## HIGHLIGHTS OF PACKARD HISTORY

The Packard Motor Car Company was born as a result of a challenge. J. W. Packard, a wealthy young electrical equipment manufacturer of Warren, Ohio, bought one of the horseless carriages manufactured by Alexander Winton in Cleveland, in 1898. It was one of the best machines of that day. Mr. Packard, after many weeks with his machine, believed that he had learned ways in which it could be greatly improved. He offered his suggestions to Mr. Winton. "Well, young man," said Mr. Winton, "perhaps you could even build a better machine yourself." Somewhat taken aback Mr. Packard said he thought perhaps he could and at least he would try.

The first Packard car, Model A 1, was completed on November 6, 1899, and is now fittingly enshrined as a permanent monument to its builder in the great rotunda of the huge engineering laboratory at Lehigh University, the gift of Mr. Packard to his alma mater. It was a masterpiece of engineering with many important mechanical features used on all motor cars today.

Friends of J. W. Packard and his brother W. D. Packard, who had labored with him in the creation of the machine insisted the brothers build "carriages" for them, so completely did they believe the challenge had been met. Six machines were built for these friends in Warren and nearby towns during 1900. They, too, proved so successful that the Packard brothers were practically forced into the manufacture of automobiles.

Many cross country endurance record runs held in New York and other eastern cities were carried away by the Packard cars with flying colors in 1901 and 1902.

A number of young business men of Detroit, who envisioned the then much derided horseless carriages, as something which all the world would some day want, became interested in the Packard machine. They invested their money with the Packards and the Packard Motor Car Company with its great factories

in Detroit was the result. Among the first decisions of the new company was to dedicate it always to the making of fine motor cars. There has been no change in this just as there has been no reorganization change in the company itself from the first.

The Packard plant was moved to Detroit in 1903. Now in the geographical center of the city, it then was far out in the country and the site itself was actually

a cow pasture.

The year 1904 saw a Packard car, famous "Old Pacific", cross the continent for the first time. It stands as the year when man first traveled in a motor car at a speed even greater than 60 miles an hour. It was the year when the Packard "Gray Wolf" hurtled through space over a measured mile at Daytona Beach in the world record time of 46 seconds. But in many ways even more important than these exploits the year 1904 brought into being the imperishable character lines which from that year have identified every Packard as a Packard. The Packard "life lines", refined and constantly beautified were created with Model L, a sensation among automobiles of its day and have remained individually Packard ever since.

Packard's early years were marked by the vicissitudes and struggles of an industry growing to giant size by leaps and bounds. But they were eased always by the fact that Packard never felt the pinch of want and has always been provided with ample funds. The world of those days acclaimed the Packard a leader among all fine cars as it does today. Modest successes in business followed year after year.

Public recognition of the Packard Company and the Packard car leaped in appreciation in 1915 with the introduction of the famed Packard Twin Six. It rose more prominently before the whole world as the United States entered the great war when Packard engineering made possible the Liberty aircraft motor and gave this powerful wartime engine to America in mounting thousands.

Following the war another engineering cycle in Packard engineering history was born in 1921 with the Packard 126, forerunner of tine cars that became the choice of particular motorists. They were made in growing numbers to supply the rapidly increasing demand. Packard has produced 50,000 fine cars in a single year.

Throughout Packard's history its biggest and most luxurious cars usually have been companioned by fine cars of smaller size and somewhat lesser cost. Packard was preparing for such a companion car in 1929. Business conditions then made it seem wise to delay.

In 1933 active work on the Packard One Twenty was resumed.

Packard has been working intensively for two years applying all the engineering and manufacturing skill accumulated in more than three decades of fine car building with the addition of the best equipment and personnel available in the industry to produce this car. Packard has brought into being a new and better small fine motor car, a car upon which it is proud to confer the honor of an old and distinguished name—the Packard One Twenty, a fitting companion to the Packard Eight, the Packard Super Eight and the Packard Twelve.

## FAMOUS PACKARD "FIRSTS"

Machine for making spiral bevel gears developed and patented by Packard

Pioneered hypoid gear rear axle

First American company to offer straight eight L-head engine

Pioneered the chassis lubricator system

Front springs shackled in front—Packard thus first to correct steering geometry

Trunnion block—eliminating "shimmy" pioneered in America by Packard

Developed thermostatic control of water circulation

Automatic spark advance used on first Packard-1899

Developed ride control

Pioneered and was largely responsible for development of steel backed bearings

Built-in glove compartments in instrument board

Hand brake lever at driver's left

Foot rest in rear compartment

Interior splines of transmission gears ground for smoother operation and longer life

Double intercoiled valve spring, giving longer life and quieter operation

Nine-bearing crankshaft for eight-cylinde automobile engines

Seven-bearing crankshaft for six-cylinder automobile engines

Hook-up of accelerator pedal and hand throttle, now used on all cars

Iron and steel jig for body frame assembly

Machines for boring both ends of connecting rods with diamonds

Rifle boring of connecting rods to lubricate piston pins

First motor car company to use radio amplification for inspecting ball and roller bearings

Accelerator pedal foot rest

Packard held original patent covering automobile wheels interchangeable at hub. This covered practically all automobile wheels

Crankshaft vibration damper patents held by Packard

Machine for finishing combustion chambers of cylinder heads

"Angleset" rear axle

Double door latch-now universally used

First to drain condensed gasoline from manifold to the ground—important safety factor

Developed Diesel aircraft engine

First to make connecting rod bearings so perfectly, no scraping-in process was necessary

Stabilizers in bumpers for heavier type cars to dampen frame movement and improve ride.

Packard cars built in 1900 had sheet metal jacket around single cylinder to hold cooling water—important feature of present-day water cooled aircraft engines

An old Packard patent covered a radiator with top and bottom reservoirs with tubes—the universally used radiator of today

Gasoline tank secured by metal straps at the rear—a Packard invention of a quarter century ago

Baggage rack at the rear of car, an original Packard patent

Sun visors

Lapped, quiet transmission gears

Offset pin to prevent piston slap in cast iron pistons—used in many cars

Four-wheel brakes—first American production car to have four-wheel brakes as standard equipment

Radiator temperature indicator as standard equipment

Hood ventilating doors

Steering wheel instead of tiller

Standardized labor and material service charges

## NEED FOR PACKARD ONE TWENTY IN TODAY'S MARKET

There is a very definite place in today's market for the Packard One Twenty. Packard is not entering this new market on any impulse of the moment. It was only after long study and extensive research had revealed new conditions, that the decision was made. Several good reasons made the entrance to this field advisable and advantageous.

First of all, the depression narrowed the market for high priced cars due to financial limitations. Again, many people became economy minded and the initial outlay for new cars and cost of operation assumed a new importance, even though the desire for quality still remained. To these people the Packard One Twenty will present a real appeal, because the initial price is low—cost of operation negligible for a true quality car.

Again the rapid increase in miles of good roads during recent years and the development of engineering improvements have materially diminished the need for the greater weight of the large car as a factor in comfortable riding. Many people, who can afford the larger cars, have become satisfied with those of lesser price and weight. The Packard One Twenty is designed to provide unlooked for comfort both on the boulevard and where the going is rough.

Another factor for the demand in lighter cars is the remarkable increase in the number of women drivers. The average woman driver insists upon ease of operation and maneuverability. The Packard One Twenty not only offers a new ease in handling, but provides big car comforts, refinement details of good taste, and possesses distinction, all so dear to the heart of every woman.

Another market widely open to this latest creation by Packard is the one calling for two cars in the family. The Packard One Twenty, at its reasonable price, will quickly replace many of the so-called second cars. With its smart appearance, and dependable performance, it will make an ideal utility car for all families who want two quality cars.

Then there is the largest market of all for the Packard One Twenty. When one considers that for over a quarter of a century the name "Packard" has stood for the best in motor cars, it can readily be appreciated that there are countless thousands who have always had a desire to own one. Many owners of the lesser priced cars are ready and anxious to graduate into a Packard. They have been waiting for years to gratify their ambition, and many may have given up all hope of doing so.

Packard now makes it possible for all these people to own a Packard. The Packard One Twenty is not a compromise car. It does not represent a hasty decision. It indicates no departure from the traditional Packard

policy of building nothing but the best.

It should be obvious to all that the best proof of honest value contained in the Packard One Twenty is in the name it bears. Packard does not gamble with its reputation. The new car is a smaller quality car, designed and built by Packard, to serve a new field. The company gives it a whole-hearted stamp of approval, because it is every inch a Packard.