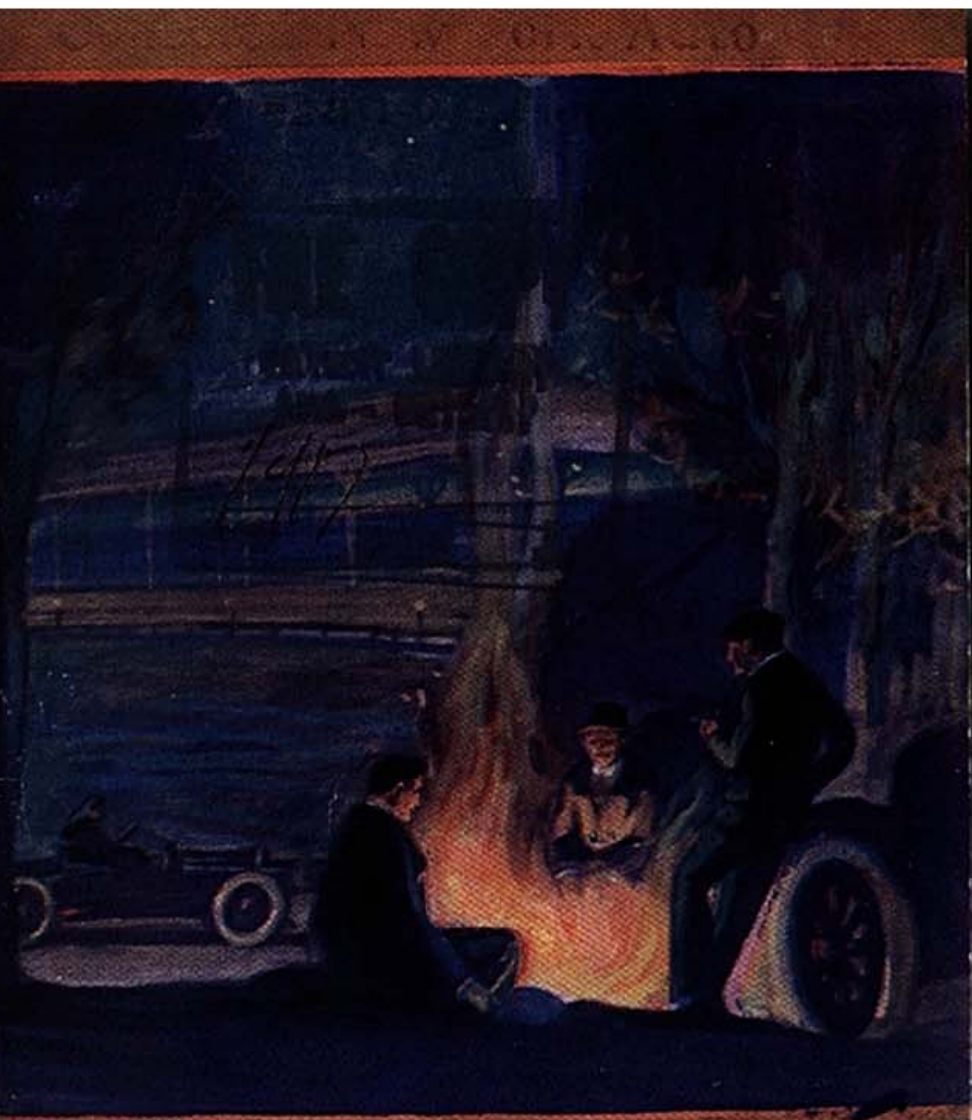
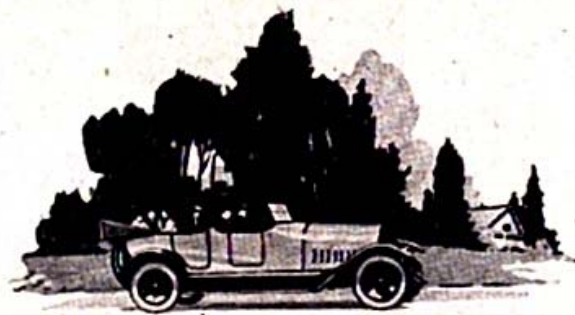




"FOURS" *to* "TWELVES"



"FOURS" *to* "TWELVES"



“Fours” to “Twelves”

TURN back seventeen years through the annals of Motordom, to the days when the automobile was still hobbling along on two cylinders: you'll find the story of gasoline motors linked inseparably with the name National.

It is a reputation that has come with seventeen years of specialization, seventeen years of costly experimentation. But with every important change in design—with the debut of the Six and later the V-type Twelve—you'll find National first in the successful application of each principle.

That reputation is not confined to this continent. It is circulated broadcast among

the master builders of Europe. Before the great war, when foreign factories were pitting their racers against the American car on its own grounds, the great European engineers made the National factory their headquarters. There were Goux of Peugeot, who won the 1913 500-mile race at Indianapolis; Boillet, the European race champion who was subsequently made driver for General Joffre and was later killed in action.

Through friendships developed in the racing days, National experimental engineers studied foreign motors in the Peugeot factory and exchanged ideas with European builders.

Back in a secluded corner of the great National factory is a platoon of engineers who work behind bolted doors. Here the sightseer is halted by the admonition "No Admission" in tall black letters, and only the chosen few are allowed to pass within.

Behind those doors, shut off completely from the rest of the plant, are the experimental shops, manned by a little crew of scientists busied with the motor problems of tomorrow.

When Motor Row was content with mere four cylinders, these men delivered the National Four, which made a record for that type engine on both the speed oval and the highway. The call went abroad for a Six, and National built and sold the first stock American Sixes.

But within the last few years a stranger has entered the high grade field. Vogue has sanctioned the V-type motor and doubled the number of cylinders. Forthwith the man who would fain outdo his neighbor champions the twelve now and sails blissfully down the boulevard with twin-exhaust pipes puffing in the rear.

Down in Indianapolis the National engineers read the barometer of the times.



National officials work with their sleeves rolled up. Here are shown Chief Engineer Wall and General Manager Dickson trying to determine, in 1909, if they should build fours or sixes. The test car is an appropriate background as they proved all their theories via that route

Back in the experimental laboratory the chief engineer hoisted a test-proven V-type National from its shelf and gave orders to go ahead in the factory. It had been ready and waiting.

From the blue-print stage to spinning crankshaft, the time required to design, evolve and produce a new type motor makes a story that can be wrought only by brains and tremendous expense. It is usually only those concerns carrying on

enormous production schedules that can afford the outlay of money necessary to develop new type motors.

Yet the National company, known for many years as a cautious and conservative institution, were ready with their own twelve when the demand came. That is because the National company have always been, above all things else, motor specialists.

It is doubtful whether any institution in the country has ever concentrated on one problem with greater intensity than the National organization has on the subject of gasoline motors.

Perhaps that is because the early day owner and founder of the National company placed the motor first in importance in the anatomy of his motor cars.

Back in 1905 he sent two National cars out to the one-mile dirt track at the Indiana fair grounds and started them on a twenty-four-hour run to show that it was possible.

MERZ

WILCOX



When a National stock car made the world's record for a straightaway mile in 1911, the (then) National president, A. C. Newby, wore the "smile that won't come off"

By completing this grueling test the National set a new endurance record for gasoline motors. It was around the camp fire, watching this all-night run, that the National founder and three of his friends 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, where is annually staged the great American speed classic.

Since the very inception of automobile racing in this country National has played an important role. Back in the early days most events were for stock cars only. Those

races won by National cars were the greatest research laboratories ever maintained.

The National cars entered were the regular product such as were sold every day. This fact demanded that every National motor must duplicate in efficiency and power the performance that was evidenced on the speed bowl. It was thus that the halo of speed was hung around the National radiator. Everything in the whole factory gave way to the problem of better motors. And finally, when with a National-built engine in a National car the famous 500-mile classic at Indianapolis was captured, the company retired from racing holding the coveted world's record.

There are men today in the National organization who have been working exclusively on this developing process for sixteen years. In their experimental work they have constructed all types, shapes and styles in their search for supreme ability. They built motors of types and designs

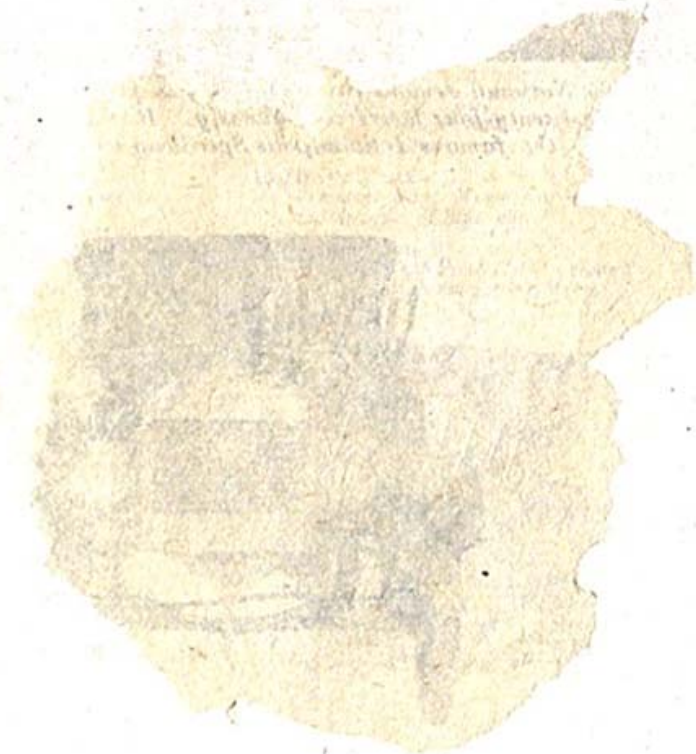
that would have been impossible to market at the time of their birth.

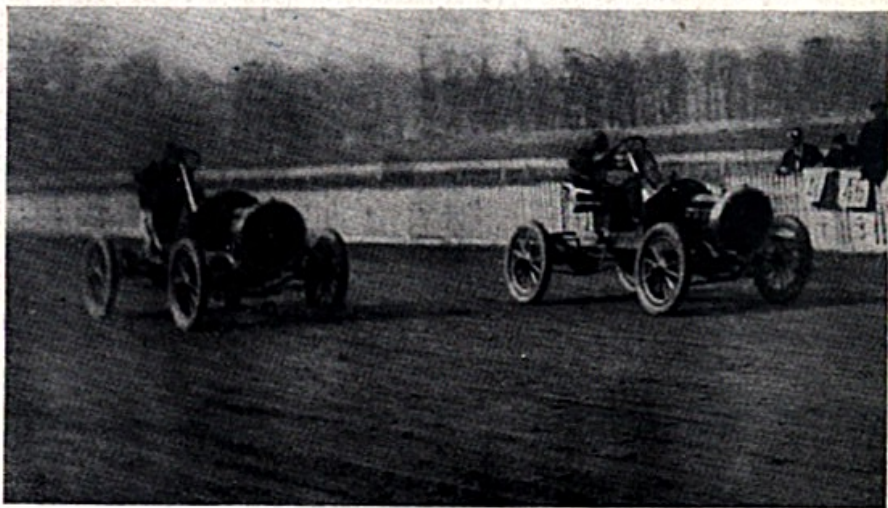
For example, there was a National Six in the laboratory long before it was introduced to the public, and you will remember that this company was well in advance of the rest in placing this type engine on the market. History has proven the worth of their preliminary work. Many of those same sixes have been in active service during the last ten years, and are still running perfectly.

Several years ago these same specialists conceived the idea of the V-type twelve-cylinder power plant. So it was that when the public was ready there was a National twelve, test proven and ready for the market.

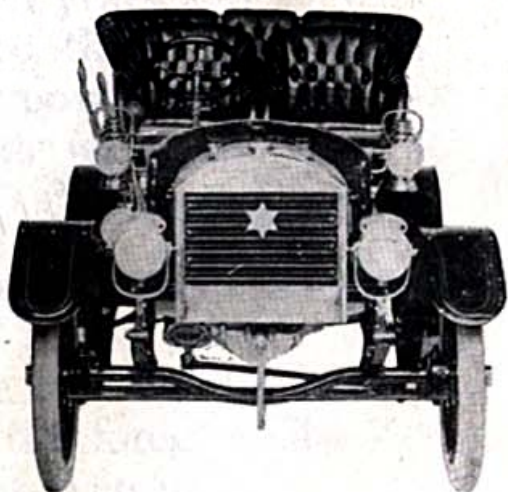
So, regardless of which way the trend may be in the future, it's safe to assume that the National motor specialists will be well in the foreground—that they will be ready far even in advance of the times.

A Few Pictures of Interest to Motor Car Enthusiasts

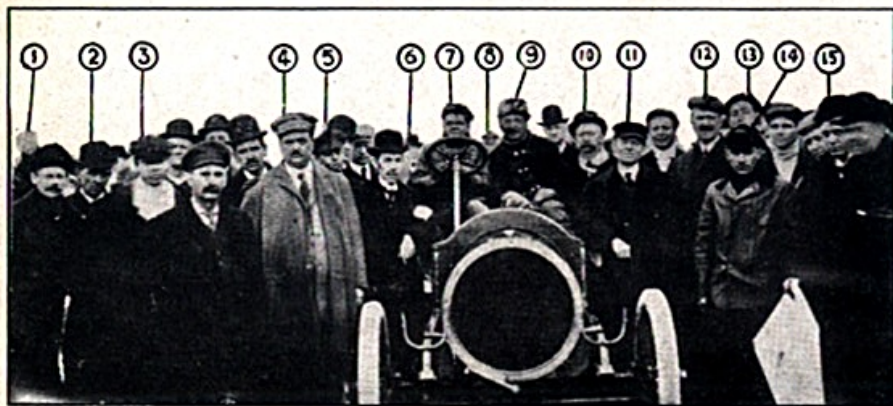




In 1905 National demonstrated that it was possible for an automobile to run twenty-four hours continuously. It was at this event that the famous Indianapolis Speedway was first proposed

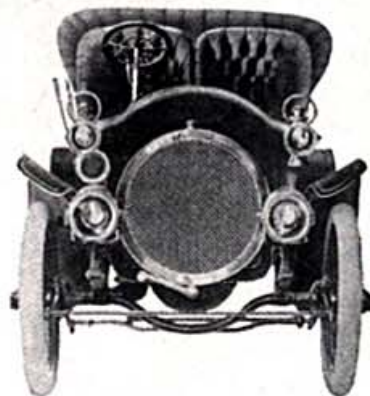


1904 the radiator was square

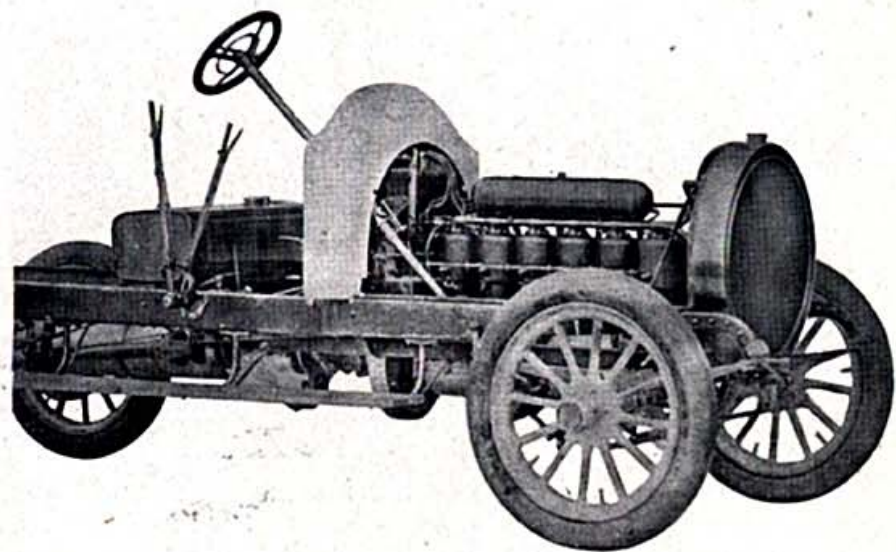


1905—Here are the drivers, official score keepers, checkers and time keepers at the then world's champion endurance event

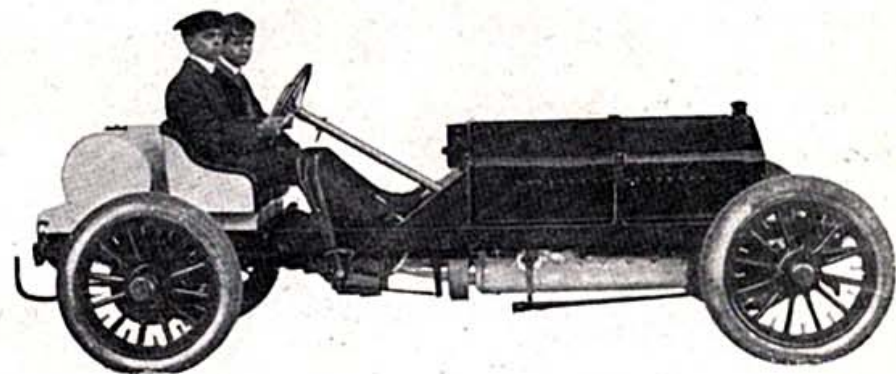
- | | |
|---|--|
| 1 Johnny Aitken
<i>(Speedway Champion) of National Experimental Department</i> | 12 C. F. Smith
<i>of Goodrich Tire Company</i> |
| 2 George Weidley
<i>Builder of Weidley motors</i> | 13 George M. Dickson
<i>General Manager (and President) National Company</i> |
| 3 Howard Marmon
<i>Designer and builder of Marmon cars</i> | 14 Harry Stutz
<i>President Stutz Motor Car Company and designer of Stutz cars</i> |
| 4 Frank Wheeler
<i>Owner of Wheeler-Shebler Carburetor Company
Second Vice-President Indianapolis Motor Speedway</i> | 15 J. A. Allison
<i>Vice-President Presto-Lite Company
Secy.-Treas. Indianapolis Motor Speedway</i> |
| 5 Wm. Guy Wall
<i>Vice-president and Chief Engineer National Company</i> | |
| 6 T. J. Moore
<i>Purchasing Agent, National Company</i> | |
| 7 Charlie Merz
<i>of National racing fame</i> | |
| 8 Carl G. Fisher
<i>President Presto-Lite Company
President Indianapolis Motor Speedway</i> | |
| 9 Jap Clemmens
<i>Now in National Purchasing and Inspection Departments</i> | |
| 10 Harry Moore
<i>Dean of National Experimental Department</i> | |
| 11 A. C. Newby
<i>President (Retired) National Company
First Vice-President Indianapolis Motor Speedway</i> | |



1905 the radiator was made round



National built America's first "Sixes" in 1905



1905—William Guy Wall, vice-president and chief engineer of the National Company for sixteen years, is here shown in his "New" Six



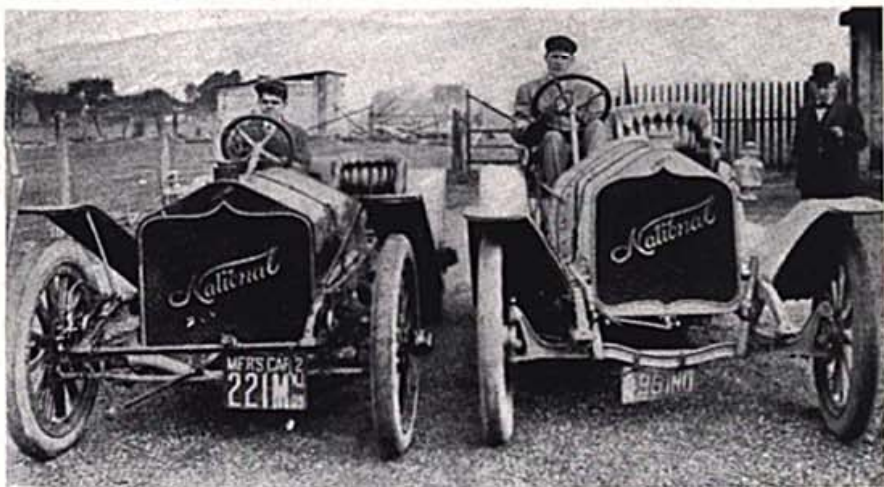
1909—The spirit of "try it out" ever prevailed among National dealers. Here are seen Wm. C. Poertner and Caleb Bragg. Poertner sells National cars in New York and has the distinction of being the oldest New York dealer on one line of cars continuously. A decided compliment to National



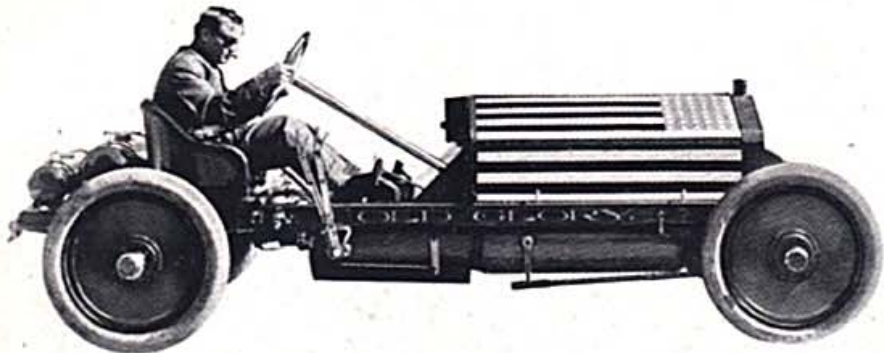
National built America's first six. Aitken proved it to be correct by the Speedway test. In the early days Wilcox served as mechanic



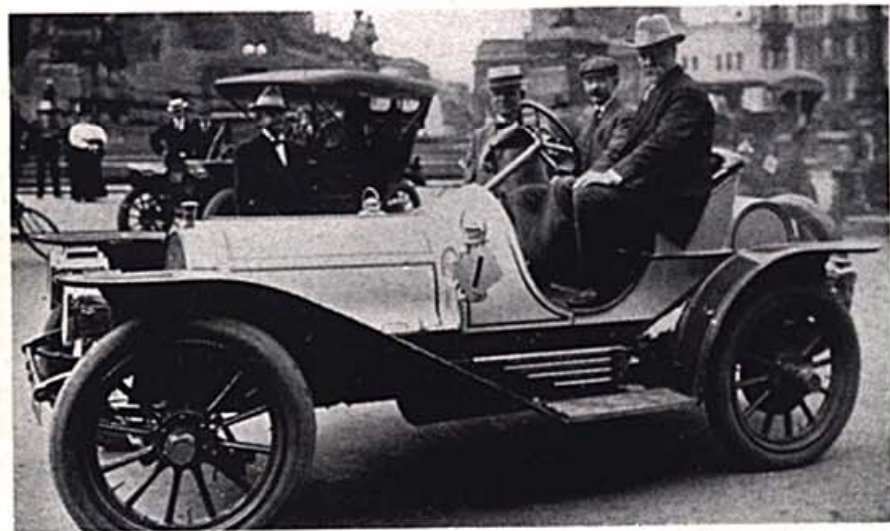
Not satisfied with speedway tests alone, National sent a fleet of stock cars to the Florida beaches. Thus the motor testing was carried on the year around. A. C. Newby, the National (retired) president did his own "checking up"



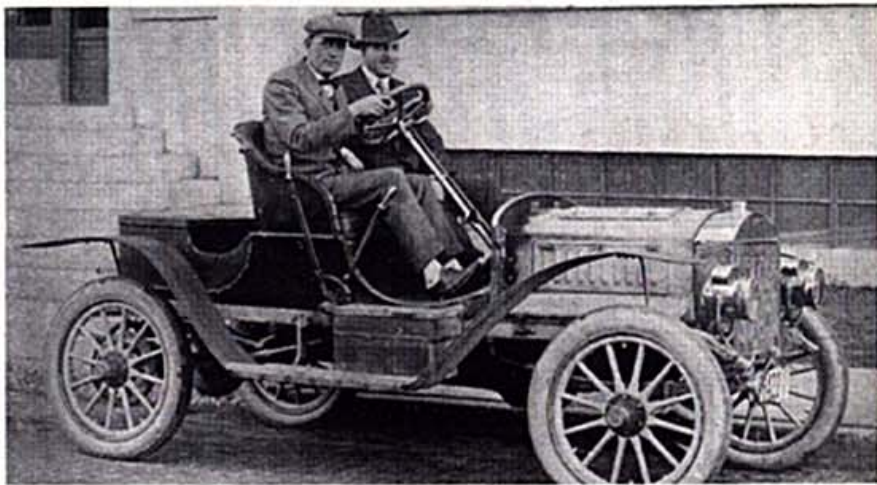
In 1907 the famous National shield radiator first appeared, and soon after it adorned the racing and experiment cars of Johnny Aitken and Merz



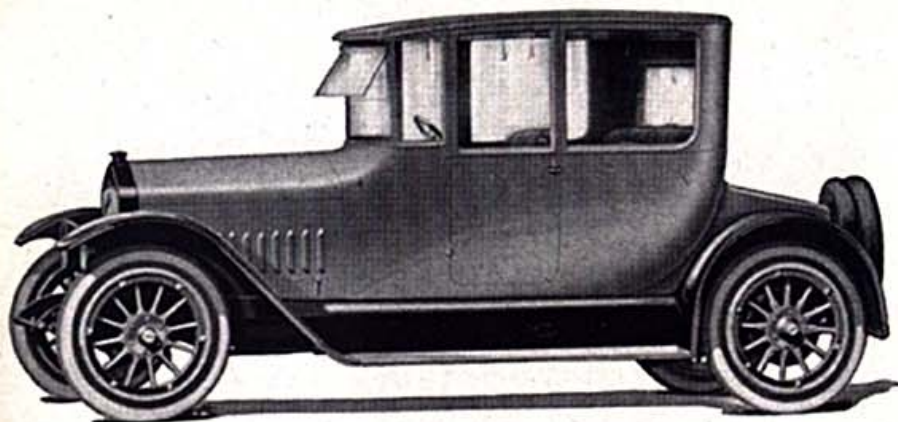
Barney Oldfield's National was one of the first six-cylinder racing cars. It was appropriately painted and called "Old Glory"



The innovation of the National Six was such an important event at Indianapolis that the Mayor, C. A. Bookwalter (straw hat), and Hon. Charles W. Fairbanks gave it their official approval

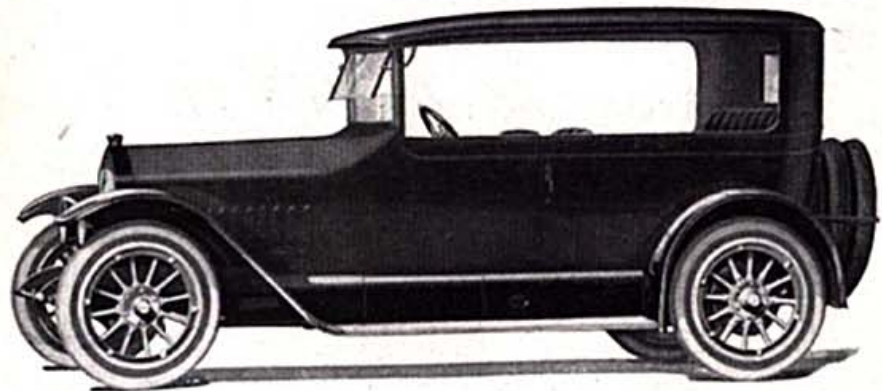


Johnny Aitken, the Speedway champion and J. M. Clarke, National Sales-Manager, in a 1904 National "Four." Below, Aitken in his "Twelve of 1917." He has worked on and grown with every National success—from fours to twelves

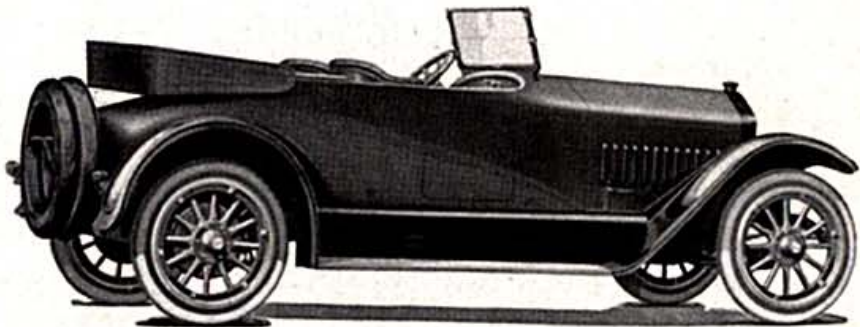


Highway Coupe, Six \$2400, Twelve \$2800

National present day styles of closed cars are built in both six and twelve cylinder models



Highway Convertible Touring Sedan, Six \$2350, Twelve \$2750



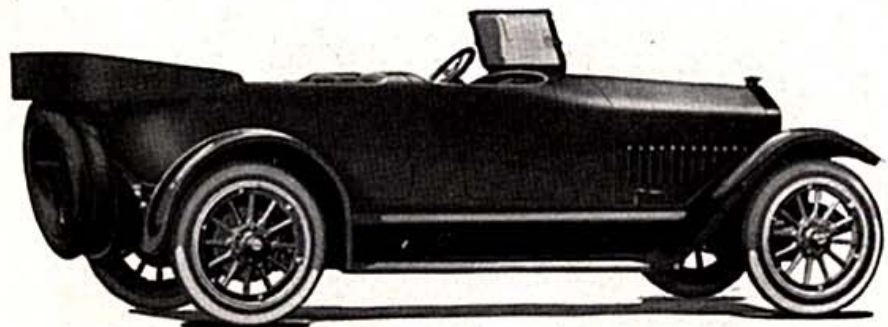
The National Six of 1917. Six cylinder, 51 horsepower, 128-inch wheelbase, 4-passenger (Touring Car 7-passenger) \$1750

Nothing bespeaks more plainly the temperament of a man than his motor.

Seventeen years ago when Monarch Motor was a pampered princeling the first National car was built, with one thought behind it, for the man who is not satisfied with the commonplace.

You have but to turn back to the pages of Motor history to see how closely National has held to that course.

While the National has never been extravagantly priced, yet with it cost has ever been secondary. With the name and the radiator has always been associated a legend



The National Twelve of 1917. Twelve cylinder, 70 horsepower, 128-inch wheelbase, 7-passenger \$2150

of speed, great power and the finest bodies of the carriage-builder's craft.

The difference between a National and the ordinary car has ever been a fixed equation—the difference between the trained athlete and raw untutored force.

As a performer, the National has been almost insolent in its road-dominance. Its driver holds the reins over all the speed he desires to release, with always an unsounded reserve under the throttle.

There's comfort in the realization that your motor is in good taste in any company; that wherever the road leads there always follow envious eyes.