

Stoddard–Dayton Company



The Stoddard–Dayton Company produced automobiles from 1905 through 1913. The Dayton Ohio based company was formed by John W. Stoddard and his Son Charles G. Stoddard. John had made his fortune in the agricultural business but by 1904 he decided to move into the ever evolving automobile manufacturing business. Charles was sent to Europe to learn their techniques, designs, and production methods. He returned to America convinced that the gasoline combustion engine was the choice of the future and that the steam and electric vehicles were on the verge of becoming obsolete.

The early Stoddard–Dayton cars were outfitted with Rutenber engines. The Rutenber Motor Company was based in Chicago, Illinois and produced four-cylinder engines that had been designed by Edwin Rutenber. His first engine was a single-cylinder version introduced around 1892. A four-cylinder version was created by 1898.

In 1902 the Rutenber Company was relocated to Logansport. The Auburn Company also outfitted their cars with Rutenber engines until 1923.

By 1907 the Stoddard–Dayton vehicles were being powered by modern six-cylinder engines. This amplified the companies' position of creating quality cars with powerful engines. The entry level vehicles were given 15 to 18 coats of paint while the limousine models featured nearly 30 coats of paint. Each coat of paint was meticulously hand sanded. After the painting process and the car were complete, the cars were driven 150 to 400 miles to verify quality. After this the engines were disassembled and they were re-cleaned and inspected. Then it was re-assembled and another road-test ensued.

The cars were not only top-quality machines; they were also very potent on the race track. The company proudly advertised their many successful sprint races, hill climbs, dirt track races, and other sporting accomplishments. In 1909 a Stoddard–Dayton won the first race held at the Indianapolis Motor Speedway after averaging 57.31 mph. In 1911 the first pace car ever for the Indianapolis 500 was a Stoddard–Dayton.

To offer a wider assortment of vehicles, the Courier Car Company was formed in 1909 by Stoddard–Dayton. Their lines of vehicles were smaller and lower-priced versions of their Stoddard–Dayton siblings.

During the early 1910's the Stoddard–Dayton merged with the United States Motor Company. In 1908 the International Motor Company was formed and later renamed to the United States Motor Company in 1910. The company's existence was due to Benjamin Briscoe. The company represented multiple manufacturers, a total of 11 in 1910 including Maxwell, Courier Car Company, Columbia, Stoddard–Dayton, Alden Sampson Trucks, Gray Marine, Brush Motor Car Company and others. Their goal was to help provide and find financial support for small and struggling independent automotive manufacturing companies.

By 1912 the United States Motor Company had entered into receivership and by 1913 they were bankrupt. This was also the demise of the Stoddard–Dayton manufacturing company. The Stoddard–Dayton had failed to compete with the low priced, high quality, mass-produced manufacturers such as Ford and General Motors.

The Maxwell Company purchased the assets of the bankrupt Stoddard–Dayton Company and continued to offer the Stoddard–Dayton models 30, 38 and 48 in 1913. Maxwell was later reorganized and became part of the Chrysler Corporation.

Stoddard`s Splendor

BY DANIEL STROHL

Think of the great mechanical and automotive innovation centers of the Midwest–Detroit, Kenosha, Auburn, Dayton.

Dayton?

Well, of course, Dayton. The city has a long history with powered aviation, going all the way back to a couple of brothers by the name of Wright, who operated a fairly successful bicycle shop on West Third Street from which they based their airborne experimentation. Nowadays, it seems as though every other Dayton–area resident works in some capacity for the sprawling Wright–Patterson Air Force base.

The same industriousness that spurred the Wright brothers gripped many other Daytonians around the turn of the century. Harry C. Stutz, who built the eponymous cars in Indianapolis, began in the craft by building runabouts in Dayton. Charles Kettering pioneered many of his inventions while working for both National Cash Register and Delco, two Dayton-based companies.

But of the nearly three-dozen automotive startups that popped up in Dayton in the first couple decades of the twentieth century, just three actually went on to manufacture automobiles. Speedwell saw a relatively prosperous time in the median of its existence, producing about 4,000 vehicles of several different body styles from 1907 to 1914. The other two grew out of a simple hay rake manufacturing company's attempts to diversify its business.



Charles G. Stoddard, the son of businessman John Stoddard and heir to his father's successful paint, varnish, farm implement and bicycle company, had a notion to build powerful, luxurious and exclusive automobiles in the European fashion of the time. In April 1904, the Stoddard Manufacturing Co. announced that it would begin production of a side-entrance touring car on a 96-inch wheelbase, powered by a 201-cu.in. Rutenber four-cylinder engine making 26hp. We haven't found a production number for that first year—perhaps that first automobile was just the prototype—but we can safely assume Charles found enough backing for his new venture. By December 1904, Stoddard Manufacturing dropped the other businesses and changed its name to Dayton Motor Car Co.

Despite the name change, the cars were—until then and ever after—known as Stoddard-Daytons. Success seemed innate to Charles, with sales of 125 units in 1905. The next few years would see a host of changes, including the proliferation of models and body styles. We also see now prices for some of these cars: A Model E runabout, the least expensive offering in 1906, cost \$1,250, while the most expensive, the Model D limousine, sold for \$3,250. Keep in mind that the Ford Model T, when introduced two years later, cost between \$825 and \$1,000.

The cars earned a reputation for sturdiness, innovation and performance those first two years. The innovation, in particular, continued in 1906-07, when

Stoddard introduced two new engines developing 15/18hp and 30/35hp, both apparently based on the Rutenber's design. Sales increased to 385 in 1906 and 1,200 in 1907. Showrooms started to appear in Indianapolis, Chicago and New York City.

But Charles wasn't done yet. In 1908, he hired on a young English engineer, H.J. Edwards, who immediately began work on a four- and six-cylinder overhead-valve engine, which the company would release that year. Though the straight-six would last just for 1908, with none apparently remaining extant today for study, Edwards designed both engines around a hemispherical-shaped combustion chamber, making the engine one of the first-if not the first-hemi engines.

The engines featured valves in the head, rather than the block, at a time when most manufacturers were progressing from T-head engines to L-heads. They also had a unique valve actuation system that used one rocker arm and pushrod for each of the heavily splayed intake and exhaust valves.

Edwards placed the pivot point of each rocker arm in the center of the head, which eliminated the possibility of placing the spark plug in the ideal location for a hemi engine. He then secured the end of the rocker arm to the pushrod, which would-via a camshaft with both lobes and divots-push and pull against the rocker arm. The push would actuate the exhaust valve, while the pull would actuate the intake, assisted by an expansion spring located toward the lower end of the pushrod.

Every Stoddard-Dayton four-cylinder engine over the next two years-from the 18hp variant in the 1908 Model H and N to the 45hp version in the 1909 Model K (the six-cylinder engine in the Model G made about 60hp)-used that architecture, but in 1910, Edwards began to phase in a refined, somewhat more conventional overhead-valve design that used two camshafts, eight pushrods and one rocker arm per valve in the 40hp and 50hp four-cylinders. The base 30hp engine that powered the Model B, H and T in 1910 continued with the former design.

Production grew to 1,400 in 1908 and 1,600 in 1909, good for eleventh and thirteenth place among American manufacturers, respectively. Those sound like decent enough figures for such a new company, but trouble loomed. Low-priced competitors, most notably the above-cited Ford Model T, began to fill the marketplace during those years. When your product regularly costs about three times that of the newcomers, even the austerity wears thin.

Stoddard-Dayton took a few approaches to the situation. The company tried its hand at competitions in efforts to increase brand awareness. Race entrants saw significant successes. A Model K in 1907 finished the Glidden Tour with a perfect score. A pair of Stoddard-Dayton Model H's won two of the first events at the Indianapolis Motor Speedway's three-day inaugural festival in 1909. Stoddard decided to pull out of racing altogether, though, following Charley Merz's infamous fatal crash during the festival. The Stoddard-Dayton would officially serve just as a pace car afterward, for three of the first four Indianapolis 500 races.

The company tried, in 1909, to compete with a lower-priced model of its own, the Courier, set up as a subsidiary company so as not to sully the good name of Stoddard-Dayton. The Courier—the third automotive success story to come out of Dayton and not to be confused with two separate manufacturers that went by the same name in Sandusky, Ohio—sold for \$1,050 and \$1,200 for the roadster and touring models. Not a bad price, comparatively, considering that Edwards continued his engineering efforts on the lower-priced model as well.



But, according to George Dammann's book, *70 Years of Chrysler*, Stoddard-Dayton had never been a financial success over the years. "Because of its non-profit position over the years, this company was saddled with a rundown plant and antiquated and worn machinery," Dammann wrote.

Thus, Stoddard sought help. Benjamin Briscoe, Jr., who started the Maxwell-Briscoe Company in 1903, had a history of grand dealings with automotive companies. In fact, according to Lawrence Gustin's biography of William Durant, it was Briscoe who had originally approached Durant with the idea—and financial backing—for a large automotive merger in 1908. Briscoe's original plan was to include many high-zoot brands, including Stoddard-Dayton and Pierce-Arrow, but Durant countered with a plan to include just Buick, Ford, Reo and Maxwell-Briscoe. Durant's plan fell apart, but he later that year put together General Motors, leaving Briscoe out.

Briscoe persisted. By 1910, he had convinced Stoddard, along with the proprietors of Columbia Motor Car Co., the Brush Runabout Co. and the Alden Sampson Co., to merge with Maxwell into the United States Motor Company.

The venture was doomed from the start. Briscoe bought up about 130 smaller companies, mostly suppliers. Many of the constituent companies, though, looked to the merger as a bail-out from their woes. As a result, United States Motor immediately became overextended.

One of the assets-gained through Columbia-was the infamous Selden patent on internal-combustion engines, which would have provided at least a grand sum in licensing fees, but a court decision in favor of Henry Ford in 1911 made the patent just another piece of impotent paper.

Spirits, however, seemed high at the beginning: Maxwell expanded into another plant that year, Brush continued to turn a profit, and Stoddard-Dayton offered 16 different body styles in 1910, 19 the year after and 21 in 1912. Both Columbia and Stoddard-Dayton, looking to grow and innovate, licensed the Knight sleeve-valve technology in 1911.

But it all fell apart quickly, first with the demise of the Sampson in 1911, then with Briscoe's voluntary departure at the behest of stockholders partway through 1912. Receivership came in September of 1912, and before the year was out, Courier would fall and U.S. Motor would reorganize into the Standard Motor Company. Briscoe then apparently asked Walter Flanders, formerly Henry Ford's production manager and instigator of the E-M-F, to step in to save U.S. Motor/Standard around February of 1913. Flanders agreed, only if the company would buy his latest production attempt, the Flanders Six. He then turned around and axed the Flanders Six. Brush, Columbia and Stoddard-Dayton continued spotty production through the first half of 1913, then Flanders killed them off as well, leaving only a shaken Maxwell.



Maxwell would go on to attract the eye of a chap named Walter P. Chrysler. Briscoe himself spent the next eight years making a low-priced car named after

himself. Stoddard and Edwards left their respective positions as vice president and chief engineer of U.S. Motor in 1912 to obtain another Knight engine license—the last one issued to an American company—and started manufacture of the Edwards–Knight in New York. Production lasted less than a year before John North Willys bought the Knight license, patents, factory equipment and Edwards's engineering service in 1913 and moved the entire business back to Ohio to begin manufacture of the Willys–Knight. We see no mention of Charles Stoddard afterward.

Don Lyons, a business owner from Dowagiac, Michigan, is one of about half a dozen devoted Stoddard–Dayton fans across the country. A few decades ago, he and his father, Dale, befriended Barney Pollard of Detroit, who had built an impressive collection of about 450 pre-war cars rescued from various junkyards. Pollard had a 1910 Stoddard–Dayton touring car that he was eyeing to make a speedster out of, so he separated the body and chassis and sold the former to Don and Dale about 25 years ago.

About a decade later, the father–son duo came across a unique body at Hershey. Actual wicker weave lined the upper edge of the wood body, and a plaque on the lower cowl proclaimed that the E.E. Denniston Co. of Buffalo, New York, had built the handsome runabout. Later research would show that Denniston built bodies from 1909 to 1911 and that this particular body had been assembled in 1910.

"It didn't have any fenders, but it was remarkably original, down to the paint and upholstery," Don Lyons said. "It was likely somebody had just taken it off another chassis when updating their car."

The duo took some measurements off the car, got the seller's name and phone number, then went home and tried to think of what chassis they could use for the loose body. They then remembered the 1910 Stoddard chassis in Pollard's collection. Pollard himself had died, but his daughter was willing to sell the chassis. They visited, took some more measurements and decided to try to combine the two.

"When we dropped the body on the chassis, it literally dropped down—all the bolt holes lined up and even a cutout in the exhaust on the chassis seemed to have been made for the body," Don said. "I have no way to prove it, but that body just had to have come off a Stoddard–Dayton."

Don and his father had restored three Stoddards previously, so the restoration of this one went relatively smoothly. They sent the body to Ernie Schwartz in Nappanee, Indiana, an Amish buggy builder and restorer who branches out occasionally into antique automobile restoration.

"He and his family are every bit as passionate about restoring carriages and sleighs as we are about restoring automobiles," Don said. "He works without any electricity—just by gas lamps—and does magnificent work."

While Schwartz repainted the body in maroon and reupholstered the plush Victorian seats and expansive cape top, Don and Dale set about restoring the chassis—a fairly typical one for the time, with leaf springs at all four corners and a torque-tube driveshaft off the three-speed non-synchronized transmission. Dale also hammered out the four steel fenders from scratch. In all, Don estimated that the restoration took 18 to 24 months, simplified by his Stoddard-Dayton parts gathering but complicated by the lack of parts available for the cars.

"Basically, we go to Hershey and buy whatever Stoddard-Dayton parts we come across," Don said. "So if parts fall into our lap, great, but the sources are drying up, so that's not really much of an option anymore. Philosophically, at some point early in the restoration, you have to decide what parts you're going to look for and what parts you're going to have to make yourself."

For example, radiators prove nearly impossible to find, and even then, so troublesome that he hardly finds it worth the time to restore an original, so he just constructs new ones.



Don and Dale did make a couple of modifications to the car. The Lunkenheimer fuel pump originally used a small copper tube from the head, just above an exhaust port, to channel air pressure to a device in the dash that incorporated a spring, valve and filter to keep hot carbon embers from flying into the fuel tank. Despite the filter, the system still threw embers into the gas tank, so they kept the Lunkenheimer in place, but disabled it in deference to an electric fuel pump powered by a hidden 12-volt battery.

They also added a small generic Tilton electric starter to the engine and a ring gear to the flywheel. Though electric starters didn't come along until a couple of years later, "You don't have to hand-crank one for long before the thrill is gone," Don said.

Remarkably, they left the rest of the car unmodernized. Though Stoddard-Dayton offered a battery-coil-distributor ignition system as an option atop the base magneto system—the magneto triggered its own set of spark plugs at low rpm ranges while the distributor triggered a second set of spark plugs at higher rpm—the touring chassis came without the optional ignition system, so Don and Dale left it so.

And note the two pedals rather than three—Stoddard-Dayton offered a gas pedal as an option—the throttle joined the spark advance control on the steering wheel. A third ear on the wheel controlled a valve in the intake manifold, used to add air to the fuel mixture when quickly dumping gas to the engine.

Don estimates about 40 Stoddard-Daytons remain today, with very few more coming out of the woodwork. Years ago, when he started tinkering with examples of the marque with his father, perhaps 20 existed at the time.

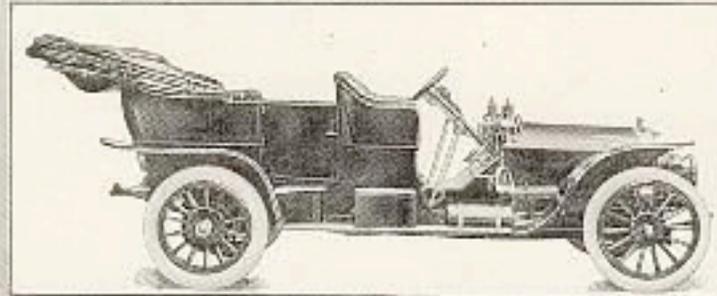
"Most of the ones that came about since then were put together about the same way mine was," Don said.

And even though Chrysler enthusiasts recognize the role Stoddard-Dayton played in the company's early history, the more popular and more numerous Maxwell gets the majority of the recognition from modern Mopar enthusiasts, leaving Stoddard-Dayton essentially among the many orphans from that time.

Stoddard-Dayton

1908 Stoddard-Dayton 1908

1908 Stoddard-Dayton 1908



HERE'S an American car worth while—Stoddard-Dayton Six-Cylinder Model 8-G. Every cylinder of the six works regularly.

Two complete systems of ignition operated separately but from the same switch. Bosch High-Tension Magneto and Jump Spark with sextuple coil and storage battery.

A 50-60 Horse-Power Machine

Power without Ponderosity. Speed with Safety. Beauty and Reliability. A Touring Car of Silence, Seating Seven.

Stoddard-Dayton Model 8-G. Motor—Six vertical cylinders cast in pairs, 4½ x 5 in. Transmission, Selective Sliding Gear. Three Speeds forward and reverse. Price, fully equipped, \$4,500, F. O. B. Dayton.

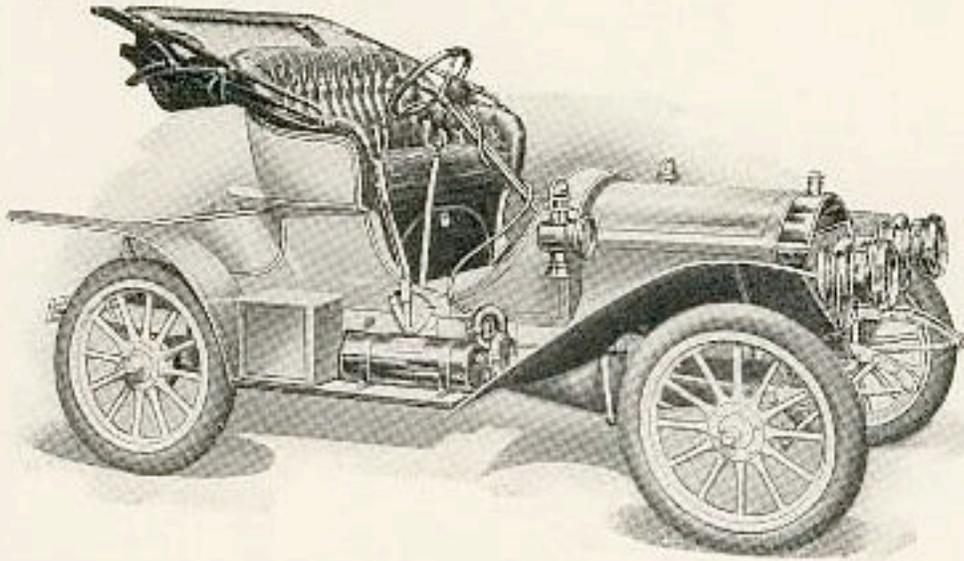
Send for 1908 Catalog

The Dayton Motor Car Co., Dayton, Ohio

Stoddard-Dayton

A Runabout of Pedigree

THE MOTORIST who wants a car for *service*, not as *big* as a touring car but equally as *good*, cannot find *anything* on wheels in the runabout class that will compare with Model-H.



Stoddard-Dayton

A car of the same general high class construction as Model-F, all parts—before and after assembly—*must* pass the same rigid inspection that insures *all* our machines to be *Cars of Dependability*. *Stoddard-Dayton* cars come of good stock—the *best* in the whole automobile family. A runabout simply in name, Model-H is, in reality, a *two-passenger* touring car of *unfailing* power and *high* speed.

Driven by our *Stoddard-Dayton* motor; 4 vertical cylinders, cast in pairs, 3.5 x 3.5 in.; transmission, selective 1-2-3; direct reverse; Traction roller drive; 100 lbs. through-out; interchangeable fenders, 25 to 25 H.P. Completely equipped with top and traps. Price, \$4,750.

The Dayton Motor Car Company DAYTON, OHIO.

STODDARD-DAYTON AGENCIES IN THE FOLLOWING CITIES:

McDuff Automobile Co., Chicago and Milwaukee; Hamilton Auto Co., Philadelphia; H. S. Mares, Cleveland; Fisher Automobile Co., Indianapolis; Hayes Automobile Co., Muscatine; Dwight, Arthurville; G. W. Coyle, J. A. Center, Buffalo; The Largest Dept. Co., Louisville; Jerome P. Parker Co., Memphis; A. M. Ziebold, Rochester; Atlantic Motor Car Co., New York; Numan W. Church, Pierre; Caver-Heedquarters, Los Angeles; O. G. Roberts & Co., Columbia; Keystone Automobile Co., Pittsburgh; J. Cleva Bennett, Nashville; Edgar L. Nye, Portland; The Central Automobile Co., New Haven; Auto-Motor Car Co., Cincinnati; Guy J. Harwell, Moline; Park Spring Automobile Station, Burton; Willoughby Automobile Exchange, Westport, Pa.; Auto Automobile Co., Troy, N. Y.; Independent Auto Co., Ltd., New Orleans; The Woodward-Royall Co., Springfield, Mass.; Philip A. Lucas, Pittsfield, Mass.; The West Gate, Toledo; Girvin Motor Car Co., Kansas City; Dunlap Motor Co., Boston, Mass.; Van Automobile Co., St. Louis; The Automobile & Supply Co., Toronto; H. P. Neuber, St. Joseph, Mo.; Ward & Dornell, Denver.