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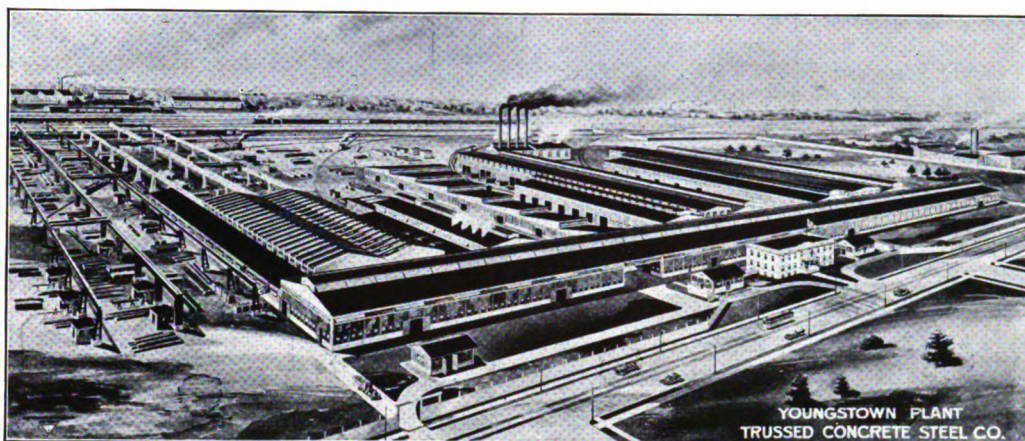
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## TRUSSED CONCRETE STEEL CO.'S PLANT, YOUNGSTOWN, OHIO

This extensive plant of the Trussed Concrete Steel Company at Youngstown, Ohio, is devoted exclusively to the manufacture of steel products, such as United Sash, Kahn Trussed Bars, Hy-Rib, Rib-Lath, Reinforcing Steel and other Building Specialties. The waterproofing and finishing products of this company are manufactured in a separate plant in Detroit, while tile plants and warehouses are located in various cities of the country. The main executive and sales offices are located in Detroit with representatives in all principal cities.

Six years ago only a few small buildings made up this entire plant. Today the factory and yards cover over the greater part of twenty-five acres of land. The plant consists of an administration building, power plant, shipping yards, and a large number of individual buildings in which the various products are manufactured. In order to more clearly understand the development of this plant and its manufacturing divisions it is well to review the products of the Trussed Concrete Steel Company and their development.

Originally the Kahn Trussed Bar was the principal product of the company. The Kahn Trussed Bar is a patented reinforcement for use in concrete girders, beams, joists and floors, and consists of a main horizontal bar with rigidly connected diagonal shear members, formed from the same section of steel. Other reinforcing products were introduced shortly afterwards. These included the Rib Bar with a specially rolled section, so formed as to secure a positive grip in the concrete; Rib Metal, an improved type of expanded metal, formed from a special section of steel and consisting of a series of Bars, rigidly connected by cross ties; Column Hooping, completely built up, and collapsible for convenience in shipping, etc.

The next important development of this company was the invention of Hy-Rib, an entirely new type of reinforcement for concrete and plaster work. This material consists of a series of dee-ribs, connected by a specially expanded fabric, all formed from the same sheet of steel. The object of the ribs is to give stiffness to the reinforcement, so as to do away with forms when used in floors, roofs or walls, and to take the place of metal studs in partitions, sidings, ceilings, etc. Coincident with the invention of Hy-Rib, Rib-Lath, and improved expanded metal lath, which is on the same general principal of Hy-Rib, was introduced, as well as Rib-Studs for hollow walls and partitions.

The most recent development in the growth of the plant is the manufacture of United Sash for use in windows, monitors, partitions, etc. This steel sash is built on an improved principal of assembling, which gives exceptional strength and efficiency to the construction of the sash. All type of sash are made including standard pivoted side wall sash, vertical sliding sash, center pivoted and top hung continuous sash, steel and glass partitions, steel doors, etc.

Bearing in mind these facts and considering the necessary shipping yards, storage, stock rooms and receiving stations to handle this large and varied output, the reader will be able to understand the plan of the factory. At the extreme left of the bird's-eye view is shown a portion of the shipping yards for the Kahn Bars and Reinforcing Steel, containing large cranes, stock yards, cut-off presses, etc. The shearing of the Kahn Bars is done on an adjoining building. Here are found presses weighing twenty-five tons a piece, and with a capacity of two hundred and fifty tons for forming the rigidly connected shear members of the Kahn Bars. The dies

for shearing these Kahn Bars weigh about five thousand pounds a piece.

The Rib Bar department is in close conjunction with the Kahn Bars, and is completely equipped with shearing presses, bending machines, locomotive cranes, etc., to supply the Rib Bars in any form desired. The Column Hooping is manufactured also at this part of the plant. The Rib Metal material reaches the shop in the form of a wash-board shaped section, which is run through punches of three-hundred ton capacity, and is then expanded into the finished material.

The buildings for the Hy-Rib and Rib-Lath manufacture are the next adjoining and are provided with railroad siding, loading platforms, etc., for shipping purposes. In these buildings the flat sheets of steel are first especially prepared, beaded, trimmed and made ready for the punching press, which with special dies cuts the material as desired. The sheets next go to the heavy forming presses, which by a process of pressing and expanding developes the product into its finished form. The Hy-Rib material is also finished by the shops in curved sheets, the curving being done with special bending machines.

The United Sash Department includes a large number of buildings owing to the great demand for this product, and the amount of space necessary for



Winnipeg Residence, John D. Atchinson, Architect

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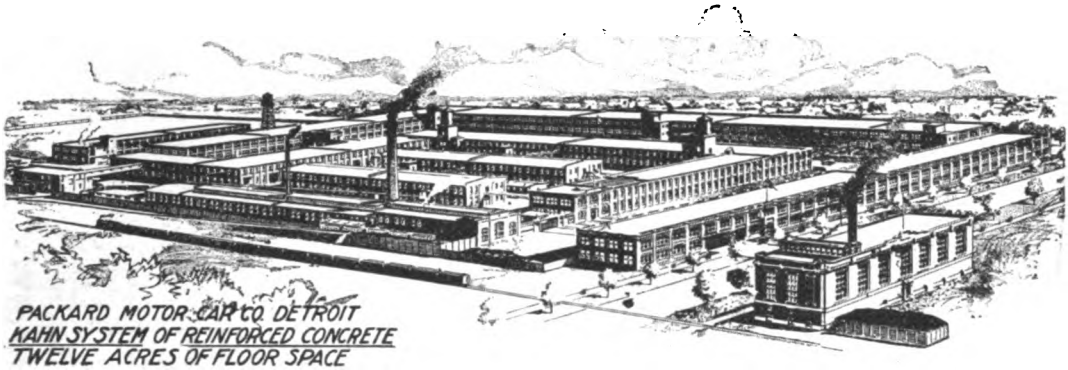
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The original plant of the Dayton Motor Car Co., Dayton, O., was of the old style brick walls and wood floors. The main addition was built **Kahn System of Reinforced Concrete**. A severe fire broke out on the fourth floor of the concrete building—spread to the old brick and wood building and completely destroyed the upper three stories. The **Kahn System** building was unharmed. The fire was confined to the contents of one floor.

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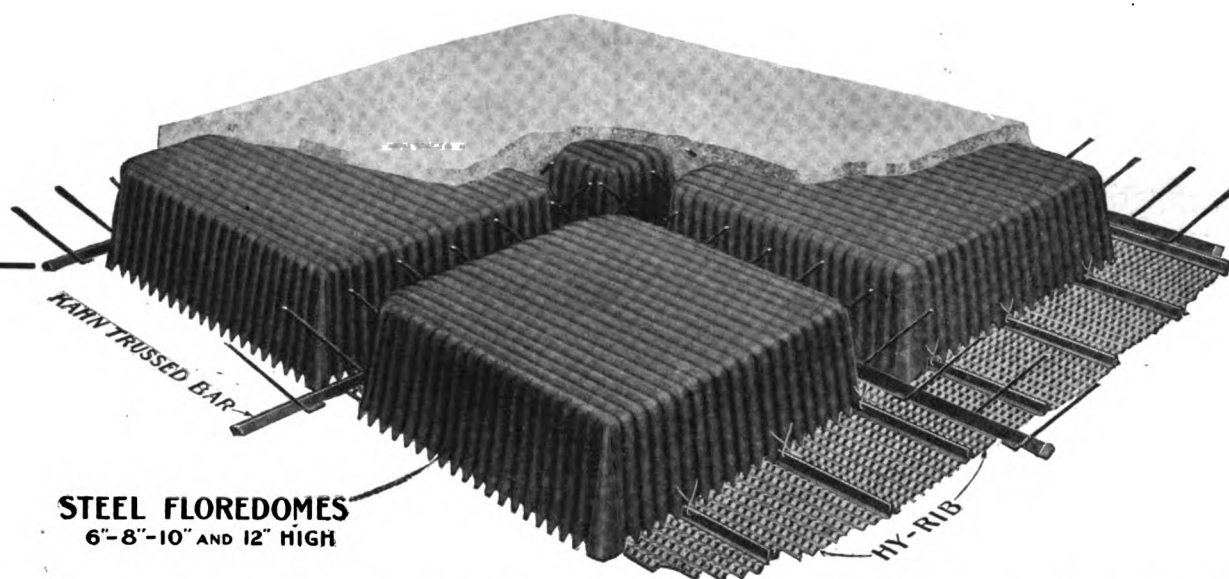


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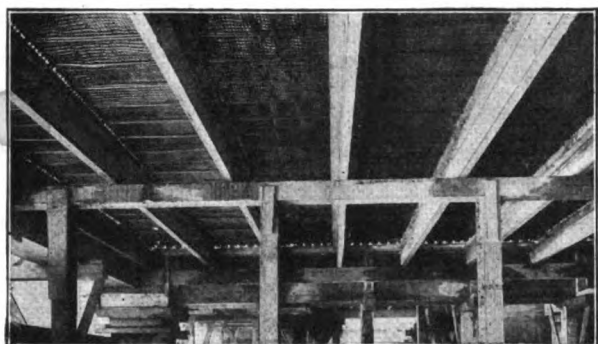
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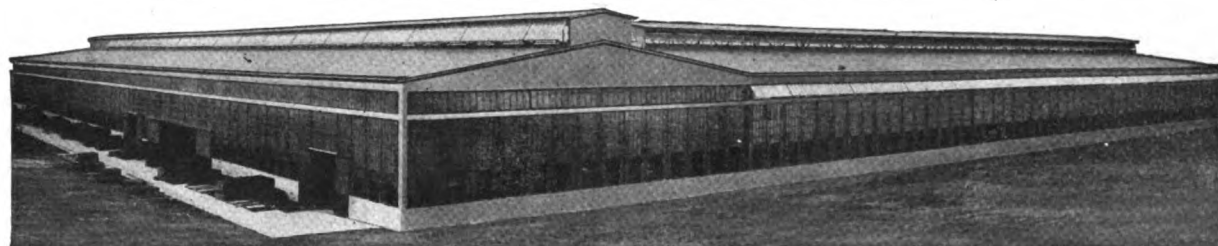


FLOREDOME Construction, Mt. Tabor School, Portland, Ore. Note straight and true lines of FLOREDOMES and accurate spacing of joists.

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A JOURNAL FOR THE PROMOTION OF INTERNATIONAL TRADE

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MARCH, 1908.

No. 1.

## MEXICO UNDER PRESIDENT DIAZ.

IN the year when the United States was celebrating the 100th anniversary of its independence the Mexican republic first elected as President General Porfirio Diaz, already distinguished as a soldier and patriot, but with his higher qualities of statesmanship as yet untested. In the thirty-two years that have since elapsed the wisdom of this choice, confirmed by six successive re elections, has been more than demonstrated. In fact, there is at the present day no statesman in Europe or America more commanding in dignity and prestige or whose achievements will merit a higher recognition from the historian.

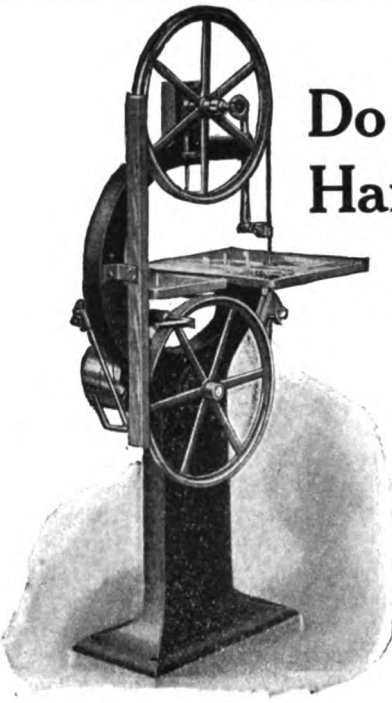
At the end of June, 1876, Mexico had 372 miles of railway and 5,760 miles of telegraph lines, while there were at the same date 765 post offices in the republic. Last year there were 14,809 miles of railroad, 45,200 miles of telegraph lines and 2,355 post offices. Statistics are, however, inadequate to indicate the progress and development that has taken place in Mexico under the wise and farsighted government of President Diaz. It is not too much to say that there has been no line of commercial, industrial or economic activity that his influence has not stimulated, no form of economic progress that he has not personally fostered and promoted. Each successive year has witnessed some new triumph of constructive statesmanship, and been marked by some definite forward step in Mexico's advancement to the foremost rank in the family of nations. This number of DUN'S INTERNATIONAL REVIEW is devoted, almost in its entirety, to presenting the essential facts of Mexico's financial, industrial and commercial situation at the present time. While the picture is naturally incomplete the facts

presented by former Ambassador Casasús and the numerous other contributors to this number are amply sufficient to indicate the marvelous transformation that has taken place in Mexico since President Diaz first assumed the direction of affairs.

## MEXICAN RAILWAY MERGER COMPLETE.

AS this issue goes to press it is announced that the long-expected merger of the Mexican Central Railroad system with the National Lines of Mexico has been completed. The actual control of the Central was turned over to the Mexican Government on February 28th, and formal announcement of the fact made on the following day. The readjustment of securities incident to the merger will be effected through New York banking houses.

That this important financial operation should be undertaken at this time is one of the strongest evidences of returning confidence in both American and European financial circles. While about 10,000 miles of railway will, as a result of this transaction, be under the direct control of the Mexican Government, no change is contemplated in the actual administration of any of the lines affected, nor will the result be Government ownership in the sense that many State railway systems are owned and operated. The actual direction of the Mexican Central Railway will remain where it is at present. What the Mexican government has aimed at and accomplished by the merger is that hereafter it will so control the railway situation in Mexico that it can prevent the establishment of rates prejudicial to Mexican industry or the conclusion of mergers or traffic agreements between other Mexican and American railways that might be to the economic disadvantage of the country.

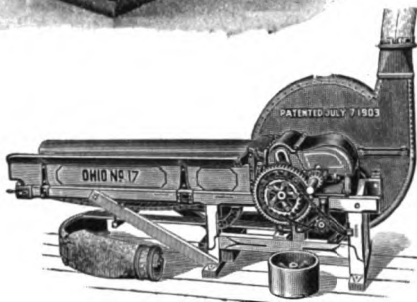


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Among our other products are Rib-Lath and Rib Studs—used extensively in both large and small buildings where permanent, fireproof, and vermin-proof qualities are desired. Full descriptive Catalog on request.

We want reliable representatives in every part of the world where agencies are not already established. In writing state experience and references.

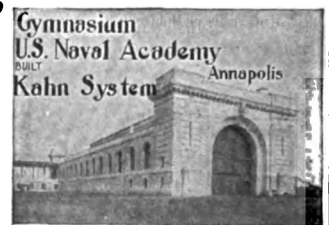
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# KAHN SYSTEM

## of Reinforced Concrete

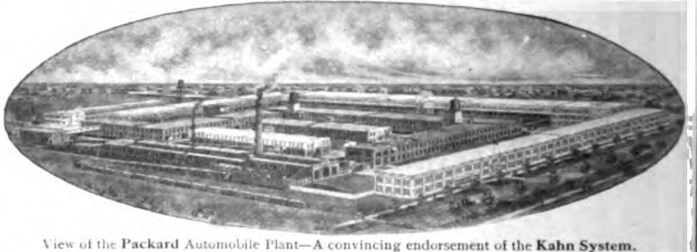
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After thorough investigation the Packard Motor Car Co. of Detroit built their first **Kahn System** building three years ago. Each year new buildings have been added until to-day their "**Kahn System Plant**," here illustrated, embraces upward of ten acres of factory floor space. The Packard Co. give the following reasons for their belief in the **Kahn System** of concrete construction:



View of the Packard Automobile Plant—A convincing endorsement of the **Kahn System**.

"First: You get the best fireproof conditions.

"Second: You avoid the delay of waiting for steel and work proceeds immediately and expeditiously and without the disturbance of riveting.

"Third: The shop light conditions are much better with the **Kahn System** of concrete construction."

If request is made on your letter head, a copy of "The Typical Factory," an elaborate book describing the Pierce "Factory Behind the Car," will be sent free. Write for copy of "Mills and Factories," and Bulletin No. 5, "What Reinforced Concrete Is."

### Trussed Concrete Steel Company

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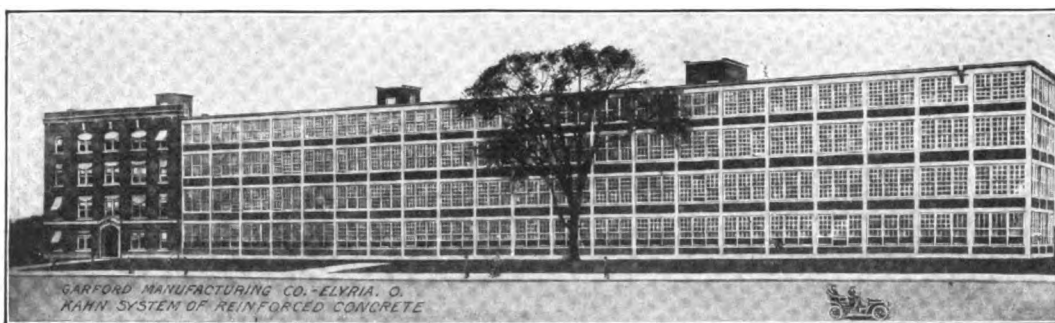
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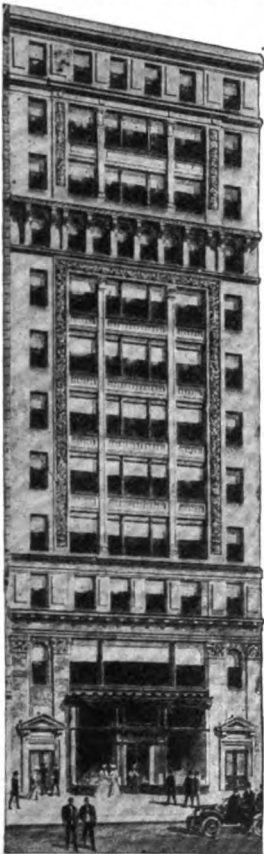
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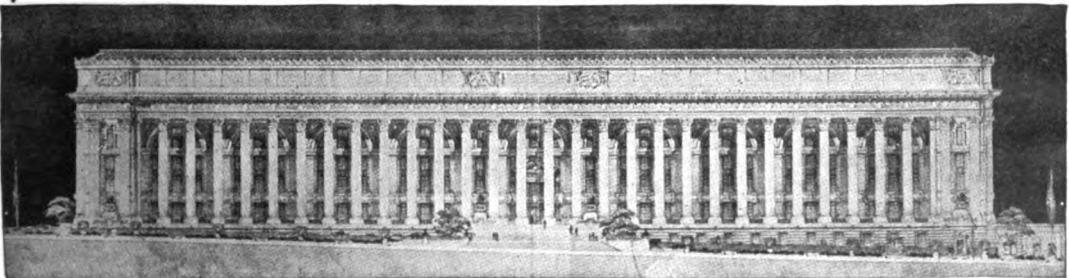
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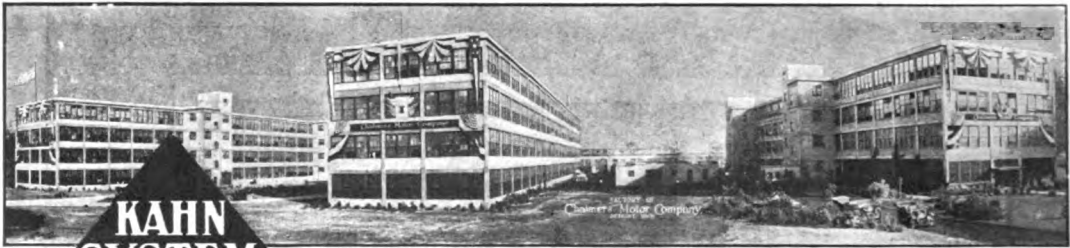
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