A COLLECTION OF ODD & INTRIGUING FACTS ABOUT MERCEDES-BENZ AUTOMOBILES

by KEN W. PURDY

To the Reader:

This booklet contains exactly what the title says — an odd and intriguing collection of facts about Mercedes-Benz automobiles. Nowhere is the writing editorialized because the writer, Mr. Ken Purdy, feels very strongly about presenting "just the facts"—and we agree with him. We hope you will find them interesting.

H. Kaizenegger

SALES MANAGER

Daimler-Benz is the oldest automobile manufacturing firm in the world.

There is 1 inspector to every 10 workers at Mercedes-Benz. This is the highest inspector-to-worker ratio maintained by any standard automobile manufacturer.

Variation by the one-hundredth part of a millimeter is the maximum tolerance allowed in a Mercedes-Benz bearing.

Mercedes-Benz cars are sold in 143 countries.

A Mercedes-Benz diesel, used as a New York taxicab, showed a $3.00 expenditure for maintenance in 40,000 miles.

The academically correct pronunciation is Mert-SAY-dis Benz.

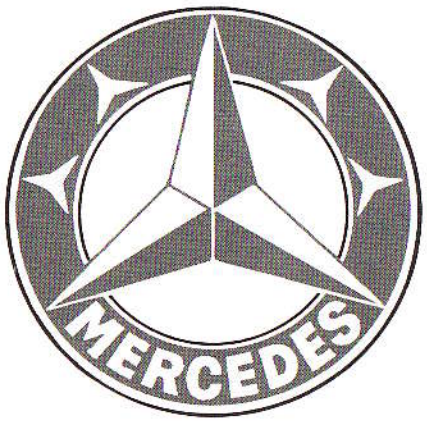
The fastest truck in the world is the race-car transporter built for the post-war Mercedes-Benz racing team. It will do 110 miles an hour carrying a car and a crew of three.

Unlike most other epochal inventions, the automobile has no one universally-recognized originator. Roger Bacon, Erasmus Darwin, Leonardo da Vinci all conceived the idea of a self-propelled vehicle. Nicholas Cugnot

ran a steam-powered vehicle in Paris in 1769. Beau de Rochas of France and Nicolaus August Otto of Germany each made engines working on the standard four-stroke principle we still use. The Belgian Jean Joseph Etienne Lenoir ran an automobile in 1862 and the Austrian Siegfried Marcus ran one in 1865—on the evening of the day Lee surrendered at Appomattox Courthouse—but neither Lenoir nor Marcus persisted with their inventions. Two men who did were Karl Benz and Gottlieb Daimler. Benz ran his first car in 1885, Daimler his in 1886, both of them in Germany. Their names have been intimately associated with the automobile ever since, and in the view of many authorities, they did in fact invent it.

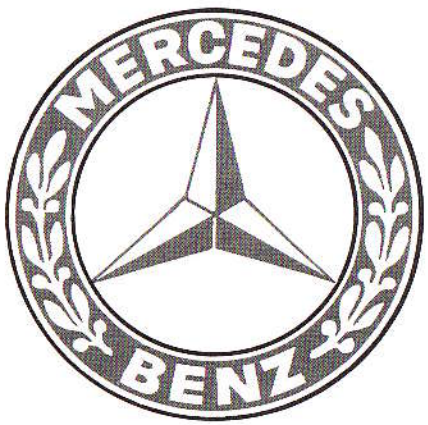
Mercedes-Benz automobiles are made by the Daimler-Benz Company, named for Gottlieb Daimler and Karl Benz, each of whom founded his own manufacturing company in Germany before 1900. In 1901 Emil Jellinek, Austro-Hungarian consul at Nice, France, and a wealthy man, undertook to sell one year's production of the Daimler factory, 36 cars, if they were named after his daughter, Mercedes.

By 1909, when the Daimler Motor Company had been using the name Mercedes for its cars for several years, the three pointed star together with the name was decided upon for the trademark.



In 1926, when the Daimler Motor Company and Benz and Cie AG were merged to form the present Daimler-Benz AG, the Daimler emblem and that of Benz and Cie AG . . .

were combined to form the emblem that, with slight simplication over the years, has been used by the company's products ever since.



The British Daimler Company, which for so long held the Royal Warrant, had no financial connection with the German firm except for a licensing arrangement around 1900.

The Mercedes car of 1901 has been called the first modern automobile. It introduced the honeycomb radiator, the quadrant gear-shift, the raked steering-column (previously steering-columns grew up straight from the floor), and it introduced a mechanical improvement fundamental to the success of the automobile: the positively-actuated inlet valve. Prior to the Mercedes, inlet valves had been *pulled* open by the suction of the intake stroke of the piston, with the result that the engine would run smoothly at one speed only. The mechanically-operated inlet valve made positive control of the engine possible.

Much of the work that goes into Mercedes-Benz cars resembles custom tailoring or custom boot-making: there are many fittings and alterations. For example, all interior metal-work, such items as seat-hinges and adjusters, are filed and formed and fitted into place by hand, then removed, plated with copper, nickel and chromium and replaced. Woodwork is hand-fitted, then removed and polished. Upholstery is all hand-fitted. Work of flawless quality cannot be done in any other way.

Mercedes-Benz 300D and 300SL engines are put together like race-car engines in the old-fashioned way that has never been improved upon: they are carefully assembled, run until they have been broken in, disassembled, magnafluxed and measured and any necessary replacements made. They are then reassembled, put into the chassis and tested again before delivery.

The two greatest British drivers of the past 30 years both drove for Mercedes-Benz: Richard Seaman, who signed his first contract in 1937 and Stirling Moss, in 1955. Seaman was killed in 1939. Moss is generally conceded by other professionals to be the fastest driver in the world today. John Fitch was the first American, and thus far the only one, to be a regular team member for Mercedes-Benz.

The purchase price of a 300SL Mercedes-Benz is about $4.00 a pound—or considerably more than filet mignon! However, filet mignon can be used only once, and a 300SL can be used at least 3,650 times: once a day for ten years, say.

From 1909 to 1912 Berner Eli ("Barney") Oldfield and Bob Burman set 23 U.S. and world records in Benz racing cars.

A race that will be remembered as long as automobiles are run is the 1955 Mille Miglia, won in a Mercedes-Benz 300SLR by Stirling Moss and Denis Jenkinson. This race, run over 1,000 miles of open road in Italy, over the route Brescia to Rome and back to Brescia, was usually won by Italians because it was impossible for foreign drivers to memorize the road. Moss, one of the greatest drivers of all time, and Jenkinson, former motorcycle sidecar world champion, *wrote* the road on a 17-foot-long roll of paper. Sitting in the open car, Jenkinson unreeled the paper in two plastic rollers and, by means of 13 hand-signals, gave Moss the information that enabled him, for example, to take one blind hill at 175 miles an hour, sure that the road went straight beyond it, and to slow to 110 for another one in order to make a left-hand turn just beyond it. Moss's Mercedes-Benz *averaged* 98.53 MPH, the *all-time Mille Miglia* record. At one point, in the mountains, Jenkinson noted, almost unbelievingly, that the car was *passing* an airplane! Moss's flat-out drive for 10 hours, 7 minutes, 48 seconds is, quite apart from the skill involved, one of the most striking endurance feats of all time.

The first gasoline automobile race of record in the United States, run on November 11, 1892 from Chicago to Waukegan and back, was won by a Benz-powered car. It ran the 92 miles in 9 hours, 30 minutes.

The first automobile ever made on a production line was the Benz "Velo" of 1893. Its 1-1/2 horsepower engine had a carburetor, was water-cooled, and drove the rear wheels through a gearbox and a differential—extraordinarily advanced features for 1893.

In recent years, race-car manufacturers have experimented with water-cooled brakes. They were a feature of the 1903 60-horsepower Mercedes car, which was probably the first true sports car.

Mercedes-Benz passenger cars have profited notably from the firm's extensive racing experience. Minutely detailed records of the behavior of the racing cars have been kept for decades, so that every new device or modification could be evaluated, and, when it had proven its worth, be passed on for use in passenger automobiles. The swing axle, finned brake-drums, fuel-injection are examples of devices that were extensively tested on racing cars and are now standard on passenger models.

In the manufacture of most of the world's automobiles, basic decisions as to design, size, styling, engine power and placement, release-date of new models and so on are made by executives primarily concerned with management and sales. At Mercedes-Benz, *all* basic decisions of that nature, except price, are made by Dr. Fritz Nallinger, Vice-president in charge of engineering, and the Engineering Department. For example, the date of introduction of a new model Mercedes-Benz is decided not by the Sales Department but by Engineering.

A permanent pool of the kind of highly-skilled, devoted employees required to turn out Daimler-Benz products is maintained by the firm's apprentice program, one of the most detailed in the world. There are about 2,300 apprentices in training at one time, most of them from 14 to 18 years old, divided into classes of no more than 20 to an instructor. The program requires two and a half years to produce a lathe operator or a draftsman, three and a half years for a machinist or a laboratory technician. Parallel with his apprentice training the candidate must attend a vocational school. The combined program is a tough one. In the third year, examinations are given not only by the D-B instructors, but by the Chamber of Commerce and Industry of Germany. Of the graduates, a remarkably high percentage remain with Daimler-Benz: more than 74 per cent.

An American piano-maker, in 1888, signed a contract to build Daimler automobiles in the United States. He was William Steinway, of Steinway, Long Island. In 1901, the first American Daimler was built; in 1903 the first American Mercedes. The project was abandoned in 1907 when a fire destroyed the factory. Only one American Mercedes is known to exist today.

Mercedes-Benz has been more successful in racing than any other team in history. Alfred Neubauer, the most famous of all team-managers, was also the best and the first — he created the function. By passionate attention to detail and by the imposition of strict discipline, he reduced the element of chance to a minimum — in the most hazardous of all sports.

An example of Neubauer's passion for doing things one way only, the right way: When one of the Mercedes-Benz team cars developed a slight leak in the cooling system just before a race in England, Neubauer had a specialist flown from Germany. The man soldered the leak, taking ten minutes for the job, got back into the airplane and was flown home again.

Another Mercedes-Benz executive of unique talent is Rudolf Uhlenhaut, Chief of Experimental Engineering. When he was developing race-cars, both before and after World War II, Uhlenhaut did not have to rely on test-drivers' reports: he is capable of fully extending any car, including 200-MPH Grand Prix machines.

The Grand Prix cars of the 1936-1939 period were so powerful and so difficult to handle that great efforts were made to give the drivers maximum security and comfort. For example, seats were made from individual molds of each driver's body, and clutch, brake and accelerator pedals were modified to suit. Even after the war, with much more tractable cars in use, any reasonable request by a driver would be met. When Stirling Moss asked for a certain complicated kind of gear-shift, it was designed, made up and installed in his car within 24 hours.

The Model W125 Mercedes-Benz Grand Prix racing car of 1937 developed the fantastic figure of 646 horsepower out of an engine about the size of

a Chevrolet. *This is the most power ever taken from a racing-car engine of this size.* Said Laurence Pomeroy, the eminent British authority, in Volume I of his book, The Grand Prix Car: "One (W125) was timed at 193 m.p.h. . . . but there is no reason to doubt they could exceed 200 m.p.h. by a useful margin."

The acceleration of the Mercedes-Benz and Auto-Union cars that completely dominated pre-World War II Grand Prix racing was prodigious, and to drive them in races run on ordinary two-lane roads required great skill indeed. The Mercedes-Benz cars had so much power that they would spin their rear wheels on dry concrete *at 150 miles an hour in top gear* if the throttle were opened suddenly. If a Mercedes-Benz were standing still, and began to move just as it was passed by another car doing a steady 100 miles an hour, it would nevertheless be ahead *within one mile!*

Mercedes-Benz racing mechanics of the 1936-39 era were expected to be able to change four wheels of a race-car, put in 75 gallons of fuel, check the oil, clean the windshield, hand the driver a pair of clean goggles and give him a drink — in 32 seconds. The whole drill was often done in as little as 28 seconds!

Rudolf Caracciola, who won 100 international races in Mercedes-Benz cars before and after World War II, and was three times champion of Europe, was famous for his ability to drive very fast in the rain. His ability was uncanny. Most amazing was the fact that he never wore goggles in the rain! Alfred Neubauer has stated in his autobiography, the belief of experts that Caracciola's eyes were abnormal in two ways: (1) They were physically insensitive, so that he actually did not feel the raindrops pelting against them while driving 150-160 miles an hour; (2) That they admitted an extraordinary amount of light, so that Caracciola saw a gray, rain-swept roadway as other men might see it under a hot July sun.

The record for the greatest number of cars of a single make owned by one man is believed securely held by Mr. Edward Mayer of London. Mr. Mayer has owned *more than 120* Mercedes-Benz cars down the years!

MERCEDES-BENZ SALES, INC.

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