

Frank B. Stearns

IT WAS A BIG DEAL if you dropped out of school in 1897—particularly if you could have decided to attend any school you wanted, because your father was a very rich man in a very big city full of rich men. But rather than follow that prescribed path, Frank Ballou Stearns decided to join the infant auto industry. Before the money men grabbed away his business, he built some enticingly different premium cars that are hugely sought by today's collectors.

Perhaps this tale really deserves to commence with F. B.'s father, Frank M. Stearns, who had made a major fortune in quarrying during the 19th century. The family estate in Cleveland was located along Euclid Avenue, where some of the city's most prestigious addresses ranged up and down Millionaire's Row. Frank M. must have been a remarkably understanding parent. Not only did he let F. B. leave school, but he also built his son a fully equipped machine shop in the mansion's basement.

Stearns, the younger, made the most of it. He began with a steamer in 1896, and was fully engaged in building cars, or at least motorized buckboards, by 1898, when he founded F. B. Stearns & Company, with the "& Company" represented by the Cleveland-born brothers Ralph R. and Raymond M. Owen. Structured that way, the ampersand only lasted until 1902, when the brothers left to chase their own rolling rainbow; they're both remembered most vividly for creating the Owen Magnetic. By then, Stearns had built perhaps 250 cars, all of them expensive, but all of them also boasting advances such as the steering wheel, magneto, and an actual four-speed transmission with sliding gears.

They also had copious power. The 1905 Stearns was pumped up with a 40hp L-head four-cylinder engine that utilized side valves. A plethora of automakers were now heavily involved in racing, but Stearns balked at building specialized racing cars, preferring to run in stock-specification events, using cars that produced up to 90hp by 1909, and which were equipped with shaft drive. Barney Oldfield liked the Stearns so much that he bought two of them, with his own money, for both road and racing use. A Stearns set an early speed record on the beach at Ventnor, New Jersey, below Atlantic City.

More than 110 years after he produced his first powered automobile, F. B. Stearns remains best-known in the car world for a radical, risky business decision. In 1911, he was granted the first American license to produce the double-sleeve-valve engine configuration that had been developed by Chicago native Charles Y. Knight beginning in 1905. Knight's design dispensed with the relatively unrefined poppet valvetrain in favor of a system that used movable sleeves to cover the engine's intake and exhaust ports. A chain-driven shaft parallel to the engine's crankshaft raised and lowered the sleeves using a worm-and-wheel arrangement. Knight called his engine the Silent Knight, and he first licensed the design in Europe to builders of grand cars, including Daimler of England and Minerva of Belgium.

Knight's unorthodox technology, therefore, found adherents on both sides of the Atlantic and in a surprising variety of vehicles, including Federal trucks, despite Charlie Knight's demand for a \$100 royalty per engine produced under license. The biggest domestic taker was John North Willys, who ordered the sleeve-valve architecture incorporated into the new-for-1916 Willys-Knight.

Stearns's view was that the Knight sleeves might cure commonplace valvetrain wear, and the associated absence of rocker arms would create a far quieter engine. It synched well with the Stearns goal of a no-compromises car—among other traits, the Stearns-Knight engine

incorporated a crankshaft cut and machined from a solid metal billet, and the finest in ball bearings imported from masters in Germany.

We mention Willys, the man, because of his role in subsequent Stearns-Knight history, what little was remaining. F. B. Stearns cashed out of his company in 1918. Willys bought it in 1925, and debuted a huge, straight-eight-powered Stearns-Knight two years later, just as the stock market crashed down and flattened the firm forever. F. B. Stearns went on to design diesel engines, and when he died in 1955, was a ranking proponent of organic farming. ☞

