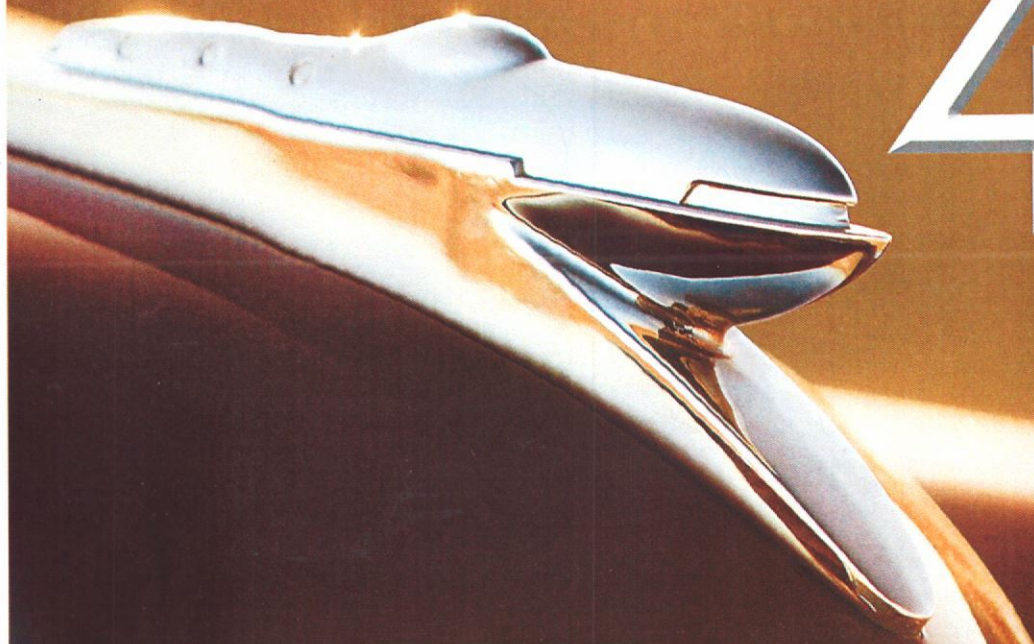




THE BIRTH & LEGACY

OF THE TUCKER 48

BY HAMPTON C. WAYT





Seventy years have passed since the first rear-engined, three-headlight Tucker 48 rolled out of the Tucker Corporation's massive factory just outside of Chicago.

Preston Thomas Tucker poses with two of his fifty-one cars outside the Tucker factory in Chicago that was originally designed to build B29 Superfortress bomber engines during World War II. When Tucker took the plant over from the government, it was the world's largest production facility. The Tucker car was uniquely styled down to its last detail, including its streamlined hood mascot and centered "Cyclops" headlight.

The brainchild of automotive businessman Preston Thomas Tucker, it was in late 1945 that a car-starved postwar public excitedly learned that he planned to give them the most advanced automobile they had ever seen. Three years later, a mere 51 of his cars were built before his company's assets were auctioned. Yet, the many trials and tribulations that Tucker faced during his ill-fated venture—including a fraud trial that ended in the acquittal of the automaker and seven associates—continue to be a hotbed of controversies. Many of his supporters believe that the postwar automotive landscape would have been a vastly different place if others had not stopped him from succeeding.

Described as a man with a hypnotic personality, Preston Tucker's career prior to starting his automobile company was rather unconventional by most accounts. Born in

Capac, Michigan, north of Detroit, in 1903, Tucker never had a formal engineering education, dropping out of Cass Technical High School in Detroit at the age of 13—but not because he was a young man without ambition. He left school to become an office boy for the Vice President and General Manager of Cadillac Motor Company, D. McCall White—one of the most respected engineers of the time—who acted as the young man's engineering mentor.

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After three years at Cadillac, Tucker joined the Michigan police force, purportedly so he could gain access to their fleet of souped-up automobiles and motorcycles. He spent most of the 1920s patrolling the local streets of Lincoln Park, although somewhere in the mix he apparently also operated his own service station and worked on the Ford Motor Company assembly lines. After Prohibition was repealed in 1933, Tucker became the route manager for Detroit-based Mundus Brewing Company, where he is said to have designed a system for the quick loading and unloading of beer barrels from the company's new fleet of Dodge trucks.

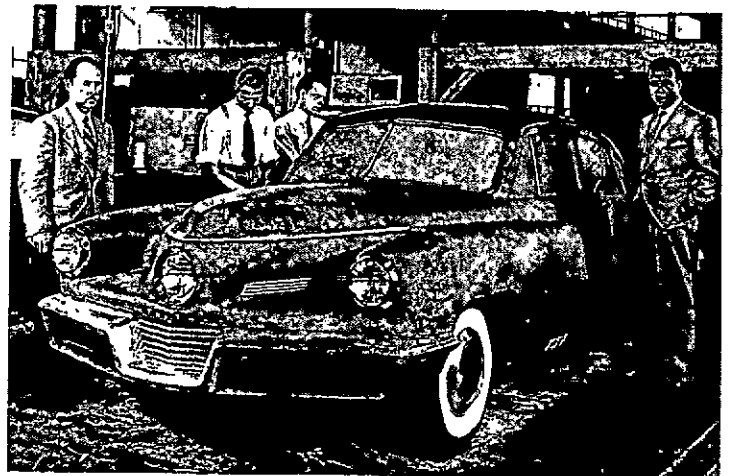
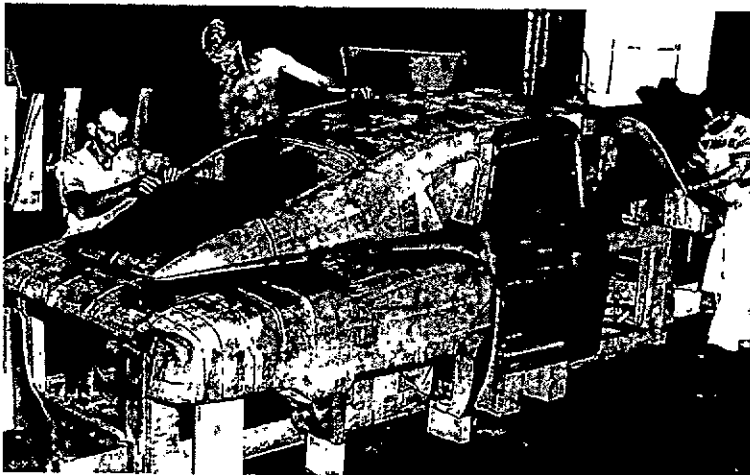
Most of Tucker's time by the dawn of the Great Depression, however, was involved in vehicle sales for notable marques such as Pierce-Arrow and Packard. His work with the latter marque found Tucker in Indianapolis, Indiana, in 1936, where he was the president and general manager of a newly formed regional Packard dealership, Packard Indianapolis, Inc.

Newspaper accounts show that Tucker had a natural gift and inclination for networking, self-promotion and generally being in the thick of things. Reports describe him as a local fixture at the Indianapolis Motor Speedway even before he moved to the city, where he hobnobbed with the rich and powerful, including Frank Fitzgerald, then governor of Michigan, James Couzens Jr., then mayor of Detroit, and even Henry Ford Sr.

As important as those men were, arguably the most significant connection of Tucker's career was that with famed race car designer Harry A. Miller. In late 1934, Miller along with two other men purchased the remains of the recently defunct Marmon Motor Car Company, originally intending to continue the well-known marque. But they soon made use of the factory to build race cars, including ten Ford-powered racers ordered by a group of Ford dealers for the 1935 Indianapolis 500, then the largest race team ever brought to the famed speedway. In 1938, Miller and his partners also constructed three rear-engined, all-wheel-drive Indy cars for Gulf Oil.

Many people would have been content with the exciting life Tucker led in Indianapolis, but Tucker was unsatisfied. After only two years, he left his Packard business to focus on obtaining government contracts. Back in Detroit, in 1938 Tucker debuted his "Tank" (a.k.a. the "Tiger") a 10,000-plus-pound Harry Miller-powered armored anti-aircraft combat car featuring a gun turret and a reputed top speed of 114 miles per hour. It failed to impress the U.S. Army brass, however, as its rate of travel was deemed too fast for service, and the

Left: The production Tucker 48 wooden body die buck. Right: The J. Gordon Lippincott & Associates design team with their proposed Tucker 49 clay model. It was the Lippincott team that completed the design of the production Tucker 48, building upon the prior work of designers George S. Lawson and Alex Tremulis.



turret (contrary to popular belief) was considered unsatisfactory for the military's purposes.

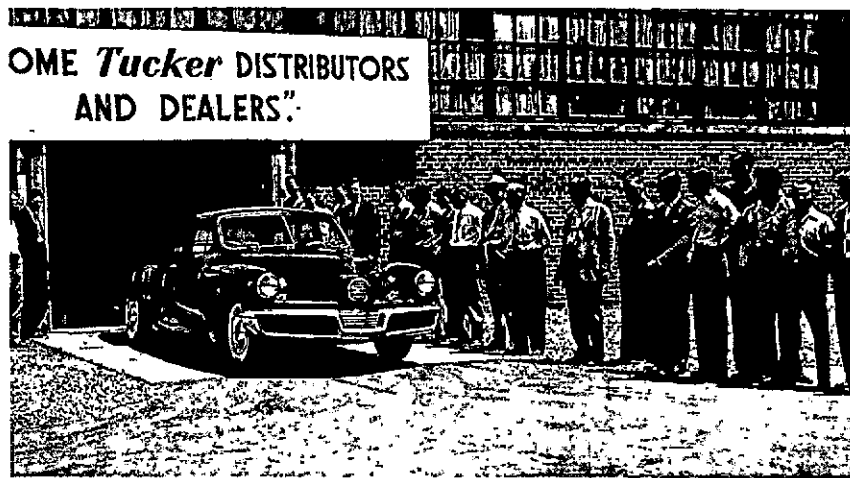
In 1940, the future automaker founded the Tucker Aircraft Corporation (also called "Tucker Aviation") in order to build his XP-57 "Peashooter"—a mid-engine fast-pursuit airplane that also featured a Miller power plant. The Peashooter never made it off the drawing board, but even so, Tucker managed to sell the company to famed industrialist and boat-builder Andrew Higgins, who made him a vice president of his New Orleans firm as part of the sales agreement. Tucker's relationship with Higgins quickly soured, though, leaving him free to pursue another interest: that of building a revolutionary new automobile, the Tucker 48.

The postwar years were some of the most opportunistic times for anyone with enough gumption to attempt building an automotive empire. During the Second World War, the American government had constructed factory after factory specifically for war work; these needed repurposing after 1945 and could be bought for pennies on the dollar. Tucker soon purchased the Dodge Chicago Plant—the largest factory in the world—which had been built to manufacture radial engines for B-29 bombers.

Peat-up consumer desires also had the postwar public screaming for new car marques. Throughout the war, government propaganda touted that American ingenuity, through advances in science and technology, would lead the country to victory—and it certainly played a conspicuous role. So, naturally, postwar consumers expected that

new automobiles would be vastly more advanced than the ones that had rolled off the nation's assembly lines before production halted. Wartime advertisements had also heightened expectations, promising that postwar cars that would be hardly recognizable compared to prewar models.

And yet, that is far from what happened. The late-1940s models offered by established automakers looked very much like those made before the war. After all, they had made significant investment in tooling and



More than 3,000 people showed up for the first tour of the Tucker facility alongside prospective distributors and dealers from across the country who were recruited to sell the thousands of planned-for production cars. All over the country, glamorous models were hired to show the car off to the public during the summer of 1948.

development before the war, and they wanted to recoup that. They also knew consumer demand was so high that they could sell their old models with little modification. And here is where Preston Tucker generated more excitement by far than any of the many other budding automakers of the time, outdoing interest in Gary Davis's three-wheeler, the Playboy, the Keller woodie wagon and the Kaiser-Frazer. Tucker's car was advertised as



- Movable front fenders that allowed the headlights to follow the road as the car turned;
- A third, fixed and centrally placed "Cyclops" headlight, providing constant forward lighting,
- A one-piece wraparound or "panoramic" windshield (a design that would become a standard in the 1950s);
- A centrally positioned driver's seat to keep the 135-mph speedy car's operator oriented on the road;
- A steering wheel "console" that positioned all of the car's instruments at the center horn button where the driver could best see them when desired,
- A lightweight plastic- or aluminum-paneled body over a tubular space frame,
- Butterfly-style doors that angled up and away from curbs.

Starting with Lawson's final four-door Torpedo, Tucker's next stylist, Alexander Sarantos "Alex" Tremulis, squared off the soft, streamlined forms and added matching upswept front and rear fenders. Tremulis also helped the engineers convince Tucker to eliminate the Torpedo's movable fenders. His final styling effort was published nationwide on March 2, 1947, under the car's new name, the "Tucker 48." Even so, Preston was not completely satisfied with Tremulis's design work and, after only three months on the project, replaced him with a team from the New York firm of J. Gordon Lippincott.

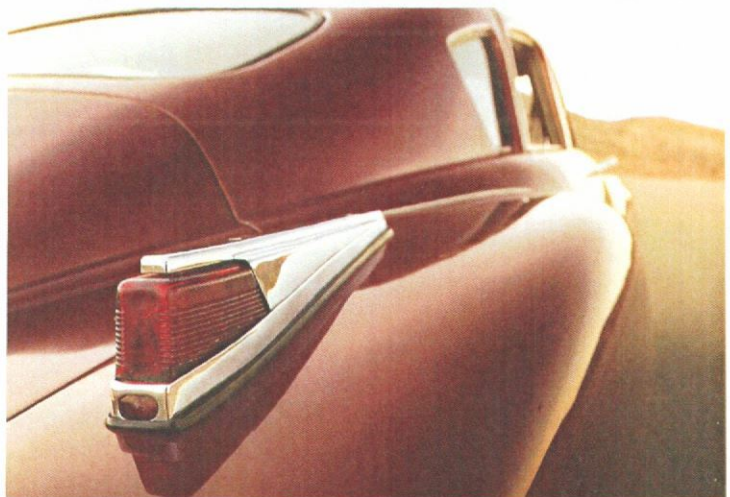
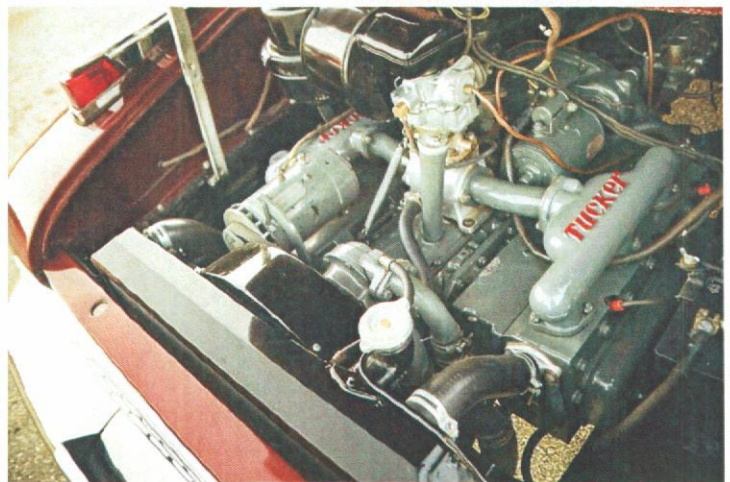
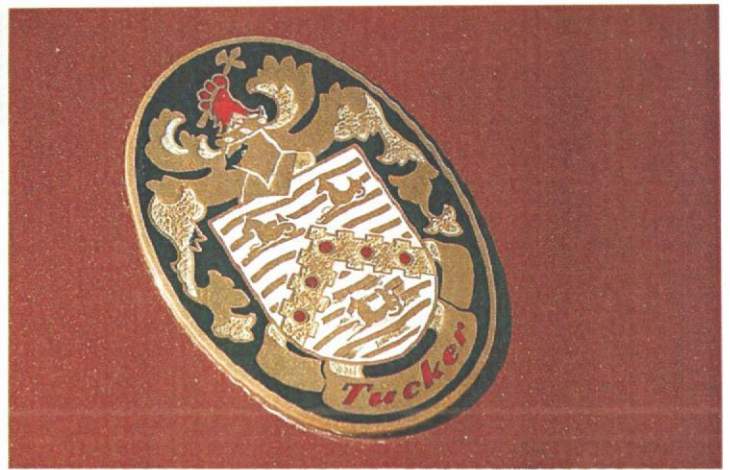
everything (perhaps more) that the American consumer was expecting—at least it was initially.

The development of the Tucker 48, as with Tucker's prior career, is often difficult to reconcile. To begin with, the car's styling regularly outpaced its engineering. Three different design groups, for example, worked on the car's appearance over a four-year period, and each design was advertised at various times as the forthcoming Tucker.

The first of these proposals, a rear-engined, streamlined sedan, was developed between 1944 and 1946 by Tucker's first chief stylist, former General Motors designer George S. Lawson. Lawson's "Torpedo," as his design was presented, was a boat-shaped, fastback four-door sedan that displayed a host of advanced features and futuristic styling (not to mention an expectedly low \$1,000 price point) that absolutely enthralled the public's imagination. It included:

During Tremulis's absence (he was later rehired to tool the design for production) the Lippincott team—consisting of Read Viemeister, Budd Steinhilber, Tucker Madawick, Philip S. Egan, and team leader Hal Bergstrom—completed the exterior design. Their contributions included a new front and rear end that featured the memorable "steer horns" front bumper (attributed to Viemeister) and the equally beloved six-exhaust-pipe rear bumper. The items were added to the prototype car already under construction, which resulted in the "Tin Goose"—the hand-built forerunner of the pilot "production" Tucker 48.

The car's engineering, as with its styling, went through a host of growing pains. Tucker's initial chassis featured an unfeasibly large 589-cubic-inch, flat-six engine that utilized oil pressure instead of a camshaft to control its valves—a feature that turned out to be highly problematic. So too was an experimental four-torque converter (one per wheel) direct-power system that was meant



to eliminate a traditional transmission. Neither of these elements proved successful and were only briefly installed on the Tin Goose.

Tucker's final power plant proved more practical if not completely original. The 48 utilized a 335-cubic-inch, flat-six water-cooled unit converted from a helicopter engine designed by Aircooled Motors Inc. of Syracuse, New York, and its model Y-1 transmission was based on the Lycoming-made unit with the Bendix "pre-selective" electric-vacuum shifter found in the front-wheel-drive 1936 and '37 Cord automobiles. Several Tucker cars, possibly as many as 23, actually came from the factory with used Cord transmissions, as Tucker's engineers reportedly installed quite a number taken from junkyards before they could leverage the earlier design for their own purposes. But even the Y-1 (the car's most commonly installed unit) was not considered by Tucker engineers to be fully satisfactory, and a completely new transmission, designed by engineer Warren Rice, was developed just prior to the corporation's demise.

By late 1948, after nearly two years of steady development, most of Tucker's major design hurdles had been

Far left: Preston Tucker with Josephine Chatham's illustration for Lawson's first Torpedo design, a swoopy four-door sedan and the unbuilt progenitor of the Tucker 48. Above: Every feature was carefully designed while production costs soared above initial estimates. Used, rebuilt pre-selector transmissions sourced from 1936-37 Cords are commonly found on the 48, as witnessed by the minute lever on this steering column; Inspired by the 16th century Tucker family coat-of-arms, Preston Tucker called his car's badge the "Symbol of Safety"; The production cars were all in effect hand-built prototypes, each equipped with modified Franklin helicopter engines, mounted at the rear.

cleared. In its final form, the 48 was not nearly as advanced as initially advertised, but it still had many features that the competition lacked—some of which were adopted by them in time. In addition to the aforementioned rear-positioned engine and transmission, the 48's specifications included:

- All-wheel independent suspension;
- A sealed engine cooling system;
- A front windshield that popped out as a safety measure in a collision (the car did not have seat belts);
- A padded under-dashboard "crash chamber" to help protect passengers during a collision;
- Interchangeable front and rear seats to help balance wear and tear on the fabric;
- The centrally located Cyclops light now following the orientation of the steering wheel.

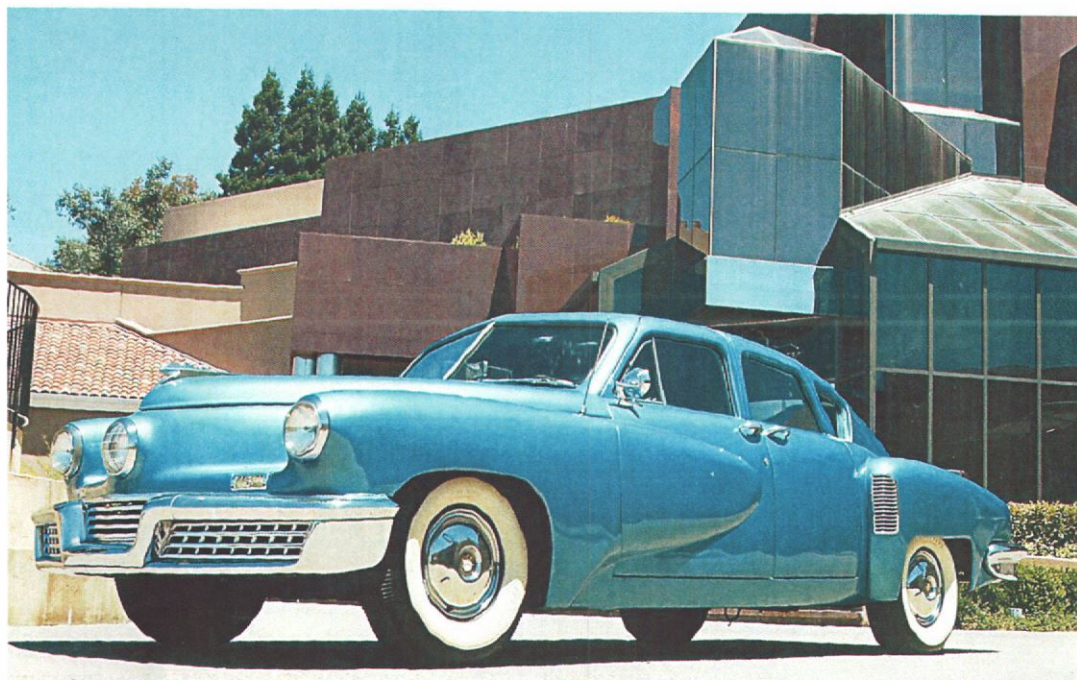
Unofficial tests at Tucker's old stomping ground, the Indianapolis Motor Speedway, also reportedly showed the car could really move! But just as its design was finally shaping up, Tucker was out of business.

Today the most popular explanation given for Preston Tucker's downfall involves conspiracy theories, corporate sabotage and nefarious government dealings that find Tucker martyred at the hands of fearful competitors—all for the heresy of trying to give the public a better automobile. Tucker certainly had his share of

unusual troubles. He had to fight to keep his production factory after receiving it, and he had difficulty buying the steel factory needed to supply the metal for his car despite providing the highest bid. He was also regularly audited by the government's Securities and Exchange Commission (SEC).

It was at the hands of the latter organization, in the name of protecting investors, that Tucker was indicted on mail fraud charges—a move that Tucker supporters say the SEC perpetrated because the Tucker car was mere weeks away from reaching production and would have caused major turmoil for the postwar plans of established automakers. Tucker himself claimed that Senator Homer Ferguson of Michigan and others were doing the secret underhanded bidding of the "Big Three" automakers (Chrysler, Ford and General Motors), and Tucker regularly placed his failure at their doorsteps. Tucker's plans for a comeback, with a Brazilian-built, Alexis de Sakhnoffsky-designed roadster named the Carioca, ended with his untimely death from lung cancer in 1956 at the age of 53.

Tucker's allegations of political and corporate misconduct are an intoxicating theme that has been repeated for decades in dozens of articles, books and even the Francis Ford Coppola-directed 1988 Hollywood movie, *Tucker: The Man and His Dream*. As history often shows, there are two or more sides to every story and, in Tucker's case, there is one simple fact that trumps all talk of conspiracy theories: competitor shenanigans or not, Tucker would have failed anyway.



Visually distinctive from every angle, the Tucker 48's looks both outpaced and bucked the styling trends of Detroit's aesthetically dull late-1940s automobiles. Tucker chassis number 1019, the twentieth Tucker built, features a striking Waltz Blue paint job. Other factory colors included Black, Green, Beige, Pearl Gray, and Maroon.



Right: Jeff Bridges recreates Preston Tucker's famous pose for the 1988 film *Tucker: The Man and His Dream*. Its director, Francis Ford Coppola, and producer, George Lucas, are both longtime Tucker 48 owners whose cars are at Pebble Beach today. Many of the original Tuckers were used in the making of the movie.

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Contrary to the popularly held belief that Tucker was just weeks away from certain success at the time of his indictment, evidence shows that he lacked the considerable funding needed to get his car manufactured. An independent two-month-long appraisal commissioned by Tucker's

own investors, just prior to the automaker's trial, determined that the venture required an estimated \$71 million beyond the approximate \$28 million (figures vary) that Tucker had already raised for his firm in order to produce his car. Most of this money was needed to establish an operational assembly line for mass manufacturing the 48, there being only a mock version (that is regularly mistaken for a real one) at the factory at the time.

The report further concluded that after securing these funds there would be a nine-month delay before the first automobile rolled off the line. Also, at an anticipated build rate of 300 cars a day, the Tucker 48 would have had a suggested retail price of \$3,289—putting it \$1,000 above the company's most recently advertised target price and in direct competition with its competitors' most expensive models. Cadillac's most popular sedan for 1948, for example, had a \$2,996 list price and only 23,997 were

sold. Understandably, Tucker's stockholders, upon learning of the results of their inquiry, decided to walk away from the venture, and the courts ordered the company liquidated.

And it is not as if Tucker was unaware that his venture was seriously underfunded. Around May of 1948, he asked the government's Reconstruction Finance Corporation (RFC) for a \$30 million loan to keep the doors to his factory open. After his request was rejected six months later, Tucker complained that "all" that stood in the way of manufacturing his car was money. Under the circumstances, it seems that the lack of cash—not sabotage—was likely Tucker's greatest challenge.

In the end, whether or not Tucker's dream died at the hands of a vicious plot or simply lacked working capital matters little. Over the years, Tucker and his car have come to represent something far greater, a timeless David versus Goliath story that also speaks to James Truslow Adams's American dream of "a land in which life should be better and richer and fuller for every man, with opportunity for each according to his ability or achievement." Preston Tucker's name, today, stands for that common man of uncommon talent whose efforts managed to make the world a better place—even if, ultimately, he was unable to slay the adversarial giants that appeared arrayed against him.