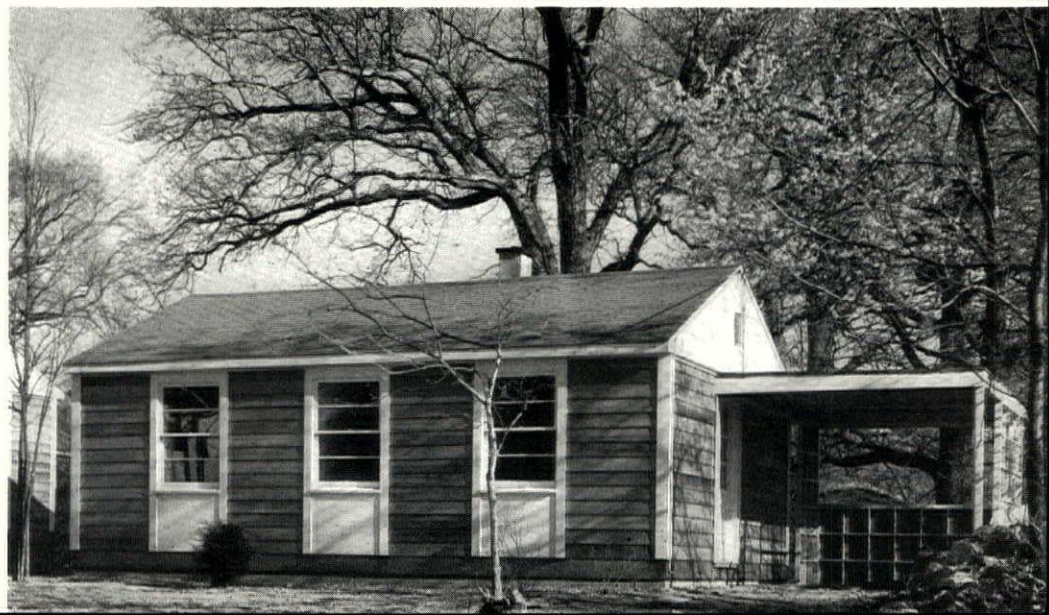


Plan of a typical "egg-crate" house; photos show a building whose plan was reversed. Platform at living room door is changed or omitted as site conditions demand.

On this page is shown an experimental demountable house built by American Houses near Peekskill, N. Y.; Holden, McLaughlin and Associates, Architects. Of panel construction, framed like an egg-crate, the finished result demonstrates the value of the architectural approach to this type of problem.

Whether designed in wood, as in this example, or concrete block, as in Max Mercer's Court Apartments on the facing page, or in any other material, these two examples demonstrate that even inexpensive construction can produce desirable results. Mercer was designing living accommodations for members of the faculty of Antioch College; Holden and McLaughlin were designing for war housing. Both make use of closets walled with plywood; Mercer had to include a solid wall between apartments to provide soundproofing. Both include carports rather than garages.

Design of the panel layout is simple. Window panels extend from floor to eaves; vertical joints between these and intermediate wall panels are covered by the window trim, which is continuous.



Discussions on Urbanism

The great program of urban rehabilitation, which seems likely to engage the attention of the postwar planners for some time to come, will call for the best thinking that can be assembled among a variety of technicians, including architects. Not only is the architect, because of his background of training and experience, in an excellent position to take a leading part in this program, but by widening his interests to include community design as well as the design of individual building projects he cannot fail to become a better architect. To approach this somewhat new field, however, the architect must learn more of the problems of the city as encountered by different experts concerned—lawyers, engineers, economists, sociologists, public administrators, to name a few. The Planning and Housing Division of the School of Architecture at Columbia University has, for this reason, established a study group composed largely of architects, which is meeting weekly for sixteen weeks to hear the views of a variety of these specialists and to participate in discussions rising out of the questions developed. NEW PENCIL POINTS will publish a monthly program report of the discussions and procedure.

1 The Planner's Position in Society Today, by Ralph Walker, FAIA; partner, Voorhees, Walker, Foley & Smith, New York. Author of numerous articles on art and architecture.

This seminar on urbanism was initiated for the following reasons: first, it is obvious that there is need of more, trained, all-around planners; second, that as the prime requisite of all planning is sound judgment the training of adult points of view might help in finding solutions to urban problems; and third, while no one professional group has the necessary background to comprehend fully the extent of planning needs, again it is obvious that through an amalgamation of the viewpoints of the economist, the social scientist, the lawyer, the architect, the engineer, and many others, it is possible to develop an understanding leadership. The country is in need of men who can coordinate the thinking of these many approaches to our life, weigh in judgment their values, and accomplish in action a planned-for result.

This seminar is an attempt to bring together adult minds of one professional group (especially architects whose normal practice is to coordinate needs) in contact with all the phases attending urban physical growth, the economic forces which have bearing on it, the social needs, and the ideal amenities which we find or desire in the large metropolitan areas of modern times. It is an attempt, in free and studied discussion of the problems of urbanism, to describe evident needs and their solutions, together with the political means required to make them effective.

This meeting as a beginning is devoted, quite properly, to the position of the planner in modern society. I am not going to treat it historically except as a point may be drawn. And, of course, I cannot hope to exhaust the possibilities of the subject. With all modesty I have neither the background nor the time at present to do so. I am going to outline merely some of the many and primary facets of the planner's relation in the modern world. Let me say that the planner's position is still one much in doubt and one in which pre-eminence has to be earned. While in general the idea of planning is gaining ground, the planner is still looked at with lifted eyebrow. Practical men who prefer opportunism, and who must get things done, resent any implication that momentary and hasty decisions are not sound. There is a tendency in all the world of practical affairs to say: "Let the future take care of itself."

I have thought we might later direct our discussion to two objectives—

- (a) How extensive can planning be in a democratic society?
- (b) To whom should the planner be responsible—the executive or the legislative power? Stated another way—which move nearly represents the democracy?

The following is indeed primary but it is a beginning. The planner may occupy a position as:

1. An individual in private planning practice,
2. A member of a governmental planning agency in literally hundreds of governmental branches—city, state and federal,
3. As a citizen on advisory committees or councils (public or private),
4. As a protagonist of ideas (either individually or as part of a group—public or private),
5. In industry or business—real estate, manufacturing, as well as other enterprises which have to foresee a future. In all of these he may operate either as a research man or a doer.

While the above possibilities would seem to be latitude enough, the planner, however, may work in a society which basically promotes or discourages actual planning. In other words, in a society

1. Which is democratic and where laissez-faire is the predominant ideal.

2. Which is democratic but where governments exercise a check on individual enterprise—make and enforce rules.
3. There is, however, a constant fear, on the part of some, that here in America we may be influenced by the early Italian and German models of Fascism, in which the state and industry supposedly plan and control national private efforts for the use of the state.
4. On the other hand, there are as many who fear the condition in which the state controls all activities and private enterprises no longer exists, i.e.—Stalinism, or Communism, or Marxism—whichever name you may choose.

It is obvious that planning will have a different aspect in each of the above societies, but one wonders if the position of the planner may be any happier in any one of these, for to further complicate the planner's position each of the following has made planning more necessary, but more difficult, i.e., a whole series of revolutions which have changed, again and again, the viewpoints of all men:

1. The social revolution which was to make society more democratic. But even in its beginnings men wondered. "Whatever assigns to the people power they are unable to wield in effect takes it away from them."*
2. The industrial revolution which created the obvious and enormous production facilities with which this war is being fought, and with which the world may, if it wishes, attain plenitude.
3. The economic revolution which first made gold a standard of all value and more lately developed the concept that effort itself might constitute a measure.
4. The transportation revolution which has made the world seem so small, although the minds of civilized men seem further apart than they did a hundred years ago. It is interesting to note how many times you hear—"The world is smaller, the universe has been narrowed." Almost as if this result were an easily understood abstraction. Who made the world smaller? What groups of people narrowed the universe? A few flyers only and now a relatively few soldiers.
5. And finally, the chemical revolution, called by chemists the discovery of a sixth continent open to all who have intelligence, which is bringing into question much that the other revolutions have achieved in maintaining widespread internationalism; so that we may ask, with some reason, if we may not now be able to remove causes of war by all staying at home. A world made by the George Washington Carvers might be the only one where full employment can exist.

It was but a few short years ago when, if you said the word "planner," you meant a man who superimposed a series of boulevards upon the city below without much idea of what was happening, except that the pattern achieved looked well, with the civic center as the real fruit on the bough—something that the Chamber of Commerce could use to attract the restless migrant leftovers of a pioneer civilization.

Men like Sir Raymond Unwin were unusual in that the community itself was their major interest. Few people thought of the surveyors who laid out the roads and planned the blocks, the new engineers who solved the water and sewer problems of the growing cities, as planners. Some cities, of course, had an idea that there were social and economic problems underlying the growth of the city, and zoning laws were a step little understood except by a few architects who took the pains to measure possible results.

*("A Time for Greatness," by Herbert Agar)

In late years there has developed, because of the impact of the depression, a new type of planner who, in place of doing simple town plans, came to believe that everything that related to life needed some research, some coordination of data, and then guidance by a planner in making the next step toward a better life.

Now we find the planner in every department of government—town, city, county, state, region, and national—and now we are told "Democracy can and must solve the problems of making an international mass production economy work, by maintaining high-level production and full employment, by achieving high-level standards of consumption for all people, and by using the earth's resources to produce an efficient high-quality environment." (From a resolution of the California Housing and Planning Association.)

Here you see in a relatively short time a jump in idea and ambition from the esthetic designer of surface beauty to the idea that says, like Archimedes—"Give us a place to stand on and we will plan the world."

At no time, however, have we really solved any one of these stages.

The blighted lands remain, the undernourished and badly-housed third still live without ambition, except as the war has changed this premise. Not that there are not many beautiful things in America—parks and parkways—superb—but oftentimes in the planning here was a bait for the realtor's trap. Planning in the sense of "conservation, development, and organization of our resources" is still talk to a large number of the people of this republic.

The traditional basis for democratic planning exists in two well-known phases:

1. Police powers (health, safety, and public welfare), and
2. Eminent domain (public need paid for at a reasoned price set generally by the courts).

These have been stretched a long way from the primary conceptions. Anyone who has followed the growth of court decisions in relation to zoning ordinances realizes how wide an interpretation can be given to public welfare. The Uthwatt Report is an extension in philosophy of eminent domain.

But in contrast to the growth there has been a rearguard action of property rights and privileges. George Allin, past president, New York Real Estate Board, was quoted recently as saying, "The fundamental idea of a city, or for that matter of any planning, is provision for the future and not a revision of the past." This was said in fighting an attempt at future elimination of nonconforming uses.

The following is an attempt to outline the basis for planning.

1. Planning seeks to substitute forethought for opportunist action.
2. There is a difference between long-range planning and mere coordination of current policies and decisions.
3. Planning seeks to use national resources of energy, materials and manpower intelligently to obtain the greatest distribution of their use.
4. Planning is the only way in which democracy may secure stability, security, through the full employment of hands, skills, and forces.
5. Planning is the medium through which society secures its tomorrow and by which there can be orderly development in social experiments.
6. Planning is the only possible means by which administration can accomplish its aims without waste.

Hardly a day goes by without some remarks concerning planning being seen in the daily press. They are of widespread origin, coming not only from many government agencies, but also from many pri-

Comments:

Would it not be logical to make a breakdown of planning as a means of generally segregating the differently involved phases, as follows: (a) Social Planner, (b) Economic Planner, (c) Legal Planner, (d) Research Planner, (e) Design Planner.

As I understand it, the fundamental principle underlying urbanism in its largest sense is to provide for the social and environmental betterment of each man, woman, and child, along economic and democratic lines. As an architect, my theme song to the public in this subject is, "Planning by Architects"—we are trained for it—have been doing it all our lives—second nature, etc. We should admit, however, that there are lawyers, doctors, scientists, and business men who have proven themselves to be good planners—yes, even some politicians and engineers. We have no corner on administrative and executive ability but we do have something that these other administrators and coordinators do not have, and that is a broad and thorough knowledge of design—basic design—integrated design—and we have the "know how" to transmit these designs from the realms of imagination to flesh and blood reality.

We are making a mistake in deliberately ignoring the war and the postwar world. Of course the war and postwar conditions should have no effect on planning design from the standpoint of desired objectives. If it is true that planning in its full meaning is directly affected by and related to social and economic conditions, then we as Design Planners and coordinators must face the fact that this war and its after effects will materially affect all social

and economic values. Thus we may be forced to design our planning in stages of development leading to the desired long-range objectives.

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ivate business and industry groups. Not all of these agree as to principles or means, but all admit the desirability. All these interests have been heightened by the war and the evident need for the re-employment of the men who will be returned from military duty, but with this interest has come a realization that problems of blight, slums, dust bowls are capable of solution and that by planning—by forethought—a job can be done.

The "planner," then, has the world ahead of him. Democratic society is being prepared to accept the concept—through desire and fear—that, by planning, a better world is possible. Granted that there will be many compromises of ideals, there exists for the first time since the founding of the country, an appreciation that not only is a thoughtful coordination of our social aims possible, but that the wealth of the country can be better distributed without sacrificing private initiative.

The ideal of citizenship may be expressed in the famous words of Pericles: "Our citizens attend both public and private duties and do not allow absorption in their own various affairs to interfere with their knowledge of the city. We differ from other states in regarding a man who holds aloof from public life not as quiet but as useless."

A large part of the planner's job is to get a democratic society to become truly so and not a series of pressure groups.

In my community, within my time, the local party in power stayed there by the token payment of a cheap cigar to the men, and a bag of candy to the women.

This lack of responsibility toward civic duties is in marked contrast to what the whole theory of democracy is based on. This is perhaps well stated in "Democracy in America," by De Tocqueville, who saw a meaning in American society in 1831: "The native of New England is attached to his township because it is independent and free; his cooperation in its affairs ensures his attachment to its interest; the well-being it affords him secures his affection; and its welfare is the aim of his ambition and of his future exertions; he takes a part in every occurrence in the place; he practices the art of government in the small sphere within his reach; he accustoms himself to those forms which alone ensure the steady progress of liberty; he imbibes their spirit; he acquires a taste for order; comprehends the union or the balance of powers and collects clear practical notions on the nature of his duties and the extent of his rights."

This is the development once again of the community in democratic life.

* * * * *

Let me sum up the questions.

1. How much planning can democracy attain? Or—
2. How extensive can planning be without interfering with private initiative?
3. Should the planner act as a research man or administrator?
4. To whom should he be responsible?
5. Should he be an individual—a commission—a bureau?

Finally—let me state my belief that the planner must not forget that the art of planning seeks the ideal of beauty, of order, of a planned community in which the citizen develops his individual expression within the self-imposed discipline of the community. Referring again to Pericles and to Athens: "We have provided education and recreation for the spirit, and beauty in our buildings, which delight our hearts by day and banish sadness."

and economic values. Thus we may be forced to design our planning in stages of development leading to the desired long-range objectives.

If this proposed planning is for the complete betterment of every man, woman, and child in the nation then, in my opinion, this planning becomes too involved with national welfare to be other than an obligation of government. Elected officials of proven abilities in each field of planning, selected upon the basis of high professional standards, may be the answer.

Would it be a reasonable procedure for the governmental Social Planner, Economic Planner, Legal Planner, Research Planner, and Design Planner to write the program, establish the requirements, and accept responsibility? In my opinion, the actual design planning in all of its ramifications should be done by architects in private practice.

Aside from the many basic and problematical issues involved such as financing this work, educating the public to the values involved, avoiding regimentation, mediocrity, legal and political difficulties, etc., there is another basic issue. Is the public completely sold on the idea of having architects in control of this proposed planning? Frankly, I doubt it. I believe the architectural profession must prove itself capable of doing the job effectively and economically. Why not take the initiative and organize a specific planning program along dramatic and factual lines? If we are going to take the lead as planners let's take the lead now.

—Ralph Moreland Karger

(Continued on page 72)

Discussions on Urbanism

Ralph Walker's question, "How extensive can planning be in a democratic society?" is certainly one of the most pertinent matters to come before the seminar on urbanism. One answer is that planning in a democracy can go as far as public support will permit. Public support for large-scale planning can only result from a large-scale educational program to teach the people of this country what planning can do for them. That is why Lorimer Rich is so right in pointing out that those of us who believe in planning should initiate widespread discussion of this subject in the press, on the air, and on the platform. Too much planning is being done "in private." Vast postwar projects are contemplated which will affect the lives of everyone in the United States. If planning is for the people, let's make sure the people are for planning. —Howard Myers

It appears self-evident that the State must be the propelling force. To avoid the wrong type of bureaucracy, public opinion must be educated and we, in turn, study how qualified individuals can participate without necessarily entering into government bureaus.

The architect, now, sits back until he is invited. The objective of this group must be to analyze the value of various experts, be they architects, engineers, real estate men, financiers, sociologists, etc., so that their part in a huge program may be understood and so that when the time is propitious they can function without bickering and without loss of time. Instruction of the public is all important. —Ely Jacques Kahn

I felt that Mr. Walker's five questions on the limitations and functions of the planner were meant to stimulate a discussion from which a common philosophical background for planning could be worked out. The goals and limitations of planning once agreed upon, a foundation for technical discussions later would exist. I am wondering whether a definite approach to planning has been crystallized in the minds of other members of the group. I reached certain conclusions on the main points of the discussion, which I should like to feel others reached as well. These are:

(1) Planning in America must take place within a democratic framework. There is often a decided antagonism to planning, based on misunderstanding or ignorance as to its aims. For example, the recent survey on "Urban Planning and Public Opinion," made by the Bureau of Urban Research of Princeton University, indicates that there is no widespread dissatisfaction among city-dwellers with cities as they exist today and, consequently, no recognition of the need for urban planning.

The solution to this problem, in my opinion, is an intensive public campaign of education, propaganda, or salesmanship (whatever one wishes to call it), sponsored by those who can now see the benefits to be derived from planning. Would it be possible to gain the financial support of endowed foundations such as the Rockefeller Foundation or the Russell Sage Foundation for a program of public education on planning?

The actual execution of long-range planning work, it seems to me, should not be determined by the chance winds of public opinion. The planner has a social responsibility even more so than the doctor.

2. Planning should be based on small neighborhood units but include large comprehensive schemes. As I remember, this paradox was left largely unsettled in the discussion. It seems to me that a good solution would call for a series of neighborhoods, which would be political as well as planning units. In each of these, democratic methods could be exercised. Planning for large areas, however, might better be handled by technicians not directly responsible to the people. A democratic control might be provided by the use of the referendum.

3. An expressed goal for planning is necessary. At no time during the dis-

ussion was the desirability of planning questioned. The necessity for planning was assumed. I should like to bring up the question: "Why have planning anyway?" This is not because of doubt on my part, but rather to bring forth an answer that would make the goal of planning clear and unanimous. The Town Planning Charter of the C.I.A.M. has made some attempt at this, but I think something of more popular appeal could be done. Could this series of discussions formulate such a doctrine? —Mark Fortune

It seemed to me important, as Arthur Holden said, that the group was concerned not with the rare impulses of the individual architect or planner but with the welfare of the community. But as he did not say, I considered it a sort of penance for past sins. I may be unjustified in my conclusions, but I have always believed that the responsibility of the architect and builder was woefully underestimated in measuring the mores of our time.

Whether we accept the war as the springboard for our thinking, as suggested by Mr. Breines, or whether we project our thinking at once to the inevitable consequences of the current social and economic upheaval, it seems to me that Lorimer Rich was eminently sound in suggesting that this group is the cream of the crop, not exactly representative of the striving designer reaching for the freedom of expression; whether it has or has not measured the full significance that will emerge as a result of this meeting of minds, it is most likely to find itself in the position of administering the formulae which will shape the purposes if not the design of the aspiring artist, and assuming a broadly educational function of spreading the planning gospel.

The ideals embrace more than the credos of a political platform or the fanaticisms of a style or fashion. Actually, these ideals create the culture of our age. The security and dignity of man in his natural environment can be threatened under almost any set of "isms," and the free play of artistic expression will not save him. What can protect and fortify him are the attitudes of the men who finger the potentials, make the compromises, arouse the minds of men and the humanistic imagination of designers to the stirring possibilities of a rich nature and a capable machine. —Mary Sklar

To the two major questions put by the chairman—how extensive can planning be in a democracy, and to whom is the planner responsible—my own feeling, with respect to the first question is that the extent is limitless, just as our war effort. With respect to the second, the answer is, of course, "the People." But that is too simple an answer. Agreement may come from the group that some sort of overall, Federal control by an appointed agency delegating controlling powers to other agencies in districts who in turn exercise some control but leave to the communities the initiating of, and power to carry out, projects, will be the answer. This would make the actual planners also the agencies for carrying out the projects and would tend to reduce the theoretical aspect of planning.

I carried away from the meeting a feeling that I had not made clear a point relative to the discussion on the question, "Is TVA a good example of democratic planning?" The TVA deals with two things (a) natural resources and (b) community life. As to (a) I think no dispute will arise to deny the just democratic principle in dealing with it by the Federal Government. As to (b) I believe it was wise under the circumstances to deal with it as was done, but I am opposed to the principle. If the principle were extended without restraint to the communities of the country at large, there would result a Federal overlordship of the way of life in these communities disastrous to the principle of local self-responsibility which I take to be a rich asset of democracy. There is nothing small in the problems of Rutherford, N. J., Chappaqua, N. Y., or of any other American city or town. The size of the actual problem is irrelevant. The size of the principle is immense. —Edgar I. Williams

2 American Standard of Living, by Dr. C.-E. A. Winslow, Professor of Public Health, Yale School of Medicine; President, NAHO; Chairman, New Haven Housing Authority.

The recognition of the importance of health from the standpoint of the architect is ancient. Let me remind you of some things Vitruvius said eighteen hundred years ago. (Here Dr. Winslow quoted from "Vitruvius on Architecture," edited by Frank Granger; G. P. Putnam's Sons, N. Y. 1931.)

Of the factors that should determine the selection of an area for human occupancy, the first is climate. If the conceptions which some people hold of worldwide reconstruction and planning after the war are to be realized, we shall have to decide where cities are to be built and where developed. Even if Vitruvius' conceptions of the particular ways in which climate affects planning were faulty, climate is still vital. Really great civilizations have arisen only under certain conditions of climate, including moderate temperature and humidity and some degree of variability.

Second is the problem of the relation of the site to be developed

to the fundamental food and other supplies of the area. I suppose all of us in recent years have become interested in geo-politics. You will remember the analysis of Europe and Asia as made up of what is called the heartland, with the coastland surrounding it, and the belief that the heartland controls. What is happening now is probably an example. Great cities have grown up on the coast, and yet the power and glory still rest in the heartland. In this continent we are unique—and fortunate—in having both the heartland and the coastland under one political government.

In a given area, the individual home must be first a part of a well-thought-out plan. We hear much today about prefabrication. Suppose prefabrication did develop completely, on a large scale, and were put into force without planning. I think the probable result would be chaos, worse than ever known before. The house is not a unit in itself. It is physically a part of a framework—it must be related to sewerage, and to a power and utility network. And a home must be a part of

a whole complex of social and human relationships.

Let us consider some of the principles of *sanitation*. There should be legislation against building a development of more than a certain number of houses without first having a study made by the State Department of Health. Then comes the problem of control of *mosquitoes* or other dangerous *vermin*. We have come to realize the importance of this more clearly in recent years. Today we find a number of disease problems which have their roots in non-human environments. Bubonic plague has a dozen world centers among wild rodents. Our own reservoir of plague infection extends through eleven states in the west and is apparently spreading eastward. Yellow fever infests broad belts of South America and Africa. So the selection of sites for cities, for urban or rural development, must take into account such local hazards.

There is also the question of *safety*. I don't know whether the hill cities of ancient times were built primarily for defense against human foes or against malaria from mosquitoes in the lowlands. As many of you know, the hilltop village was originally the norm for states like New Hampshire and Vermont. Later, when the danger diminished, people moved down to the more fertile lands. This problem of safety has a new, modern manifestation. We have to build for a dispersed population, scattered through the countryside so we can't be successfully bombed.

From these physical, environmental things we come to the *building* itself. This is the subject with which the Committee on Hygiene of Housing of the American Public Health Association has been concerned for some years. We have divided our analysis of the basic principles of health into four main headings: Satisfaction of physiological and psychological needs, and protection against contagion and accidents.

(Here Dr. Winslow quoted at length from principles enunciated in "Healthful Housing," a booklet issued by the Committee on the Hygiene of Housing of the American Public Health Association in 1939.)

Transportation within the city includes provision of streets that can be walked on, and connection of the city with other areas vital to it. The recent, splendid city plan for New Haven is sound because it takes into account industrial, commercial, and human needs, but it was built really around transportation. Again, I think it altogether possible that air travel may necessitate a certain reorientation of urban and regional planning.

Probably related to transportation is *access to means of livelihood*. Some of these industrial plants are excellent examples and will probably be continued. Some will grow and flourish and some old ones will decay. Some New England cities are quite awake to the possibility that far-reaching industrial changes may take place that will affect them greatly. Many of the housing developments being built in industrial centers are bad. I should like if I were in Mr. Blandford's position to see a large bulletin board put up outside each war project—"This is war housing. It is rotten and ought to be torn down at the first possible moment. There will be an opportunity to rebuild, to build new centers." In any case, this is a factor the planner ought to take into account.

I cannot predict—I am not a prophet. But, of course, the planning and particularly the housing that is to come after the war will be affected by the *economic situation*. We are told now by many that we are going to move into an era of plenty; certainly we must look for a progressively-rising standard of living all over the world. I should, however, like to point out one danger in that connection. I see very distinct signs of it among those who do not like the present-day programs of social welfare. They are now saying, "You won't need social security any more because everybody is going to have plenty of income." I believe we are going to move gradually to an era of wider and wider distribution of wealth, but it isn't going to come when the guns cease firing and we can't afford to discard the various methods that have been developed for achieving social equilibrium. Let's not be too hasty in discarding them, although we may hope that the number who will need public housing will be less in the future and that ultimately this class will vanish, but I do not think many here will see that happen.

Recreation is much too lightly dismissed. Our approach to the problem of living dates back to the day when man had to labor many hours a day and came home to fall into bed. Now we have shorter hours of labor, longer hours of leisure, and inevitably a shortening of the working span of a man's life. The old system of education, especially in elementary schools, was designed to help man earn a living. The child who is born today is going to spend two-thirds of his waking time in something other than earning his living. There should be a real emphasis on education which will enable him—

and adults as well—to use that part of his time satisfyingly and productively.

Access to Commercial District: The cracker barrel by the stove in the country store is a fundamental Americanism. Access to the commercial center is not necessary just for people to buy; that is only one phase of the broader value of the market places, which also furnish a means of inter-communication, vital to wholesome community life.

Social Intercourse: One of my pet theories has to do with moving the national capital from Philadelphia to Washington. As the situation was, Philadelphia was the political capital; it was also the economic, business, and the social capital. If it had remained the political capital, it would unquestionably have developed into a center of national life like London or Paris. It would have maintained its industrial domination. It would have been the business capital instead of New York, and the whole history of this country might have been different. Political, business, and social leaders would have had points of contact. Instead, we have today a political capital in Washington, where there is no real knowledge of public opinion. New York is the financial capital, and there is no social capital. In London the banker, the duke, and the statesman dine together. They see each other at the club. Their ideas are exchanged. They don't regard each other as devils.

Then there is *education*—contact with schools, and with various other forms of education, for adults particularly. More and more I should expect, in the future world, organizations for adult education, with which we have done very little here. Perhaps some of this will not be necessary. Maybe the radio will take the place of some agencies, but at present the school is vital.

The final one of these structural essences is *religion*, the church; you will find in each New England village the hill crowned with its steeple. The church is the center of village life, and that relationship between the church and the community remains.

There are a few more things on my list, of a more vague and mystical kind. It seems to me that the city must be designed with the recognition of the human need for the two opposing elements of order and democracy. The palace and the jail were symbolic of the regal and the military governments. Perhaps some of the things we are doing today can be considered symbolic of the democratic government. Compare the Gothic city—walls around houses clustered around a spire pointing to the sky—with a good, modern housing project. In the latter, the recreation places, the central rooms, the whole laid out with space around it, catch the eye. One is based on the king and royalty, the other is based on human daily life. One is based on heaven and the other on earth, and daily human life. What the spire of the city and the planning of the housing project stand for are significant and necessary contributions to social health in the broad sense.

Finally, this city must be something splendid and proud, something that may inspire the loyalties of the people, not just a place where people exist. Some people laugh at Main Street loyalties, but I think these are among the best things in our civilization. I like what George Newman said: "What a strange and mysterious thing is a city! It is both a dream and a reality, a past and a present, the houses, workshops, and shrines of a commonwealth. It is the hearthstone of the people from which they measure the world. It is their dwelling place, the cradle of the living and the sepulcher of the dead, a home in the minds of men where their glory remains; an unseen army passing forth through the Horn Gate and Golden Gate and the gates of the west. It is the embodiment of the arts and crafts of man, the mart and market place of his merchandise, his rear guard from the enemy and his hiding place from the tempest, the beginning and end of the work of his hands. For men make cities, and cities make men; 'the walls of our cities are men'."

Comments:

Mental and emotional sickness being 50% of all illnesses, we need 50 square feet more per family than is allowed at present. Little things occurring every day can make life exceedingly unhappy. The better integrated the family, the less bothered they are with "little" things. How near to the ground need one live to have a healthy reaction to life? Lack of space, within dwelling and without, is one of the big problems. Need of window space to feel not shut in.

Leisure: Where work and leisure fit perfectly, you have the ideal (rare). The job problem is one of the cardinal factors. Need to determine whether people are taking advantage of recreational opportunities. Recent poll showed most time taken by 1) eating; 2) conversation. The urban situation may accentuate psychiatric difficulties. Breakdown of family life may be greatest fault. Children like games that pertain to life. Need for progres-

Discussions on Urbanism

sive education in recreation. Are recreational facilities adequate? Will families and individuals have sufficient privacy in future housing?

Postwar Planning: Greater cooperation needed between officials and workers. Much architectural education needed to make best use of material at hand. Washington should not be the instigator in recreation; the city should be. Building neighborhoods rather than individual homes should be the goal. We who realize problems need to educate others. —Miss E. Rogers

The vital situation, as I see it, depends on the extent to which war problems force us to principles which cannot be fought now. When it comes to public housing of a permanent nature, where financing over a 50-year

stretch assumes that the buildings will be intelligent investment of public money, it seems extremely important to analyze how wise the program imposed on the architects at the present time may be. It is all right to assume that working people prefer to eat and gather in a combined kitchen and living room, but the problems of the growing generation of children who want privacy for entertainment distinct from their parents, of a little more of the human quality in the housing scheme, is going to be of far greater importance.

The one specific point which Dr. Winslow emphasized is the question of loyalty and affection for a neighborhood or a home, and it is very hard to see how people thrown together in the antiseptic boxes which have been built can fall in love with the result. —Ely Jacques Kahn

3 Cities Are for HUMAN Beings, by Robert S. Lynd, Ph. D.; Chairman, Department of Sociology, Columbia University. Author of books on economics and sociology.

Great cities have been spoken of as "wens of civilization." Likewise, one might speak of modern business corporations as impersonal monsters devouring human life. Or some people regret, in the spirit of William Norris, that we have left behind the handicraft era for the machine age.

I assume that all of us agree that these, and like strictures on contemporary institutions, have some justification; but one does not throw out the baby with the bath. We need to recognize that cities are extensions of man's social environment, and as such, potential aids in effective living. I say "potential" because neither a big city nor urban decentralization is necessarily a facilitator of life or a sign of progress. Change is apt to mean progress only to the extent that it represents the selection and following of positive criteria extending the potentialities of human living. A basic problem the planner confronts in America is that, as planner for human welfare, his aims run counter to the American tradition of casual growth primarily in pursuit of profit.

I need not point out to you people the basic crudeness and human irrelevance of the factors that are allowed to control the placement and growth of our cities.

So I take it that planning, unless one is a very docile planner, involves the selection of some other criteria than the sheer ability to make money as a hired man for this largely casual status quo, and the use of such a selected criterion as a policy blue-print in changing the prevailing ways in our urban American culture. The planner's responsibility is to try to move American culture in a direction that makes more human sense than does its going line of development.

As to what a planner's criterion is, certainly it is the meeting of people's basic human needs. How are we to get at these? The assumption in our culture is that people are free and rational and know perfectly well what they need. This tends to deter the planner from saying that he knows better than the common man what the latter should want. Or if he tries to prescribe for people what makes sense to him as a planner, he may find that the people just are not having any, thank you. Or, if he asks people what they want, they are apt to say that they want what is customary or conventional, and he feels silly about his bright idea!

But I do not believe the planner can stop there. In the face of our faith in the solid horse-sense of the common man, I do not believe people may be relied upon blindly to know what they want or what is best for them. If this sounds undemocratic, I do not mean it so. I believe there is no ultimate point of reference in democratic society but the wants of people, the mass of common people. But individualism has abused, exploited, and battered men's capacity to respond effectively. Our culture, operating as allowed to operate, has probably been *confusing* men and making them socially illiterate faster in the last seventy-five years than all of our agencies of communication have been managing to make them literate. And I think this is true despite our better schools, printed matter, radio, etc. Modern urban living is so complex and people tend to be so insecure, defensive, harassed and, as a result, so rigid in certain ways of behaving, that choices by such persons under pressure tend to be too often neither free nor representative of the real wants of the people or of what is best for them. Not of course at every point, but by and large.

I believe we Americans are tending to drown in our boasted freedoms. Take our freedom to be private and alone. In a big city one must have only one tie to society—the tie to a pay check. As a result, our large cities are full of lonely people. And despite the fact that it is unnatural and distasteful for human beings to be lonely, they will fight for the right to be left alone. This amounts to a loss of

one's sense of self, since there is no self but a social self, a self with other people.

There is a general loss of positive values in our industrial urban society which constitutes a dangerous social pathology. In Rountree's study of York, England—the first study was made about 1900 and the restudy late in the 1930's—he says, "Among a vast number of people, football pools have become obsessions and actually constitute the chief interest of their lives." That, I submit, constitutes a serious indictment of modern urban society. And I cite this debasement of human wants in support of my point that we may not safely take the expressed wants of poverty-stricken, battered people as our guide as planners in deciding what to give them.

People fear the loss of their freedom of choice to planners. But consumers, apartment renters, home buyers do not have real freedom of choice. The prevailing character of our so-called "free" market is the widespread tendency for people to accept second- and third-best approximations. As the advertising journal, *Printers' Ink*, has commented: "Consumer demand" is too strong a term for what goes on in the market today, and "consumer acceptance" is a more accurate term. If people know and can get what they really want, why is there such a turnover of apartments here in New York every October? I don't believe we need fear social planners as much as the newspapers tell us we should.

If people are considerably confused over their wants, it forces you planners and the experts available to you to be prepared to state your own humanly imaginative version of people's wants—and, I believe, of what they *ought* to want if they knew as much about a given technical matter (be it nutrition or housing) as experts do. I therefore believe that the planner inevitably becomes a political and moral agent in society as a trained surrogate for the socialized intelligence of society. His job is not to deal only with familiar, given things, but to be the constantly imaginative interpreter of human needs and new potentialities. To do this involves pushing constantly for positive new developments.

Some of you may fight shy of this idea of planners as essentially political and moral persons. But I personally think that a democratic society should test the planner by the extent to which he is continually and creatively engaged in sorting out and standing for a coherent set of things that he will stake his reputation on as good for people. We should be as experimental as we need to be, but there comes a time when anybody who has studied a field and can rank as an expert in it has a right to suspend indecision temporarily and say, "Up to this date, January 21, 1943, in the light of the best we know and in view of the need of society to begin acting on *this* problem, the following looks like a reasonable line of action."

What are some of the things that people today *should* want? To cite a homely example, I suspect that under present housing costs per cubic foot, with the accompanying tendency to have smaller rooms and a loss of privacy, the dining room in small houses, and especially in apartments, is a socially wasteful anachronism. People need that space for another bedroom, for a larger living room, for a game room, or for a quiet room where you can go off where you can't hear the children at the radio. And I say this in the face of the well-known tendency of people to continue to insist on having the conventional separate dining room. There is no virtue in popular habits *per se*—e.g., the rectangular layout of city blocks, the front of the house facing the noise of the street, with a front lawn too small and a backyard also too small, when if we combined the space we could have a real garden. All these things should be functionally tested by the planner in terms of what they are good for in aiding life. And in view of the well-known tendency for popular habits to lag behind best

practice, one job of the planner is to push against these lags. I could go on and list a number of things like this, but I prefer, because of its crucial importance, to put my time here on what I believe should be the crucial and central emphasis of the planner in the United States now.

I want to stress the *social* aspect of planning, planning for group living. In our concentration on individualism, we Americans have let our society as a living growing thing go to seed. We have made freedom in the United States personal and defensive. But if free democratic institutions are to be saved, all of us have an urgent, central job to socialize the concept of freedom—not freedom *from* others, but freedom with and through others. For the planner, be he a housing, city or economic planner, I think that means that what we ought to be centrally engaged in in our planning is to plan the physical and functional setting that will encourage people to *live together* in organized, functionally constructive groups. We have had a long trend throughout all of our national life which has been unbuttoning the individual from society. I think we have come to the point now where this trend disassociating individuals from all social responsibility and necessary social participation can not and will not be allowed to go on any further. The planned economy that is now coming rapidly, and is here to stay, can not tolerate the social atomism that has increasingly characterized our American life. You can not base a planned economy on an anarchic social base. A major aspect of American life from now on is going to be close functional group organization.

This need to re-build living together *is*, I say, no option, but a "must." There will be no survival in the right world from now on for un-planned economies; and planned economies require a planned, coordinated social base. A planned nation must be a nation of group action. So what you planners face is not the mere re-ordering of physical units, but their re-ordering in a fashion serving the needs of people functionally organized as living groups around the processes of a planned economy.

On a nationwide scale, social security will increasingly widen the sense of group dependence and action. Within single cities, occupation will be the chief sorter-out by groups. The large industrial units will set the pace in group life among industrially employed populations. In non-industrial parts of the population there will be an increasing organization of retail, clerical and professional groups which will encourage group solidarity.

Now what does the planner do with this? From my stance as a sociologist, my own "ought" would be that there should be an increasing organization of our living and recreational goods and services, houses, playgrounds, medical care, adult education, and religious life, around job groupings as basic units. This would be on the theory that it is desirable to achieve a maximum overlap in functional social participation among people similarly employed. You will say that people don't want to have to live with people they work with. Well, they should not if they don't want to, but I hasten to qualify that statement. This may be one of the anti-social and defensive habits bred by insecurity and resulting defensiveness in contemporary functionally bad culture.

You may say that a factory worker does not regard himself as primarily a factory worker; he may prefer to live in a middle-class neighborhood. All right, let him, if he can afford it, but again I qualify this by saying that we are going to have a more stable, less restlessly climbing, society in the future. The TNEC reports show how largely evaporated already is the American tradition of universal opportunity and vertical mobility. An overwhelming share of our population increasingly remains on its class level. So, I say, it makes sense to plan basically for a rounded social and community life stemming out from occupations as a functional hub. I do not mean company towns or housing developments. The industrial corporations' hands have got to be kept off the living quarters of their employees. No person must fear the loss of his living quarters because of the arbitrary say-so of his foreman or boss. And this probably means the socialized financing of housing developments.

Now what are the common goods and services that might enhance the community living of people so initially segmented off by common

jobs and neighborhoods? You have all speculated on these: common clubhouses, either in a separate building or in ample space in a large apartment block, for shop and union meetings, for nursery schools for working mothers' children, for dances, for meetings; small rooms for study groups, adult education classes; game rooms adapted to counteract specific conditions of work in given factory situations—active games such as ping pong or bowling for sedentary workers, and quiet rooms such as chess or checker rooms and libraries for workers in the noisy parts of the factory; access to pianos for musical education; children's radio rooms so that in apartments tired parents won't have to listen to the crazy programs kids like to listen to; workshops where men and fathers and sons can carpenter, make and repair furniture, etc; and possibly cooperative stores, cafeterias and laundry service.

You probably know about the Palaces of Culture adjoining some of the large factories in the Soviet Union. I remember especially the one near the Stalin automobile plant in Moscow. It is a beautiful building, with lounges, club rooms, study rooms, and recreational rooms for the workers. There are two rooms for chess, each seating about forty people. On the roof is an observatory with a telescope and an adjoining astronomy class room. There are all kinds of music rooms for chamber music, chorus, and orchestral work, etc. There is a big lecture hall seating about 350. I asked the person who was taking me through: "How often do you have lectures?" "Every night," he answered. I asked how often the room was filled for the lecture. He said, "Every evening, and we repeat each lecture at least once and sometime twice each evening."

What I have been trying to get at in saying that we Americans ought to want to live together more is that we Americans are badly conditioned. Our habits, our emotional insecurities, discourage our living together and encourage our drawing off into privacy—so that we even "play" by sitting in rows of anonymity at the movies. But this has got to go, because our present social anarchy is not a workable base for a planned economy. And it should go, also, because only by pooling the overhead cost per family of the goods and services our modern technology can produce can the mass of our people achieve more than minimum access to the humanly useful things we know how to provide today. It behooves the modern planner to achieve a firm stance regarding such potential developments, and then to force the pace of change by pressing for planned development of humanly needed facilities. Many of the negative attitudes of people which we now fear will evaporate in the presence of superior facilities. If we want, as we must from now on, a positive, constructive social base for our national life, we must plan a facilitating physical matrix for it.

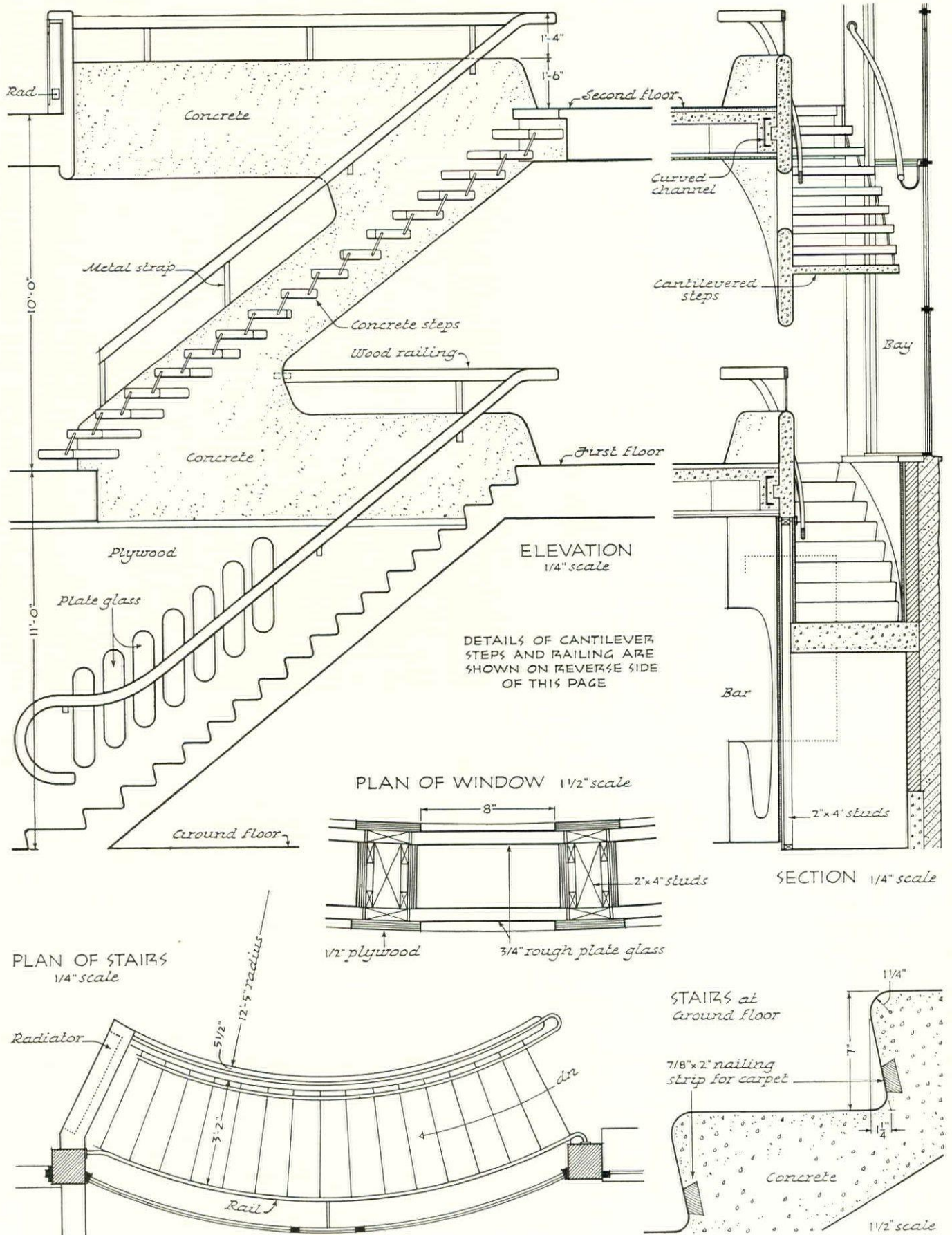
As you can see, I am frankly impatient with planning and planners who do not work with a full philosophy of personal and social living for the masses of the people central in their planning. Not that one gets all, or even most, of what is wanted under such socially global planning. But I think we can say emphatically that we shall get less of what is wanted and more of what we do not want if we don't set exigent standards for ourselves and for society.

Too much present planning is ambulance chasing and social work on the casualties of our messy American culture. A blighted area is nuts to a planner and he sets to work happily to tidy it up, but I think the planner faces an occupational hazard in letting himself get monopolized by such "social work" planning. This is the same difficulty that the sociologist faces who gets preoccupied with divorce, delinquency and crime, and social disorganization; or that an economist faces when he concentrates on pathological details of our economy, trying to patch, patch, without asking: "Granted all my patching, can the system be made to work?" The planner must brake the tendency within himself to rely over much on the mass of people's ability to help themselves in our complex world. Most common people in our modern, industrial society are not "free" enough institutionally or emotionally to let themselves go and discover what they want—much less actually to get what they want. It is much more nearly correct to confront almost any constructive change in customary habit in the mood that people are tied, unfree and must be helped.

This is why I urge an ultra-active social role by the planner.

Cantilevered Stairway

Selected Details

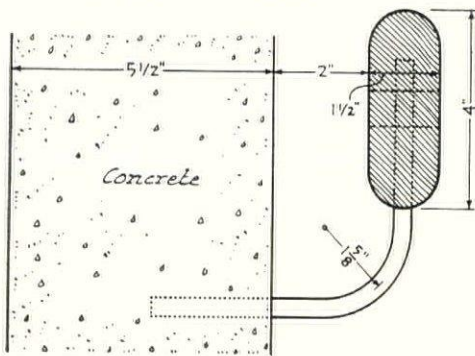


WALTER GROPIUS & MARCEL BREUER... Architects



ETZRA STOLLER

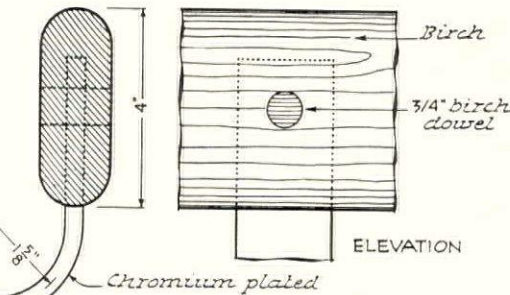
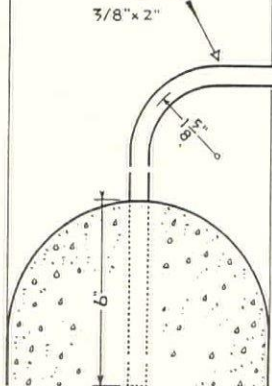
SCALE ELEVATIONS ARE SHOWN ON REVERSE SIDE OF THIS PAGE



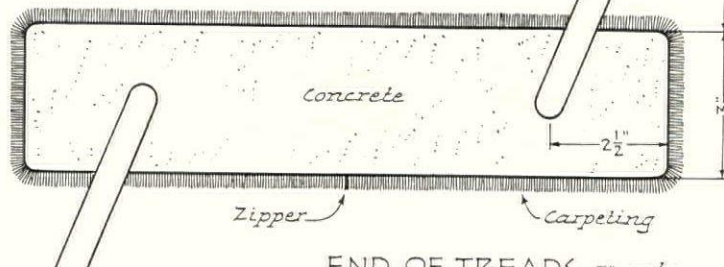
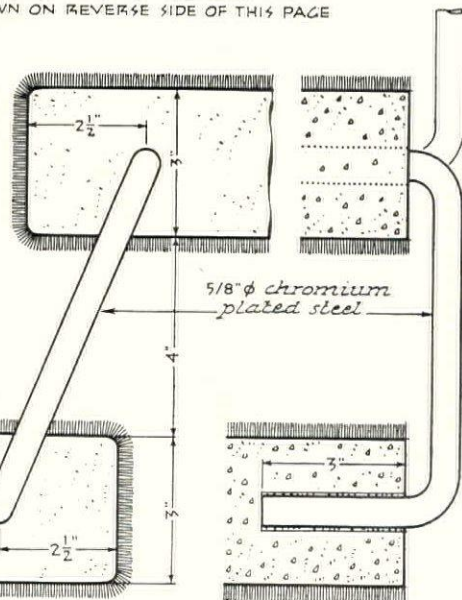
HAND RAIL DETAILS
3" scale

Section

3/8" x 2"



ELEVATION



END OF TREADS 3" scale

TREAD SECTION

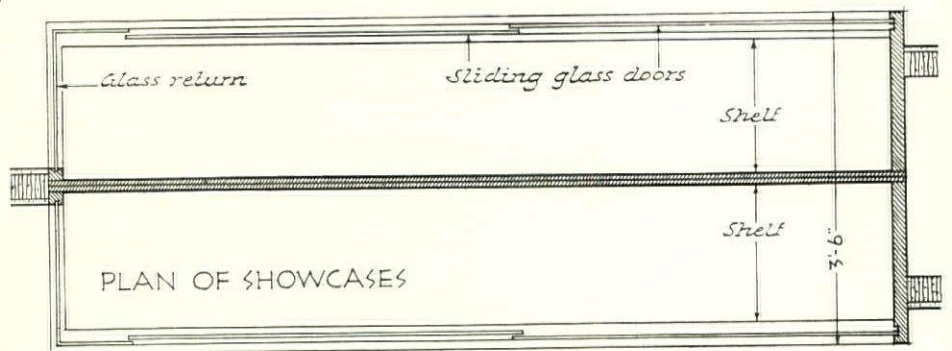
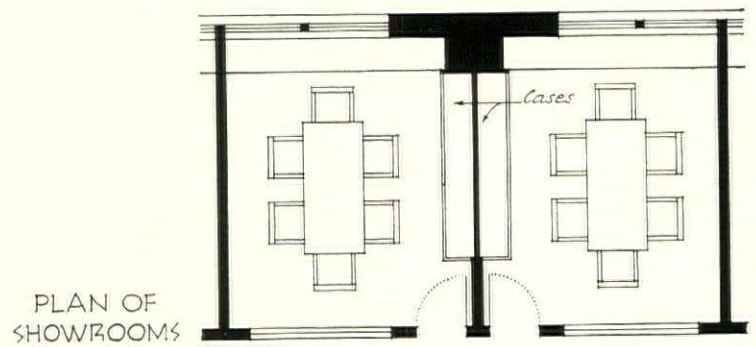
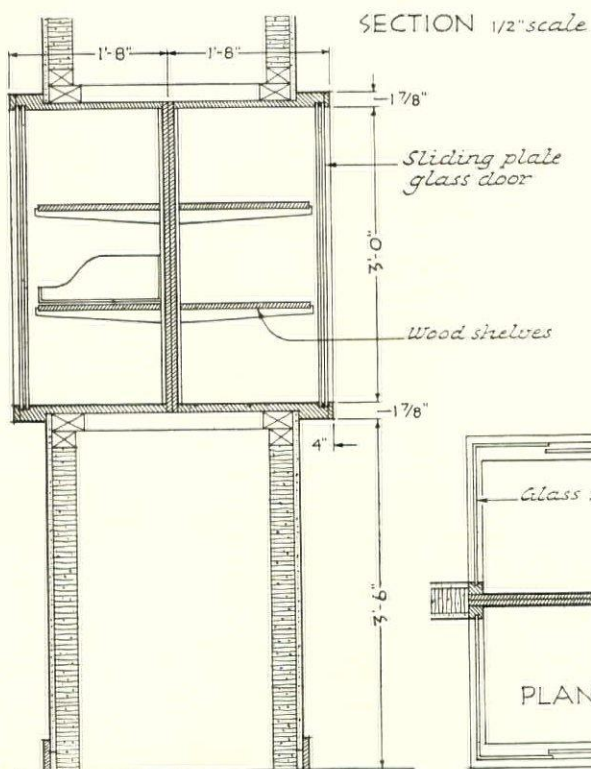
WALTER GROPIUS & MARCEL BREUER... *Architects*

Buyer's Table

Selected Details



EZRA STOLLER



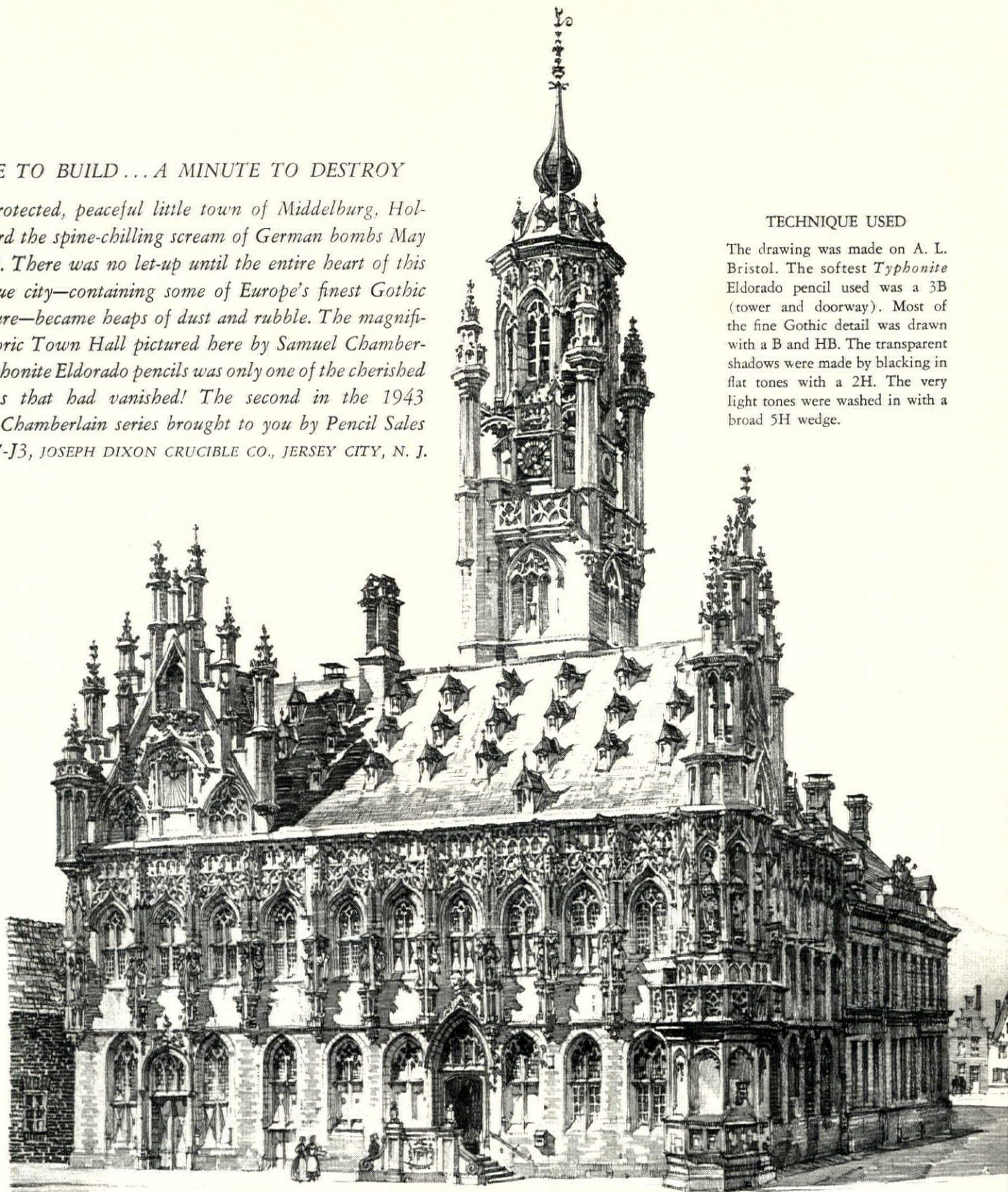
LEON BARMACHE *Designer* VINICIO PALADINI *Architect*

AN AGE TO BUILD... A MINUTE TO DESTROY

The unprotected, peaceful little town of Middelburg, Holland, heard the spine-chilling scream of German bombs May 17, 1940. There was no let-up until the entire heart of this picturesque city—containing some of Europe's finest Gothic architecture—became heaps of dust and rubble. The magnificent historic Town Hall pictured here by Samuel Chamberlain's Typhonite Eldorado pencils was only one of the cherished landmarks that had vanished! The second in the 1943 Eldorado-Chamberlain series brought to you by Pencil Sales Dept. 167-J3, JOSEPH DIXON CRUCIBLE CO., JERSEY CITY, N. J.

TECHNIQUE USED

The drawing was made on A. L. Bristol. The softest Typhonite Eldorado pencil used was a 3B (tower and doorway). Most of the fine Gothic detail was drawn with a B and HB. The transparent shadows were made by blacking in flat tones with a 2H. The very light tones were washed in with a broad 5H wedge.



Samuel Chamberlain
WITH DIXON'S TYPHONITE ELDORADO

THE TOWN HALL MIDDELBURG, HOLLAND

TYPHONITE
ELDORADO

Manufacturers' Literature

Publications mentioned here are all 8½ x 11" unless otherwise specified and will be sent free of charge, upon request. When writing for any of the literature noted here, please mention THE NEW PENCIL POINTS.

Laminated Construction

Technical catalog, 12 pages, illustrates the successful use of glued, laminated construction over an eight-year period. Practically every conceivable shape and type of arch and beam, and practically every basic type of installation is shown, with photographs, drawings, and suggestions

for its application. Unit Structures, Inc., Peshtigo, Wisc.

Toilet Seats

Catalog No. 200 (A.I.A. File No. 29-4-22), four pages, on the Sperzel sanitary toilet seat, specially designed for public wash rooms. The seat consists of two scientific-

ally-designed, black bakelite seat pads connected by a white plastic-covered yoke. Construction details and features are included. Sperzel Sanitary Seat Co., 218 Metropolitan Life Bldg., Minneapolis.

Washrooms.

Second edition of "Washroom Advisory Service Manual" (16 pages, A.I.A. File No. 29-i) from Scott Paper Co., Chester, Pa., presents a detailed study of washroom planning. The manual discusses such highlights of a well-planned washroom as maintenance, lighting, showers, toilets, ventilation, washing facilities, etc. Suggestions and layouts for more comfortable and efficient washrooms (industrial, school, and office types) are contained in blueprint type drawings.

Steel

Two new features pertaining to the versatility of strip steel as a building material are publicized in an advance printing of the 12-page Stran-Steel catalog from Great Lakes Steel Corp., 1130 Penobscot Bldg., Detroit, Mich. Stran-Steel is now cold-rolled to a curve in the same operation which forms the nailing groove. The catalog introduces the new C-Section, a structural member made from strip steel, cold-formed to shape. The catalog furnishes up-to-date information to those already acquainted with Stran-Steel and to those who plan construction for postwar use or for such a time when steel is permissible for general domestic use.

Fluorescent Manual.

Service and maintenance handbook from Westinghouse Electric & Mfg. Co., Edgewater Park, Cleveland, Ohio. This manual, 32 pages, 5 x 7", explains how to take care of a fluorescent lighting system, and sets forth simple principles that can be applied to the care of any installation.

Lettering

"Script and Manuscript" is a new 36-page booklet on lettering released by Higgins Ink Co., Inc., 271 Ninth St., Brooklyn, N. Y. The main section is devoted to 32 modern script alphabets with an explanation of their uses. Instructional pages are devoted to manuscript writing and engraving. Fifty cents a copy.

Roofing Handbook

Engineer's Handbook of APS weather-tested, protected steel roofing and siding. The manual discusses its application on wood and steel construction, gives blueprint type, cross section details for window flashing, sidewall, and counter flashing, corner flashing, as well as strap and girt fasteners. 28 pages. Levinson Steel Sales Co., 33 Pride St., Pittsburgh, Pa.

Postwar

Mailing piece from Fitzgibbons Boiler Co. Inc., 101 Park Ave., New York, contains an editorial written by Paul K. Adams, vice president of the firm, urging Fitzgibbons workers to pull together now for the better things which are ahead. It is one of several mailing pieces which the firm plans to issue to supplement its postwar advertising program.

(Continued on page 83)

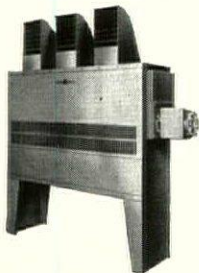
For Army-Navy Projects and War Industries

At this time The Herman Nelson Corporation is busy furnishing Heating, Ventilating and Air Conditioning Equipment for use everywhere in connection with work vital to our National War Effort. However, The Herman Nelson Corporation is maintaining Sales and Service Offices in all Principal Cities in order to help facilitate war work. Each office is equipped to quote and aid in working out details for your war project.

HERMAN NELSON hijet HEATERS



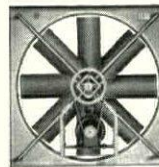
Horizontal Shaft Propeller-Fan Type hijet Heater projects warm air downward in the desired direction. Eliminates waste fuel and space. Available in 48 models, sizes and arrangements.



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Kansas City, Mo.
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Nashville, Tenn.
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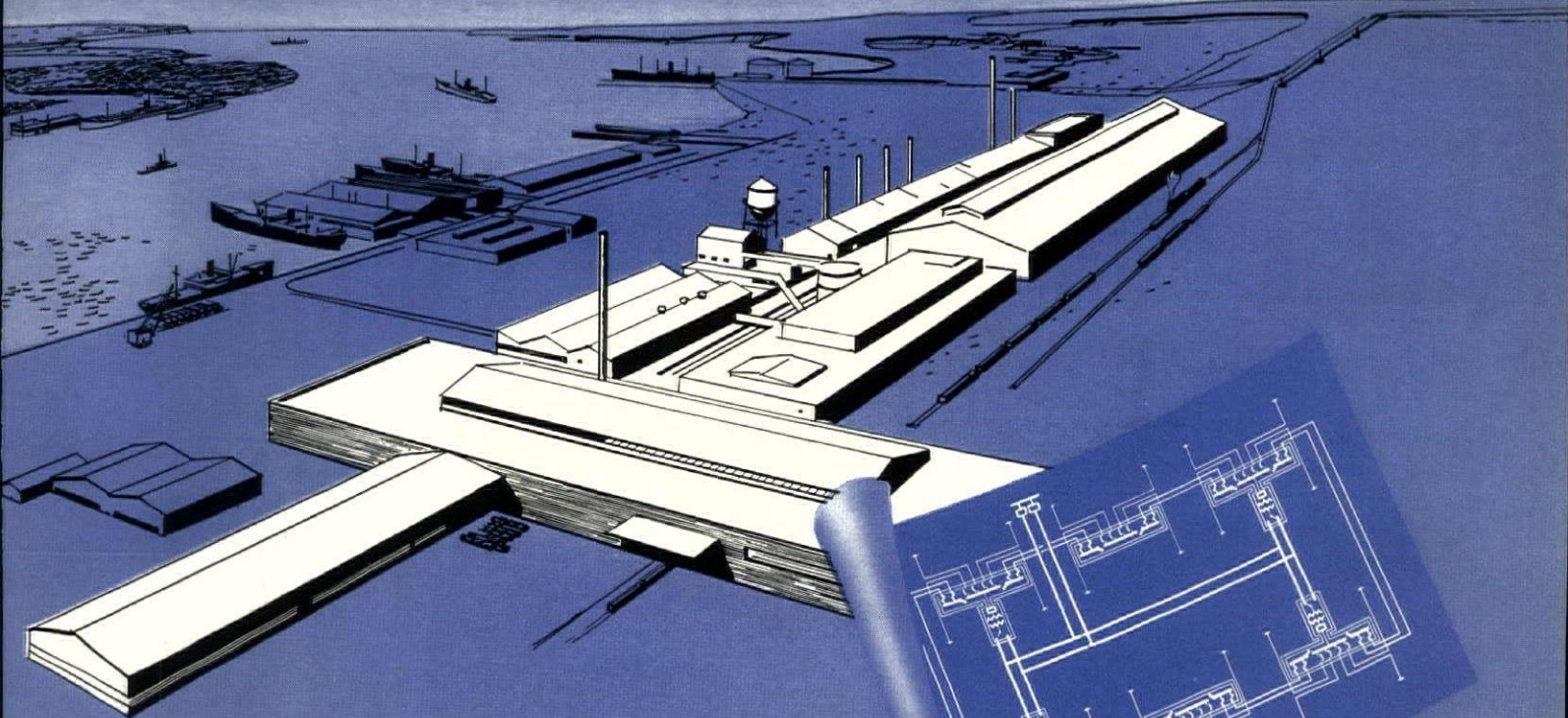
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San Francisco, Calif.
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Keep up-to-date on latest plant distribution systems. Send for this 24-page Book, B-3152, which briefly describes different plant distribution systems, and points out the advantages of each.



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Would it take you 300 years

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It took 300 years to achieve the first basic improvement ever made in windows*. But no one can have that much time to design windows for tomorrow's homes. It's easy to see what post-war windows will be like—if you consider them in terms of *basic human needs*. So stop just a moment and speculate with us as to what those needs may be...

WEATHER-TIGHTNESS? A "must" for every post-war window is complete weather-tightness—truly modern weather-stripping that bars out chills and drafts. For double-hung windows, choose a type of construction that gives better protection from air infiltration.

LOW MAINTENANCE? Certainly! That's why you'll find it important to use a window material that is lasting—a *thoroughly tested* material able to stand the most severe demands of time and weather. Wood—as used in Curtis Silentite Windows—is such a material.

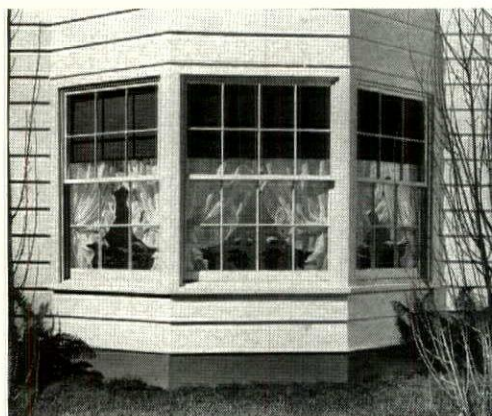
EASY OPERATION? Tomorrow's windows must be easy to operate—they must not stick, rattle or bind—they must be absolutely *trouble-free*. That calls for an enlightened conception of window design and construction.

QUALITY? Remember, quality can only be determined through years of use, in every type of structure, under a wide variety of conditions. Remember, too, that the *reputation of the maker* will be one of your best guarantees of quality in post-war windows.

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THERE IS ONLY ONE SILENTITE AND ONLY CURTIS MAKES IT
Its patented features aren't available in any other window



HERE'S OUR SUGGESTION:

We think the present family of Curtis SILENTITE Pre-Fit Windows goes further than any other type of window in meeting the needs outlined here. In addition, our research is constantly directed towards developing further window improvements. We suggest, therefore, that you keep in touch with Curtis on windows and other high quality woodwork for today—and tomorrow. Curtis Companies Service Bureau, Clinton, Iowa.

(Continued from page 80)

Paint.

Wax-Fortified (impregnated with protective wax) paints and enamels for industrial and commercial use are described in a 12-page catalog issued by S. C. Johnson & Son, Inc., Racine, Wisc. Specifications, price lists, color charts included.

Wood Sash.

4-page folder on projected wood sash contains four 18" x 24" sheets with full-size sill, jamb, and head details of the sash installation in frame, masonry, and poured concrete construction. One sheet contains full-size details of the new awning-type window. This unit is similar in design and operation to that of the projected sash except that muntin bars are lighter, and units are made to sizes which make it possible to use the same size glass as is commonly used in double-hung windows. Rolscreen Co., Pella, Iowa.

Q-Panels.

20-page booklet, 5½ x 8½", "Quick is the Word," from H. H. Robertson Co., Farmers Bank Bldg., Pittsburgh, Pa., turns the spotlight on the skills which the firm offers to the end of speed in building construction. It describes how the firm works in getting war buildings under roof, and behind walls, with Q-Panel construction.

Oil Heating.

How to determine the steps that should be taken to replace the gallons of fuel oil lost by rationing is explained with formulae and charts in an easy-to-understand, timely paper prepared by G. D. Lortz, of the National Mineral Wool Association. The 4-page leaflet may be had from The Philip Carey Mfg. Co., Lockland, Cincinnati, Ohio.

Pipe Units.

How pre-sealed insulated pipe units for underground steam lines are factory pre-fabricated is described in a 6-page folder (Bulletin 4208) from The Ricwil Co., Cleveland, Ohio. Also available is Bulletin 4223, 8 pages, which discusses the pre-fabricated insulated pipe units which are available with welded connections for use in underground and outside overhead steam, fuel oil, and hot water piping.

Batteries.

Valuable hints on the care of storage batteries, whether in industrial use or in automotive service, are given in the November, 1942 issue of "Exide News," published by Electric Storage Battery Co., 19th St. and Allegheny Ave., Philadelphia.

Lighting.

Booklet 2130 from Curtis Lighting, Inc., 6135 W. 65th St., Chicago, presents types of products which find most frequent use in industrial plants producing war goods. Included are data on fluorescent industrial lighting units, and units for the industrial office and drafting room.

(Continued on page 84)

ONE WAY TO BEAT THE LABOR SHORTAGE

... Only one man needed to erect walls and ceilings of Armstrong's Monowall

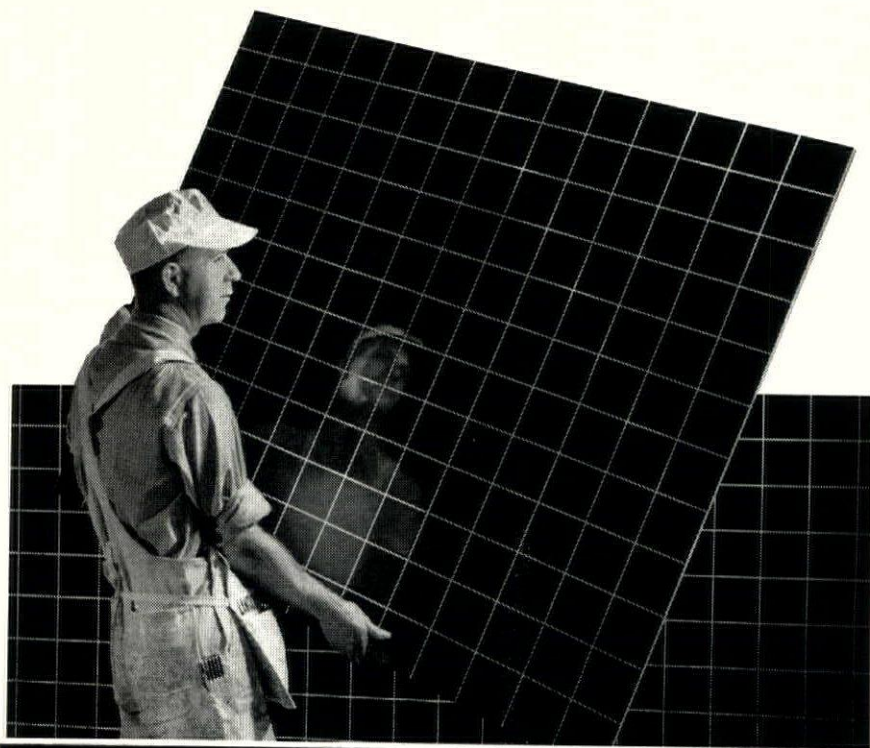
YOU don't need to turn away clients on remodeling work because labor is scarce. You can give them the modern walls and ceilings they want by specifying Armstrong's Monowall. One carpenter can put up this decorative, hardened wood-fiber board by himself—with no special tools or training. Usually he can complete an average size room in one working day.

That's because the large boards of Monowall are cemented direct to almost any existing wall or ceiling surface which is dry and firm—such as plaster. Also, there's no

finishing to do after installation. Monowall's tough, colorful surface is applied at the factory, ready for years of service.

Mirror-smooth Monowall is sure to please your clients, too. The 33 practical colorings (in plain, tile-, wood-, and marble-designs) are readily adaptable to almost any remodeling or renovating job, or new construction. That's why Monowall is being widely used for baths, kitchens, other rooms in homes, and public and commercial buildings of all kinds.

See SWEET'S, or write for samples and complete information. Armstrong Cork Company, Building Materials Division, 6903 Lincoln Street, Lancaster, Pennsylvania.



ARMSTRONG'S MONOWALL

Made by the makers of TEMLOK INSULATION—Sheathing, Lath, De Luxe Interior Finish

(Continued from page 83)

Expansion Bolts.

Catalog No. 42, from American Expansion Bolt & Mfg. Co., 903 N. Spaulding Ave., Chicago, illustrates and describes the firm's expansion bolts, anchors, and accessories for highway, industrial, and general use. 28 pages. Diagrams show how bolts are used in various types of construction.

Lighting.

Catalog 45-S, 16 pages, from F. W. Wakefield Brass Co., Vermilion, Ohio, describes the firm's Red Spot line of lighting equipment for combat operations and war production. Specifications and performance data are included.

Furnaces.

Standard minimum specifications (Commercial Standard CS99-42) for gas floor furnace of the gravity circulating type were recently approved by the American Standards Association, 29 W. 39th St., New York. The standard covers construction and installation requirements for gravity, circulating-type, gas floor furnaces, including those having single or dual wall register outlets, for use with natural, manufactured, mixed, and liquefied petroleum gases.

Switches.

24-page Bulletin No. 500 (A.I.A. File No. 31-D-42) covers the design and listings of

all types of Square D safety switches for industrial applications. Includes Type A heavy duty industrial switches, Type C industrial switches, general purpose switches (Type D), double throw switches, and manual motor starters in standard sheet metal, dustproof, and explosion-resisting cast enclosures. Square D Co., 6060 Rivard St., Detroit, Mich.

Gypsum.

Standard specifications for gypsum lath (ASA No. A67.1-1942), gypsum sheathing board (ASA No. A68.1-1-1942), and gypsum wall board (ASA No. A69.1-1942) approved by American Standards Association, 29 W. 39th St., New York. All three standards cover such aspects as composition, flexural strength, sampling; dimensions, weights, and permissible variations; finish, packing, and marking.

Paint.

Vol. 3, No. 3 (A.I.A. File No. 25) of "Paint Progress" emphasizes the growing application of the function of paint during wartime. Subjects such as painting for dimout purposes, for war plant lighting, for conservation of wood and metal, make up the major portion of the current text. New Jersey Zinc Co., 160 Front St., New York.

Fluorescent Units.

Seven new industrial lighting units for use with fluorescent lamps are pictured and described in new L-78 Catalog Sheets. Masonite reflectors, non-metallic shielding eggcrates, Forlamp units, mechanic's portable, and quick-starting fluorescent units are included. Edwin F. Guth Co., 2615 Washington Blvd., St. Louis, Mo.

Concrete Construction.

Form-Ty Engineering Guide, 32 pages, from Richmond Screw Anchor Co. Inc., 816 Liberty Ave., Brooklyn, N. Y., provides specific helps for the architect, engineer, and contractor in presenting methods for faster and less costly concrete construction work. A check chart of the various types of ties for construction and their application is presented, together with construction and cross section details. An analytical discussion on the proper selection and use of materials and methods for tying and anchoring forms for concrete construction of all kinds is included. Two pages are devoted to form design charts and tables.

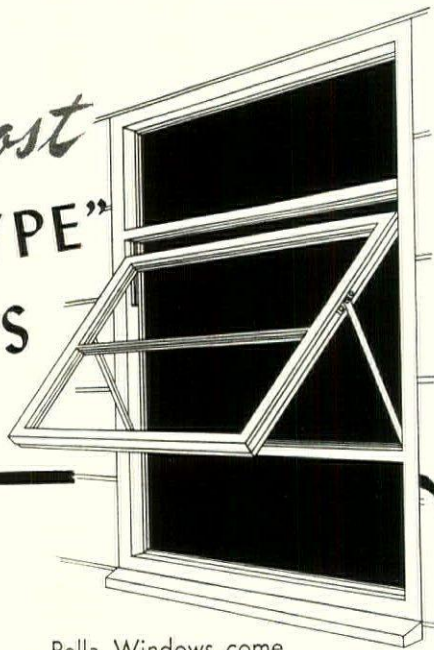
Insulation.

24-page booklet, 6"x9", from Armstrong Cork Co., Lancaster, Pa., discusses the use of the firm's Temlok insulation for insulating farm buildings and homes. Its application under wood siding, shingles, brick veneer is presented in cross section details.

Redwood.

Four types of Redwood pipe—continuous stave, machine banded, bored, and Redwood-lined metal pipe—are discussed in Section III, File 3D4, Sheet 2, 16 pages issued by California Redwood Association, 405 Montgomery St., San Francisco. Illustrations, engineering data.

New, low-cost "AWNING-TYPE" WINDOWS



FOR STANDARD 2 x 4 FRAME OR THIN WALL CONSTRUCTION

Ideal for pre-fabricated and conventional low-cost homes, barracks, factories, temporary schools, etc.

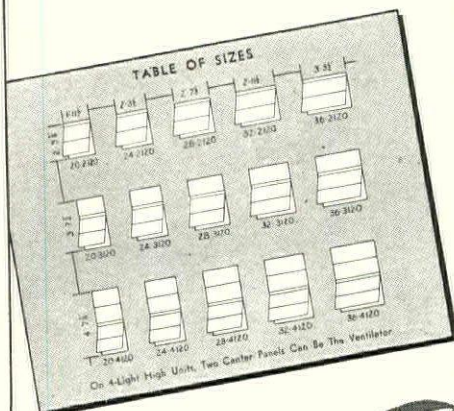
They set right into the studding . . . require no frames, sash weights or balances.

Pella Windows come completely assembled (except for lock handle). No fitting is necessary on the job. 1 3/4" sash. All wood parts are made of clear white pine and toxic treated with Woodlife.

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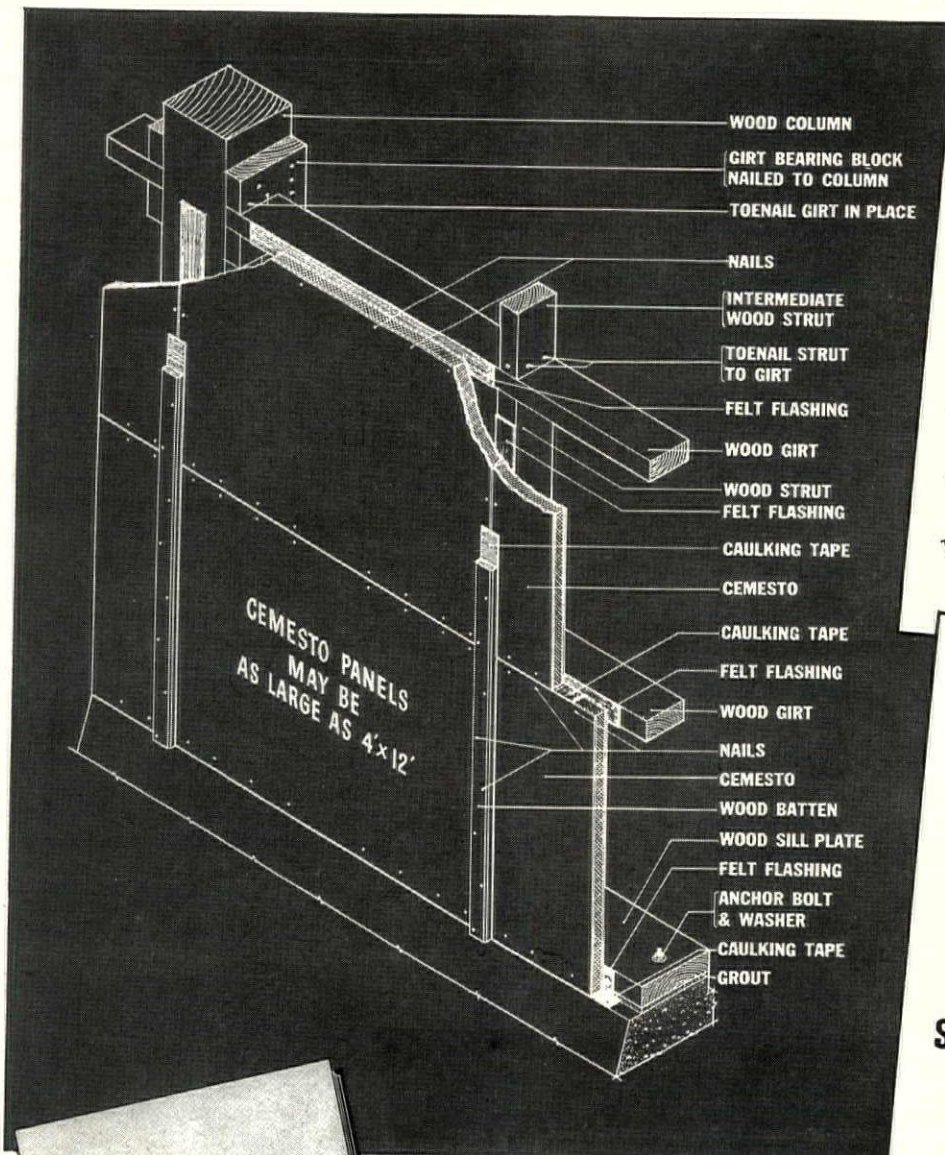


Pella

AWNING-TYPE WINDOWS

Made by makers of Pella Rolscreens, Venetian Blinds, Casement Units

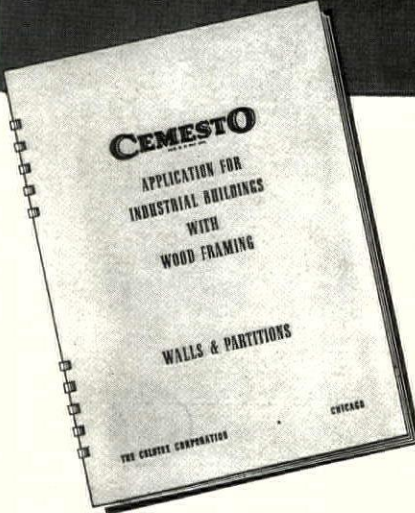
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Competitions

Rome Prize Awarded

The Alumni Association of the American Academy in Rome has announced the winners of the prizes in the 17th annual collaborative competition for students of architecture, landscape architecture, painting, and sculpture. First prize of \$100 was awarded to the following team: James H. Hofmann, architect; Roger Anliker, painter; Mitchell Milidonis, sculptor; Richard C. Pfahl, landscape architect. The architect and landscape architect are from Western Reserve University, the painter

and sculptor from the Cleveland School of Art.

First mention for collaboration went to the following team from Western Reserve University and Cleveland School of Art: John A. Rode, architect; Hazel Janicki, painter; Dorothy Grant, sculptor; R. J. Tichy, landscape architect. Miss Janicki won a special prize of \$25 for her outstanding work in painting.

First mention also went to a team from the University of Pennsylvania and the Pennsylvania Academy of the Fine Arts: George Felton, architect; John Hanlon, painter; Amelia Zell, sculptor. Mr. Felton won \$25 for his work in architecture. Another special prize of \$25 was awarded to Tony Greenwood for his work in sculp-

ture. He is attending Pennsylvania Academy of Fine Arts.

The problem was "A Presbyterian Church" located in Appleton, Wisconsin. Thirty teams participated, representing ten of the leading art schools of the country.

Langley Scholarships

Proposals for candidates for the Edward Langley Scholarships will be received until March 31 by the American Institute of Architects, 1741 New York Ave., Washington, D. C.

Awards are made annually on a competitive basis from the standpoint of the character, ability, and the need of each candidate, the purpose of the grant, potential contribution to professional knowledge or welfare, and the amount of grant required.

Any American or Canadian architect may propose any other architect or architectural draftsman residing in the same country. The faculty or the head of any architectural school in America or Canada, whose standing is satisfactory to the AIA Committee on Awards and Scholarships, may propose any teacher or student in such school. Proposals must be made in duplicate on forms available from AIA headquarters.

Bridge Design Winners

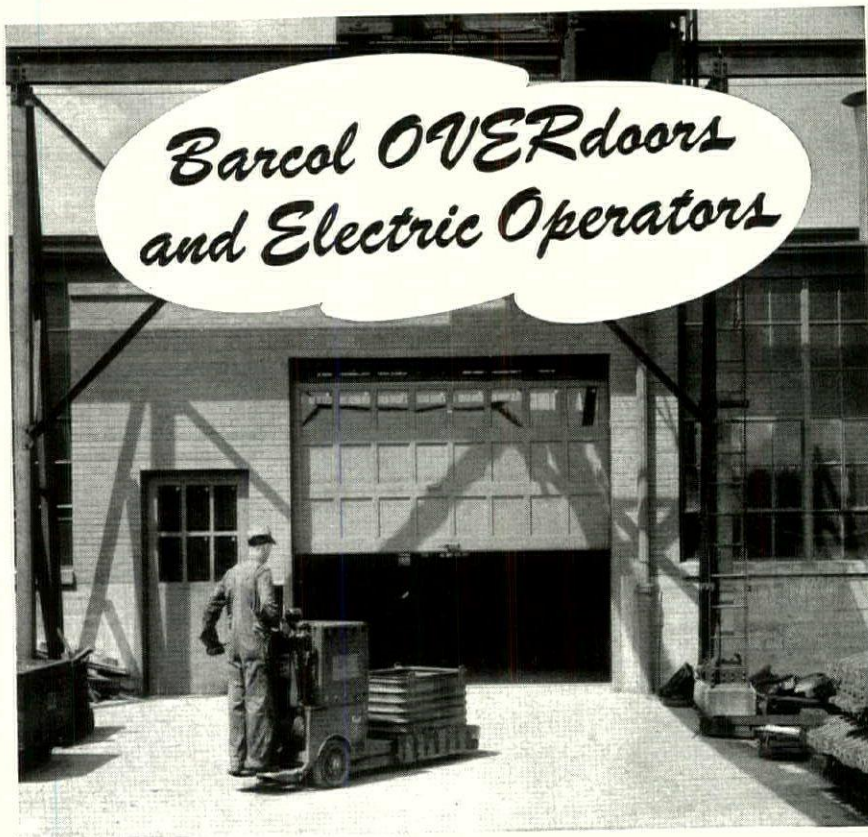
Three students from Iowa State College won all the prizes in the recently-concluded annual Students' Bridge Design Competition sponsored by the American Institute of Steel Construction. First prize of \$200 was awarded George W. Russell; second prize of \$100 went to N. Clifford Prall; while Curtis D. Hicks won the third prize of \$50. The subject for the design was a steel grade separation bridge carrying a highway over a four-track railroad, a navigable canal, and a dual four-lane highway to which there are connections with the overhead crossing.

Certificates of honorable mention were awarded to John R. Leary, Pennsylvania State College; and Charles R. Vosburg, W. David Frevert, Robert Lueder, and Clarence F. Rost, all of Iowa State College. Sixty-two students from six colleges participated in the competition.

Syracuse Scholarships

One \$400 and four \$200 scholarships in architecture will be granted by competition on July 10 by Syracuse University, Syracuse, N. Y., to incoming freshman students. Contestants must send to the College of Fine Arts, not later than July 1, a portfolio containing not more than 20 examples of their work in free-hand and mechanical drawing, together with three letters of recommendation as to their personality, character, and general fitness. The high school or preparatory school record of each candidate must also be submitted. Architecture scholarships may be held for five years provided the student maintains a C plus average yearly.

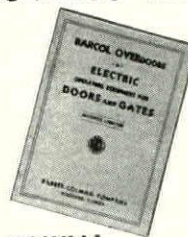
Further information on the competition may be had from Dean H. L. Butler, College of Fine Arts, Syracuse University, Syracuse, N. Y.



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Books and Periodicals

Traffic and Parking Study

A Plan for Improvement of Conditions in the Central Business Areas of New York City. (165 pages, 63 photographs, maps, and diagrams, \$4.50. Regional Plan Association, Inc. New York.)

Experts in various fields who venture to prophesy regarding our postwar world may disagree in judging the speed or the scope of future developments, but they all concede that technical progress, now somewhat veiled by military secrecy, will be felt in all our ways and means of life.

Transportation is the link between producer and consumer, and the very pivot of our urban civilization. Therefore all predictions concerning transportation need the immediate consideration of surface planners. We shall have more motor transportation, of goods and of men, than ever before. We shall have lighter cars, better fuel, more efficient use of fuel, and greater speed. We shall be rewarded for present abstinence by lower operating costs. But we can hardly benefit from these improvements if we move these swifter cars over obsolete, bottlenecked road systems, and squeeze them through the traffic jams of over-parked city streets.

All indications point to the fact that we shall have many more cars than before. More people want to live in quiet suburban areas; the trend to the periphery and the prospects of industrial decentralization require a network of communications which is planned—scientifically planned—and not subject to the accidental irregularities of the motorless age.

We can hardly be too bold in providing space and facilities for the requirements of rapid communication. They represent the arteries and the bloodstream of future civilization.

It is an impediment for many of the traffic provisions and regulations that they are conceived within existing narrow laws and rights, and without vision for future needs. Even fairly progressive projects became obsolete a few years after their completion, when their designers did not foresee the increase in speed and in number of vehicles. This oversight is responsible for many of our calamitous traffic conditions today; whoever tries to go shopping by car in the afternoon, or returns to New York on a Sunday evening, is well aware of the difficulties of our traffic and parking situation.

The face of future cities evolves clearly enough to foresee that the organization of space is an important element of future planning. Buildings are conceived as parts of a system of open parks, not as the fillings of an indifferent gridiron of streets. The "block" is abandoned and the necessity of sufficient elbow-room for traffic and recreation is of prime importance. The traffic problem is first a parking problem. It is evident that cities of the future will have to provide parking facilities (and even covered parking facilities) for general use, just as they pro-

vide streets, sidewalks, bridges, play areas, and picnic grounds for public use without special tolls or charges. The medieval city was built around the market place which was laid out with sufficient space to house all the rural carriages which came to market. But present police regulations haunt the parked car and reduce it to the status of a public nuisance.

The West-side and the East-side highways are perhaps the most important events in New York's traffic history, because, if finished and fully used, they will completely change the arterial system of Manhattan. It is like turning the intestines inside out. Most of the traffic flowing, until now, down Broadway and Fifth Avenue will prefer the outside arteries, branching off in short cuts to the main business sections.

These two highways are the most logical answer to the problem of interurban traffic congestion, but their benefits are partly lost because they lack a system of feeders and car-park terminals which would bring the highways right to the doorstep of the main business and amusement centers. The exit at 57th Street, for instance, should lead directly, without stop-light delays and one-way detours, to a wide car-park between 6th and 7th Avenue. Such a system of arteries with well dispersed terminals would certainly relieve the over-crowded streets.

The main tendency of traffic planning is segregation of high-speed and low-speed traffic, of truck traffic, private car traffic, and movement of pedestrians. Very little has been done, except restrictions and administrative measures (regulations for loading and unloading practices) for the safe routing of trucking. New York needs, beyond any doubt, a West-side and an East-side trucking highway, again with an independent system of feeders and terminals. The coming developments will certainly have some similarity to the development of railroad transportation during the last century.

These ideas are not taken from the present *Traffic and Parking Study*. It is, however, in the light of such inevitable changes and desirable developments that we may study a plan for improvement of conditions in the central business areas of New York City. This report is presented as the collaborative efforts of eighteen official agencies and twenty-six civic and business organizations; it must be valued as a definite document. The fact, however, that the report was started in 1940 and took two years for completion accounts for certain limitations. Scarcely anyone at that time could have had the boldness of imagination and the magnitude of concept which the war has opened up before us, and which are beginning to establish the postwar building program. Driving and parking restrictions are very useful administrative measures, but they do not solve the burning problem of the need for more space and more flexibility for the movement and parking of cars. The traffic problem

cannot be solved by asking the man in the street about his parking needs and habits, which are, after all, fairly obvious. The problem can be solved only by providing parking spaces in great numbers where they are needed. And the architectural ambition of the city requires that these parking lots be not left as eyesores between party walls, at the mercy of the man who wants to make a few pennies on a vacant lot. They must be treated with the same architectural care as other public utilities and buildings—for instance, paved, fenced, and embellished with a few trees.

To the greater issue of what we expect from our cities in the future, this report presents the raw material of observations, tabulations, and maps. When the exact maps of existing parking and traffic facilities and garages prove anything, they prove that the filling of a great public need was left mostly in private hands, and that parking spaces are placed very haphazardly where, perchance, a vacant lot was waiting for a speculative builder. There was not, and apparently is not now, a policy determined enough in allocating parking fields where they are most needed—let's say every second or third block. There are blighted areas enough just around the corners of Broadway or Lexington Avenue which could be systematically lined up in a comprehensive plan. Chasing around the block five times searching for a gap at the curb would come to an end if people knew where parking facilities were.

Parking lots are traffic terminals, like the waiting rooms in a railroad station. If we do not provide such waiting rooms we have no right to complain that people are crowding the streets. We hardly need complicated polls and tabulations to find out that people do not want to walk five blocks or more from their car to their destination. To rely on occasional empty lots (which in their present state are a disgrace to a town, anyway) means the perpetuation of their ugliness.

If the congestion in midtown Manhattan is almost beyond repair, it seems not yet too late to do some creative thinking for the Brooklyn downtown section. Cheaper land prices, the remaining open spaces, and the progressive blight near the main business and administrative area might well justify the acquisition of land for parking spaces under a general rehabilitation program. Inevitable adjustments later on may well cost many times the amount they would cost right now. *City-planning problems of such importance must be planned!*

Some of the recommendations of the Report are already well in the planning stage. The reports on parking meters, zoning laws, necessary changes in laws, and all kind of legal and economic aspects fill several very interesting chapters.

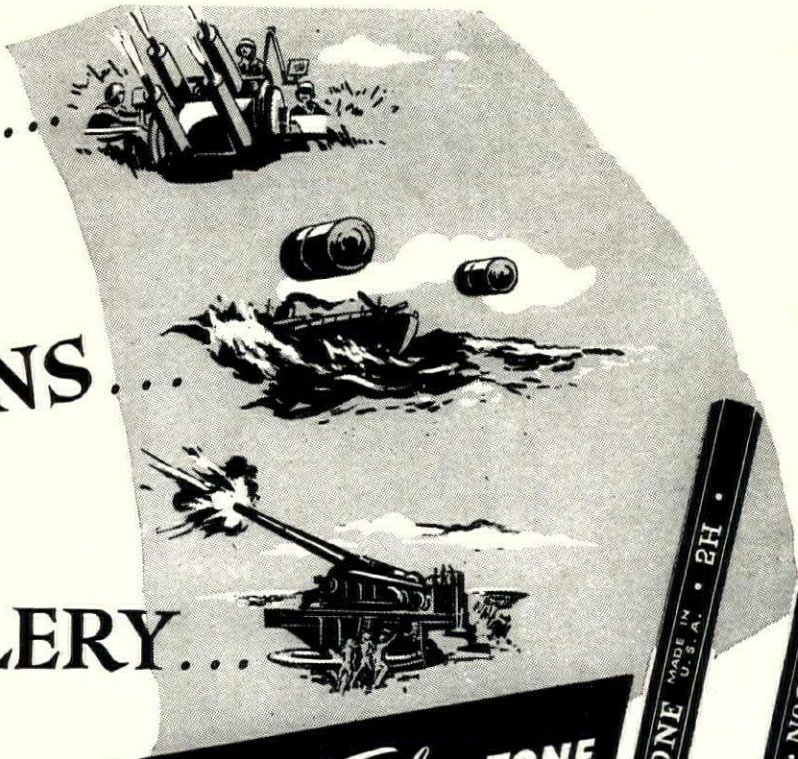
Konrad F. Wittmann.

(Continued on page 90)

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(Continued from page 88)

Maurice Rotival, Chairman Section of City Planning and Research, Department of Architecture, Yale University, prepared the following selected planning bibliography.

General Planning:

Adams, Thomas: *Outline of Town and City Planning*, Russell Sage Foundation, New York, 1935.

Bertram, Anthony: *Design*, Penguin Books, Inc., New York, 1939.

Black, Russell Van Nest: *Planning for the Small American City*, Public Administration Service, Chicago.

Chiodi, Cesare: *La Città Moderna*, Milan, Italy, 1935.

Giedion, Sigfried: *Space, Time and Architecture*, Harvard University Press, Cambridge, Mass., 1941.

Le Corbusier: *The City of Tomorrow*, Harcourt Brace & Co., Inc., New York, 1929.

Le Corbusier: *Des Canons, des Munitions? Merci! Des Logis . . .* S.V.P. Boulogne, (Seine), 1937.

Le Corbusier: *Oeuvre complète de 1934-1938*. Zurich, 1939.

Lethaby, W. R.: *Form in Civilization*, Oxford Press, New York, 1922.

Mumford, Lewis: *The Culture of Cities*, Harcourt Brace & Co., Inc., New York, 1938.

Sert, José Luis: *Can Our Cities Survive?* Harvard University Press, Cambridge,

Mass. Report, Vol. I, of Fifteenth International Congress of Architects (C.I.A.M.), 1940.

Sharp, Thomas: *Town Planning*, Penguin Books, Inc., New York.

Unwin, Raymond: *Town Planning in Practice*, London, 1909.

Our Cities; Their Role in the National Economy, National Resources Planning Board, Washington, D. C., 1937.

Regional Plan of New York and Its Environs, Regional Plan Association, Inc., New York, 1929.

Urban Planning & Land Policies, National Resources Planning Board, Washington, D. C., 1939.

Government:

Jones, Victor: *Metropolitan Government*, University of Chicago Press, Chicago, Ill., 1942.

Studenski, Paul: *Government of Metropolitan Areas in the United States*, National Municipal League, New York, 1930.

Walker, Robert A.: *The Planning Function in Urban Government*, University of Chicago Press, Chicago, Ill., 1941.

Urban Government, National Resources Planning Board, Washington, D. C., 1939.

Law:

Bassett, Edward M. and others: *Model Laws for Planning Cities, Counties, and States*, Harvard University Press, Cambridge, Mass., 1935.

State Legislation on Planning, Zoning, and Platting, Circular XII, September 10, 1939, National Resources Planning Board, Washington, D. C.

Pamphlets published by the Federal Works Agency, Washington, D. C.

Hansen-Greer Report, Federal Reserve Board, Washington, D. C.

Urban Redevelopment laws in the states of New York, Illinois, and Michigan.

Periodicals and publications of the following planning organizations:

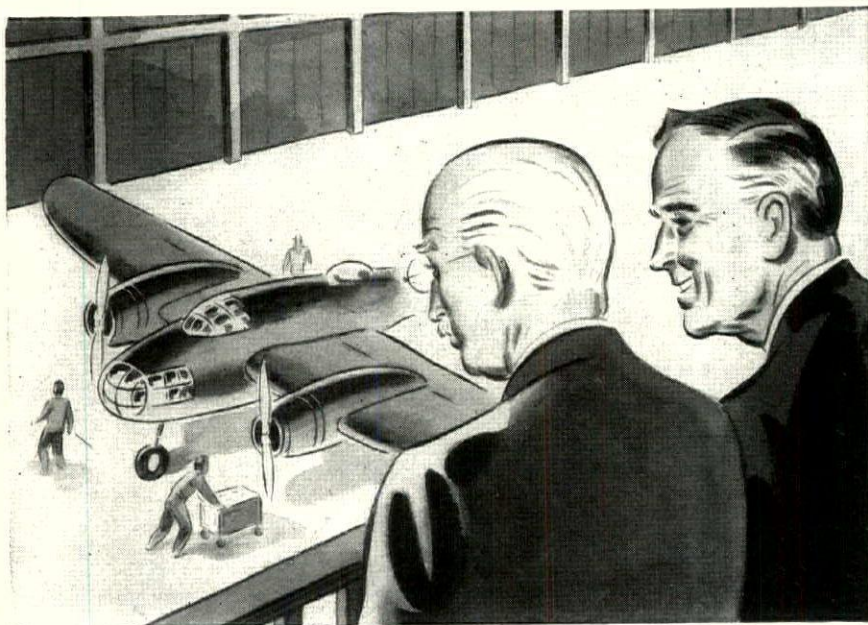
American Institute of Planners, Chicago, Ill.; American Society of Planning Officials, Chicago, Ill.; National Planning Association, 123 Water St., New York; Ministry of Political and Economic Planning, London, England; Mr. W. S. Morrison, Ministry of Town and Country Planning, London, England; Urban Land Institute, Washington, D. C.; AMERICAN CITY, 470 Fourth Ave., New York; ARCHITECTURAL FORUM, 20 W. 45th St., New York; ARCHITECTURAL REVIEW, 45, The Avenue, Cheam, Surrey, England; L'ARCHITECTURE D'AUJOURD'HUI; NEW PENCIL POINTS, 330 W. 42nd St., New York.

The following annotated bibliography of planning literature was prepared by Margaret Greenough King.

City Growing Pains

A series of discussions of metropolitan area problems, published by the National Municipal League, 1941. Facing the problem of haphazard decentralization and its ill effects on city administration, these articles consider the problems of Atlanta, Boston, Chicago, Cleveland, Dallas, Denver, Detroit, Los Angeles, Newark, New

(Continued on page 92)



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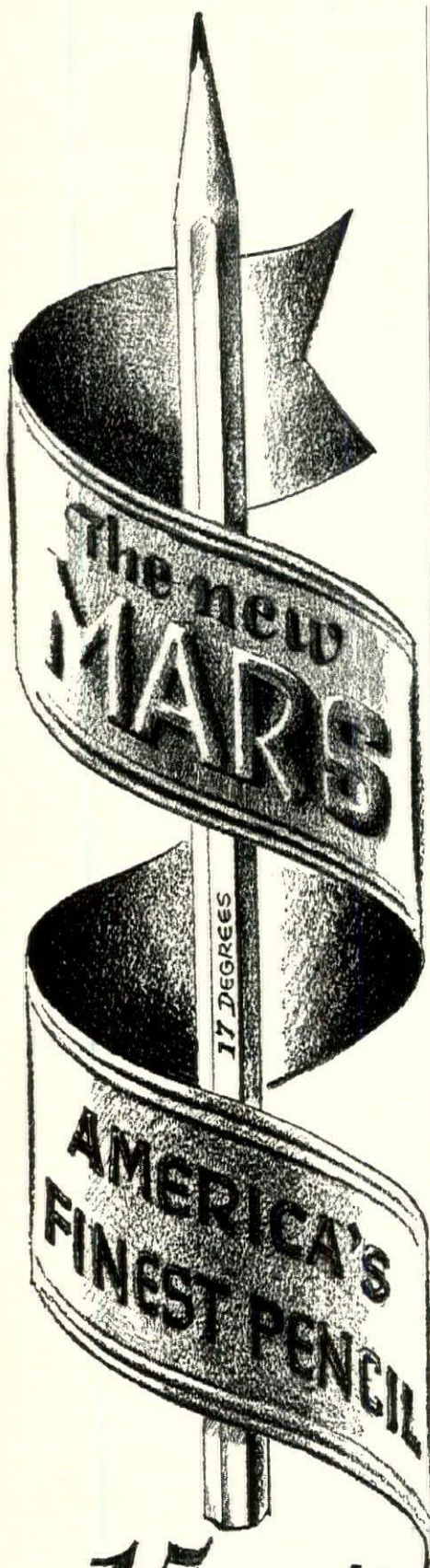
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(Continued from page 90)

Orleans, New York, Philadelphia, Pittsburgh, St. Louis, San Francisco, the counties of Virginia. A thorough review of city problems and some hint as to their solution.

Evaluating Rural Housing

By Charles I. Mosier, Ph.D., 1942. Subtitled, "The Development of the Florida Housing Inventory and the Index of Housing Adequacy," the booklet sets forth a method and even the questions to be used in a similar inventory, mathematically worked out and accompanied by statistics.

The Improvement of Local Housing Regulations Under the Law

An Exploration of Essential Principles, New Haven, November, 1942. In examining the basic troubles of housing, the Subcommittee on Housing Regulations has laid out standards for future laws. A quite complete research into the problems of actual legislation.

Facing the Future—With the Chicago Plan Commission

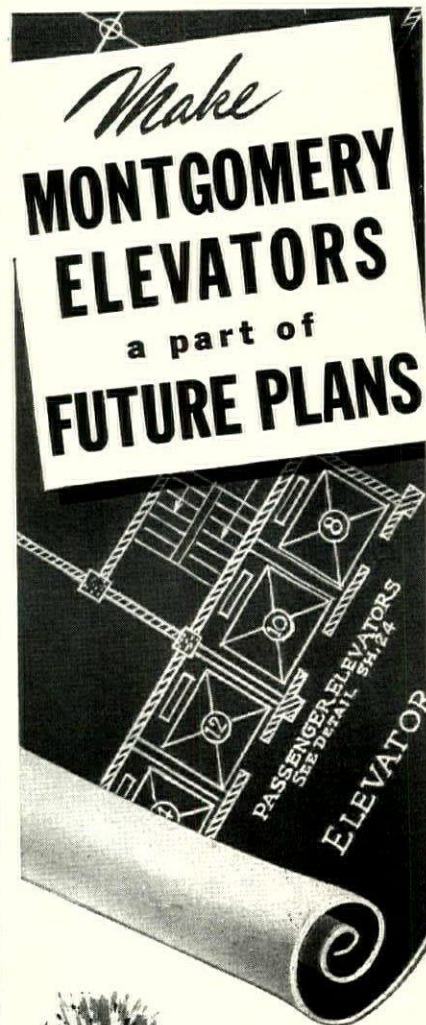
Chicago, Dec. 1941. Looking at her continued loss of population to outlying districts, Chicago posits a method for stabilizing employment and halting decentralization. The plan consists of a land-use survey done by the WPA, restudying of zoning regulations, wiping out slum areas, face-lifting for respectable neighborhoods, and consideration of city transportation problems.

Greenbelt

By O. Kline Fulmer. In the introduction, Lewis Mumford calls attention to the need for planning whole new communities, and warns against merely building patches of new housing in an already declining neighborhood. This is a concise summary of Greenbelt, showing the unique features of the plan as it exists, the basis for this type of planning in history, and the way this problem was approached. The solution of land-acquisition and ownership should cause some discussion among planners.

Housing as a Town-building Program

A postwar housing problem for the students of the Graduate School of Design, Harvard University, February - March 1942, proposed by Walter Gropius and Martin Wagner. An eight-week problem for a new township to be part of a series along a super highway to go through Weston and Wayland, Mass. A thorough program for town planning, accompanied by statistics collected by the group before the program was written, and comprising studies of significance of the township, superhighways as town-founders, the social structure of the new township, and housing design in a variety of types—some demountables or with preplanned additions. Though it was a school problem, the thorough research makes it quite possible for actual use.



Today, building plans prepared for immediate construction are for the most part related to war—the science of destruction. When building restrictions are relaxed at the end of this conflict and we again start constructive rather than destructive building, new projects of all types



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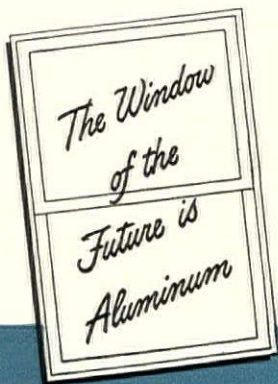
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Properties that make Alcoa Aluminum tubing invaluable for war work are also advantages which will appeal to architects and builders for future, peacetime uses. The enormous quantities being produced by Alcoa today, and the developments in fabricating methods, promise greater economies through the use of aluminum tubing. ALUMINUM COMPANY OF AMERICA, 2198 Gulf Building, Pittsburgh, Pennsylvania.



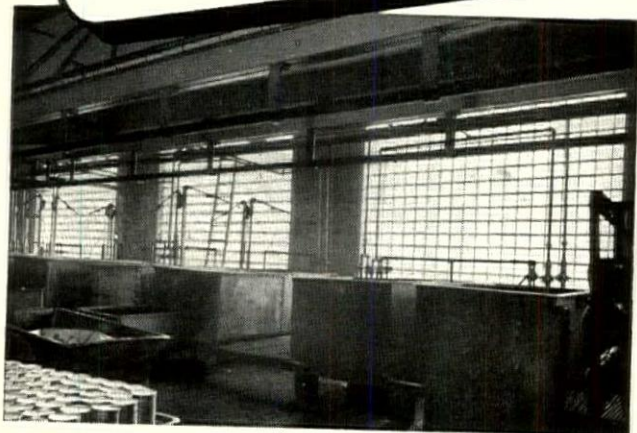
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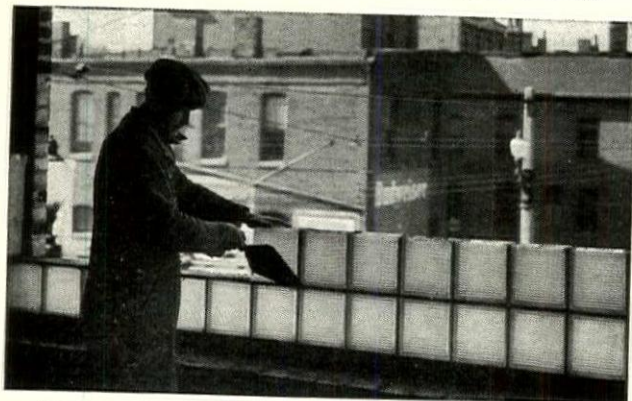
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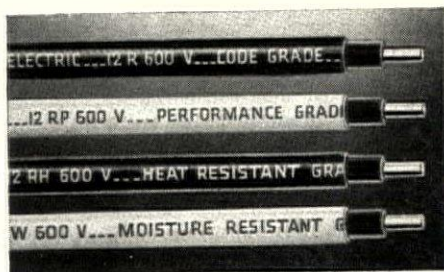
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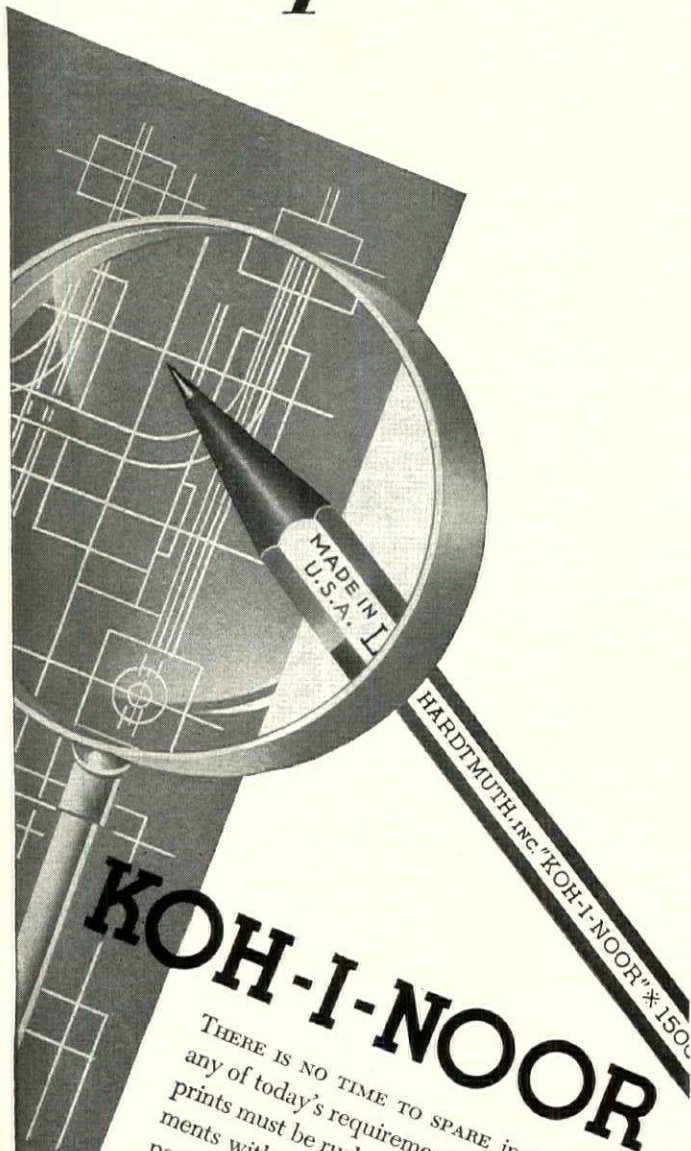
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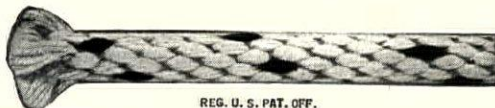
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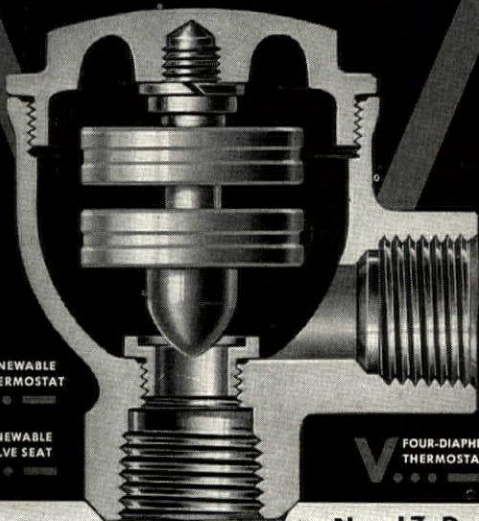


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