

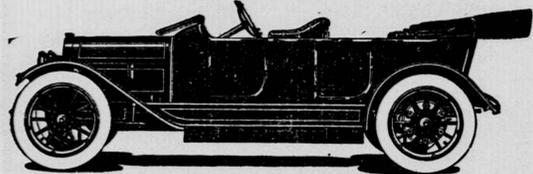
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And all because it is built to give "Motor Luxury Without Extravagance." We rest our case on the following features—features hard to find in cars anywhere near the price of the MICHIGAN "40." Sixty horsepower strength in frame, axle, brakedrum and vital parts. 4 1/2 x 5 1/4 long stroke motor—four speed transmission—left-hand drive, center control—electric self-starter, electric headlights and flush side lights—18-inch wheel base, 4 1/2-inch tires—extra wide and flexible 3/4 elliptic springs—cushions 14 inches of best Turkish leather, 50 inches wide on the rear seat.

It's the one car that is recognized for setting the pace for REAR MOTOR VALUE during 1913 and years to come.

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No Extra Price

We cut the price on No-Rim-Cut tires about 11 per cent in April.

Partly because of lower rubber—partly through multiplied output.

Now these oversize tires—these tires that can't rim-cut—are sold as low as any standard clincher tires.

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Now, at the same price, you have this choice:

You may get a hooked - base clincher tire of which 23 per cent become rim-cut.

Or you may get, at the same cost, a No-Rim-Cut tire which never can be rim-cut.

You may get an old-type clincher tire, barely rated size.

Or you may get, without an extra penny, a tire ten per cent larger in air capacity. An extra capacity which, on the average, gives 25 per cent more mileage.

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ALL AUTOMOBILE INTERESTS RADIATES FROM THE BIG FACTORIES IN MIDDLE WEST

Automobile Editor of The Star, on Tour of Motor Factories, Tells of Impressions Gained in Plants Where Pleasure and Business Vehicles Are Turned Out With Magiclike Rapidity, in an Endeavor to Catch Up With the Demand From Every Hamlet, Village, Town and City in the United States.

BY HOWARD S. FISK.



Detroit, Mich., April 26—If any one has any idea that the automobile industry is falling off, all that is necessary is to come out here to the "City of the Straits" and visit some of the automobile factories, where the workmen are straining every nerve, working from morning until night; all in an endeavor to catch up with orders for future deliveries.

With the approaching touring season at hand the manufacturers are being besieged from every section of the country for cars, more cars, until it seems as though there never will be a limit to the motor car craze. And one stops and asks the question, "And where are they all going?"

Every factory I have visited so far presents practically the same scene. Agents, distributors and salesmen from every nook and corner in the United States are to be found lined up day after day at the office of the sales manager or general manager, inquiring when they will be able to get shipments of cars.

And when you see these men out here, traveling as they do many hundreds of miles, it is a safe bet that they have not only orders for cars, but that they have deposits up and are patiently waiting for their touring car or roadster as the case may be.

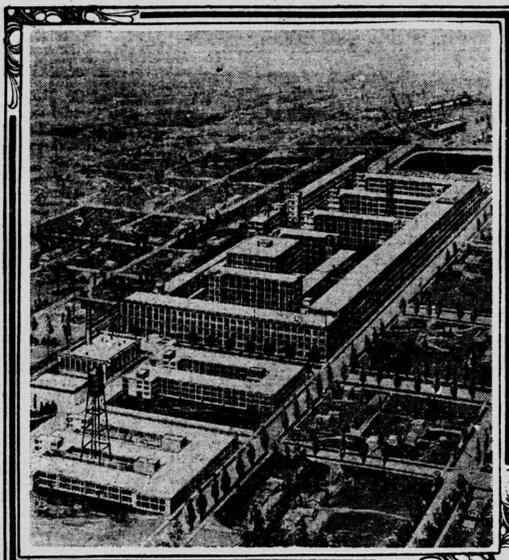
When one stops to think that this big city will turn out nearly 80 per cent of the entire production of the United States this year, which will approximate about 350,000 motor cars, then you can begin to appreciate what a mammoth industry the automobile business is. The total production this year in America will reach nearly \$500,000,000, and that means some money. Detroit is now enjoying its fourteenth year in the automobile industry and can proudly boast of thirty-three automobile factories, employing nearly 30,000 wage earners.

Early History of Auto. While Detroit itself has had a wonderful growth, no other branch of business is the subject of more frequent inquiry and none other has had such an astonishing development as the making and assembling of automobiles and the manufacture of their parts and accessories.

The automobile industry is to be credited with a large share of the city's recent growth. The first company engaged in this work started in 1890 with \$500,000 capital. According to the census of 1904 the number of companies making automobiles and their parts was nineteen with \$3,446,976 capital, employing 2,044 wage earners, with a product valued at \$8,240,000. In 1909 there were sixty-eight companies assembling cars and eighty-six more whose sole business was the making of automobile parts and accessories. Together, they gave employment to 45,586 salaried officers and wage earners. There are besides many other companies, which have the making of such parts as a portion of their business.

The capital employed by the ninety-four companies was approximately \$30,000,000. The number of cars built 130,000, valued at \$115,000,000. Large additions were made to a number of the plants during 1912. The capital employed now exceeds \$60,000,000 and the output promised for 1913 is largely in excess of that for 1912. The largest company manufacturing a standard low-price car actually shipped out 17,000 of them last month.

There are at the present time thirty-three companies that make or assemble automobiles, and about seventy-five others whose sole business is the making of automobile parts and accessories. They



A MODERN AUTOMOBILE FACTORY IN DETROIT THAT COVERS THIRTY-EIGHT ACRES OF FLOOR SPACE.

employ in their home factories about 60,000 men. The output by these factories for the automobile year, from October 1, 1911, to September 30, 1912, was about 100,000 cars, valued at \$180,000,000.

Increase in Small Cars. Present indications are that the output for the automobile year from October 1, 1912, to September 30, 1913, will be about 385,000 cars. Of these, however, 200,000 are low-priced cars, made by the Ford Motor Car Company, whose product last year was only 78,000. Another company, the Studebaker corporation, will send out between 40,000 to 50,000 medium-priced cars. There is no great increase in the number of high-priced cars. The average value of the whole will therefore be much less than that in 1912. The average export value per car in that year was \$1,130.

The estimate of 627,000 pleasure cars as the output of the whole country for 1913 is said to be somewhat of an exaggeration. The production outside of Detroit in 1912 was in excess of 25,000 cars and there is no indication of a very large average increase for this year.

Pioneers in Auto Making. Meantime, Henry Ford continued experimenting, inventing, building at a small plant at the belt line crossing of Mack avenue. His company was not incorporated until June 27, 1903. Its present plant in Highland Park is one of the largest in the country. Its specialty is low-priced cars, and it puts out a much larger number of cars than any other company in the United States.

Standing of Industry. The gain in the volume of business has been greater than that in the number of establishments. For the twelve months ending June 30, 1904, the industry stood according to the following figures:

	1900	1910
Number of companies	28	717
Incorporated	20	580
Capital, \$	\$12,855,880	\$155,138,140
Total manufacturing capital	\$7,344,972	\$10,125,000
Percentage of corporate capital to the whole was 63 in 1900 and 81 in 1910.		
In the latter year there were a few concerns members of trusts, whose capital was not given separately. In 1900 there were fourteen concerns, with capital of \$500,000 or more, of which only four had more than a million. In 1910 there were sixty-four with a capital of half a million or more and forty with capital of a million or more. The companies filing articles of incorporation for the two years named were as follows:		
Number of companies	1900	1910
Authorized capital	\$1,611,200	\$12,802,310
Paid up	\$1,029,750	\$6,549,276
and unissued	16	84
Amount of increase	1,156,900	16,511,500

Nearly 2,500 Factories. In 1911 there were 2,125 factories in this city making automobiles, parts and accessories, while at the present time the total number has increased to 2,450. The total employed male wage-earners in the earlier year was 97,056, while in 1913 the

seventeen with \$1,070,000 capital, and the number of automobile companies to twenty-two, with aggregate capital of \$4,225,000, employing 4,300 wage-earners and putting out 10,736 cars, valued at \$11,419,250. But the most rapid growth of the industry has been since 1908, as shown by the following comparison:

	1908	1909	1910
Capital	\$5,700,000	\$15,200,000	\$35,425,000
Men employed	8,430	16,000	27,000
Value of product	\$22,000,000	\$54,200,000	\$134,587,000
Number of cars built	18,200	45,000	114,120

Even the latter figures do not show the capacity of the industry as it stood at the end of the year. During the year over \$1,000,000 was expended in new automobile buildings and additions, and a large amount for the equipment, much of which was not yet in commission.

Plants Dot Michigan. The number of automobile companies operating in Michigan and their capacity output in cars as they stood at the end of the year 1910, was as follows:

	No. of capacity companies	In cars
Detroit	24	229,300
Adrian	1	1,500
Flint	4	4,000
Grand Haven	1	1,200
Grand Rapids	4	4,000
Jackson	3	10,000
Lansing	3	18,000
Oakland	2	9,000
Pontiac	4	11,850
Warren	1	900
Total capacity	38	313,350

No complete records of the operations of Detroit companies for 1911 have been compiled, but the output is estimated at 200,000 cars, with a selling value of \$161,000,000.

A large proportion of the automobiles and their parts destined for the foreign trade goes through the seaboard ports and its amount is not ascertainable. That which has Detroit for its point of departure represents mainly the sales to Canada and England. Their value since 1903, when automobiles first appeared as a separate item in the export tables, has been as follows:

	1903	1910
1903	\$82,932	
1904	162,221	
1905	225,325	
1906	299,354	
1907	428,120	
1908	552,010	
1909	696,708	
1910	1,088,653	
1911	1,864,594	

In the first two months of 1913 they amounted to \$1,266,875.

As an evidence of the rapid growth of this industry the companies which were engaged in business in the year 1900 are compared with a period ten years later.

	1900	1910
Number of companies	28	717
Incorporated	20	580
Capital, \$	\$12,855,880	\$155,138,140
Total manufacturing capital	\$7,344,972	\$10,125,000

The percentage of corporate capital to the whole was 63 in 1900 and 81 in 1910. In the latter year there were a few concerns members of trusts, whose capital was not given separately. In 1900 there were fourteen concerns, with capital of \$500,000 or more, of which only four had more than a million. In 1910 there were sixty-four with a capital of half a million or more and forty with capital of a million or more. The companies filing articles of incorporation for the two years named were as follows:

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While criticism was heaped high on the company for attempting to enter a new field, nevertheless the officials of the company started out with the idea of building up an equally good reputation in the electric bicycle line, and they soon convinced their competitors in the automobile industry that they were in the game for good. That the company has

Remarkable Growth of the Industry in Last Decade Described by Fisk—"City of the Straits," Hub of the Motor Universe, Employs Thousands of Workmen and Millions of Dollars Invested in Manufactories. Sales Manager Says Sales for the Month of May Will Be Limited Only by Ability of Factory to Produce.

figures are set at approximately 110,000. With these figures in front of us there remains but little doubt but that it is one of Detroit's leading industries.

At the twelve Studebaker plants I saw nothing but activity everywhere I looked. It reminded me very much of the old days in the industry, when the demand for automobiles was always so infinitely greater than the supply. Here I found cars were being turned out at the rate of 200 a day, with everybody making a tremendous though unavailing effort to catch up with the urgent requests of their dealers. At plant No. 1 were about 100 "35" models and it has already gotten ready to turn out the long-expected "40" model under car. Factory samples are now in transit to all the branches and production in large quantities is already under way.

At plant No. 8 the "27" cars are coming through at a similar rate. Sales Manager Benson, who is on the eve of his departure on a trip that will take him to the Pacific coast and the far northwest. "From our point of view sales conditions were never more prosperous," he said. "Our records for this month have all been beaten and our sales next month will be limited only by the ability of the factory to produce. The sales and production departments are in perfect accord, despite the tremendous incentive to speed, and neither department is content to see production enhanced a bit more rapidly than is consistent with conscientious inspection and error-free ship." The total output by this corporation will be about 40,000, with 50,000 as the maximum figure.

Cadillac Plant a Bee Hive. The Cadillac plant is another bee hive of industry. The output here for 1913 will be about 15,000 cars, an increase of about 3,000 over last year. A still greater increase is planned for next year. The company is now on its last lap of 1913 business. The distributors throughout the country have been instructed to keep the closest kind of touch on the supply and their demands to make both ends meet, so far as possible. Not an increase of the kind of touch on the supply and their demands to make both ends meet, so far as possible. Not an increase of the kind of touch on the supply and their demands to make both ends meet, so far as possible.

Demand for High-Priced Cars. In the higher priced field the Lozier Company is moving along at a steady gait. The daily output is now reaching ten cars, while the yearly production probably will reach 2,500 cars. There is still a good demand for high-priced cars, according to Sales Manager Paul Smith, who has just returned from the Pacific coast, where he looked the field over. It might be interesting to note that the Lozier company is an automobile men drive Loziers. That is where the slogan came from, "The Choice of Men Who Know." The Lozier plant is one of the most modern and up-to-date in Detroit. A visit through the large machine shops reminded me very much of the big gun shops of the Washington navy yard. The trip was very instructive and many new features were being introduced into the perfection of a high priced car.

The King Motor Car Company has been entirely reorganized, and the total output this year will be about 3,000 cars, 1,000 of which will be produced the first six months of the year.

One of the most interesting plants here is the Ford Motor Company, which will produce 200,000 cars, which is the high water mark in the automobile industry. Here cars are being turned out at the rate of 1,000 a day. Just as an indication of what can be done at this plant one day in January last, 13,350 finished cars were built and shipped, a business in one day amounting to \$70,000, and which required more than 200 freight cars to handle the shipments. In spite of the increased facilities for producing the daily orders are in excess of the daily output. An idea of what it means to move the 1913 output is shown in the statement that it will require 35,000 freight cars to move them. According to officials at the factory the output in any year will be at the rate of a car to every other car that is built in this country by the other manufacturers.

Young Men in Ford. The Ford company is an organization of all young men. Not an executive head has been added to a single department of the business in more than six years, during which period the output of cars and sales have been nearly doubled each year. Ten years ago the company was capitalized at \$28,000 and did an annual business of \$200,000. Today it is the largest motor car factory in the world, has a capitalization of \$90,000,000 and sells annually \$200,000,000 worth of cars in all parts of the world. The January sales were nearly \$9,000,000, or more than twice that of any other month. The Grand Trunk railway system for the same month. In the past four months the firm has done a business of nearly \$70,000,000, and two of those four months were not what they consider good ones.

Out on the main line of the Michigan Central and Grand Trunk lines I found the Anderson Electric Car Company busily engaged turning out Detroit electric pleasure cars and trucks. It was here that this old and well established carriage concern has been made to meet the demand of the automobile age. The plant is well lighted and everywhere the men, women and children of the workmen, with all the latest magazines and reading rooms, with all the latest magazines and reading rooms, with all the latest magazines and reading rooms, with all the latest magazines and reading rooms.

operation among the various departments of the plant is set aside for the men, where they can get a good rest and be refreshed. The Packard Motor Company is just now having the biggest month in the history of the company. About 400 cars, according to officials of the company with whom I talked. The total output this year will be about 400 pleasure cars and 2,000 trucks of various sizes. This plant is working up to capacity and every effort is being made to meet the spring demand. The company has never before been able to meet this demand, and with everything up to the minute, including the latest improved machinery and enlarged facilities, there is every prospect that the demand will be met this year.

The Packard plant employs 7,000 wage-earners, which represents a total of about 20,000 people, and if all put together would constitute a small city in itself. The sight of 7,000 people being turned loose at 5:30 in the evening, which is the hour when the various mechanical departments shut down, was a spectacle which I beheld a few days ago when

(Continued on Seventh Page.)

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In 1913 Marion Cars

THE steel used in the long Marion springs comes direct from Manchester, England. What better proof can you ask of their temper, their resiliency and long life—Manchester steel! Try them.

Then we use deep upholstery, hand-buffed leather and the best of curled hair—Marion cars are noted for easy riding, arm-chair comfort. Sit on their cushions—jump up and down if you like. Better yet, we'll drive you over rough roads and show you, at any time. Ask us about the Marion.

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