

HOW HYATT ROLLER BEARING WAS MADE

Experiments to Perfect Bearing to Stand Strain of Sugar Cane Mill Led to Discovery.

HYATT INVENTS MANY THINGS

Experiments to perfect a bearing that would withstand strains of a sugar cane mill led to the discovery of the principle and to the development of the Hyatt roller bearing.

John Wesley Hyatt, the inventor, disclosed that interesting fact recently at one of the several little celebrations in honor of his seventy-eighth birthday anniversary.

It was in 1880 that Mr. Hyatt was working with his sugar cane mill. He had perfected a mill superior to any then used, both in its efficiency for increasing the percentage of pure extraction from the cane and in greatly diminishing the time necessary for the operation. The greatest trouble he experienced with the mechanism was with the bearings. The ones he was using were obtained in the open market, but they did not prove satisfactory.

Mr. Hyatt says that, without an efficient anti-friction bearing, he must give up his mill project. He, therefore, gave his attention to this new problem—the perfection of an anti-friction bearing. The first experiments were with wood rollers. Then he worked with solid steel rollers, with vulcanized pipe and with tubing—using many different types of cages and retaining bars.

After several years' research and experiment, the Hyatt flexible roller was developed and a company organized for its manufacture. The bearing first was made in a small building in Newark, N. J. Soon new buildings were necessary and there has been a continual increase of manufacturing facilities since that time.

At present three new buildings—which will increase the plant's floor space by a third—are being erected at Newark and two others are under construction in Detroit. In addition, the Hyatt company has service branches in eight different cities in the United States.

While Mr. Hyatt's name is known nationally by millions in connection with the anti-friction bearing he has been granted patents on inventions along many diversified lines, the total being over 500. He was awarded the Perkin medal some time ago, and his name was placed beside that of Sir William Henry Perkin and the six great American chemists who previously had received that honor.

Started Out as Printer.

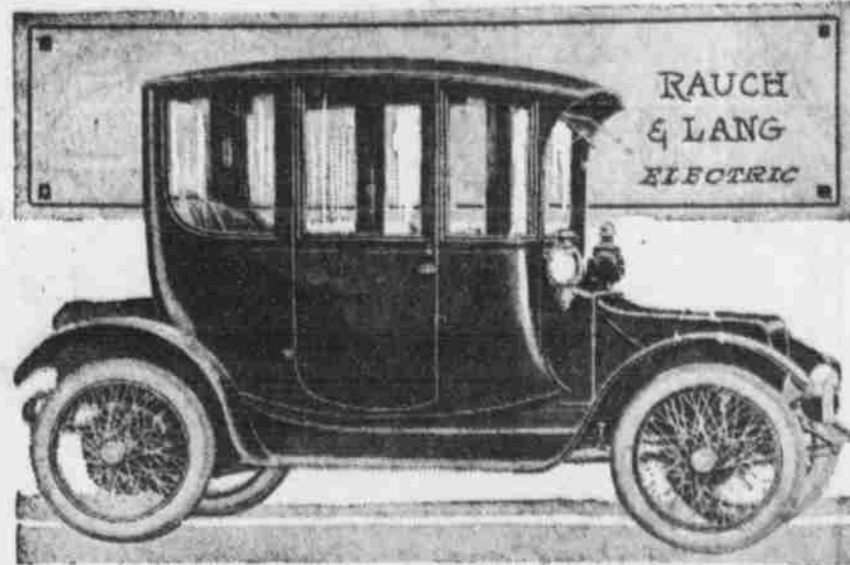
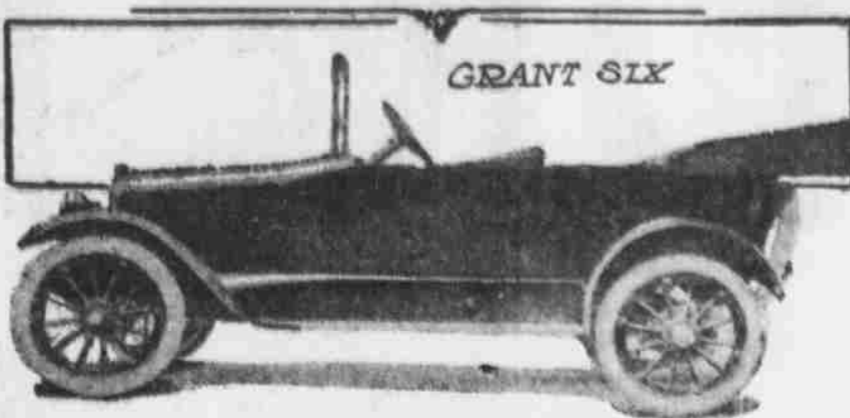
The founder of the Hyatt company was born in Starkey, N. Y., in 1837. He worked first as a journeyman printer, and in 1861 took out his first patent papers covering a family knife sharpener, which included a new method for making solid emery wheels.

Later he went to Albany, where he worked as a journeyman printer. Seeing an offer of \$10,000 for a substitute for ivory for billiard balls Mr. Hyatt began experimenting in the hope of gaining the reward. He made a number of useful plastic compositions, none of which, however, was good enough for billiard balls. These experiments led him into the manufacture of checkers and dominoes made of pressed wood, and, with his two brothers, he established what is now known as the Embossing Company of Albany.

Many experiments followed along diversified lines, and many patents were taken, among them one which covered the fundamental invention of celluloid. In establishing the Celluloid company of Newark, Mr. Hyatt had associated with him his brother, Isaiah S. Hyatt, and in the next few years several different patents were taken out either by the inventor of the Hyatt roller bearing or jointly with his brother.

Later Mr. Hyatt took up the subject of water filtration and organized the Hyatt Pure Water company. He was granted a valuable patent on an important feature of the filtration process, which marked a new era in water filtration.

Autos for the Men and Women Both Are Shown at the Show



Startling Spark Plug Facts Given

The state of Michigan claims thirty-three large manufacturers of motor cars. Twenty-four of the thirty-three use a Michigan made spark plug known as the A C plug. Sixteen of the thirty-three builders are located in Detroit alone. Of this number all but four use A C plugs. This conclusive proof of superiority—this wonderful record is held by the Champion Ignition company of Flint, Mich., manufacturers of A C plugs. Not only are these plugs used on Michigan built cars, but they will be found as standard equipment on most of the high class cars made in America.

Mr. Champion claims there are only a few makes of cars not equipped with A C plugs. The present A C plug popularity has been acquired purely on quality and performance. It is to the interest of every car builder to equip his car with the best ignition system possible. It is the heart of the motor—the element that goes far toward spelling success or failure for the car. Builders recognize the folly of using poor plugs.

MITCHELL INSTRUCTION BOOK DISTRIBUTION

That the Mitchell-Lewis Motor company hit upon the most popular scheme of imparting information on the cars and operation of an automobile when it put out its fifty-page brochure is made known at the general office at Racine.

"The purchaser of Mitchell cars is given a card to fill out and send to the factory," said an official of the company. "He must attend to this himself. It is held that if the dealer writes for the instruction book the owner is not so likely to regard it as a valuable asset as if he himself applied for it."

"Since more than 4,000 owners of the new Mitchell are listed in the United States and almost five times that many instruction books have been distributed upon owner's card applications, there must be a very general use of the book by others. I don't marvel over this, for the book is more comprehensive and explanatory than were some of the ponderous and technical ones that used to be sold for \$2 a volume when the motor car industry was in its early days. Every possible trouble that a man might have with an automobile is designated in this book along with the other things. Small wonder that an interested car owner will read it from 'kiver to kiver.'"

CHANDLER SIX ATTRACTING ALL

Price and Quality Make it Subject of Inquiry from Thousands Who Would Buy.

BEAUTY OF BODY ATTRACTS EYE

The new model, Chandler "six" is raising enthusiasm among lovers of beautiful, durable, speedful automobiles. Its quality is remarkable and its price—\$1,366—bears testimony to the Chandler company's claim as a price pioneer in the high quality six-cylinder field.

The Chandler people are especially proud of this achievement, in view of the present high prices of automobile materials, particularly steel, aluminum and leather.

Large production, correspondingly low overhead charge and solid financial strength make this car possible.

The Chandler has been seen by a great number of Omaha people and pronounced a car that meets the demands of the people both in price and in quality.

With its great wheel base and new, graceful body, with walnut paneled tenon cow, the car delights the eye. It has the same high-powered thoroughly tested motor that has made Chandler power and speed famous.

Plenty of Room. The roominess of the car is a feature that attracts much favorable notice. It seats seven persons, and there is a goodly margin of comfort, room and to spare. The seats are wide and tilted back a little bit. There is lots of "leg room."

Deep, soft hair cushions, upholstered in the new, long-grain, semi-glazed leather, are only one of many refinements of luxury on the interior of the car.

Among the equipment of the car are similar call bearings, Stewart-Warner magnetic speedometer, Stewart vacuum feed, Gray & Davis' separate unit electric starting and lighting system, Bosch high tension magneto, Chandler aluminum crank case, Chandler full floating, silent, spiral-bevel-gear rear axle and silent chain drive for motor shafts.

The mechanical excellence of the Chandler is known all over the country, but the beauty of the new body and its luxuries must be seen to be appreciated.

And many people are inspecting the cars and have them demonstrated now in Omaha.

The Chandler four-passenger roadster is attracting much attention.

STANDARD MOTOR CAR CO. TO HANDLE FIRESTONES

Standard Motor Car company has made arrangements to handle the Firestone line of tires and accessories as a whole-

sale proposition along with their Allen line of cars.

Mr. Changstrom says "During this past summer we found a growing tendency for a high class tire. We think we have it in the Firestones. A large number of our cars come through equipped with Firestone and we have had a good opportunity of watching this tire the past season."

Mitchell Factory Men to Storm the Omaha Auto Show

If all of the automobile factories that have representatives in Omaha were to send as strong a delegation to the Omaha show as will arrive from the Mitchell factory, the hotels would have to be enlarged to accommodate the crowds.

In addition to the salesman and district managers who will be present to assist at the show the factory will also be represented by the following officials: I. W. Bates, vice president and general manager; O. C. Friend, sales manager; F. W. Pelton, advertising manager, and George W. Hipple, the general merchandising counsel. These gentlemen will be the guests of J. T. Stewart, 25, the local Mitchell distributor, at a luncheon he is giving his dealers at the Omaha club Wednesday, Mr. Friend will give the dealer a little talk and it is hoped that Mr. Hipple can be persuaded to give his celebrated address entitled "How to Get the Name on the Dotted Line." Mr. Hipple's early training with the National Cash Register company and his wide experience in the automobile business particularly well fit him for his new position at the Mitchell factory of assisting the various Mitchell dealers in all parts of the country in organizing their sales forces in the most successful manner.

Mr. Bates is probably the best known of any of the American automobile engineers. It was he who designed the first medium priced six-cylinder car to appear in America, the model B, which was sold in 1907. He also designed the famous Mitchell Baby Six, which appeared in the fall of 1911, about two years ahead of the other light sixes.

MUST BE AMERICANS TO GET THEIR PROMOTIONS

For the first three days of last week, an increase of 50 per cent in applications for first papers toward American citizenship, as compared with normal business, is reported by the authorities in Detroit. The announcement to 12,000 employees of the Packard Motor Car company by Vice President and General Manager Alvan Macaulay, that promotion in the Packard institution will be given only to American citizens or to those who have signified their intention of becoming citizens, was posted Monday.

The opinion given at the office of the county clerk was that the increase is directly due to the "Americans first"

policy at the Packard show, and the feeling in sympathy with the announcement in other industrial concerns of the city.

Not one resignation has resulted at the Packard factory, J. H. Weller, supervisor of labor, has announced, although it is estimated that 30 per cent of the workers are not yet American citizens.

APPEARANCE HAS MUCH TO DO WITH SELLING A CAR

"Without in any way underrating the importance of mechanical efficiency as a big talking point in the sale of an automobile, it is a fact that all the chassis and motor merits possible will not sell a medium or high priced car unless that car has good looks and comfort," says

H. S. Daniels of the KisselKar. "Appearance may not be everything, as the old proverb holds, but it does create an impression in the mind of the prospective purchaser of an automobile that it is difficult to efface."

"For instance, the KisselKar high efficiency 22 has a wonderful power plant, an uncommonly simple and accessible chassis, and is modern and complete in every mechanical sense. Still, it would not be the exceptional seller that it is but for the beauty of its lines and the luster of its finish."

"To insure this finish, Kissel buys the very finest quality of steel sheets for body, hood and fenders. These provide a surface for finishing operations that insures the best results, that otherwise could not be had."



Prestige

The Baker R & L Electric represents that heritage of worth which of necessity comes of sixty-four years' leadership in quality coach building—is the unerring endeavor to produce only what is truly best.

The Baker R & L has never been made to measure down to price. Rather, price has always been fully commensurate with high quality. People who know and want the best always

select that equipage which shall reflect their social standing and good taste.

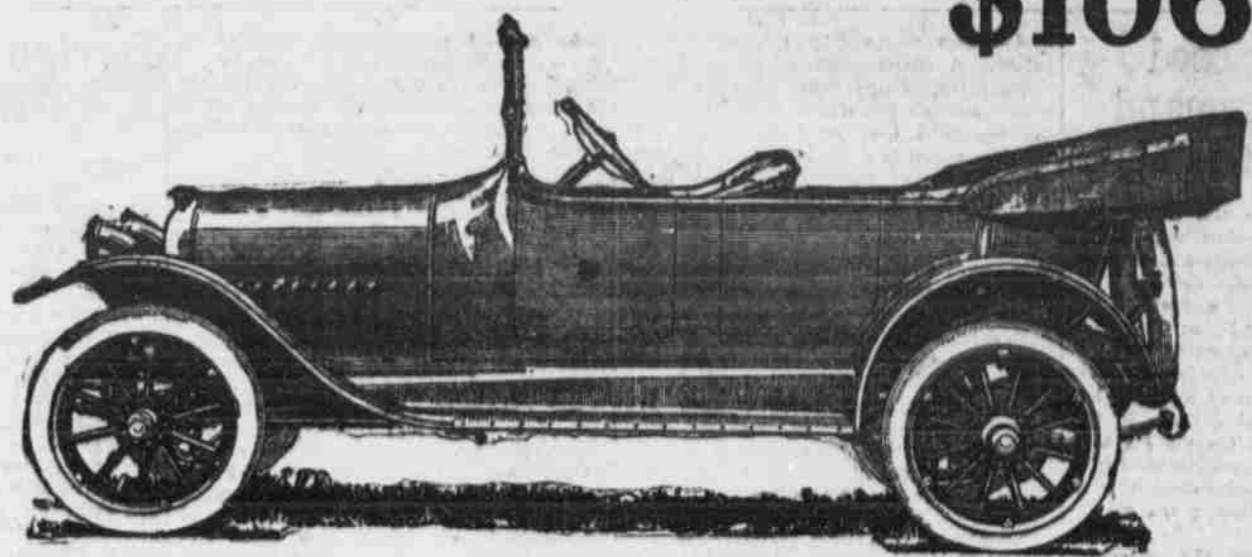
That is Prestige—the appealing quality for which the Baker R & L is selected—more than the sum of mechanical perfection, beauty of design and skillful workmanship—

Not forgetting that the Baker R & L is the all-season car—the car of Utility as well as the Car of Fashion.



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Velie Sixes \$1065



See the Velie Exhibit at Booth No. 37, Auditorium

Dealers, never before have you had the opportunity of selling Velie cars at so low a price.

Here is a full sized Velie—the product of the same great manufacturing organization—with all the quality insured by the Velie name—at \$1065.

You know car values. You can make comparisons as an expert. Compare the Velie with all others on the specifications—on the price. On this comparison we believe you will admit that the Velie values appeal to a wide market in your locality.

We want a few more dealers to give us the complete distribution required for a nationally advertised car. In sections not closed we want men who realize this opportunity. To such men we offer our liberal proposition. Here is an underpriced car—an advertised car. A Velie-built car with many years of Velie reputation behind it—beautiful, luxurious, wonderfully equipped.

Judge the remarkable values of this car by such features as these: Velie Continental Motor 40 h. p.; multiple dry disc clutch; automatic ignition system; Hotchkiss type of drive; spiral gears in rear axle; 48-inch underslung rear springs; Velie-Stewart vacuum feed; push button starting device; two-unit Remy electric system; Velie mirror finish 20 operations; fine leather, deep-tufted upholstery; double-bulb headlights; 15-gallon tank, with gauge at rear; cowl light shows if tail light is going; one-man top; 32x4 tires, non-skids on rear. Complete equipment.

Velie Motor Vehicle Company Moline, Illinois

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Factory representatives will be on hand to explain the uses and merits of their products

You are cordially invited to make yourself at home at our store during the show.

C. S. Powell
President.