

# 24

## HOURS OF INDIANAPOLIS THE BIRTH OF THE BRICKYARD

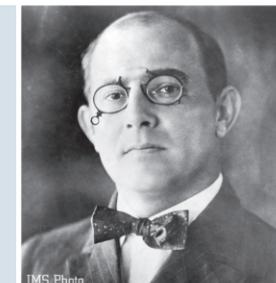
**It's hard to know exactly when Carl Graham Fisher and the other three founders first conceived of the Indianapolis Motor Speedway – but one reputable account points to a milestone stock car race that took place back home again in Indiana 100 years ago this November. The race was another one of Carl's big promotional ideas: a run at the 24-hour automobile speed record.**

story by | Mark Dill

The contest was the latest brainstorm from a very fertile mind that fired promotional ideas like a Gatling Gun. Fisher was renowned – sometimes infamous to Indianapolis law enforcement – for marketing stunts. To draw attention to his businesses, he rode a bicycle on a tightrope stretched across big downtown Indianapolis buildings and he pushed automobiles from the rooftops. He attached a giant gas balloon to a car and flew it over the city.

As crazy and mesmerizing as his stunts were, he measured their success by the attention they attracted to his businesses. In 1905, Fisher owned one of the first automobile dealerships in the country, with locations at 330 North Illinois Street and 400 North Capitol Boulevard. He also started a new business with an acetylene gas headlight product called, "Prest-O-Lite," in 1904.

**Promotional 'stunts' like the 24-hour race served one main purpose for Fisher (left), to sell cars from his Illinois St. dealership and draw attention to his Prest-O-Lite business.**



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All of this meant Fisher's fortunes were tied to the burgeoning automobile industry. In 1905, Indianapolis and Detroit were locked in a battle to become the car capital of America. Nine manufacturers, including National, Premier, Marion and American called the Circle City home.

His enthusiasm led him to conceive one of the major auto racing events of the year in 1905. After witnessing an impressive run by two National Motor Vehicle Company stock cars in a 100-mile race at the Indiana State Fairgrounds on November 4th, Fisher wanted to bring to Indianapolis the world's record for distance covered in 24 hours by an automobile. He approached Arthur C. Newby, a colleague and founder of National, about his idea.

The 100-mile race had been a runaway success for the National Motor Vehicle Company. In addition to National, other companies included in the event were Pope-Toledo, Premier, American, Marion, Marmon and Stoddard-

**Charlie Merz and W.F. "Jap" Clemens roared around the Indiana State Fairgrounds on their record-setting and historic run at the "24-hours."**

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**Fisher approached National Motor Vehicle Company founder, Arthur Newby (right) with the idea of a 24-hour endurance contest to showcase his cars.**



Dayton. A pair of Model C 1905 Nationals stormed to the front, steadily pulling away. They ran neck-and-neck until one blew a tire and tore down a big section of fence. The other car, driven by W. F. "Jap" Clemens, won the race with a new record of one hour, 53 minutes, 21.8 seconds, at an average speed of about 53 mph. The only other car to finish, a Premier, was nearly 45 minutes behind. The class of the field, National clearly had a chance to grab big headlines with a run at the around-the-clock record.

Newby recognized the opportunity to promote his company and products. Like Fisher, he was another Indianapolis entrepreneur in an age of bustling industrialization. He and Fisher had been in the thick of the bicycle craze of the 1890's when the two-wheelers were still a trendy novelty. Fisher's first successful business was a bicycle shop in downtown Indianapolis.

But the automobile was coming on fast and many in the bicycling community transitioned to horseless carriages. Fisher built his dealership, and Newby, with partners L. S. Dow and Phillip Goetz founded National Automobile and Electric Company, located at 1101-47 East 22nd Street in Indianapolis. In 1904, the partners changed the name to National Motor Vehicle Company.

There can be no doubt that Fisher's motivation in designing a 24-hour contest was rooted in promoting both his dealership and his Prest-O-Lite business. For an event that would require extensive nighttime driving to succeed, lighting was essential.

Called a "beautiful spectacle" by a trade journal covering the endurance run, Fisher provided 500 of his acetylene gas lamps arranged 25 feet apart and affixed to the fences that lined either side of the track. Firsthand accounts indicate that the lamps, shaded to prevent glare, gave the drivers a clear view.

The assault on the record was sanctioned by the American Automobile Association (AAA) and organized by the Indianapolis Automobile Racing Association, so there could be no doubt of it being official. Guy Vaughn in a French Decauville, who ran 1,015.6 miles in 24 hours the previous June at New York's Empire City track, held the mark.

Only two cars, both Nationals, started, with Clemens and Charlie Merz, the same drivers that dominated the 100-mile race weeks earlier. They were 40-horsepower

stock cars, stripped of their fenders and back seat to minimize wind resistance.

The drivers were sent off 30 seconds apart at 2:45 in the afternoon of Thursday, November 16. The first mile was covered in a respectable time of 69.4 seconds. They ran consistently at about this rate or a few seconds faster for the first 50 miles. Clemens then pressed harder, turning laps as fast as 62.5 seconds. By the 94th lap, he was two minutes, 19.6 seconds ahead of his record-setting pace in the 100-mile race. But it was not to be. A tire suddenly exploded, and repairs cost him seven minutes, 18 seconds.

**Having raced a National at the Indiana State Fairgrounds only months before, Merz climbed behind the wheel for the grueling 24-hours.**



from the private collection of Cornelius W. Hauck

Merz, too, lost time due to tire wear, but was able to get to the National crew in front of the judge's stand for replacements before any serious incidents occurred. Clemens, back on the track, pushed as hard as ever.

His daring paid off, as he set the new 150-mile record at two hours, 52 minutes, 32.8 seconds, a full 13 minutes better than the previous mark. The car was junk two minutes later.

It was about six o'clock and nightfall was coming fast. The Prest-O-Lite lamps were burning and Clemens was running a mile a minute up the home stretch. Without warning, a steering knuckle broke. The car began banging against the outside fence as the judges, the National crew and what few spectators had hung around cranked their necks in the direction of the thumping sounds to sort out the bizarre sight. The rudderless National knocked down a dozen or more fence posts, and then abruptly shot across the track to the inside fence. All this time, the helpless Clemens could do nothing more than watch. He decided not to jump from the car, but instead held tightly to the steering wheel. The National splintered the fence at a 45-degree angle destroying a few Prest-O-Lite units in the process.

Although the accident happened only about 50 feet from the judges' stand, all they saw was dust, smoke

**After an accident eliminated one of the Nationals early, drivers Clemens and Merz took turns behind the wheel, battling the bitter November cold.**



Auburn Cord Duesenberg Museum

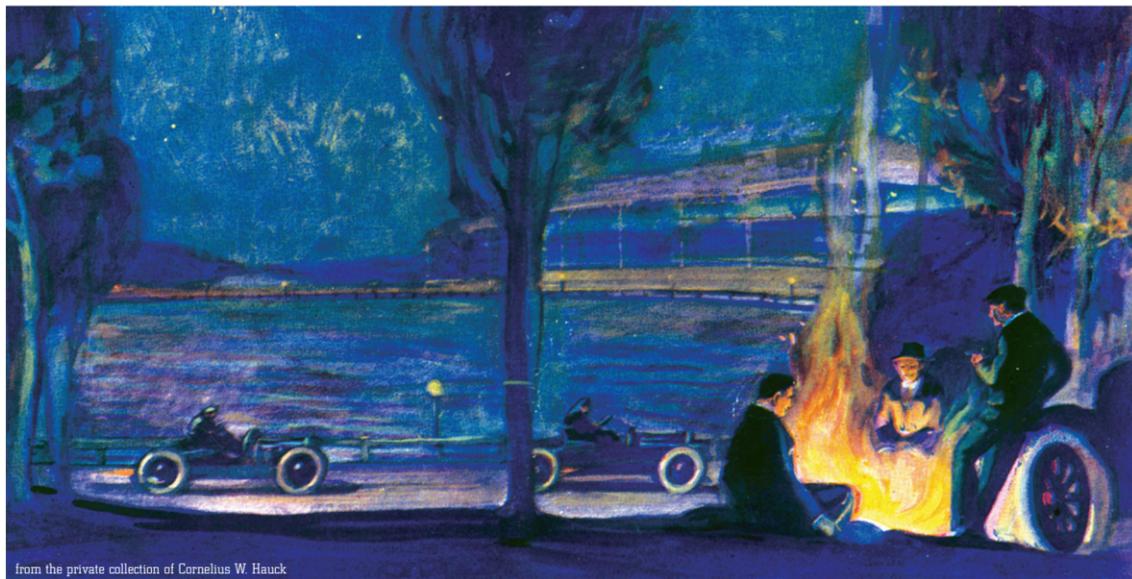
and flying lumber. Somehow, despite both front wooden spoke wheels being crushed by the impact, the car remained upright. From the center of commotion, a cry of “all right,” was heard. It was Clemens, who remained in the driver’s seat, alerting the officials he was uninjured.

A curious crowd quickly formed around the wreckage. The force of the impact was evident in the destroyed wheels, and the front of the car was twisted beyond recognition. Not only was Clemens uninjured, but he was unfazed as well. After a brief meal, Clemens replaced Merz because he had been making better time, as much as five miles ahead of his teammate before his accident.

As night fell, the harsh November Indiana weather turned the event into a struggle to survive. The two drivers spotted each other throughout the night. Clemens and Merz, their faces exposed to the wind, could bear no more than 30 minutes at a time. Goggles were useless, as they clouded with frost within minutes. The driver’s eyes bloodshot, the lone National would roll to a stop. The crew helped one frozen man to a bonfire for hot coffee and sandwiches as the other took his place. At times, they had to be carried from the car. The stops consumed a total of two hours, 54 minutes. Guy Vaughn had only spent one hour, 44 minutes stopping for food, fuel and repairs – in far more hospitable weather.

With the loss of the faster National, the drivers failed to set new records for hundreds of miles. It wasn’t until they reached the 650-mile mark that they began to consistently click off records. From that point forward the team set every mark through 1,000 miles. When 2:45 Friday afternoon rolled around, National owned the new world’s 24-hour distance record at 1,094.56 miles, about 79 miles better than previous record holder Vaughn. Counting the delays, they averaged just above 45 mph. To achieve that, they were lapping consistently well above 50 mph.

The result was a great triumph for National, and they proclaimed their achievement in their advertising for



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their new 1906 Model D car that was just ready for introduction. But an outcome with more lasting impact apparently occurred as Speedway founders Fisher, Newby, Frank Wheeler and James Allison warmed themselves by a bonfire as Merz and Clemens drove through the night. The scene is depicted on the cover of a rare 1917 National Motor Vehicle Company brochure as follows:

“It was around the campfire, watching this all-night run, that the National founder (Newby) and his friends (Fisher, James Allison and Frank Wheeler) conceived the possibility of a great motor speedway; and as a result, those same four men built and own today the world famous track at Indianapolis...”

National continued as a force in the industry until 1924. Their hallmark was a unique round radiator, and their company tagline became, “Watch for the Round Radiator.” The shape distinguished the car, and the company said it was a more effective cooling system because its diameter matched that of the fan behind it.

**This painting on the cover of a National promotional brochure depicts the “Birth of the Brickyard.” Notice the products of Prest-O-Lite illuminating the racetrack in the back.**

**With the new world record in their hands, National went about making sure the world knew, as boasted by this advertisement for the 1906 Model D.**

**National Reliability**  
 Was demonstrated in the most convincing manner at Indianapolis on November 16 and 17, 1906, when a NATIONAL STOCK CAR made  
**1094.56 Miles in 24 hours**  
 Breaking the world's record by 78.5 Miles

**The Car that Broke the World's Records**  
 National Model D, 4 cylinder, 28-40 H. P. Price, \$4000.

**An Innovation in Touring Cars**  
 National Model E, 6 cylinder, 30-60 H. P. Price, \$4500.

Stylish, powerful, smooth running, easily controlled. Aluminum body, seats 7 passengers comfortably, all facing forward.  
 WRITE FOR PARTICULARS  
**NATIONAL MOTOR VEHICLE CO.**  
 1003 East 22d St., Indianapolis, Ind.

DEalers: Linscott Motor Co., 124 Columbia Ave., Boston; Thomas & Hubbs Co., 318 & Broadway, New York; Ralph Tompkins Auto Co., 111 Madison Ave., Chicago; Tunga Auto Co., Broad & Third Sts., Philadelphia; Fisher Auto Co., 208 N. Illinois St., Indianapolis; Liberty Auto Co., 129 South St., Pittsburg; Columbia Auto Co., 204 Olive St., St. Louis.

Auburn Cord Duesenberg Museum

National, which won the Indianapolis 500 in 1912, continued to evolve their product in the coming years, with a particular focus on the engine, which grew from four cylinders to twelve by 1917. The same 1917 brochure that describes the bonfire setting when the Speedway founders conceived of the track, reports that the decision of Newby to pursue the 24-hour record in 1905 spoke of the company’s dedication to superior gasoline engine design.

“Back in 1905 he (Newby) sent two National cars out to the one-mile track at the Indiana fairgrounds and started them on a twenty-four-hour run to show that it was possible.”

But possibilities were what the Speedway founders and the pioneers that drove and worked on the early race cars were all about. All of us have talked late into the night – sometimes in front of a campfire – solving the problems of the world, and then too frequently lapsed back into our routines at daybreak. But these men started companies, broke speed records and built a monumental Speedway that annually hosts the greatest stock car drivers and teams in the world – 100 years after a stock car brought the world’s 24-hour speed record home to Indiana. ■

**AD**

# SOLE SURVIVOR

## THE LAST 1905 NATIONAL MODEL C

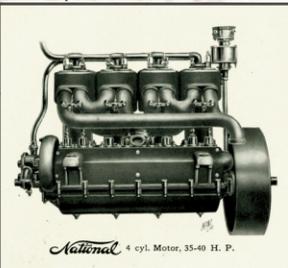
story by | Mark Dill  
photos by | Frank Taliaferro, Elon Photography



Today, early vintage Nationals are very rare. One owner is cardiologist Dr. Allen Johnson, who grew up in Evansville, Ind where his grandfather William Dress, the namesake of Dress Memorial Airport, was once mayor. Johnson now lives in La Jolla, California. He owns a 1905 National Model C, the only one known to exist today. The car is identical to those used in the 1905 24-hour record run at the Indiana State Fairgrounds. Speedway founders Carl Fisher and Arthur C. Newby promoted the event.

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A rare sales brochure from the period shows a detailed sketch of a National 4-cylinder engine.

The Model C's 300 cubic inch 40-horsepower engine had four cylinders and a three-speed transmission with a reverse gear. Unlike many of the cars of the day, the National had a driveshaft that transferred power to the rear wheels. Many cars of the era used an older design of heavy-duty chains connected directly to the wheels like bicycles.

Allen restored the car over a 13-year period, with the help of friends and a network of enthusiasts. He provides excellent insights to the challenges drivers W.F. "Jap" Clemens and Charlie Merz faced in the 24-hour record.



Although it's over 100 years old, the 40-horsepower, 4-cylinder National engine can still push the car to over 70 mph.

mechanism that worked with the transmission to put a drag on the drive train. The hand lever activated drum brakes on the rear wheels. These used brass brake shoes 1.75 inches wide against 12-inch bronze drums. Metal against metal is a poor grip design.

"You have to drive way ahead of yourself," says Johnson, who stresses that in the event of an emergency at top speed, such as the accident Clemens luckily survived during his record run, there was no chance to stop the machine safely.

"The transmission brake automatically disengages the clutch, so you lose all the stopping power of the engine's compression. You just start free wheeling. To run the time they did, they were pushing 70 mph on the straights – with virtually no brakes. These men had a lot of courage to drive that fast."

Johnson says the car initially felt like a tractor, only a lot faster. Its top speed is about 70 mph, which is quite a thrill because the brakes are very primitive. The cars were designed with two types of brakes, one operated by a hand lever, the other by pedal. The pedal activated a

Johnson says driving the car is a sensory experience. There is no windshield, so goggles are a must. You sit high, fully exposed to the elements. Drivers accustomed to modern cars notice an immediate difference in operating the National. Instead of pushing pedals at an angle to the firewall, the National's pedals are depressed in a downward thrust, directly vertical to the floor. While the engine components are nearly perfectly balanced and there is little vibration, seals are ineffective, and excess oil is released under the car, but also mists back on the driver. The gears are aligned in a straight line, and the driver pushes forward to shift. Downshifting requires the driver to go back down through each gear.

The engine design involves a "splash" system of oil distribution. This approach relies on the crankshaft and piston rods dipping into the oil at the bottom of the crankcase, as well as a regulated feeder system at the top of the engine adjusted by a knob on the dashboard. Without pumps or proper seals, oil burns and leaks from the car, so drivers had to be cognizant of how many miles they could travel before adding more.

The bane of any driver was tire failure. Clemens and Merz had their share during their record run. The 34-inch diameter wheels were made of artillery wood.

Johnson describes a "clincher" system, where the wheels were outfitted with a metal guard that clamped down on the four-inch wide, soft rubber tires. Removing the clamps and the old tire and then replacing them is labor intensive. Race crews typically carried knives to skip a step by cutting the old tires off before squeezing the new ones on.

Despite all the extra effort to drive a 100-year-old stock car, Johnson has a lot of respect for the machine and its creators.

"She's a real hot rod," Johnson says. "She goes plenty fast." ■

**The National's unique vertical pedals (right) are visible on the floorboard.**



**After 13-years of patient restoration, Dr. Allen Johnson (below) takes pride in owning the only known National 1905 Model C in existence.**

