

KING MAKES ONLY EIGHT-CYLINDERS

Five and Seven-Passenger Touring Car, Five-Passenger Sedan and Roadster Models

In addition to the five-passenger, eight-cylinder King, the King Motor Car Company, for the forthcoming year, will also manufacture a seven-passenger, eight-cylinder touring car, a five-passenger, eight-cylinder roadster and a five-passenger, eight-cylinder sedan.

The eight-cylinder chassis, which is being added to the King line, has a motor of three-inch bore and five-inch stroke, 120-inch wheelbase, 34x4-inch tires and a number of other changes mechanically. The body lines are entirely new. The five-passenger, eight-cylinder King will be continued in conjunction with the new model.

The new seven-passenger King has graceful lines, which merge from the hood to the cowl, gradually sloping upward and outward till they end in a full rounded back which, in its breadth and pleasing lines, gives the impression of ease and comfort on the road. Crowned fenders and rounded skirts further carry out the soft body-line effect. The two auxiliary seats in the touring car fold into the back of the front seats and in the roadster into the rear deck.

In the motor for the new King the engineers are following some new designs. Staggering cylinders are used, permitting the use of connecting rods, which operate side by side on the crank shaft instead of in yoke. The cylinders are arranged at 90 degrees and cast in block of four.

A large cellular radiator, with extension tank and large capacity intake and outlet water manifolds, are part of the radiation system on the new car. The exhaust manifold is unusually large. Large bearing surfaces, both main bearings and connecting rod bearings, are a feature.

The motor is of the unit power plant type, with three-point suspension. The lubrication force is fed and splash. Ignition is furnished by Willard storage battery and Atwater-Kent distributing system. For starting and lighting the Ward Leonard single unit is employed. A Ball duplex carburetor is used in conjunction with the Carter gasoline system for carburetion. Vic Cramer's Neverleak one-man top is regular equipment.

The starting motor is mounted above the crank case is connected with flywheel and extends back over the clutch housing. The transmission case is unusually compact and rigidly bolted to the crank case. The emergency brake is placed on the rear of the transmission case and operated on the transmission shaft.

The forward end of the spring is now attached to the frame by means of a shackle, while the rear end is under the rear axle. The whole spring suspension is placed lower on the frame, which gives the car a much lower seat, without losing road clearance.

The rear axle is connected with the rear cross member of the chassis by means of a tubular torsion rod and swivel joint connection, which allows full action to the springs. A deeper, wider channel section frame and heavy cross members give the chassis an unusually sturdy appearance.

An innovation is found in the front cross member, which is so shaped as to support the front leg of the motor, while at the same time it shades the radiator.

The King eight is represented in Harrisburg by the King Car Sales Company at 80 South Cameron street, in charge of W. P. Keister, with Albert N. Straub as salesmanager.

United States Has 448 Automobile Factories

Table showing the number of automobile factories by state: Michigan 86, New York 60, Ohio 52, Illinois 47, Indiana 45, Pennsylvania 35, Missouri 16, Minnesota 15, Wisconsin 14, California 13, Massachusetts 17, New Jersey 10, Connecticut 7, Iowa 6, Washington 6, Maryland 4, Colorado 3, Kansas 3, Kentucky 3, Tennessee 3, Texas 3, Oregon 2, Delaware 2, Georgia 1, Louisiana 1, Maine 1, Nebraska 1, North Carolina 1, Rhode Island 1, Oklahoma 1, South Dakota 1, Utah 1, Virginia 1, West Virginia 1.

Inter-State Car's Novelties Are Many

The Inter-State roadster has many features which will interest the lover of touring. Back of the seat a deep compartment is built to take care of baggage. It will easily hold the contents of a small steamer trunk. In the rear of the body two tires can be carried on demountable rims, held securely by special locking device. The floor of this compartment can be locked. The tires can be carried safely and free from dirt and the bad effects of exposures to the weather.

THE MOTOR CAR OUTLOOK

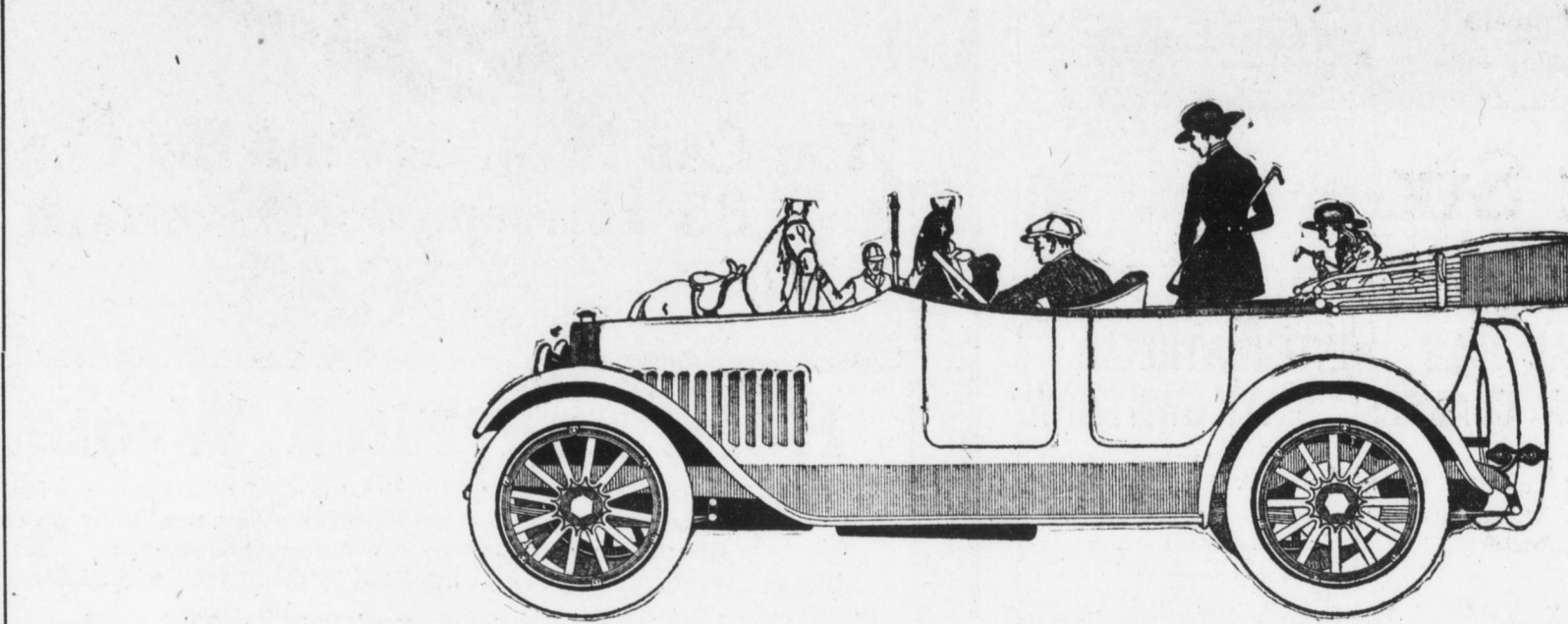
By W. C. Leland, General Manager Cadillac Motor Car Co.

The outlook for the coming year is not lacking in encouragement for the well organized automobile manufacturers whose product has established itself in the confidence of automobile users. It would be difficult to name an industry which rests on a more secure foundation than that portion of the automobile industry which comprises properly constructed, honestly made motor cars.

The universal demand for the transport of passengers and material will continue while our civilization stands. The intrinsic merit of the motor car for this purpose insures permanency to the industry.

The period of evolution through which the automobile industry is passing may temporarily embarrass those manufacturers whose products are not thoroughly established. Intelligent discrimination in buying motor cars will be manifest this year to a greater extent than ever before.

The coming year will demonstrate the firm hold which the honestly made motor car has on the American public. We believe that the adherence to the policy of maintaining excellence in the quality of material and workmanship and the policy of giving to the purchaser a liberal return for their expenditure will be a material factor in the constant increase in the production of motor cars.



(Inexpensive to Run and Easy to Drive—the New 3400 r. p. m. Chalmers)

The mist of gasoline that whirls through the tiny perforation in the carburetor jet of the 3400 r. p. m. Chalmers, rushes into action that has changed the whole aspect of automobile engineering.

The conditions surrounding the manner in which its dormant energy is awakened, brought to life, and compelled to perform, explain the strange ability of this new car.

The six cylinders of its engine are small—3 1/4 by 4 1/2 inches. The small area from which heat can be thrown away by radiation, reinforced by the incredibly short cooling process between the swift succession of its explosions, create maximum energy with minimum waste.

"Make her perform," said Hugh Chalmers to his engineers. "Get acceleration, long mileage on gas, activity."

The result—18 miles for every gallon of gas, anything up to 60 miles an hour, and supremacy of pick-up. 3400 revolutions per minute means that every gram of energy is wrung from every drop of gasoline that is

inhaled by the powerful suction of the motor pistons.

It means that when, at the point of highest pressure, a spark from the distributor ignites the oxygen of the air with the carbon of the gasoline, every mechanical condition is such that loss of energy is cut down to the lowest possible degree.

It means that the 3400 r. p. m. Chalmers gets twice the mileage on gas that many another high-speed engine will deliver.

The speed of its uncanny carburetion makes flight satin-smooth by bringing the explosions of gas so close together that you are unconscious of anything but an uninterrupted stream of might.

Unlike cars of superfluous might, the 3400 r. p. m. Chalmers has a pick-up so flexible that it's the first to make its get-away at the crossings, and the last to take another car's exhaust.

It's a cheap car to run and an easy car to drive.

Price, \$1050 Detroit



Keystone Motor Car Co. Distributors

1019-1025 Market Street

Both Phones

C. H. Barner Manager

NEW MARK ACROSS THE ALLEGHENIES

McNamara in Maxwell Sets New Philadelphia-Pittsburg Figures

With the peaks of the Alleghenies covered by a glare of ice, and the hollows full of drifted snow, Ray McNamara, in a 25-horse power Maxwell has amazed all Pennsylvania motorists by driving from Philadelphia to Pittsburg—294 miles—in eight hours, nineteen minutes.

The former record, set last June by J. G. Vincent in a high-powered 12-cylinder car was nine hours, twenty minutes.

McNamara's run was thoroughly checked by newspaper men at both ends and at York, Bedford and Ligonier along the route.

The road between the two chief cities of Pennsylvania has long been a favorite testing ground for automobile manufacturers, on account of the steep grades and the rough nature of the highway which, for most of the distance, crosses in succession the parallel ranges of the Allegheny mountains. In winter, however, the course is usually left to local traffic.

The record over the course has always been a subject for competition, though prior attempts have been confined to the season of longer daylight and more favorable road conditions.

McNamara made his start in the small hours of the morning to avoid urban traffic and covered half his route before daylight, crossing the famous Cove mountain grade in the dark, with only his electric lights as a beacon.

Over this and other successive grades that have proven a Waterloo to

so many cooling systems, McNamara and the Maxwell climbed without replenishing tanks or radiator. Often the grades were icy and many of the valleys were deep with snow, broken only by logging crews and sleighs. Crossing the Chestnut ridge, after a lively snowstorm, McNamara warmed his back by the rising sun.

The finish was attained without a motor stop and with but two delays, both short, one caused by a freight train standing at a crossing, the other occurring when a tire chain became unfastened.

McNamara was accompanied by B. F. Durham who had shipped as relief driver. The hero of four trans-continental trips remained at the wheel for the whole distance, however, Durham watching the speedometer and sounding the alarm horn.

Among other records held by McNamara in the Maxwell are the fastest performances between Detroit and Indianapolis, and between Chicago and Cleveland.

"Like the other records, we did it by steady plugging, rather than by great bursts of speed," said McNamara at the end of the run. "The car to take on a run of this sort is one that will accelerate quickly, and that is a Maxwell characteristic. We jumped time and again from eight to ten miles an hour to forty or better while I'd be taking a long breath."

McNamara's average time was 36 miles an hour.

Production of Automobiles For Last Ten Years

Official figures furnished the Telegraph by the National Automobile Chamber of Commerce:

Table showing automobile production from 1905 to 1915. Columns: Year, Passenger Cars Only, Total Production. 1905: 23,896; 1906: 32,462; 1907: 47,239; 1908: 55,846; 1909: 125,593; 1910: 175,800; 1911: 209,957; 1912: 278,261; 1913: 450,000; 1914: 515,000; 1915: 703,527.

PEERLESS EIGHT LOCAL AGENCY

One Type of Chassis Will Be Featured This Year; Here For the Show

Among the newcomers to be shown at the Harrisburg auto exhibit this year, but known from coast to coast for nine years, is the Peerless which is to be sold in this territory by the Keystone Motor Car Company.

For the first time since 1907, when it brought out only one model, the Peerless Motor Car Company has committed its factories to the production of a single type of chassis. The new eight-cylinder model 56, introduced to the public at the automobile show, will be manufactured exclusively during this season.

In commenting on this new policy, R. J. Schunk, general sales manager of the Peerless Motor Car Company, says:

"Owing to the quality and consequent high price of our product the Peerless clientele has naturally been composed of experienced owners. The demand of the experienced owner is

specialized. When he tours he wants the best obtainable for touring, which means great power, reasonable wheelbase, large wheels and ample carrying capacity. This demand brought the big car into being. In the city the experienced owner wants snap in the motor, a short turning radius and economy of maintenance, because his city driving is more nearly a routine matter, and he naturally looks to maintenance cost. This specialized requirement meant a smaller, reasonably powered car.

"From a six-cylinder motor of given size the best of these two widely different types of service cannot be obtained; consequently until this year we have made it a practice to manufacture each season more than one type of car. The development of our eight-cylinder motor, however, makes it possible now for us to concentrate on a single chassis. The great power and flexibility of the properly constructed multiple cylinder motor adapts it admirably to the requirements of touring and city work alike.

"From a manufacturing standpoint the advantages of concentrating on a single model are indeed great. These advantages are reflected in the price of the new Peerless Eight. Including the very finest equipment, upon which we have always insisted, the price for the model is less than one-third of what two years ago we were forced to charge for the big '60-Six,' to which the new eight is comparable in performance."

WILLYS-KNIGHT CAR BIG SUCCESS

Sleeve-Type Motor on One of Models Made by Willys-Overland Company

A car that is arousing unusual interest in this field is the new four-cylinder, forty-horsepower Willys-Knight at \$1,095. Carl Hansen, salesmanager of the Overland-Harrisburg Co., local distributors, reports that those already in use are giving perfect satisfaction. This is the lowest price at which a car with the Knight type of motor has ever been offered. Up to the present writing there has been a veritable famine in this new product of the great Willys-Overland plant.

The important difference between the Knight type and the poppet valve type motor is that the Knight has sleeves instead of valves. There are four of these sleeves, one inside the other, sliding up and down between the cylinder wall and the piston. Each sleeve is provided with openings which at the proper moment in the operation of the motor come opposite each other thereby permitting a change of fresh gas from the carburetor to enter the combustion chamber and likewise providing means for the burnt gases to pass out into the mufflers. The action of the sleeves is absolutely positive, as they are opened and closed by positively operated connecting rods, eliminating any uncertainty as to the time or extent of the opening. Mr. Hansen points out that the sleeves of the Knight motor do not have to be made to a tight fit to hold compression gas as is true of the piston, and while in operation, they are always covered with a film of oil. This dispels the common impression that the operation of a sleeve valve might offer some difficulty. The car itself in stock models is a large and powerful five-passenger

touring car, a two-passenger roadster and a four-passenger coupe and is also being offered by Mr. Hansen with various special winter bodies, including limousines, landaulets, laudau-broughams, broughams, collapsible broughams and sedans.

MOTOR DELIVERY ECONOMICAL

Have you ever thought of the earning power, the real value of the motor truck, the efficient service it gives, the economy of operating? E. J. Cavender, local Garfield representative, states that a motor truck will permit a more rapid and economical delivery and increase business. Users have found them satisfactory for efficiency, economy, durability and reliability under all operating conditions. The driver of a horse drawn vehicle, adds Mr. Cavender, develops a certain speed, because his horse in front of him is in no hurry; the same speed is applied to the balance of his work, and the delivery cost to his employer keeps steadily on the rise. The same driver, put to work on a motor drawn vehicle, will ginger up and surprising results will follow. The decrease in delivery cost will be very noticeable.

Advertisement for Dead Storage for Automobiles. Features: Excellent facilities at reasonable rates. We particularly invite inspection of our special fireproof automobile storage department. Capacity—150 Cars. Also Dry Storage For General Merchandise. MONTGOMERY & CO., Office 627 Walnut Street. Bell Phone No. 367-J. United Phone No. 533-W.

Ten Motor Concerns Increase Capitalization \$169,225,000

Table showing capitalization of ten motor concerns in 1915 and 1914. Columns: Company, 1915 Capitalization, 1914 Capitalization. Total 1915: \$35,675,000; Total 1914: \$204,900,000; Increase: \$169,225,000.