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Stanley Steamers and the Twins Who Built Them

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Published by

The Magic Age of Steam

Yorklyn, Del. 19736



The Stanley twins in their first car, 1897.

STANLEY STEAMERS AND THE TWIN WHO BUILT THEM

Automobiles powered by Steam? This in itself is a strange and fascinating idea, but no stranger or more fascinating than the twin brothers who designed, built, and merchandised these legendary cars. It is a story of an age that is past, and almost forgotten, yet one that made its unmistakable mark on mankind for generations to come. It is the story of Yankee ingenuity at its best during that famous age.

The Stanley twins, Francis E. and Freeland O., were born at Kingfield, deep in central Maine, in 1849. In early manhood they moved to Lewiston, where they became violin makers of local renown, and also engaged in the manufacture of certain photographic processes. In the early 1890's, they obtained a patent on the "Stanley Dry Plate", a very important advance for photographers of that day. The dry plate business, especially, proved to be a great financial success.

The twins were inseparable, and, indeed, it was impossible to tell one from the other. F. E. was the inventive genius; F. O. not only gave his brother encouragement but managed well the financial affairs of their enterprises. About 1895 they moved to the Boston area, and settled in Newton, Mass., where they bought a building to continue the manufacture of their popular dry plates and other photographic supplies.

Charles E. Duryea is generally credited with the building of the first successful American

automobile in 1892. Elwood Haynes, Ransom E. Olds, Henry Ford, and a score of others also had some sort of motor vehicle running before 1896. But in those early years, believe it or not, there were many more attempts to build a steam car than to utilize those new-fangled internal combustion or gasoline engines. It was a tried and true power known to many more people than was the gasoline motor. In fact, there were 125 makes of steamers alone built in the years before 1905. How many of them did you ever hear of, other than the STANLEY?

On Memorial Day, 1896, the Stanley twins attended a "race" at a local fairground, in which was entered a small, primitive, home-made steam car. The little machine did not impress them for its performance that day, but on the way home F. E. remarked to his brother: "Let's build one better!" And so they did.

In 1897 the Stanleys had a small, chain-driven steamer running around the streets of Newton. Then they built another. They became engrossed in their project. They, too, went to country fairs. In their first race with that first car, they covered a mile in just over 2 minutes (28 m.p.h.). It wouldn't be long before people all over the country would start to read about the Stanleys, and not only the records, but the legends, began to grow. They decided to engage in the automobile business in earnest.

At the very earliest attempt at "mass production", the Stanleys, in 1898, planned to build 30 cars exactly alike. They ordered their bodies from a leading carriage shop (when they arrived, they were equipped with whip sockets!), but not being satisfied with the way engine and boiler designers would furnish these necessary parts of

a steam car, they decided to build their own. The danger, in the Stanleys estimation, was of adding too much weight, and they knew that every extra pound cut down on performance. Most steam vehicles (stationary engines, locomotives, etc.) were heavy, and that was all steam engineers of that day knew. So the small, 2-cylinder engine was built on four light frame rods, and the boiler, constructed with almost paper-thin shell, was wrapped with several layers of piano wire to make it strong. Of these 30 original cars to be built, probably not more than 10 were completed. The Stanleys were approached to sell out their automobile business!

"We have no automobile business- - yet", F. O. told their prospective buyers. "That's all right, we'll buy it anyway" was the reply.

1899 was a good financial year for the Stanleys. They sold their dry plate business to George Eastman for two million dollars. They sold their "automobile" business to New York investors for one quarter million dollars. They agreed to stay out of the automobile business for two years. And on August 31 of that year, F. O. Stanley, accompanied by his wife, drove one of their little cars from Newton to Glen House, New Hampshire, and up the cart road to the top of Mount Washington, the first automobile to make the climb (the first gas car made it in 1902). Even though they were out of the automobile business, the fame of the Stanley Steamer was spreading far and wide!

At the end of 1901, the Stanleys bought back their factory in Newton (it had gone with the sale) for \$20,000 and started to make cars. Their minds had not stood still for those two years. They already knew they could build a steamer far ahead

of their competition, and much advanced over their earlier cars. They geared the engine direct to the rear axle, eliminating the chain drive. They drove the four necessary pumps with one crosshead and one moving part. They patented a water level indicator with no moving parts. The bodies would carry two adults and two children on a little seat in front with folding foot-rest. And 35 m.p.h. was no strain at all for the little $4\frac{1}{2}$ H.P. 1902 model Stanleys. About 400 were built this first full year. They could have sold many more. The fire chief in Newton had one. Country doctors realized the advantages. And the Stanleys themselves (always having "souped up" cars for their own use) were thoroughly enjoying themselves by racing each other through the suburbs of Boston to the dismay of local police, as the good officers of the law were never quite sure which one they were chasing.

The Stanleys could not imagine why anyone would even consider buying an internal combustion machine. The advantages of steam seemed to them so obvious. If a prospective buyer would query one of them on how he could best learn to operate the car, he would likely receive an answer like: "If you can't learn, then let your wife do it, she can boil water on the stove. This is no different."

For three years the Stanleys built the little runabout model with minor changes, and they built about 1500 of them. But their craze for speed and recognition in the blossoming auto industry (they had plenty of company in this) forced them to build bigger and more powerful machines, just for the track races and the hill climbs which were prevalent and well publicized in those days- a must for a small company who wanted to keep its product before the public.

A young man named Fred Marriott had joined the Stanleys by 1905, and Fred was to become the Barney Oldfield of the steam car drivers. F. E. Stanley and Louis Ross had already made a mark by winning many track meets and Mount Washington Hill Climbs, and Fred Marriott was to continue their reputation at such famous places as Giants' Despair Hill Climb (Wilkes-Barre, Pa.), in the British Isles in 1906, and at several annual Ormond Beach, Fla. races. The Stanley racers and the events surrounding them would make a story in itself. But to over-simplify here, the world's record set by Fred Marriott at Ormond Beach in January, 1906 (127+ m.p.h.), and the unofficial record on that fateful day in January, 1907, also at Ormond (190+ m.p.h.) when Marriott was seriously injured, provided the climax, and the latter event the end of the Stanleys' racing ambitions.

Fred Marriott recovered and lived until 1957. In his later years, he loved to relive his glory days. The Stanleys learned much from their racing as did the outside world. The power plants developed for the racers were adapted to the passenger car line, and even to the famous Mountain Wagons, which also would make a story all their own.

F. O. Stanley had tuberculosis, and shortly after 1900 began spending his summers at Estes Park, Colorado. About 1905 he built the Stanley Hotel there, and needed ways to transport his guests from the railroad stations at Lyons and Loveland, some 35 miles and 2500 feet in elevation away. Stanley touring cars were far superior to internal combustion cars for this climb, but could not carry enough passengers and baggage. First the 9-passenger Mountain Wagons were developed for this run, and soon these were expanded to 12-passenger vehicles, and even a few 15-passenger models were built. These "Wagons" proved

so successful that soon resort hotels were buying them all over the northeast, in addition to the ones shipped to the Rockies. From 1909 to 1915, about 300 Mountain Wagons were produced. The Poland Spring House in Maine would allow no motor vehicles except the Stanley Mountain Wagons on the grounds, as the gas cars annoyed their guests rocking on the long front porch.

By 1908, production of Stanley Steamers had reached 1,000 per year, and most of these were the "economy" Model EX which seated from two to four passengers and sold for \$850. It was also the most profitable year for the company. Still capitalizing on the fame of their racing cars, and staying far ahead of their competition in smoothness and silent operation, they could not produce enough to supply the demand. It was not until one day in 1909 that a sad F. E. Stanley went home and told his wife that there were more gas cars registered in the State of Massachusetts than there were Stanley Steamers. They would not compromise their product, but the industry was starting to outgrow them.

Stanleys were built for 15 years after 1909 and it was certainly not all down hill. Probably the finest cars they built, combining the great and snappy performance of the early cars with some of the convenience of the later ones, were during the period from 1910 through 1914. Even during this period, young dealers like T. Clarence Marshall could not get nearly as many cars as they could sell. Cars of this period still had wood frames, full-elliptic springs front and rear, brass gas lamps, right hand drive, and were non-condensing which means they were most spectacular to see steaming along the highway. 8,000 Stanleys had been built by the end of 1914.

There was much pressure by customers and dealers to put condensers on the steamers to prevent so many water stops on longer trips. The Stanley twins reluctantly gave in on their 1915 models. Some say an epidemic of hoof and mouth disease, which caused the draining of many horse-watering troughs, brought this to a head. But, while the mileage between water stops was increased with the advent of the condenser, other problems accompanied this new device, as F. E. knew would happen. Oil from the exhaust steam got back into the water tank and from there to the boiler, which eventually caused the bottom sheet of the boiler to overheat and leak. Many condensing cars, otherwise good, were laid aside after a very few years' service and low mileage. And most distasteful of all to the Stanleys was the addition of all that weight. There went much of the famed performance of their cars, at a time when internal combustion engines were getting smoother, more powerful, and even equipped with self starters.

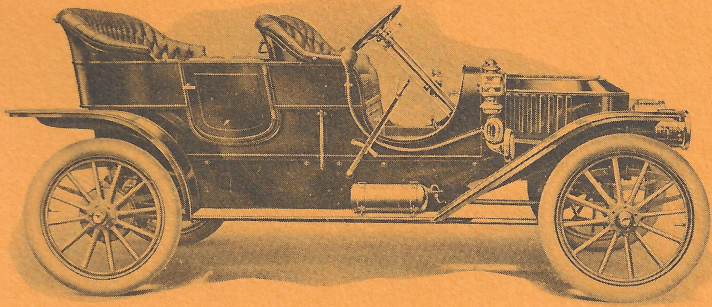
F. E. Stanley was still a fast driver. In his late sixties, he would cover the distance between Newton and his summer place on the coast of Maine in record time. In 1918, to avoid a collision with a farm wagon, he ran up the bank alongside the road near Newburyport, Mass., his car overturned, and he was instantly killed. F. O. immediately sold his interest in the Stanley Motor Carriage Company.

F. O. Stanley, who had suffered from TB most of his life continued to spend his summers at Estes Park. He died in 1940 at the age of 91.

The company continued to build Stanleys, mostly touring cars, with added refinements but

with no major improvements. Little change in style was made from year to year. The cars were comfortable, roomy, and well built, but they had the drawback of short-lived boilers (the condenser problem), were quite sluggish in performance, and the imagination and Yankee ingenuity was gone. They weighed just three times what a car with this much power should weigh, in the mind of F. E. Stanley. And so, in 1924, in the final year of Stanley production at the old Newton plant, just 101 Stanleys were turned out. When an old company employee was asked, many years later: "Did they tell you they were going to close down on a certain date?", his reply was, simply: "They didn't have to, we knew".

Certainly less than 14,000 automobiles was not an impressive array of cars in over 20 years of production. Henry Ford built over one million Model T's in a year by the mid-twenties. The Stanley was not a plush luxury car in a class with an English Rolls Royce or an American Pierce Arrow. But perhaps because it was so completely unorthodox, so improbable yet completely practical with its marvel of simplicity, 22 moving parts vs. 900 in an average gas car, it made a mark for itself and for the men who built it far beyond its numerical strength. How many of you have heard this tale? "They'd give a new Stanley to anyone who could hold the throttle open for five minutes!"



This typical Stanley Touring Car of 1910 was rated at 20 H.P. (the middle size), burned white gasoline, used about 1 gallon of water per mile, achieved 10 to 12 miles per gallon of fuel, and was capable of maintaining a road speed in excess of 40 m.p.h. It took 20 minutes to "fire up" from cold, and though some owners attempted to drive their cars all winter, freezing was a problem. But it was great on hills, and its smoothness and silence of operation are still marvels today.