

# Restoring Ra

An early aerocar with Benz and Mercedes his

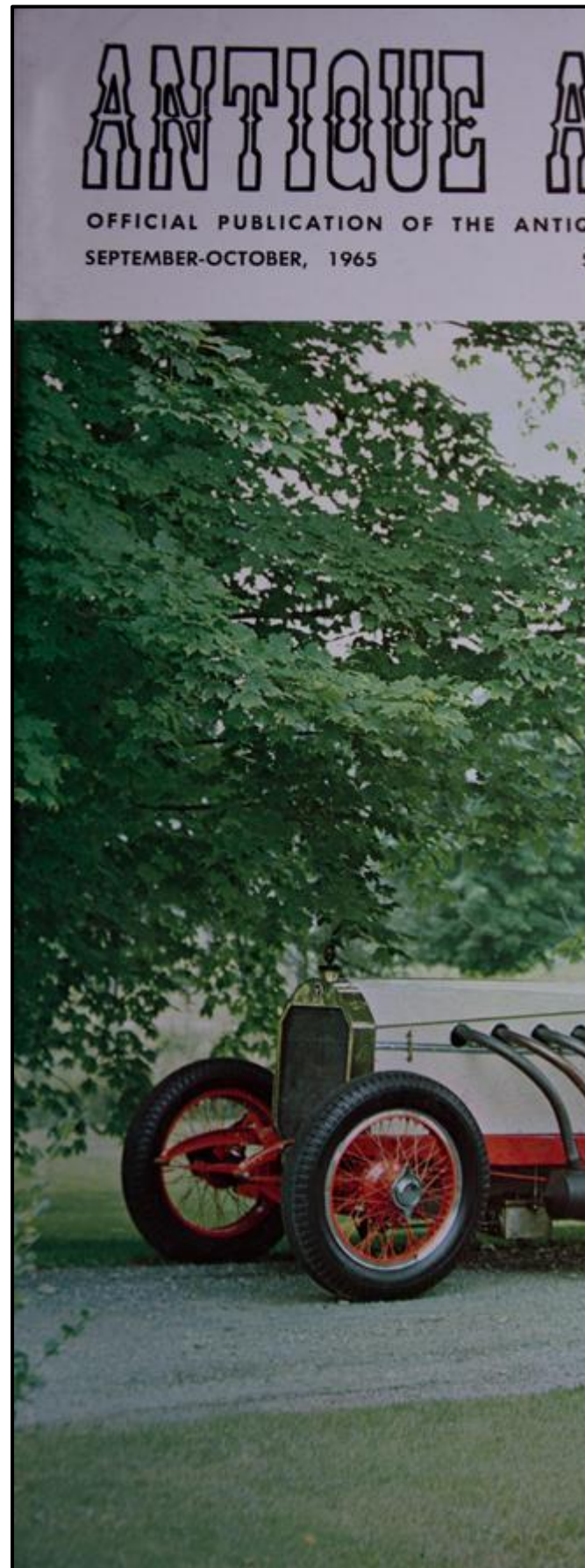
Official history records the merger of Daimler and Benz in 1926. What you may not know is that the fortunes of the two companies crossed briefly years before thanks to wealthy amateurs in England who sought to resume motor racing after the conclusion of the First World War.

After hostilities ceased in November 1918, nations directed their energy and efforts elsewhere. For those inclined towards motor racing, war equipment was repurposed and “aerocars” made good use of powerful and reliable airplane engines.

In England, racing at the famed Brooklands resumed in 1920 after repairs were made to the facility. Originally opened in 1907, Brooklands was a major center of aviation. When the war came, it was used extensively for manufacturing airplanes and training pilots to fly them.

But after the war, places like Brooklands and people like Louis Zborowski re-energized the motor racing. Zborowski, who inherited a fortune as a 16-year old, did what any teenager would do with a bottomless bank account and an open race track – he built racecars and went racing.

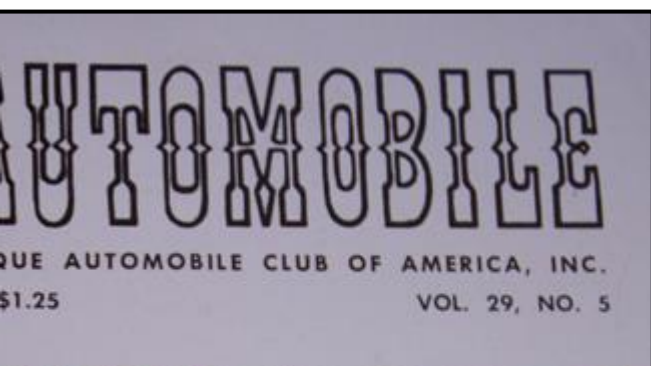
Zborowski’s racing exploits deserve a story by themselves, but for purposes of this story we’ll focus on the aerocars he built that were known as “Chitty Bang Bang” cars. There is some debate about the



# Rabbit the First

story gets an engine overhaul a century later.

story and photos by Kevin Ehrlich  
cover photo courtesy of  
The Antique Automobile Club of America



origin of the name. Two possible theories suggest the name came from the sound of the cars or in tribute to British female aeronautical engineer Letitia Chitty. The more likely origin of the name was a lewd song popular among British military men that meant something to them, but wouldn't have been known beyond their circles.

Zborowski built several "aerocars" which ran over 100mph and won a few races. He also encountered a few accidents and incidents, so only one of the original Chitty cars survives.

Amidst this excitement, a wealthy Englishman named Lord Scarisbrick commissioned a car of his own to go racing in 1921 or 1922. The project combined a 1907 Mercedes chassis with a Benz Bz.IV 6-cylinder engine from about 1916 or 1917.

Lord Scarisbrick apparently paid £1600 to the London company of C.H. Crowe & Co. to build the car, including a custom £160 Bosch starter motor. The price tag easily exceeded the cost of all but the most expensive houses and cars at the time. Roughly equivalent to \$8000 in 1921, the tariff in 2017 dollars would likely be in six figures.

The car was a credible racing machine. Lord Scarisbrick ran it at places like Brooklands and the beaches of Fanoe in Denmark. It ran 113 mph at Brooklands and won several races.

Lord Scarisbrick couldn't have realized it at the time, but his machine was the precursor to the products that we know as Mercedes-Benz and likely one of the first to combine the marques in some fashion. His car was created several years before Daimler and Benz formally combined in 1926, like the many other smaller German companies looking for sufficient scale to survive in a post-war economy. The Mercedes brand name was a property of Daimler which also started the tradition of the three-pointed star in 1910.

The 1907 Mercedes chassis likely came from a chain-drive "75" road car. Its frame required five additional cross members for strength for the race car, but the Mercedes axles, steering box, gearbox and other bits were retained.



The powerplant for the race car came from Benz & Cie who built thousands of engines for the war effort in their small Mannheim, Germany factory.

Better known for cars and trucks, Benz started work on its first aircraft engine in 1908. After early development led to some success, Benz developed

a succession of in-line 6 cylinder water-cooled engines. Relevant to our story, the Benz Bz.IV was built from 1916-1918. About 6400 engines were built, primarily servicing the needs of light reconnaissance and artillery spotting aircraft.

The engine is large to say the least. Measuring about 5 feet from fan to flywheel and weighing about 850 pounds, the 6 cylinders displace a total of 18.8 liters and work together to produce about 228hp at 1400 rpm. Four valves sit atop each cylinder with springs fully exposed to the elements.

Advanced for its time, the pistons were made of aluminum. The cylinders were made of cast iron with steel jackets surrounding them where water was circulated for cooling. Over

time, these jackets deteriorated and the porosity led to leaks.

The engine's route from the Benz factory to Lord Scarisbrick's car is unknown. There are suggestions that the engine came from a Zeppelin, but that seems unlikely mostly due to the fact that Zeppelins were mostly powered by Maybach engines due to their



corporate affiliation. The Benz Bz.IV engines were very commonly used for airplanes, so it wouldn't be a surprise if the engine came from a fixed wing airplane rather than a Zeppelin. In fact, there is some lore suggesting that Scarisbrick's engine came from a German airplane that went down in France during the war. It may be impossible to ever know for sure.

With power sorted, brakes were an afterthought at best for Lord Scarisbrick's car. A handbrake to the rear wheels coupled with a transmission brake were it. The car has no front brakes at all.

In its time, bodywork was rudimentary. It would have been focused on function rather than beauty. Paint color or scheme would not have been a priority. No effort would have been made to quiet the exhaust and instruments, if any, would be modest at best.

Lord Scarisbrick labeled his custom creation "Rabbit the First" with Rabbit being a nod to Lady Scarisbrick who joined





her husband in the car frequently. There is no record of a "Rabbit the Second" but perhaps the name is an indication of Lord Scarisbrick's optimism at the time of future cars. The Chitty Bang Bang cars had a similar naming convention with Chitty I, II and III being built and Chitty IV in process at the time of its patron's death. (Chitty II is the only surviving of the group.)

Lord Scarisbrick sold Rabbit the First after winning several races for £200 (or roughly \$1000). The car was modified further in the 1930s – including the addition of bodywork and a radiator from a Bentley to replace the Mercedes radiator which was damaged in a race - before finding its way to new ownership on Long Island, New York in 1937 or 1938. Bought sight unseen, the new owner may have thought that he was purchasing one of the original Chitty cars. Apparently, the car's poor condition and rough red paint job made for an unhappy new owner.

A restoration ensued to install a radiator from a 1919 Locomobile that was similar to the



Mercedes original and a new exhaust, rebuild the engine and gearbox, replace the starter, restore the upholstery and wheels, and paint the car in its current crème and red livery. The new and improved "Rabbit the First" made its public debut in 1940 at a Veteran Motor Car Club of America parade in New York.

In 1946, it was sold to another owner on Long Island before finding its way to new owners in 1950. Famed automotive artist Peter Helck partnered with historian Charles Lytle paid about \$600 for the car. It sat on blocks for about 15 years before Helck and Lytle gave the car in December 1963 to Jim Hoe in Connecticut. Jim was well known for Duesenberg restorations and coordinated a restoration effort. The process proved to be a resource drain which tested Lytle's patience and eventually led to Helck buying out his share of the car.

This restoration is largely responsible for the car in its current form. Additional instrumentation was likely added along with exhaust mufflers on the left side of the car to avoid annoying the neighbors.

The body also received attention to make it more polished and straight. Helck drove the car often and presented his completed product for a cover feature in the Antique Automobile magazine of the Antique Automobile Club of America in September-October 1965.



Over the years, the car has taken a variety of names. In addition to Lord Scarisbrick's

original name of "Rabbit the First," the combination of Scarisbrick and C.H. Crowe also led to the name of "Scariscrow" at some point. Helck likely added his own twist by calling the car a "Benz-Mercedes" and adding the cheeky radiator badge with that name and the upside down three pointed star.

Helck owned the car until his death in 1988 when it moved to live with a family collection in Maryland. In 1999, it returned to the Fanoe Beach in Denmark to replicate its 1923 run as part of an event hosted by the Danish Motor Club. It also made an appearance at the Amelia Island Concours in March 2008, winning Best the Class of Beach Racers.

Subsequently, the car again changed hands, leaving Maryland to move to California. Its semi-retired current owner likes to tinker with old cars and the Rabbit is no exception. After driving it for a few years, the leaks in the metal jackets around the cylinders were not improving on their own, so a project was undertaken to remove and restore the cylinders.

Each of the 6 cylinders have been removed and each takes a material amount of effort to clean up and prepare for fresh jackets. The original jackets are unsalvageable, so they are being fully replaced with sheet brass. The metal craftsmanship is stunning. Even new dies were made to replicate the bands in the brass of each cylinder jacket. While each is still very time consuming, the first cylinder should take the longest because of the need to create templates and dies from scratch. As the current owner says, "These engines were built at a time when technology was expensive and labor was cheap."

Of course, none of the original craftsman that built the Benz engine in 1916 or 1917 could have imagined that their engine would be powering a car a century later. In wartime, the engines needed to be robust enough to keep an airplane flying but nobody was planning to ensure that they lasted for decades or a century.



At present, two cylinders are fully completed which means four remain. In addition to the cylinders, there are plans to install a different front axle with brakes to give the owner a better chance of surviving an outing at speed. The remaining work will take some time, but the look at a work in process is fascinating.

The owner is a fan of Mercedes-Benz and in fact worked at a Mercedes dealership in Boston early in his working career. He has a few other interesting examples of the marque in his



garage, including the favorite of his collection - an iconic 1972 600 Short Wheel Base Kompressor. It is the product of a marvelous restoration and is the only 600 with a supercharged engine (of course). The Mercedes-Benz

Classic Center operation has been very helpful in keeping the older cars on the road with advice, assistance and parts.

If you're interested in seeing more about the car or updates on the restoration process, the owner puts short updates on the internet from time to time. You may have to sort through updates on a few of his other projects, but look up the Restoration Blog episodes on "Jay Leno's Garage" on YouTube.

We plan on following up on this story when the car returns to the road. The owner has a few other projects on his plate, so the car will get done when it gets done.

Thanks much to Jay Leno for his assistance on this article. Any errors are solely the responsibility of the author.