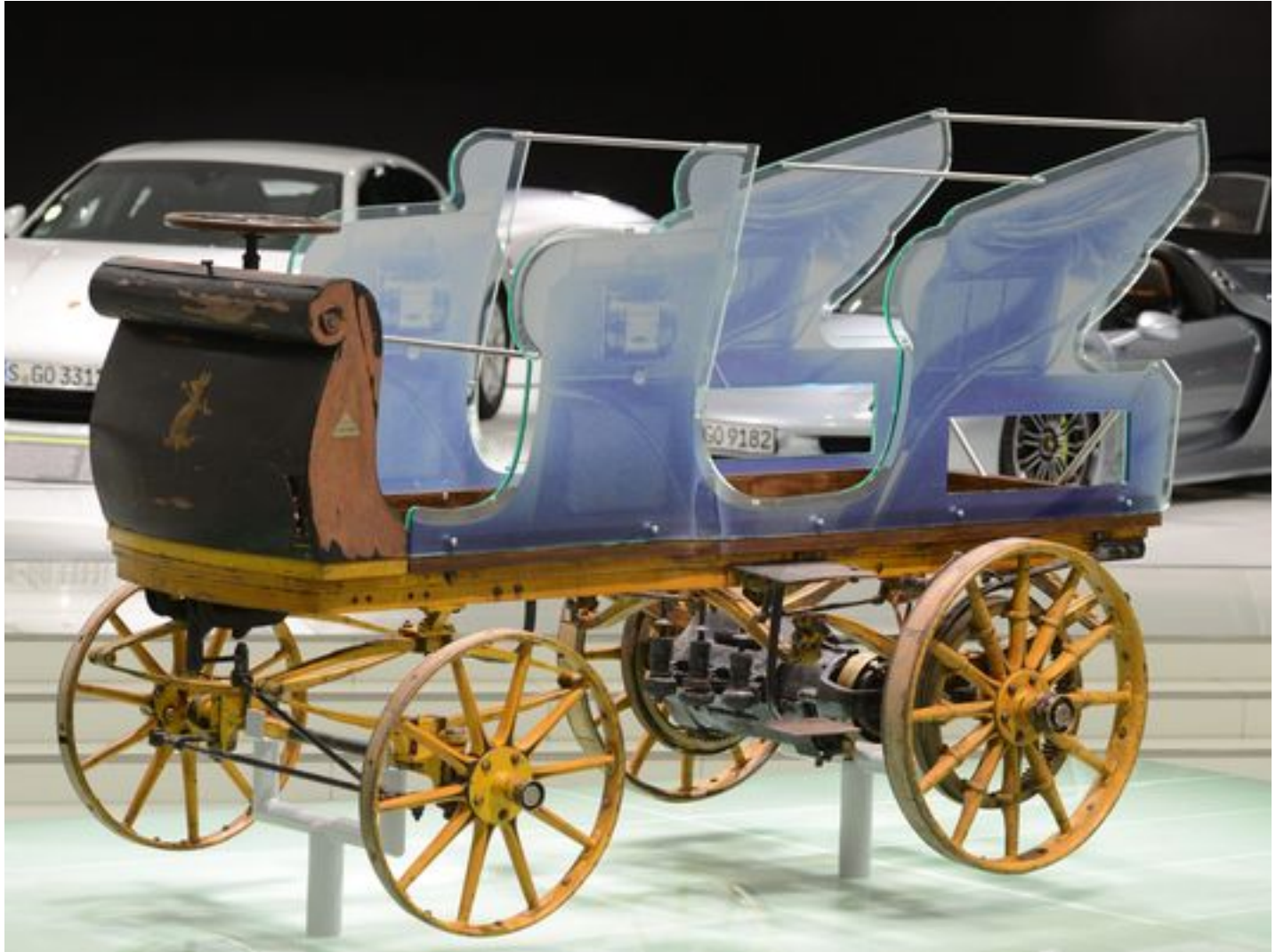


Porsche's first car, in 1898, was electric

<https://www.usatoday.com/story/money/cars/2014/01/27/first-porsche-1889/4941635/>

The first Porsche car ever built was unveiled in Stuttgart on Monday. The 1898 "Egger-Lohner electric car model C.2 Phaeton," or in short P1 has been sitting in an old shed in Austria since 1902. (Jan 27) AP



(Photo: Franziska Kraufmann, epa)

The first Porsche-designed car was unveiled in Stuttgart, Germany, on Monday. It had been sitting in an old shed in Austria since 1902. The car is, officially, the 1898 Egger-Lohner electric vehicle, C.2 Phaeton. It's known as P1, signifying Ferdinand Porsche's first design.

It is an electric-power car, developed by Ferdinand Porsche, who founded the namesake sports-car company in 1948. Before that, as a young man with engineering aptitude but no formal engineering training, he was working for car builder Jacob Lohner, who assigned Porsche to come up with an electric drivetrain Porsche says it hit the streets of Vienna, Austria, on June 26, 1898, when Ferdinand Porsche was 22. He engraved the code "P1" (standing for Porsche, number one) onto all the key components.

In the classic case of auto-collector's fantasy come true, P1 was discovered in a warehouse, where it had been untouched since 1902, the car company says.

According to the automaker, Ferdinand Porsche's powertrain was a rear mounted electric drive that weighs a modest 287 lbs. and produces 3 hp. For short periods, up to 5 hp can be achieved in overdrive mode, allowing a top speed of 21

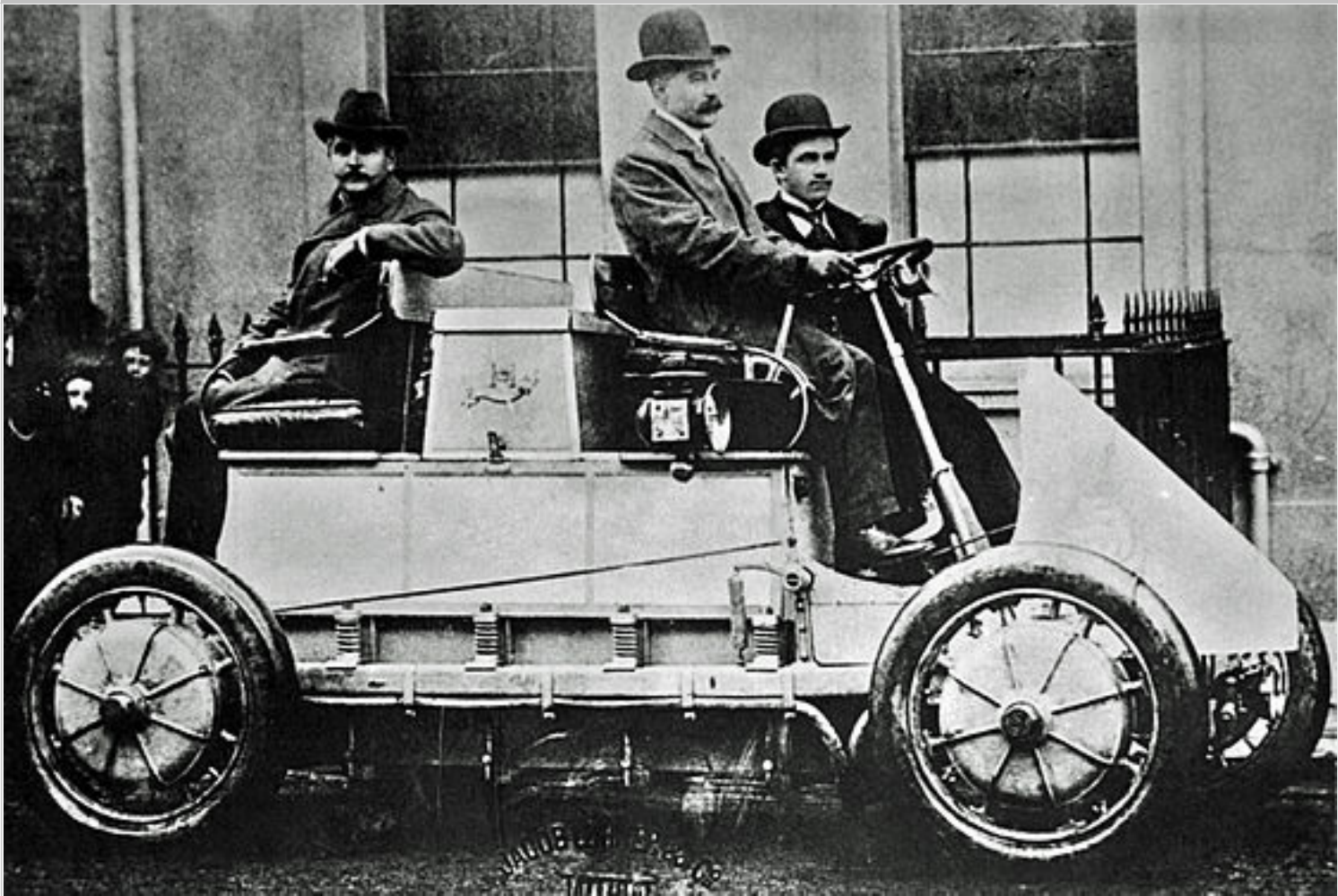
mph. The first serious test came in a race for electric cars in September 1899. The contestants had to complete 24 miles with three passengers on board.

Ferdinand Porsche piloted the P1 across the finish line 18 minutes ahead of the second-place racer, the car company's history shows. Perhaps more important, P1 was among fewer than half the racers able to finish. The others dropped out because of technical problems.

The Phaeton designation (in mythology, a reference to the son of the god Eos) refers to an open car with front and back seats, derived from horse-drawn carriages of similar configuration. The car demonstrates that automaker Porsche's turn toward electrification hardly is a new development.

<https://en.wikipedia.org/wiki/Lohner-Porsche>

Lohner-Porsche Mixed Hybrid



Overview

Also called	Lohner-Porsche Electromobile
Production	1900–1905
Designer	Ferdinand Porsche
Body and chassis	
Class	Horseless Carriage

<u>Body style</u>	2-seater convertible 4-seater
Powertrain	
<u>Engine</u>	10–14 hp Two/four hub-mounted electric motors, driven by battery and/or petrol engine.
Dimensions	
<u>Curb weight</u>	1,500 kg (3,307 lb)

The **Lohner-Porsche Mixed Hybrid** (sometimes wrongly referred to as *Löhner-Porsche*) was the first [hybrid vehicle](#) and was developed by [Ferdinand Porsche](#). First prototypes were two-wheel drive, [battery-powered electric vehicles](#) with two front-wheel hub-mounted motors. A later version was a [series hybrid](#) using hub-mounted electric motors in each wheel, powered by batteries and a gasoline-engine generator.^[]^[]^[]

Development

At the age of 23, Ferdinand Porsche boarded a train in North [Bohemia](#), [Austria-Hungary](#) (now [Czech Republic](#)), and headed for Vienna to embark on his first job. Despite Porsche having no formal engineering education, [Jacob Lohner](#), at his *Lohner-Werke*, employed him to develop an electric powertrain for his coaches. Porsche's prototype car boasted a low-friction drivetrain, due to the hub-mounted electric motors directly driving the wheels. Each internal-pole [electric motor](#) was capable of 2.5 to 3.5 hp (1.9 to 2.6 kW), peaking to 7 hp (5.2 kW) for short bursts.^[]

The 1898 "System Lohner-Porsche" created a press whirlwind across Europe. Lohner received his first order from E.W. Hart, himself a coachbuilder of Luton, Britain. Hart asked for significant modifications. His vehicle was to be capable of running on petrol, as well as electricity, of carrying four passengers, and of employing four-wheel drive. The custom coach was a monster dubbed *La Toujours Contente* ('always satisfied' in French), a jab at record-holder Camille Jenatton's electric *La Jamais Contente*, and was exhibited at the December 1900 Paris Exhibition. The enormous Lohner required 1.8 tonnes of batteries consisting of a 44-cell 80-volt lead-acid battery, all housed in a spring-suspended battery container to protect the fragile cells. The four electric motors weighed a total of 1280 pounds, contributing to a total vehicle weight of over 4 tonnes on its Continental pneumatic tires. With a battery capacity around 270 amp-hours and four forward speeds, the 56-horsepower coach ran in several expositions and competitions. It cost 15,000 Austrian crowns.

Despite such ambitious engineering, the car was completed on time and was delivered personally by Porsche. Hart was so impressed, he purchased another, two-wheel drive example at a relative bargain of 7950 Austrian crowns.

On November 6–9, 1900, the Automobile Club of Great Britain and Ireland sponsored an electric vehicle endurance trial, in which the four-wheel drive Lohner-Porsche was one of 11 entrants—one of three entrants Hart brought to the Chislehurst starting line. The first-place winner of the trial was a *Louis-Krieger* car dubbed the 'Powerful'. Thanks largely to its lighter weight and larger-diameter wheels, it achieved a first run of 59 miles at an average of about 10 miles per hour. *Le Toujours Contente* suffered tire failures on its 34 miles with Porsche at the wheel. One competitor stated, "there were inches of mud on the floors; rain came through the roof; the sheds were doorless and the cars and attendants were nightly exposed to the full force of wind and rain." Other electric vehicle entrants managed only 7 miles distance through the muddy, rutted course. Ferdinand Porsche caught a severe cold, contributing to the vehicle's elimination from further competition.

Too costly for popular consumption, Lohner utilised the revolutionary drivetrain technology for larger commercial vehicles. Lohner-Werke manufactured rear-drive double-decker buses for Berlin and front-drive fire engines for the cities of Vienna, Frankfurt, and London. Lohner was commissioned to build vehicles for the Austrian emperor, as well as the kings of Norway, Romania, and Sweden. According to a biography by Andreas Stieniczka, the funeral coach for Archduke Franz Ferdinand, whose murder in Sarajevo was the event which sparked off World War I, was manufactured by Lohner-Werke. Over 300 Lohner-Porsche vehicles were sold through 1906.

In addition to custom coachworks, Lohner supported Porsche's continued racing efforts. Several Austrian land speed records were set, with a top speed eventually achieving 37 mph (60 km/h) with Porsche at the wheel. It was victorious in a number of [motorsport](#) events including the Exelberg-Rally in 1901. With both drivetrain engineering excellence in Lohner's custom coaches and motorsport experience, [Porsche](#) won the 1905 Potting Prize as Austria's most outstanding automotive engineer. In 1906, Porsche was snapped up by Daimler-Benz as chief designer. Jacob Lohner said at the time: "He is very young, but is a man with a big career before him. You will hear of him again."

The Lohner-Porsche's design was studied by Boeing and NASA to create the Apollo program's [Lunar Roving Vehicle](#). Many of its design principles were mirrored in the Rover's design. The series hybrid concept underpins many modern railway locomotives, and interest in series hybrid automobiles is growing rapidly.