

AUTO DERBY AT CHICAGO JUNE 9

PROSPECTS FINE FOR FULL LIST OF ENTRIES—32.

Hudson Company to Make Debut—The Old Familiar Favorites.

Chicago, April 7.—Altho the first signed entry blank for the third annual auto derby, which will be held on the Chicago speedway June 9, has yet to be filed away by the local promoters, it is not difficult to forecast the field for this race—the opening classic of the 1917 season—

There probably will be four American teams of three cars each on the starting line. They will have on their hoofs, the Hudson, Stutz, Mercer and Duesenberg nameplates. Hudson is the neophyte team, the company making its racing debut at Chicago this year, altho two of its cars campaigned last season by individual owners, Ralph Mulford and Ira Vail. Both Mulford and Vail will be members of the factory team, which will be managed by Arthur Hill, able director of Dario Resta in 1915 and 1916, assisted by Billy Chandler, who has abandoned the Stutz factory to act as mechanical expert for Hudson. Jack Gable, formerly mechanic for the late Bob Burman, also will chase prize money at the wheel of a Hudson.

Stutz and Mercer Cars. Stutz and Mercer will celebrate their return to the racing game in the auto derby. The Stutz cars will be entered by Earl Cooper, who has been entrusted with them by Harry Stutz, the builder and owner. Altho these cars were retired after they captured the 1915 road racing and speedway championships, last season Cooper was permitted to drive one of them on the Pacific coast and another was driven in the Cincinnati inaugural race by Gil Anderson and disabled. Cooper has not announced who his teammates will be.

The Mercers, former favorites of the fans at Elgin and Indianapolis, have not been active in racing circles for two years, the factory confining its entries to the fall meets on the New York speedway in 1915 and 1916, and the team captain, Eddie Pullen, driving on the Pacific coast for the California distributor. The Mercer drivers this year probably will be Pullen, Ruckstell and Thomas.

Duesenberg Always a Contender. Duesenberg, always a persistent contender in road races and speedway events, will be represented by three new cars, equipped with 16-valve aviation motors. Altho Fred Duesenberg has not announced the personnel of his 1917 team, it is thought that Wilbur D'Alene and Tommy Milton will drive for him.

Altho the French Peugeot will not be as prominent this year as last, when they took 13 of the 25 speedway races on the 1916 schedule, as the result of the retirement of Dario Resta and the Indianapolis speedway from racing, the auto derby will not be without foreign competition. Sunbeam of England and Fiat of Italy each sending two cars across the Atlantic to wage international combat. Josef Christaens, the Belgian, may be at the wheel of one of the Sunbeams and Cagno and Scates have been named as the Fiat drivers.

Only One Peugeot Probable. Unless Alphonse Kaufman, who brought Resta to this country, finds another driver for his car and Indianapolis sells its French speed creations at the prohibitive price it is asking for them, it is probable that only one of the four Peugots now in America will be campaigned this season. This Peugeot, owned by Lutchor Brown, has been turned over to Ralph De Palma, who also plans to enter the rebuilt Mercedes in the auto derby.

This auto exhausts the supply of foreign cars in this country with the exception of the two Delages and the Peugeot, owned by Harry Harkness of New York. He has not announced his 1917 racing plans as yet and it is a question whether his exotic mounts will be prepared for another campaign since they failed to show much promise last season.

Barney Oldfield has switched his allegiance from the Delage to a novel aluminum car that has been built for him by Harry Miller of Los Angeles and which will make its maiden start in the auto derby. The promoters also have been promised several other individual entries, including George Buzane's Duesenberg, William Washington's Duesenberg, Joe Boyer's Fontenac and Tom Alley's American, that will bring the number of starters up to the limit—33.

Wheel and Motor World

LIGHT-WEIGHT CARS HOLD ROAD AND GIVE EASE

Oldtimers in the automobile business are often heard to remark that the chain-driven cars of the early days were superior to the average car of today in ability to hold the road.

The loss in road-holding quality, due to the adoption of shaft drive with its heavy working parts located directly on the axle, was either overlooked or put up with because the relief from early-day troubles overshadowed it in importance.

Within recent years, road-holding ability has received more attention, however, as is shown by the increasing favor accorded semi-floating rear axles and quick-detachable rims, each being the lightest type of construction employed for its purpose.

The builders of the Franklin have consistently followed light-weight practice in the models they have offered the public for the past 15 years. They claim that the first requisite for ease of riding and ability to hold the road is light weight, and that the proper relation of the weight above the springs to the weight below is very important.

The Franklin engineers have gone about producing a car that measures up to their self-imposed standards by extensive use of aluminum and alloy steels, together with careful designing of parts, making possible a touring car that weighs only 2,280 pounds. Axles are 30 per cent lighter in proportion to body weight than the average. This is made possible by the use of nickel-steel tubing and aluminum differential housing, and by keeping the transmission of the rear axle and locating the service brake on a transmission brake drum. In addition, all cars are equipped with quick-detachable rather than demountable rims.

GARFORD COMPANY COMBINES SALES AND SERVICE DEPTS. In its long and successful career, the Garford Motor Truck company believes that it has probably never made a more practical decision than that which combines their sales and service departments into one unit and under one head. In this, and in no other way, in its opinion, can service for truck users be handled intelligently and efficiently.

"The ability to render quick and intelligent service is an asset in favor of any truck manufacturer," declares S. M. Williams, sales manager of the Garford Motor Truck company. "After purchase, service has come to be regarded as something which his work at the shore in the past he credits to displaying in the newspapers, rather than to the fact that we have been advertising the Pullman nationally thru magazines and had the cars on exhibition at the auto shows in Atlantic City.—Editor and Publisher.

the business man acquires a lien on when he buys a truck; and your shrewd buyer makes sure of his ability to command such service. "The business man knows this and no amount of salesmanship can convince him that this is not so. He has also learned to distinguish between promises and facts and it often happens that his investigation of service facilities is just as thorough and just as painstaking as his investigation of the character of the truck he buys.

"Service, the real, must be willing, intelligent and prompt and when such service really exists, it goes a long way towards closing the sale."

HIGH TYPE OF COMPLETELY EQUIPPED CAR It is surprising to those who recall the motor car of some ten or twelve years ago, to note the radical changes that have taken place in what constitutes "standard equipment." The purchaser of a car, but a few years ago, found that he had bought the chassis and body only. Before he could operate his car with any degree of comfort or safety it was necessary for him to purchase even such essentials as lamps, horn, top, etc. As a type of the completely equipped car the Graham Motor Car Co., 410-12 Fifth street west, points to the Pathfinder Touring Roadster, from the Indianapolis plant of the Pathfinder company, as a notable example of what, in these latter days, is considered the completely equipped automobile. Indeed, this company goes many steps beyond all other car manufacturers in the items of equipment which are included in the one purchase price.

Of course, there are a full complement of electric lamps for front, rear and tonneau, starting and lighting batteries, speedometer, clock, gasoline gauge, electric horn, windshield and tool equipment. Then, each Pathfinder is equipped with Hartford shock absorbers, thermostat to control water temperature, motorometer to show what proper motor temperature is maintained, Delco starting system, Silverton cord tires and tire pump, and a hundred or more luxuries and conveniences.

DODGE BROTHERS FIRST CAR STILL USED DAILY An unusual bit of information concerning the first Dodge Brothers motor car ever built developed from a discussion among automobile men in Detroit a few days ago. "Old Betsy," as the car is familiarly known, is still in daily service in the experimental department, just where she originated more than three years ago. Altho she has already piled up a record of more than 150,000 miles, she is being used today for the most difficult experimental runs. However, the unusual lies in the fact that "Betsy," unlike most experimental cars designed only "to see how it looks and acts,"

was made up originally of manufactured parts, just as the she came in the regular line of production. "The common practice," said F. J. Haynes, Dodge Brothers works manager, who was discussing early motor cars with the other automobile men, "is to use castings in putting together the experimental car. This is done because it is a very long and costly process to make up dies for forgings. Dodge Brothers, however, set about making dies for every part which they had previously determined was to be a forging. With some of these, of course, the drop forgings were absolutely necessary. In many others the plain castings would have been adequate for ordinary experimental purposes.

"It may surprise you to know that the better part of a year was consumed in making up these dies, all because Dodge Brothers insisted on 'doing it right from the beginning.' "It is probably the remarkable success of the car from the first day of production is explained to a large degree by this initial thoroughness."

PROCESS OF MAKING AN AUTO CAM SHAFT There isn't any manufacturing plant more interesting than a motor car factory. In fact, it is little short of marvelous to watch the speed with which the various parts which go toward making up a spick and span 1917 automobile are manufactured. While in Detroit recently a newspaper representative visited the great Studebaker factories and inspected every process of manufacture from the founding to the assembling department. One of the most interesting manufacturing operations was the processes necessary to make a single part, the cam shaft used in the new series 18 Studebaker cars.

The steel for the cam shaft comes to the factory in bars. This bar is cut off by gigantic shears into billets about a foot long. The billet is heated to a malleable state and placed on the die of a great steam hammer. In a few strokes the billet of steel is elongated and shaped roughly into its final form. After this operation the shaft is allowed to cool in the air. It is then heated again slowly to 1700 degrees Fahrenheit. This heat treatment readjusts the grain of the steel after the strains of the dropforge hammer.

It then goes thru several lathes and as a last finishing process it is cleaned, straightened, inspected and then passed on to the final grinder. Here it is ground to shape under emery wheels. Automatically the emery wheels are guided over the curved surface of the cam so as to insure accuracy to the one-thousandth of an inch.

price of the Maxwell touring car and roadster models. The advance takes place May 1. It amounts to \$30. Indicating the degree of efficiency that has been attained in the Maxwell company's manufacturing plants, this increase takes rank, it is pointed out, as the narrowest margin of price advance found necessary by any automobile producing organization since prices first evidenced a marked upward trend as a result of the stringency in metals and other raw materials after the first year or so of the European war.

GOODYEAR COMPANY ADDS MILITARY TRAINING Military training has been added to the educational classes of the Goodyear Tire & Rubber company's factory school at Akron, Ohio, according to an announcement just issued to employees by F. W. Litchfield, vice president and factory manager. Instruction is to be given under the supervision of ex-army officers of long military experience. The Goodyear factory is in operation 24 hours of the day, divided into three 8-hour shifts. The classes in military training have been arranged so that each shift of workers may have two hours of drill each week.

CHANDLER COMPANY IN FACT CAMPAIGN. One of the most interesting advertising campaigns of many a season is that now being followed out by the Chandler Motor Car company of Cleveland, manufacturers of the Chandler Six. Mr. R. Reedy, manager of the Graves Auto Co., local Chandler distributor, says that he never had any doubt of the value of newspaper advertising, but that his conviction as to the value of such ad-

vertising, if the advertiser has a real story to tell, is greater now than ever before. "Chandler advertising this spring," said Mr. Reedy, "has been what the factory calls a fact campaign. Not that Chandler advertising has not always been based on facts, but that the advertising this year has emphasized and reiterated certain simple fundamental facts about the Chandler car which very largely are exclusive Chandler facts." The Chandler company in perfectly plain English is calling the attention of the public to facts.

The Chandler company in its advertising makes no words when it says that not to its knowledge has a professional motor car driver ever made a record with a Chandler Six, but that all the thousands of owners of Chandler Sixes every day are making the kind of records that count—records of satisfactory service. And that the Chandler company has never built a racing car, because Chandler owners do not want racing cars, and the 55 to 60 miles per hour speed that every Chandler does is speed much greater than the owner would ever ask for. And that the Chandler company has never built a special mountain-climbing car with short wheel base and low gear ratio because the ease with which every Chandler climbs grades on high gear is satisfying to the Chandler owner. And that the Chandler company has never supplied any Chandler dealer anywhere with a special gear ratio for demonstrating purposes, because what any Chandler Six does, every Chandler Six will do.

REMARKABLE PROOF OF FINEST CONSTRUCTION. Information just received from the Toledo factory of The Willys-Over-

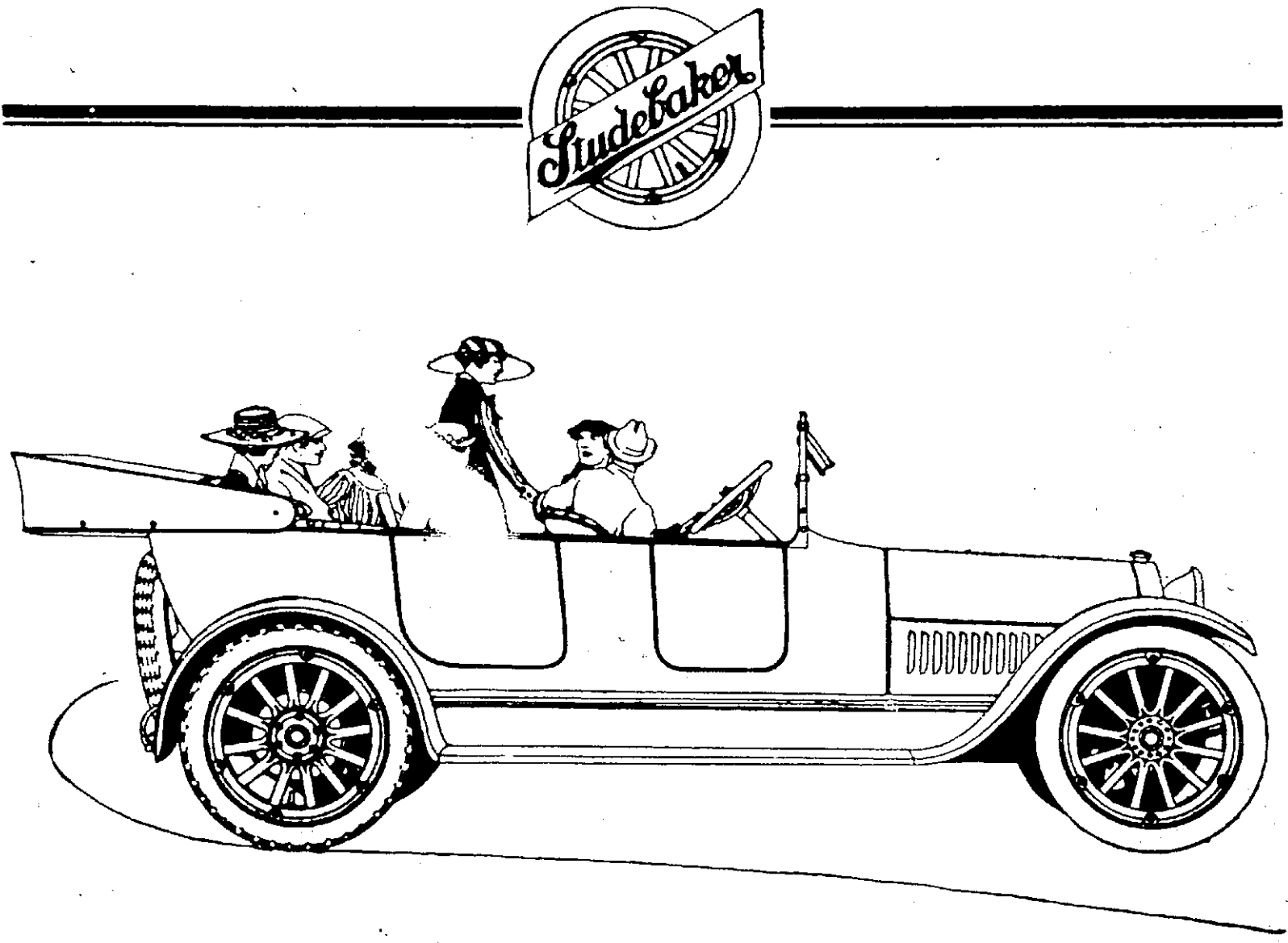
land company by the Overland-Hanson Co., local Willys-Overland dealer, contains a novel endorsement of Willys-Overland construction and the quality of the material used by that company in its production. "Last year," says Mr. Hansen, "the steamer Wisely, carrying a cargo of general merchandise bound for Vladivostok, caught fire at sea, and was beached on the Chinese coast, about 600 miles from Hong Kong.

"Included in the vessel's cargo were 18 six-cylinder Overland touring cars. "Some time ago the vessel was raised and the greater part of the cargo salvaged. "These 18 touring cars, when raised to the surface, presented a sorry appearance. The vessel had been on fire for several days, before

sinking to the bottom, where it lay for three months. "During all this time the cars were subjected to the effects of fire, smoke and water. In addition, chemicals which the boat also carried, affected the paint and upholstery. "Examination revealed, however, that the motors and chassis were in excellent condition. At an average cost of \$200 these cars were refinished and put into livery service. According to a letter from their owners to the home factory in Toledo they are giving excellent satisfaction."

Dr. Stallenberger, specialist in chronic, nervous, special diseases, Waterloo, Russell-Lamson, Saturday, April 7, 200th visit. (advertisement) Look today for the Want page.

Increased TIRE MILEAGE We will re-tread your old tire and double your mileage. Work guaranteed. VULCANIZING Re-tread Tires for Sale. Waterloo Auto Clearing House 108 EAST FIFTH STREET.



The Studebaker SIX The Latest and Best Studebaker Automobile

STUDEBAKER has spent four years in perfecting a single basic automobile design. Each year Studebaker has produced a better car. The Series 17 Studebakers offered such remarkable values at their prices that the entire output was sold early last August. The Series 18 is still better. They embody ninety distinct improvements of mechanical construction, convenience and comfort. In ratio of power to weight they are probably the most powerful cars on the market. In ratio of power to gasoline consumption the most economical. Their balance is refined to such a point that a single set of tires frequently runs from 8000 to 12000 miles. Their lines are distinctive. Their paint and varnish work excellent. Genuine leather is used for all upholstery—leather not only genuine, but high grade genuine leather. Their seats are formfitting, deep, comfortable, luxurious. See the Studebaker SIX, examine it thoroughly, see how carefully every detail is finished—even the tonneau carpet is bound with leather. Ride in the Studebaker SIX, sense its ease, its roadability. Then you will realize why at \$1250 it is the greatest "buy" on the automobile market today.

Campbell Motor Car Co. 417 West Fifth Street Phone 281

Table with 2 columns: Model Name and Price. Includes Four-Cylinder Models like FOUR Roadster, FOUR Touring Car, etc.

Table with 2 columns: Six-Cylinder Models and Price. Includes SIX Roadster, SIX Touring Car, etc.

PAIGE The Most Beautiful Car in America. FOR family touring, to realize in fullest measure the pleasures and benefits of recreative driving during the out-of-door season now opening, the new seven-passenger Stratford "Six-51" offers you the supreme value among American motor cars. Every feature and detail, usually found only in the most expensive cars, you will find in this roomy, powerful and sumptuous Stratford. All of that Paige Beauty, Paige Stamina, Paige Mechanical Excellence, Paige Comfort and Ease of Driving you will find in the Stratford, because it is designed by the same engineers who design all Paige models—each for its requirements—"The Most Beautiful Car in America."

Table with 2 columns: Model Name and Price. Includes Stratford "Six-51", Fairfield "Six-46", Lincoln "Six-39", Brooklands "Six-51", Dartmoor "Six-39", Limousine "Six-51", Sedan "Six-51", Sedan "Six-39", Town Car "Six-51".

Paige-Detroit Motor Car Company, Detroit, Mich. Central Auto & Supply Co. Corner Sixth & Franklin Sts. Waterloo—Phone 2789 Cedar Rapids—Phone 132