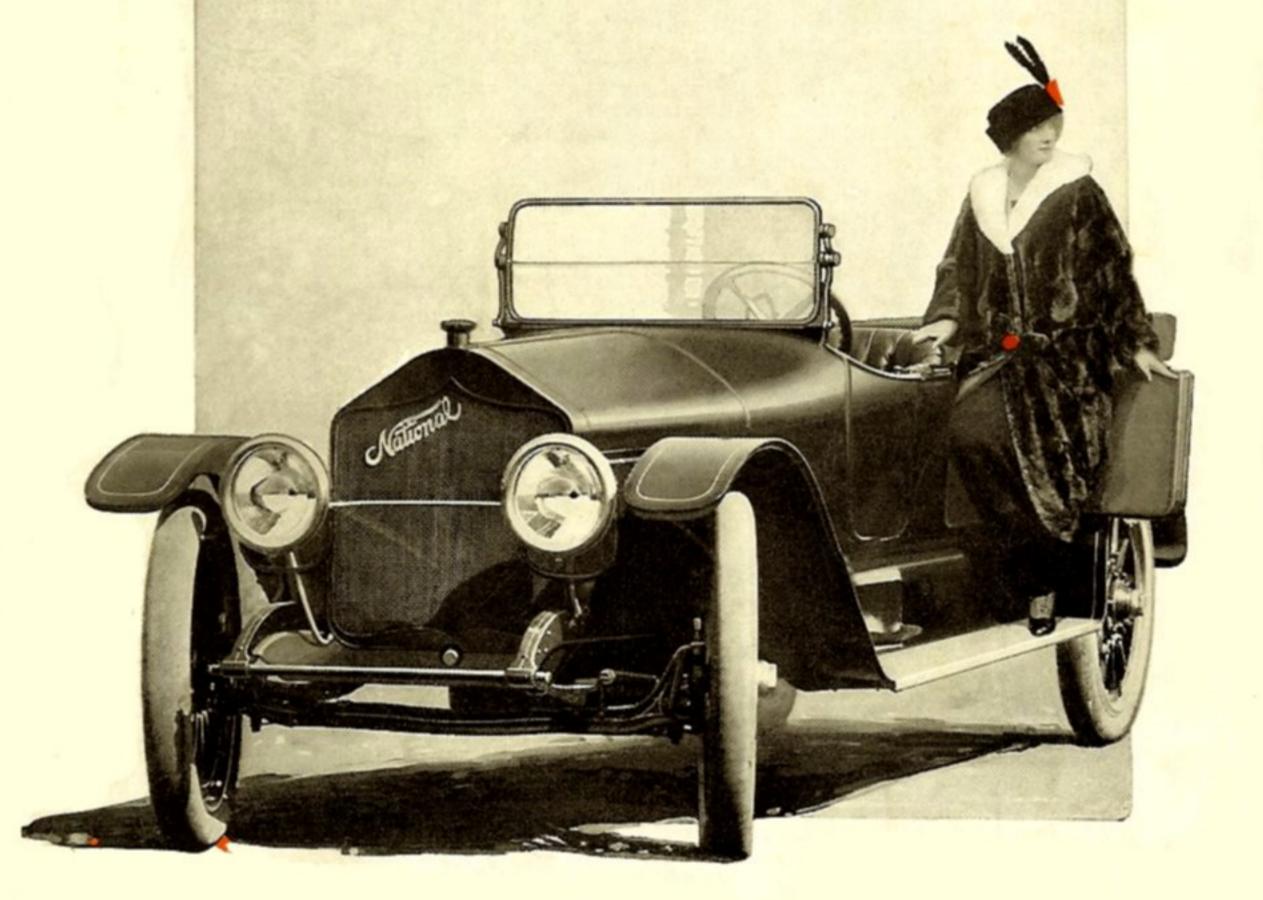
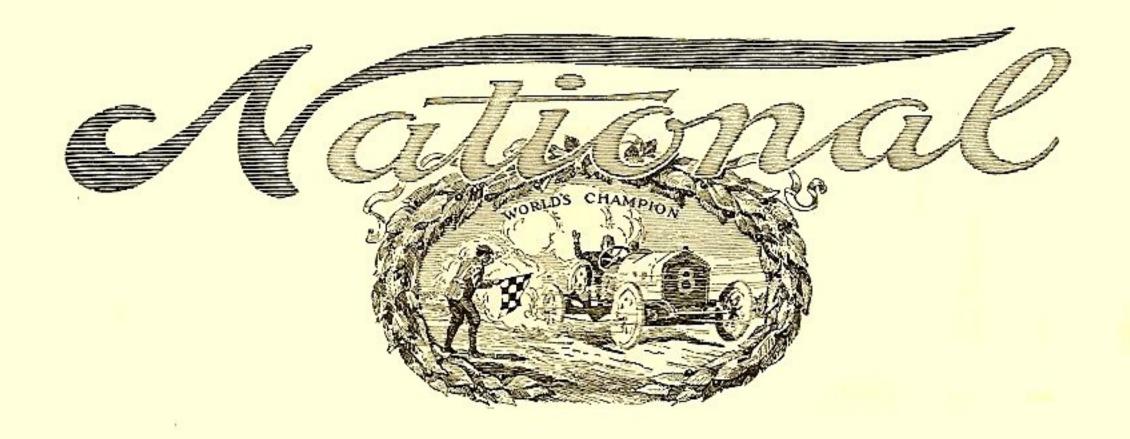
Actional

C. E. HARTSON, 190-194 MONROE AVE.

MOTOR CARS





Race victories with us do not stop at the end of a race—they live forever in the character of your car and the way it is built. Racing is not an end, but a means; a school for our engineers; a test for our materials; an absolute proof of our quality; a positive guarantee of our reliability as well as stamina.



NATIONAL MOTOR VEHICLE COMPANY

INDIANAPOLIS, INDIANA, U.S.A.

MEMBER OF THE AUTOMOBILE CHAMBER OF COMMERCE



Our Policy

HIS is the most important Automobile News announced for 1914 and the Most Liberal Offer. Here is a bold, unique stand taken by fourteen-year-old Pioneers who believe Pioneering is needed more Today than ever.

Knowledge of the National's Policy eliminates Dickering or Horse-Trading tactics in buying a car. Our Policy makes it possible to buy a National car as you do a reliable Watch, or a high-grade Piano. You want a watch to give accurate Time and a piano because of its Quality. In other words you buy a Watch and a Piano for Results—and not because of the particular individual parts that enter into their construction. You leave that to the makers.

Results vs. Specifications

THE National car is evolved from years of Toil for but one purpose—Results! Our ambition is Quality. We take the responsibility for what enters into its makeup, while you need think only of its Performance.

We ask you not to look at our Specifications but to judge the National by what it can actually Do; how adequately and comfortably it Performs; and the Longevity of its efficient Service.

We offer you a Whole Car where every mechanical part operates harmoniously to produce a Unit of satisfactory Results.

We give you a car you can buy without having to raise the hood to investigate; without worrying about its Insides and without bothering to make a detailed analysis of its various component Parts or Specifications.

Own Performance and Not Parts

THE name National guarantees the car. We prize our Reputation above all else. Where others point to Quantity, we demonstrate Quality.

We sell you our Experience, Ability, Judgment, and our Responsibility, and not a mere Job of assembled wheels, axles, gears, etc.

Specifications alone are misleading. An inferior car may have similar specifications, or similar parts to a quality car.

We offer you Performance, Confidence, Reliability, Comfort and Endurance.

This is why the National car is Distinctive;

why it has an Individuality that ranks above the Mob of other cars.

Ours is a Square Deal attitude toward National owners.

Product of Years and Not of Single Seasons

THE National has a Heritage of Years of accumulated quality, a steady development toward Perfection, where others have complete destruction of Car Character annually in order to produce something Different.

The National is built on the Series basis, every day beginning a new year. Improvements do not wait upon the Calendar. Nor do we make changes for the mere sake of changing. We do not upset our manufacturing efficiency by forcing yearly models. We have no fundamental faults to disguise by changing body styles, no more than we try to divert attention from quality by pointing to mere specifications.

Test the National For All you demand of a car. Buy it then without the trouble of attempting to be an Expert on every Mechanical reason incorporated into the car's Unit of construction. A single feature is good only in its relative position to all the rest of the car. We put the Right material in the Right place. Our experts devote their lives to this Duty. We take that Responsibility. You enjoy the Results.

Only a company of unimpeachable reputation, of sound financial standing, of reliability built upon years of success can make you this most Liberal Offer ever made by any automobile builder.

Service, with us, begins when the car is built. Service is put into your car. This is why the National requires the least service afterwards.

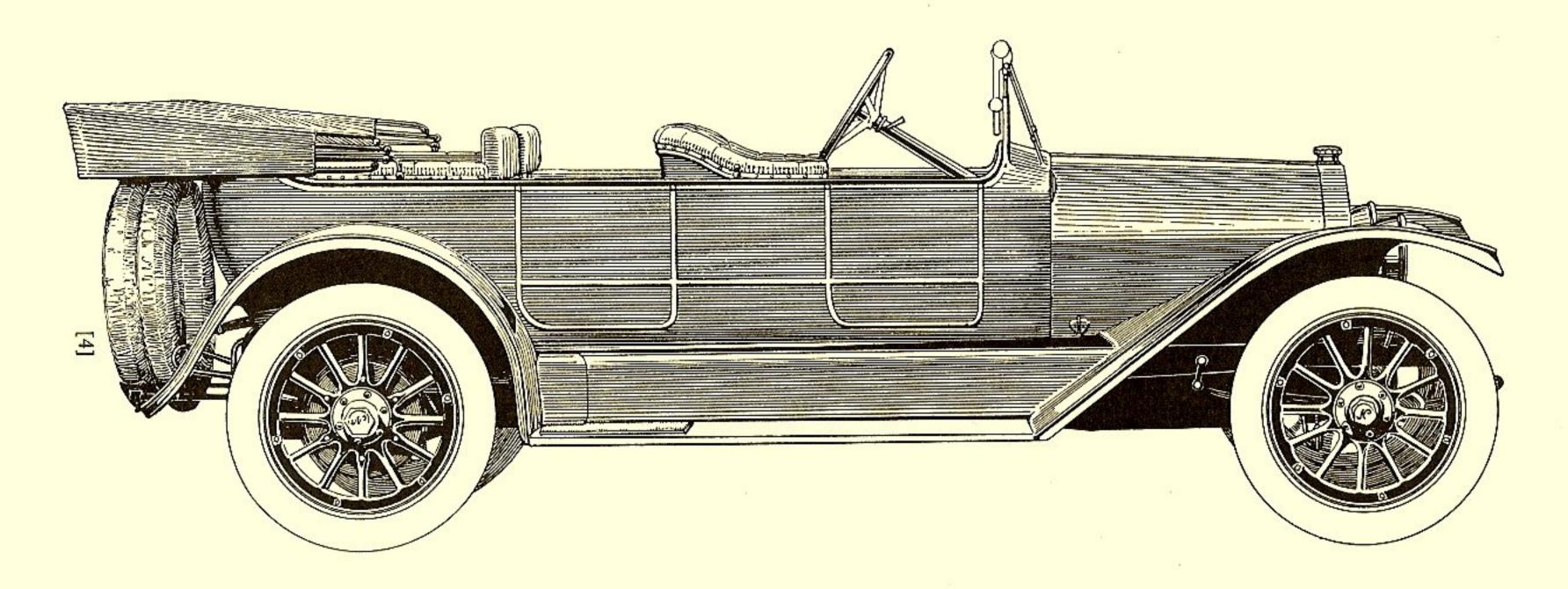
Actual Progress and Not Mere Changes

URS is an efficient, concentrated organization able to give you more car and a better car per dollar because motor car making has been reduced to a fine specialized science by us.

Ours has been a steady Growth, and not a hit-or-miss Gamble. We are Business Men, not Chance-Takers.

This is our Policy-Results!

National 40

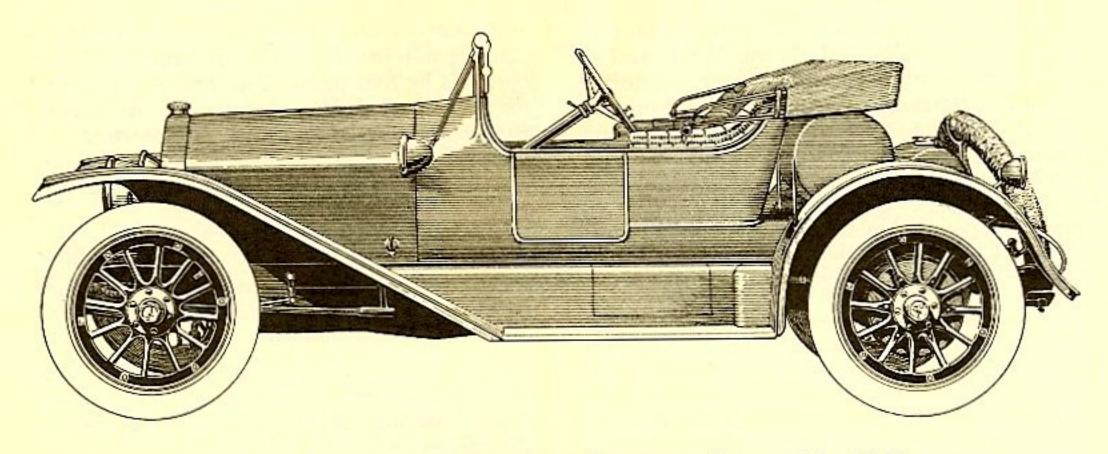


SEVEN-PASSENGER-Four-Cylinder Touring Car-Series V-3-\$3400

The highest achievement in motor car building.

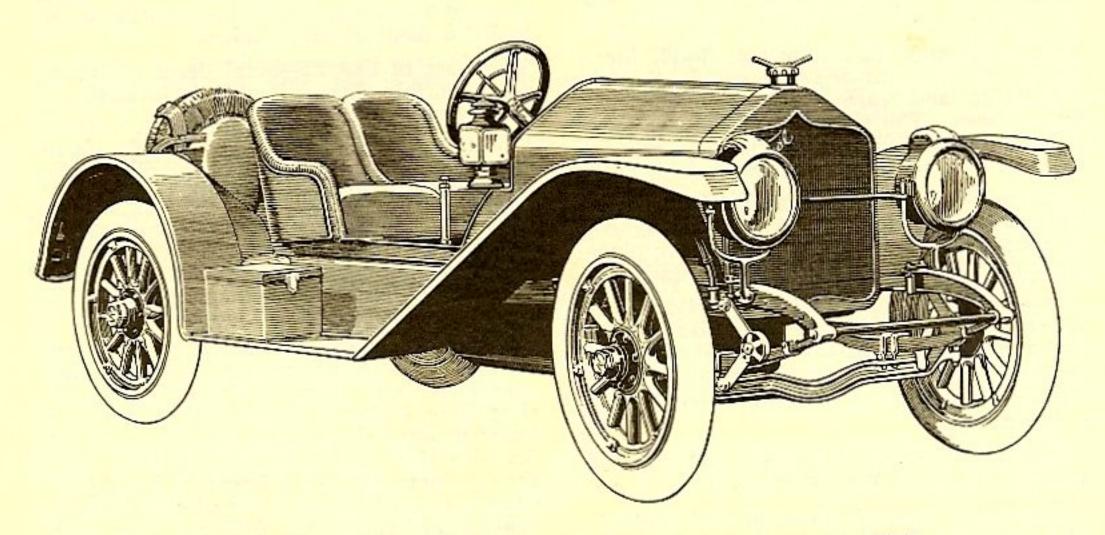
The best all-round touring car.

National 40 - Series V-3



SPEEDWAY ROADSTER-Four Cylinder-Series V-3-\$3150

A distinctively individual car of power, speed, comfort and beauty. Without an equal.



SEMI-RACING ROADSTER-Four Cylinder-Series V-3-\$2750

Unique in its stylish appearance, strikingly designed, and world-famed for its speed, power and stamina.

National 40 - Series V-3 - Specifications

FOUR-CYLINDER CARS

Motor-Four cylinders, 47/8 x 6 inches vertical, cast in pairs and thoroughly annealed. Tire pump, integral part of motor. Motor is mounted on frame. Extra large mechanically operated valves, with nickel steel heads, exhaust and admission on opposite sides and interchangeable. Spiral cut timing gears operating cam shafts. Two separate sets of spark plugs. Tapered nipples used on intake, exhaust and water pipes in place of packing. Crank shaft of vanadium steel, ground to one-thousandth of an inch, with extra long bearings. Horizontally divided aluminum crank case. Interchangeable parts. Valve stems and springs are completely enclosed, eliminating noise and affording protection.

ELECTRIC STARTER—Gray & Davis dynamo lighting and motor starting.

CLUTCH — Self-contained aluminum cone, leather face, spring cushioned, giving gradual engagement.

Transmission—Sliding gear selective type. Three speeds forward and one reverse. Gears made of chrome nickel steel, oil tempered. Annular ball bearings on main and counter shafts. Gears run in oil.

GUARDS-Wide continuous enclosed metal guards front and rear.

WHEEL BASE-128 inches.

GAUGE-56 inches; optional, 60 inches for Southern roads.

OILING—Crank case, constant level force feed oiler, with gear-driven pump, feeding oil to cylinders and bearings of motor. Capacity, four gallons. The roadster has an auxiliary oil tank on rear deck containing ten gallons, with pressure feed to crank case.

IGNITION—On all types gear-driven, hightension, dual double distributor Bosch magneto with storage battery. Two sets of spark plugs are located in valve caps in cylinder heads.

TIRES—Speedway roadster, $34 \times 4\frac{1}{2}$; five-passenger touring and coupe, $36 \times 4\frac{1}{2}$; seven-passenger touring and limousine, 36×5 . Diamond or Firestone.

RIMS—Firestone demountable rims regular on all models.

GASOLINE FEED—Air pressure on all tanks generated by small pump in crank case.

GASOLINE CAPACITY—Touring, toy tonneau and limousine, twenty-one gallons; roadster, thirty gallons.

CARBURETOR—Rayfield 13/4-inch on all types but roadster; Schebler optional. Two-inch on roadster. Brakes—Two systems. Two internal expanding hub brakes lined with improved fabric operated by foot pedal. Two brakes on outside of rear wheel drums operated by hand lever. Rear wheel drums 16 inches in diameter.

FRAME—Pressed steel, wide flanged, firmly riveted and braced and curved up over rear axle.

Front Axle—I-beam steel one-piece forging.

Drive—Bevel gear through straight line shaft, with double universal joints and torsion member.

REAR AXLE—Full floating type, inner axle used only as driver, wheels turn upon double row of bearings on hollow axle, which carries all weight.

FINISH—National blue; options, National green, National maroon and National gray body and gears.

UPHOLSTERY—Unusually deep and comfortable.

Steering System on Left Side—Eighteeninch wheel, inclined post. Worm and gear, operated chuck. Ball joint connections to steering knuckle.

COOLING SYSTEM—Special National radiator; adjustable ball-bearing fan attached to engine base. Water circulated by centrifugal pump. Radiator mounted on trunnions.

CONTROL IN CENTER—Single lever at driver's right controls all speeds. Three forward and one reverse.

Springs—Half elliptic, forty-inch front, fifty-inch rear; three-quarter scroll elliptic, two and one-fourth inches wide.

BAGGAGE COMPARTMENT — Large baggagecarrying compartment concealed under touring car front seat and easily accessible.

Tools—In box concealed by splasher back of running board.

FULL EQUIPMENT consists of top, cover and curtains; ventilating and rain vision glass windshield; one extra Firestone demountable rim; Gray & Davis electric starter; Gray & Davis dynamo electric lighting system; Truffault-Hartford shock absorbers on rear; Warner speedometer; electric horn; tools and jack; Gray & Davis 12-inch black and nickel electric bullet head lights; Gray & Davis 6-inch black and nickel electric bullet side lights on speedway roadster and toy tonneau, and dash insert electric lights on touring cars; Gray & Davis black and nickel electric bullet tail lights, and tire carriers on rear.

DOMINANT FEATURES

THE MOTOR

THE National 40 motor ranks as one of the highest achievements of automobile engineers the world over. It is conservatively rated at forty horsepower. In severe hill-climbing contests—one form of contests where National cars show undisputed leadership—the motors develop more than 100 horsepower.

Notwithstanding the great power produced by this motor, which eliminates the necessity of changing gears except in extreme cases, its flexibility is such as to allow extremely slow speed in congested traffic with perfect control at all times.

Its superior speed, power and uniform reliability has been demonstrated in all manner of severe contests and has gained a world-wide reputation for National cars. It is the criterion of long-stroke motors, 4% x 6.

ELECTRIC LIGHTS AND STARTER

THESE National cars have an electric starter system of the Gray & Davis make, which consists of a dynamo which charges the battery and furnishes electric lights. This dynamo is placed near the front of the engine and is run with silent chain off of sprocket on cam shaft. It is of the constant speed type, so that voltage is held extremely constant and eliminates any possible danger of overcharging the battery. At the same time it produces a current at such low speed of the car that the battery is continually being charged.

The electric motor used for the starting in connection with this dynamo is geared to the engine in such a manner that the simple pushing of a plunger with the foot throws this motor in gear with engine, and automatically throws in the starting switch, turning the engine over at a speed of about one hundred revolutions a minute. When the foot is taken off this plunger after the engine is started it automatically throws out switch and disconnects the starting motor from the engine itself, so that the motor is entirely out of operation until it is required again to start the engine, thus eliminating all wear on commutator and danger of its being injured in any way.

A sufficiently large storage battery is used to run the lights for a number of hours even when the engine is not running and to start the engine a great number of times, and while, it is not recommended, the starting motor can be used to propel the car should emergency arise in the case of the driver accidentally allowing his engine to stop.

ACCESSIBILITY

It is not only in the fundamental principles of construction and operation that National 40 cars excel, but also in the fine details such as the accessibility of mechanical parts. For example, the enclosed valves are built in such a manner that it is possible to remove the covers with ease in a fraction of a minute. In cars lacking the National's superior design, enclosed valves are hard to get at and require a great deal of time to uncover.

NOISELESSNESS

of National cars. In the motor the cams are so shaped that they give maximum power without accompanying noise. This is the fruit of many years' expert study and experimenting in the National factories. The valve stems and tappet rods and springs are housed in pressed steel jackets. The shape of tooth employed in the transmission gears and rear axle gears makes them practically noiseless.

CENTER CONTROL

THE advantages are many and pronounced in favor of the National drive and control. These have met with instant favor among discriminating motor-intelligent people.

The natural instinct to reach for the control levers with the right hand is not lost, as the control levers, being in the center, are at the driver's right as in the past.

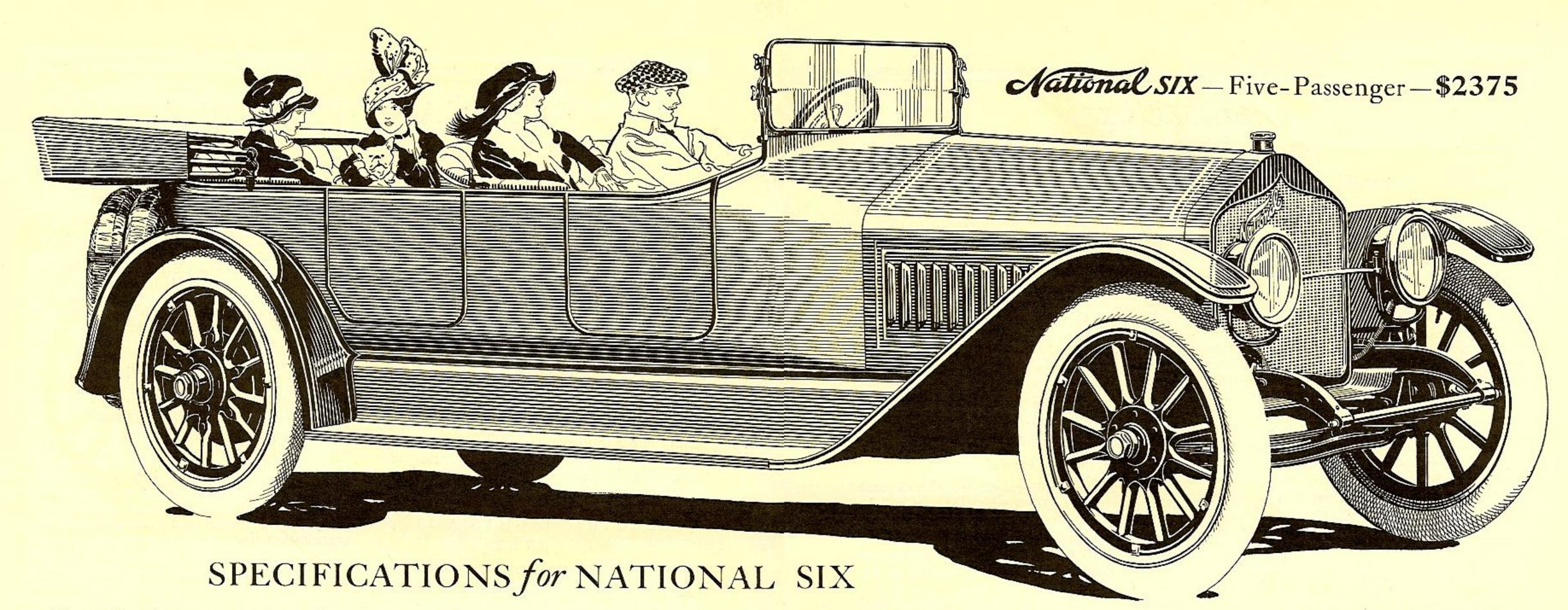
MATERIAL THE BEST

No better material is used in any car at any price than is found in every National 40. The most expensive and toughest steel, scientifically heat-treated, is used throughout the entire machine, which not only reduces the weight of the car, but defies shock and vibration and does not crystallize. These materials are also the very best procurable to insure the durability and low maintenance cost of cars.

No greater ability in designing, nor greater skill and care in building, is to be found anywhere than in the National factories.

All the driving parts, such as inner axles, pinion shafts, etc., subject to torsional strain, are made of the world's best chrome nickel steel.

More than 500 parts are made of pressed steel. This insures the maximum of strength in proportion to weight.



Motor—Six cylinders, 3¾ inches bore by 5½ inches stroke, cylinders cast en bloc and thoroughly annealed. Tire pump integral part of motor. Motor is mounted on main frame. Mechanically operated valves, exhaust and admission on same side and interchangeable. Spiral cut timing gears operating cam shafts. Cam shaft ground to one-thousandth of an inch, with extra long bearings. Horizontally divided aluminum crank case. Ixterchangeable parts. Valve stems and springs are completely enclosed, eliminating noise and affording protection.

ELECTRIC STARTER—Dynamo lighting and motor starting. Conveniently and easily operated from driver's seat by small foot plunger.

CLUTCH—Self-contained aluminum cone, leather face, spring cushioned, giving gradual engagement. Clutch removable without disturbing transmission. Clutch operates smoothly and our efficient clutch brake facilitates changing gears quietly.

TRANSMISSION—Sliding gear selective type. Three speeds forward and one reverse. Annular ball bearings on main and counter shafts. Gears run in oil.

Guards — Wide continuous enclosed metal guards front and rear. Metal dust shield between frame and running board.

WHEEL BASE—132 inches.

GAUGE-56 inches.

OILING—Crank case, constant level force feed oiler, with gear-driven pump. Capacity, three gallons.

IGNITION—Gear-driven, high-tension, dual magneto with storage battery.

Tires-36 x 4½. Diamond or Firestone.

RIMS-Firestone demountable rims

Water and Dust Protection—Detachable metal dust pans of our improved type protect all working parts. Splash pan between frame in front of radiator.

GASOLINE FEED—Air pressure on tank, suspended in rear, generated by small pump in crank case.

GASOLINE CAPACITY—Twenty-one gallons.

CARBURETOR—Automatic. Controlled by lever on steering column, also by foot throttle. Dash control of mixture.

Brakes—Two systems and four effective brakes with large brake bands that hold secure in either direction, operated by foot pedal and hand lever. Two internal expanding hub brakes lined with improved fabric. Two brakes on outside of rear wheel drums. Rear wheel drums 16 inches in diameter. These brakes grip evenly on both wheels, thus eliminating liability of side-slip or skidding. The brake drums are of one-piece pressed steel.

Frame-Pressed steel, wide flanged, 5-inch

channel section, firmly riveted and braced and curved up over rear axle to allow low suspension of body, and center of gravity. No sub-frame. Frame off-set in front to permit short turning radius.

FRONT AXLE—I-beam steel one-piece forging. Large adjustable roller bearings in hubs.

Drive—Bevel gear through straight line shaft, with double universal joints and torsion member.

REAR AXLE—Full floating type, wheels turn upon two rows of roller bearings on hollow axle, which carries all weight. Entire system readily accessible.

Body—Stream line, long, low and graceful, giving "one piece" effect; wide doors; side entrance at both sides front and rear; sheet metal. Carrying capacity, four or five passengers; smart slope from cowl to radiator cap and gradual converging lines from the rear to radiator, giving a distinctive pointed appearance. Instrument board with entire control of car conveniently arranged within easy reach from driver's seat.

FINISH—National blue. All metal trimmings black and nickel.

UPHOLSTERY—Unusually deep and comfortable. Black leather. Special deep cushion springs.

Steering Column on Left Side—Eighteen-inch wheel with finger grips, inclined post. Worm and gear, operated chuck. Ball joint connections to

steering knuckle. Push button for horn on top of steering post, in center of steering wheel, always convenient.

Cooling System—Special radiator of most improved National design; adjustable ball-bearing fan attached to engine base. Radiator mounted on trunnions. Brass outlet tubes from cylinders to radiator. Notched hard rubber cap on radiator. Belt-driven fan with adjustment for belt tension. Water circulated by centrifugal pump. Capacity of water circulation system, 6 gallons.

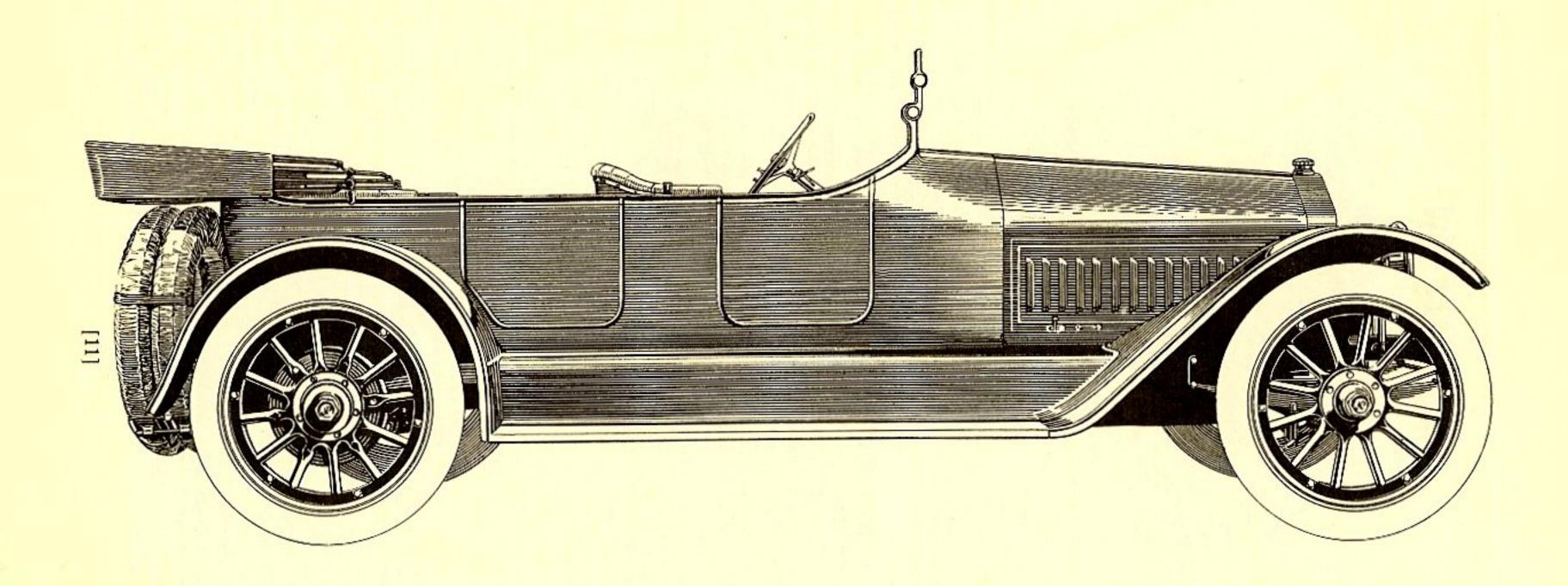
CONTROL IN CENTER—Single lever at driver's right controls all speeds. Three forward and one reverse.

Springs—Front: half elliptic, thirty-eight inches long. Rear: special National cantilever swiveled on frame attached rigidly on rear axle. Grease cups on springs. Clipped construction.

Tools—In special box, convenient and readily accessible, under right front seat.

Full Equipment consists of top, cover and curtains; ventilating and rain vision glass windshield; one extra Firestone demountable rim; electric starter; dynamo electric lighting system; Warner speedometer; electric horn; 12-inch black and nickel electric head lights with double bulbs, giving strong lights for driving and also smaller lights when car is standing. Black and nickel electric license tail light. Tire carrier on rear. Tools and jack.

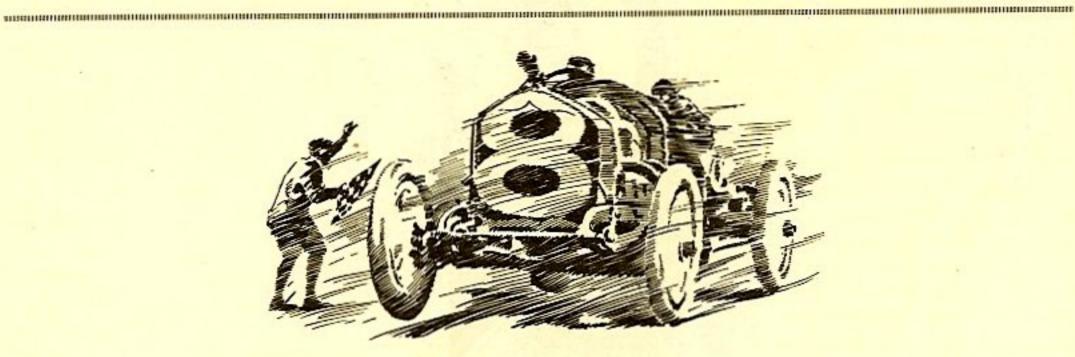
National SIX



NATIONAL SIX-Four Passenger-\$2375

The very latest word in design, low, long and graceful. As good as it looks.

THE WORLD'S CHAMPION CAR



THE one and only American made car that remains superior to all foreign cars in demonstrations of speed, power and reliability in the International 500-mile races is the National.

Fiat 6 hours 21 minutes 06 seconds in 1912 Peugeot 6 hours 35 minutes 05 seconds in 1913

It will be noticed as remarkable that the car winning second place to the National has faster time than the car winning first place in the 1913 race when the National was not entered.

National cars have not been confined to any one kind of contests, but have demonstrated superiority in all manner of events.

Following are the places won by National cars in four consecutive years:

In 1909: First, 34; Second, 19; Third, 12. In 1910: First, 68; Second, 47; Third, 37. In 1911: First, 84; Second, 48; Third, 30. In 1912: First, 1 (only race entered by factory).

Grand total for these four years alone: 187—First. 114—Second.

79—Third.

380-Total number of places won.

Following is a table of the winnings of National cars in 1911 alone:

					I-irst	Second	I para	10031
Road Races					9	3	2	14
Speedway and	1	fotor	dron	nes	11	7	5	23
Beach Races					20	10	5	35
					29	9	5	43
2200			•		15	19	13	47
					84	48	30	162

In 1912 the National car makers entered but one race, and won, the 500-mile international sweepstakes on the Indianapolis Motor Speedway. This was the longest and hardest race of the season, in which the National defeated the best of American and foreign cars in actual running time of 81.72 miles per hour for 500 miles. This broke the record by 4.11 miles per hour, the total time being 381 minutes and 6

seconds. The National is not only swifter, but also surer.

Foreign cars won all the races of 250 to 500 miles in America in 1912 except the one race the National builders entered. This leaves one conclusion, that the National is not only superior to other American-made cars, but also to European invaders. In 1911 National cars won eighty-four races, repeatedly defeating European cars.

The National's 1911 list includes the World's Stock Championship, World's Road Race Championship, World's record for fastest mile with stock car, and Desert Run from Los Angeles, Cal., to Phœnix, Ariz.

ROAD RACE CHAMPION FOR CLASS

The National 40 holds the world's road race record of 74.42 miles per hour for 301-450, Class C, made at Santa Monica.

FREE-FOR-ALL ROAD RACE CHAMPION 1911

Santa Monica, Cal., Road Races, October 14, 1911. Free for all. 202.008 miles. Time of 162:24.6. Average of 74.628 miles per hour.

Following are only a few of the races won by National cars recently:

STOCK CHAMPION

Elgin National Trophy Race, Elgin, Ill., August 26, 1911, 305.03 miles, Class B 600 and under. Time, 275:39.08. Average of 66.4 miles per hour without a tire change.

STOCK MILE CHAMPION

Atlantic-Pablo Beach Races, Jacksonville, Fla., March 30, 1911. One mile record trials for Class B. Time 40.32 seconds. Average of 89.28 miles per hour. World's stock straightaway mile record.

National cars won nine out of twelve 1911 road races entered.

National 40 won Los Angeles to Phœnix Desert Run, November 4-6, 1911; 551 miles; free for all; time 20 hours 23 minutes.

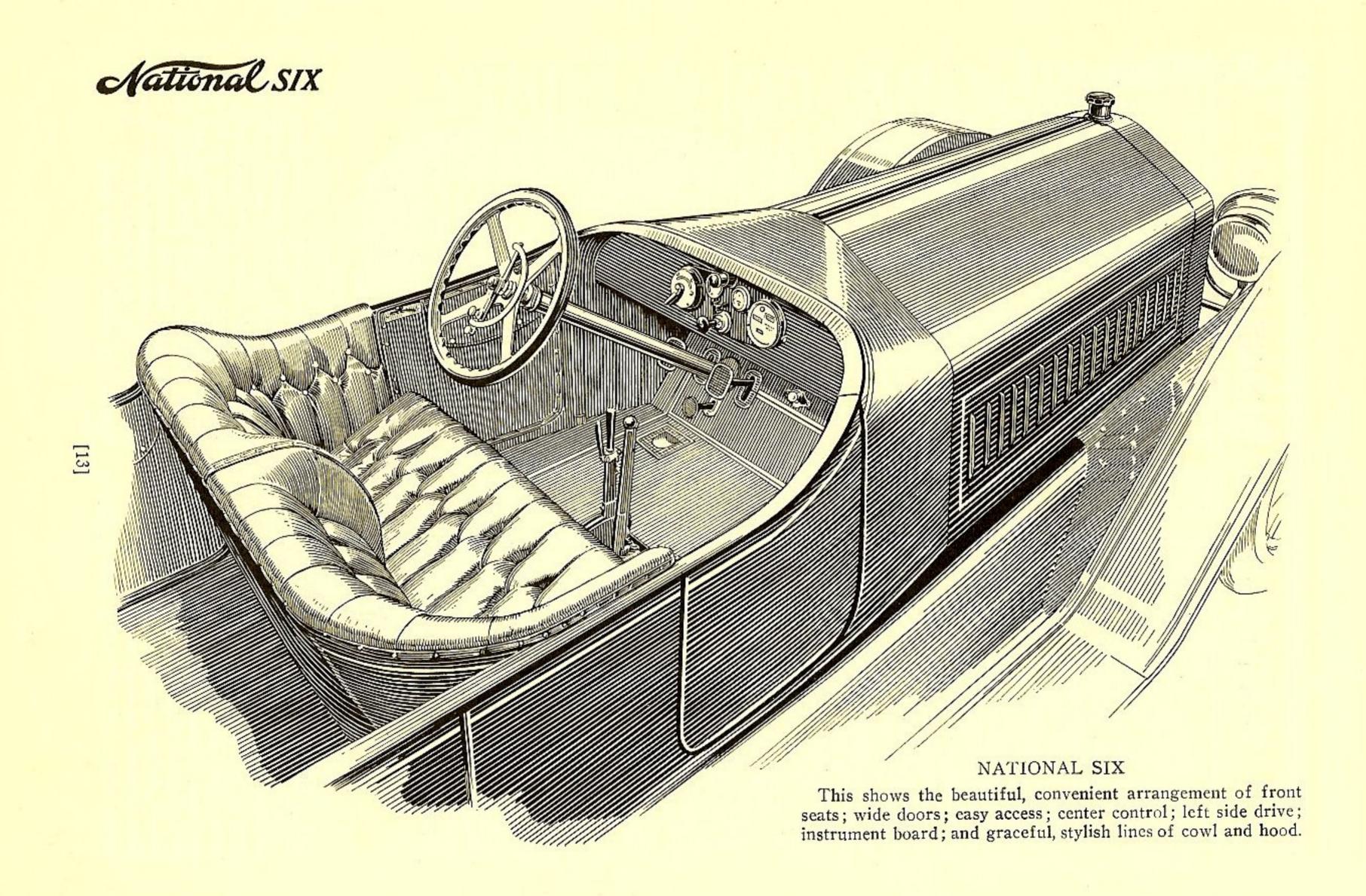
National 40 holds the kilometer straightaway record of 26.75 seconds for 301-450, Class B, stock chassis.

National 40 holds the straightaway five-mile record of 3:56.82 for 301-450, Class B, stock chassis.

National 40 holds the straightaway ten-mile record of 8:03.67 for 301-450, Class B, stock chassis.

National 40 holds the Speedway fifteen-mile record of 11:48.78 for 301-450, Class B, stock chassis.

National 40 holds the Speedway 100-mile record of 85:43.11 for 301-450, Class B, stock chassis.



NATIONAL'S CLOSED CARS

LUXURY AND UTILITY COMBINED

Our wide range of exclusive styles gives you an individual closed car—made to order, as it were. True artists have produced rare beauty and convenience, accompanied by luxurious comfort for our discriminating patrons.

To the National car's heritage of flexible power, noiseless operation, and reliable performance is added an opulence of refinement and a wealth of beauty. The control of our closed cars is simplicity itself.

The woman with a National closed car can step directly from her home into her luxurious car and travel with security, privacy, warmth and comfort, no matter how bad the weather.

She finds her car always clean, inviting and restful.

A touch of one button and the electric lights are on; another button and the powerful, flexible motor is running.

The entire car is under her immediate control; she need make no exertion nor effort; her gown and coat and hands are not brought into contact with anything that can soil them.

And the name National is synonymous of reliability and sureness—a car equal to all demands, mighty in its ability and simple in its control, giving you at all times freedom from worry and absolute confidence and pleasure.

FOR MEN

The National closed cars are popular in metropolitan cities among business and professional men who find them so convenient and dependable in making business calls, going to their offices and visiting their clients and customers.

FOR WOMEN

The National closed cars are the criterion of all that discriminating women can ask—always at her command for social calls, shopping excursions, for the theater, and in many instances these closed cars are used to take the children to school in bad weather.

The Coupe is furnished on either the four or the six-cylinder chassis.

COUPE

Artists add rare beauty to the National coupe after the mechanical engineers have perfected the fundamentals of the car's construction. Here is a handsome, comfortable, convenient car that is suitable for men and women alike. Here is the busy man's car. Here is the ideal machine for the woman. With electric lights, electric starter, and everything convenient and

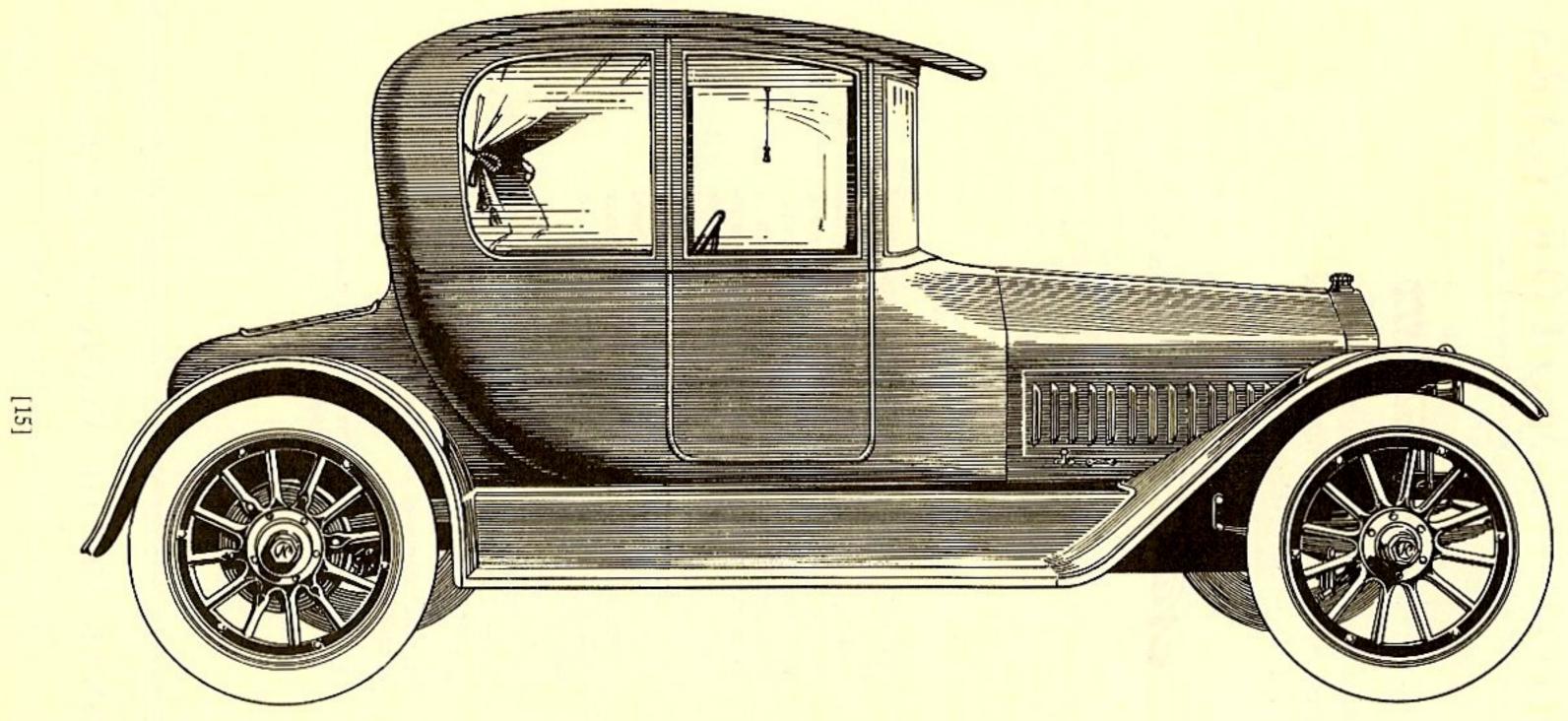
simple to manage, the woman's most discriminating desires are all gratified. The latest body styles are best exemplified in this coupe. Note the graceful slope of the hood, blending with harmony into the coach. The lines of this car make one continuous symmetrical effect, not broken up, nor spoiled by ungraceful design. The very best of material is used.

THE LIMOUSINE - SERIES V-3

SEVEN-PASSENGER

V-3, Four-Cylinder is the criterion of luxury, comfort, style and convenience. Fully equipped with built-in adjustable ventilating and rain vision glass windshield; tire carrier on rear; one extra Firestone demountable rim; Gray & Davis electric starter; Gray & Davis dynamo electric lighting system; Truffault-Hartford shock absorbers in rear; Warner speedometer; electric horn, tools and jack; Gray & Davis

12-inch black and nickel electric bullet head lights; black and nickel electric pillar side lights; Gray & Davis black and nickel electric bullet tail light. Other conveniences are: 12-inch upholstery; speaking tube; vanity box; interior dome electric light; folding extra seats which disappear under front seats; flower vase; coat rail; foot rest; umbrella rack; baggage carrier; left-side drive; center control; foot mat in running board; and two pullman disappearing electric reading lights.



NATIONAL SIX COUPE-THREE PASSENGER-\$2850 The ideal closed car for women or men. Cozy, comfortable, convenient and quiet.

NATIONAL MOTOR CARS

National SIX

National Six-Four-Passenger					\$2375
National Six-Five-Passenger					2375
National Six-Three-Passenger	Co	oup	e		2850

National 40 - Series V-3

Semi-Racing Roadster	. \$2750	Seven-Passenger Touring Car	*		\$3400
Speedway Roadster	3150	Three-Passenger Coupe	Ç		3500
Four-Passenger Toy Tonneau	. 3300	Four-Passenger Sedan			4600
Five-Passenger Touring Car	. 3300	Seven-Passenger Limousine .			4800

WARRANTY

We warrant all motor vehicles manufactured by us (except tires, ignition apparatus and trade accessories, such as lamps, tops, windshields, gas generators, speedometers, tools, etc.) against defects in materials and workmanship for six months from date of shipment from our factory. Should any part so warranted be found defective in materials or workmanship within said period, our entire liability of any kind is limited to making good said part at our factory, without additional compensation, provided that the purchaser shall send us the part alleged to be defective, carrier's charges prepaid.

We reserve the right to disclaim responsibility in connection with any motor vehicle manufactured by us if it has been altered or repaired outside of our factory, and we assume no responsibility whatever for repairs, replacements or other damages occasioned by misuse, negligence or accidents.

WE DO NOT MAKE OR AUTHORIZE ANY WARRANTY
BEYOND THAT EXPRESSED ABOVE

NATIONAL MOTOR VEHICLE COMPANY

INDIANAPOLIS, INDIANA, U.S.A.