



*National*

"HIGHWAY" SIX

"NEWPORT" SIX

**NATIONAL  
SIXES**

1916



# *National* Sixes

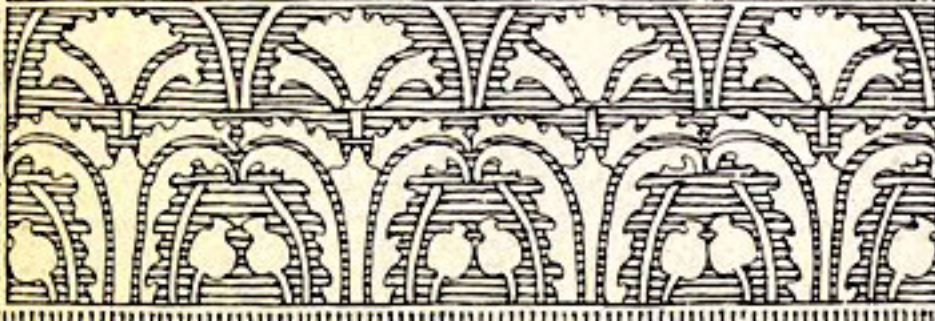
Part I  
The "Highway" Six

Part II  
The "Newport" Six

National  
Motor Vehicle  
Company

Indianapolis, Indiana  
U.S.A.

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*One thing is an assured and accepted fact about motor cars to-day—the Six is all right. Everybody, no matter what else he thinks, likes the Six.*

*Most buyers feel that the Six is the logical car for them. Statistics prove that they do. The whole country has voted the Six ticket.*

*This book covers two wonderful Sixes: The National "Highway" Six, and the National "Newport" Six.*

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## NATIONAL "HIGHWAY" SIX

*The Kind of Man Who Buys It*

**T**HE National "Highway" Six sells for \$1,690. There are a certain class of men who buy it, and a certain class who do not. If we tell you what kind of men buy the "Highway" Six, it will describe the car to you fairly well, and it will help you to decide whether or not you are a National "Highway" Six kind of man.

The typical "Highway" Six owner lives in a pretty good house, on one of the main residence streets in a good-sized city. When you go up this street you are apt to see several "Highway" Sixes standing in front of houses. Go two blocks east or west and there will be no "Highway" Sixes out in front.

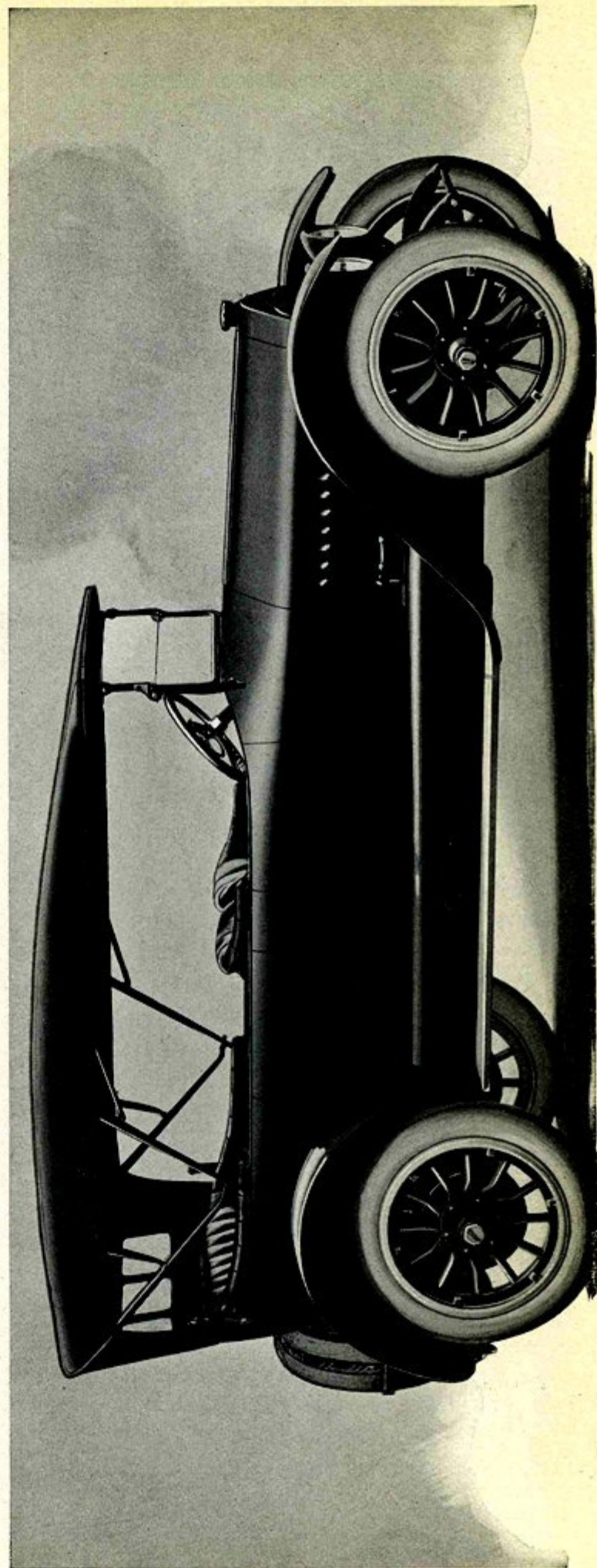
The man has moved into this street and into this house and into this neighborhood because it has seemed a natural thing for him to do. His kind of people live in this neighborhood and that is why he is here. It is not a marble palace neighborhood, but it is a good neighborhood.

The man is important in the business circles of his city. He is either at the head of a very good business of his own, or he is high in one of the big businesses of his city.

He does not have to own a bargain automobile. He buys his automobile much like he buys his house. Neither the house nor the car are in the extravagant class, but they are both away above the average.

He decided on a six. That was natural. The man is conservative rather than adventurous. Then he decided on what kind of six. He did not want an expensive six, neither

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NATIONAL "HIGHWAY" SIX TOURING CAR, \$1690

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did he want an ordinary six. He determined to spend from \$1500 to \$1800 for his car. This man looked about and reviewed the market and made a list of the sixes at \$1500 and over.

He gravitated right toward the National "Highway" Six at \$1690. In the National he found a car that stands away from the mass of sixes. (The mass of sixes today run from \$1200 to \$1300.) One stood out. The National "Highway" Six at \$1690 hit his mark.

It was a car that would express his character to the world and bespeak his standing in the community—just like his living in his certain neighborhood does the same thing. He did not figure it quite like this, but this is true, nevertheless.

The National is different in appearance from other cars—from the mass of sixes. The man liked the lines of the National, and it rather struck his fancy, too, to own a car with a racing record. He liked the National pedigree.

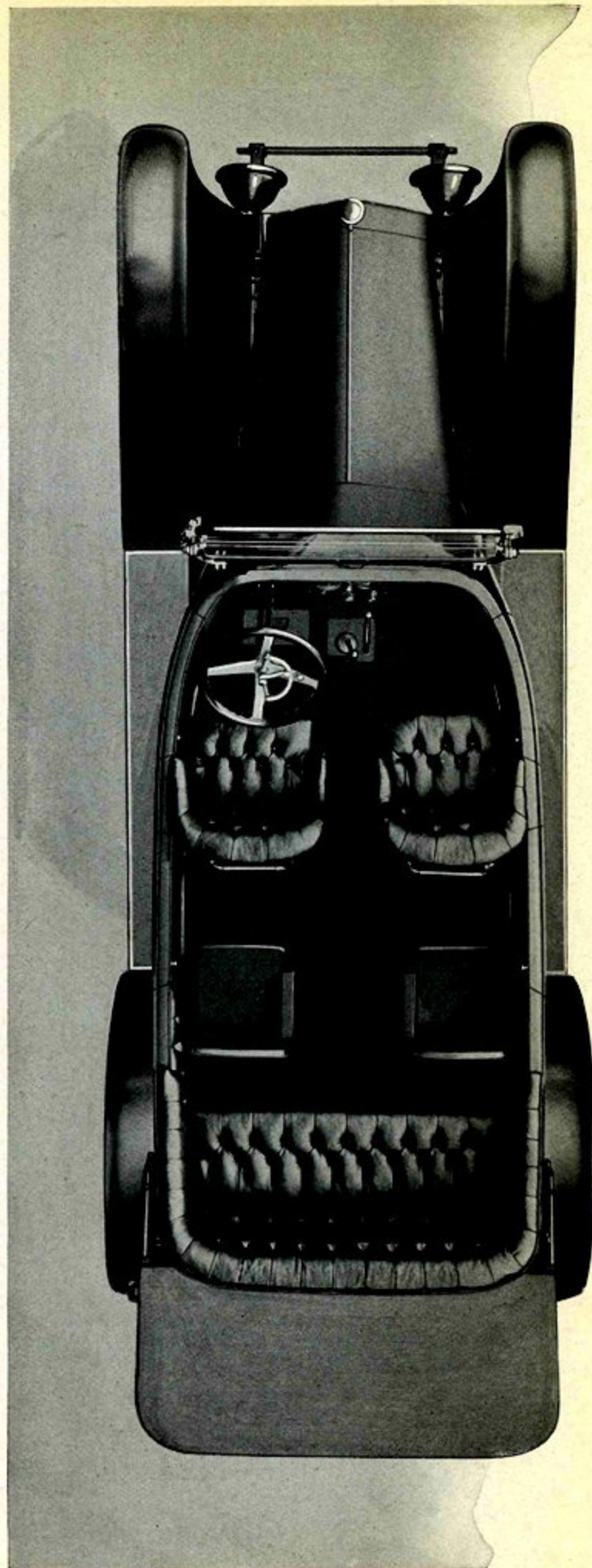
He sized up the National Company and found that it was solid and conservative and old in the automobile business.

And before he started to look around he knew about the National motor. He had read about National motors in the history book of the race track. He knew its reputation for speed and strength and toughness.

He liked the name "Highway." This was not his first car. He had owned cars before, and he is the kind of man who *uses* an automobile. He makes trips. The name "Highway" struck him.

When he went down town for a motor car, he came home with a National "Highway" Six.

That's the kind of man a typical "Highway" Six owner is. Are you anything like him?



INTERIOR OF NATIONAL "HIGHWAY" SIX TOURING CAR. TWO FOLDING CHAIRS OPTIONAL AT \$30 EXTRA CHARGE

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## NATIONAL "HIGHWAY" SIX TOURING CAR

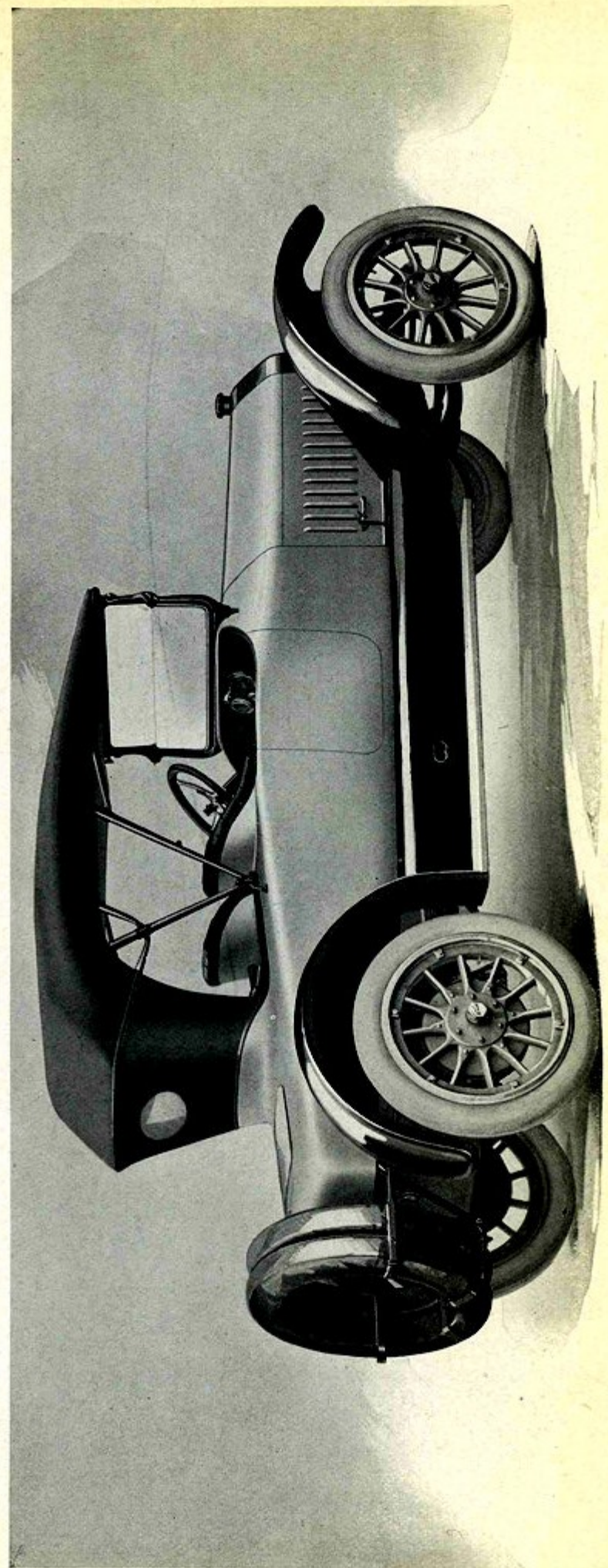
THERE are thousands of automobiles that look very much the same. You can take the first ten cars of which you think, in the "thousand-dollar" class, for instance, and the differences in their appearance will be minor. And any one car that you think of will be different from year to year. There are very few automobiles that have a consistent, lasting, recognizable personality. Automobiles are much like people in this respect: there are lots of them, and very few that stand out.

The National car acquired the keynote of its character in its early racing days. Every individual National car is somewhat reminiscent of the race track. The lines of this latest National "Highway" Six are lines that bespeak good, blue-blooded breeding. They give to the National car a look of strength and cleanliness and aggressiveness that no other car begins to possess. It might be said that the National seems not only aristocratic, but *athletic*.

The National "Highway" Six has many desirable conveniences, some of which are found in many high-grade cars at this time, and some of which are exclusive with the National Company. Aisle-way front seats, which the National Company has used for three years, throw the car into one comfortable, livable room, provide a separate seat for the driver, afford perfect ventilation for the front and rear apartments, and make the "one-man top" true to its name.

The driver's seat is adjustable. It may be moved forward or back so as to comfortably accommodate all members of the family.

The car is supplied, if desired, with two extra folding arm-chairs at a slight additional cost. Though the car with the auxiliary seats



NATIONAL "HIGHWAY" SIX ROADSTER, \$1690. THREE-PASSENGER

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is called a six-passenger car, the rear tonneau seat will carry three, so that, in emergency, there is really a seven-passenger capacity.

## NATIONAL "HIGHWAY" SIX ROADSTER

**I**N the National "Highway" Six roadster, the racing strain of National cars is even more evident than in the touring car. The roadster is usually a man's car, so National designers have not held back in their desire to build a car with an appearance of vigor. This six roadster will remind you of the National car which holds the world's stock car championship. The lines are indeed different, but the fighting look is there.

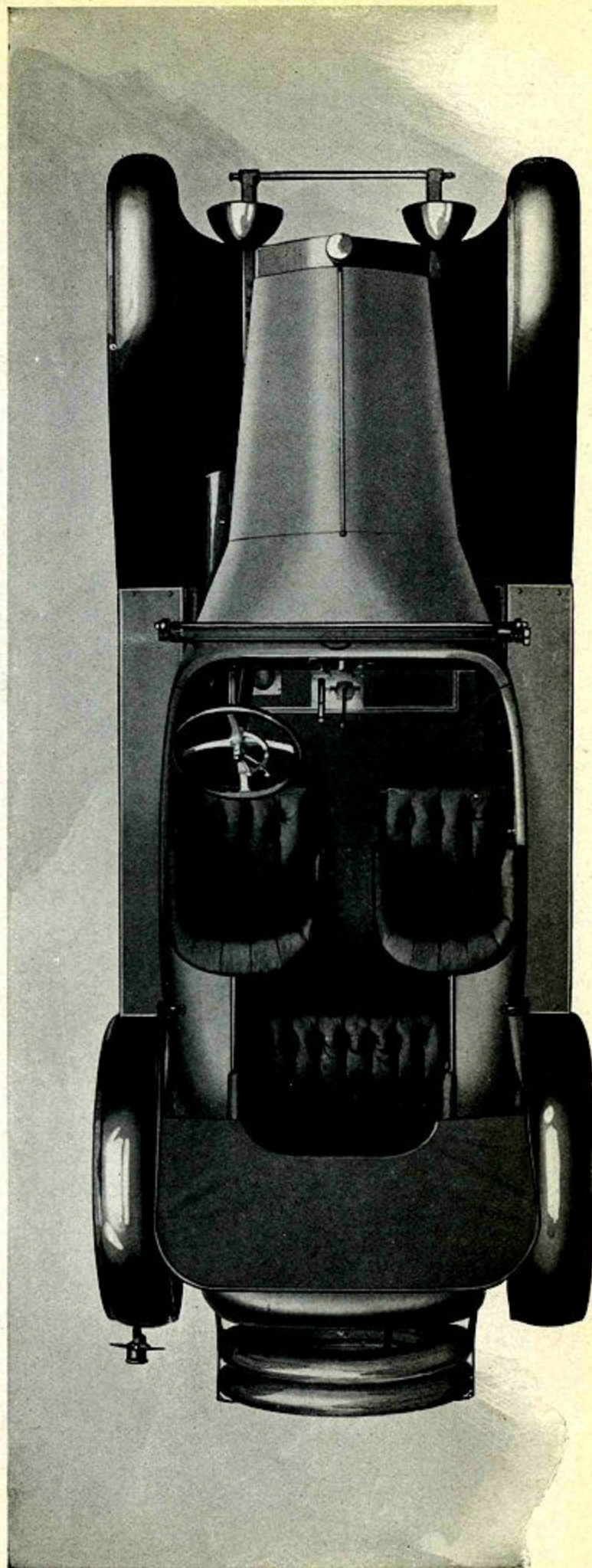
This is a car that will not lag at the get-away, and a car that will eat any roadway with a ferocity to suit any man. The motor develops fifty-one horsepower when you let it out, though it may be throttled down to a snail's pace—such is the versatility of its wonderful six motor.

It is a car with "pep," power and pugnacity.

The arrangement is unusual. Commodious seats are provided for three people, with the top extending over all. There is a big, trunk-like compartment in the rear, for touring convenience.

National cars were about the first to use cantilever springs in this country, and today the National Company stands very far in advance of most motor car companies in its application of the cantilever spring principle. The National follows the foreign practice of using an extra long cantilever spring and having it practically horizontal.

All National models are extraordinary in their comfort.



INTERIOR NATIONAL "HIGHWAY" SIX ROADSTER. THREE-PASSENGER. LUGGAGE SPACE IN REAR



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## SPECIFICATIONS

### NATIONAL "HIGHWAY" SIX

**MOTOR**—*Cylinders*—L-head, cast en bloc. Size  $3\frac{1}{2} \times 5\frac{1}{4}$ . Removable top cover to allow free access to water-jacket space. Valves all on right side.

*Horsepower*—National "Highway" Sixes develop up to 51 horsepower. Piston displacement, 303 cubic inches.

*Pistons*—Each piston is fitted with three rings. They are unusually light in weight. Corresponding weight has been added to the crank case and crank shaft, which makes the National motor light and economical but solid and sturdy in operation.

*Crank Shaft*—Four bearings. Size: front  $1\frac{3}{4} \times 2\frac{7}{8}$ ; two in center  $2 \times 2\frac{1}{4}$ ; rear  $2\frac{1}{8} \times 3\frac{1}{4}$ .

*Lubrication*—Of the self-contained positive feed type, the oil being pumped to top of main bearings. From there it overflows into pockets in bottom of crank case, into which the connecting rods dip. Pockets have overflow holes which allow the oil to drain back into reservoir beneath, so that a constant level of oil is maintained.

**IGNITION AND CARBURETION**—*Carburetor*—Rayfield. Warmed by hot air from the exhaust. "Choking" is practically impossible. Dash adjustment and primer for cold weather use are conveniently located. Vacuum gasoline feed from 17-gallon tank in rear.

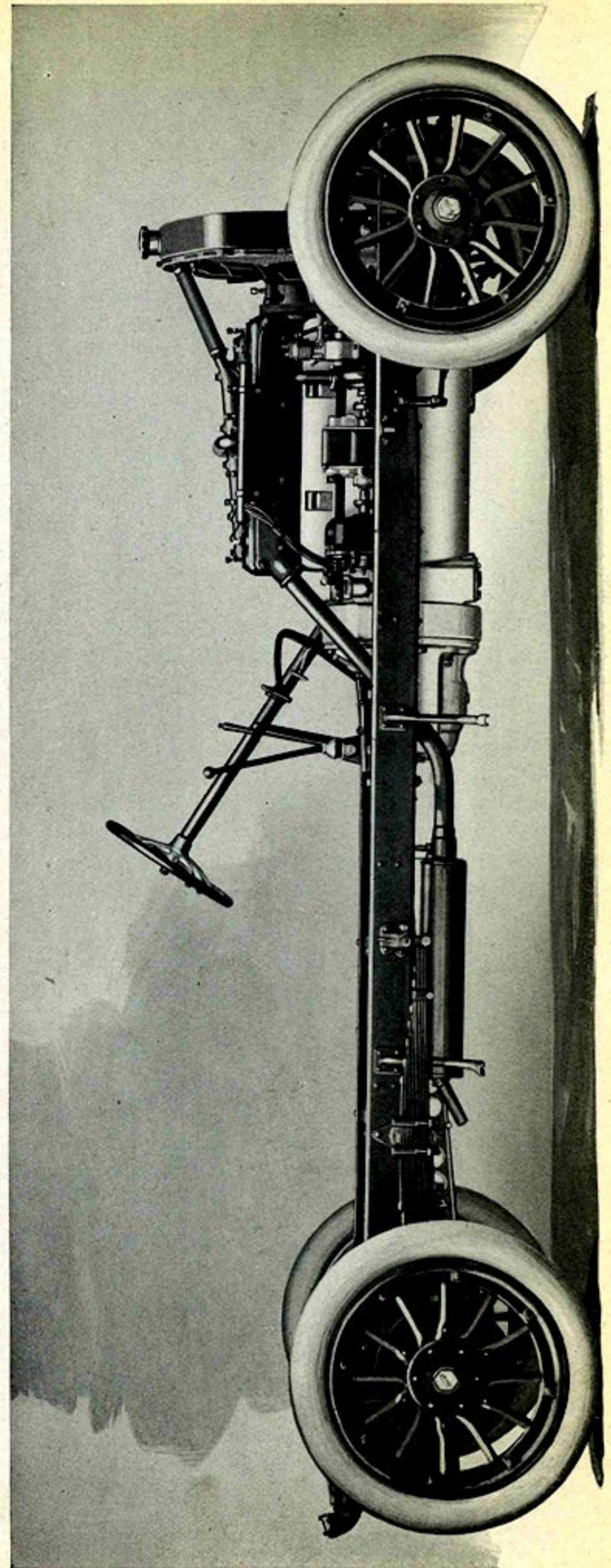
*Ignition*—Supplied by a reliable high tension magneto, the most positive ignition to be had. Entirely separate and independent of electrical equipment.

**CLUTCH AND TRANSMISSION**—*Clutch*—Aluminum cone, faced with durable material, operating in fly-wheel of motor.

*Transmission*—Selective type. Three forward speeds. Large broad-face gears. Annual ball-bearings throughout. Unit type, combined with clutch and motor.

**ELECTRICAL SYSTEM**—*Lights*—Conveniently controlled by one switch on the dash. The two powerful headlights are also fitted with small bulbs, thus giving two sets of lights in front. Lighting system is entirely automatic. Westinghouse system. Dynamo is separate from starter motor, eliminating possibility of troublesome "shorts." Battery is concealed behind running board splash and accessible by means of easily removed cover.

*Starter*—Westinghouse separate unit system. Built and guaranteed by the well-known Westinghouse company. Starting is effected by a small but powerful electric motor geared to the fly-wheel. The engagement is mechanical, automatically made by pressing small push-button on the car floor. Ammeter on dash.



STURDY NATIONAL "HIGHWAY" SIX CHASSIS

## SPECIFICATIONS

*Continued*

**AXLES AND BRAKES—Front**—I-beam, one-piece steel forging. Large adjustable roller bearings in hubs. Ball thrust bearings at top of steering knuckles.

**Rear**—Full-floating axle with large roller bearings. Driving pinion and ring gear have spiral cut teeth. These helical bevel gears are silent.

**Drive**—From motor to rear axle by straight line tubular shaft. Strong torsion member relieves shaft from strains.

**Brakes**—National brakes stop car gently, without jerks or noise. Service brakes easily operated by foot pedal. Contract on rear wheel drums. Size 15 x 2. Emergency brakes are instantly applied by convenient hand lever. Internal expanding type.

**WHEELS, FRAME AND SPRINGS—Wheelbase**—128 inches.

**Tires**—Size 34 x 4½. Option of Firestone, Goodrich or U. S.

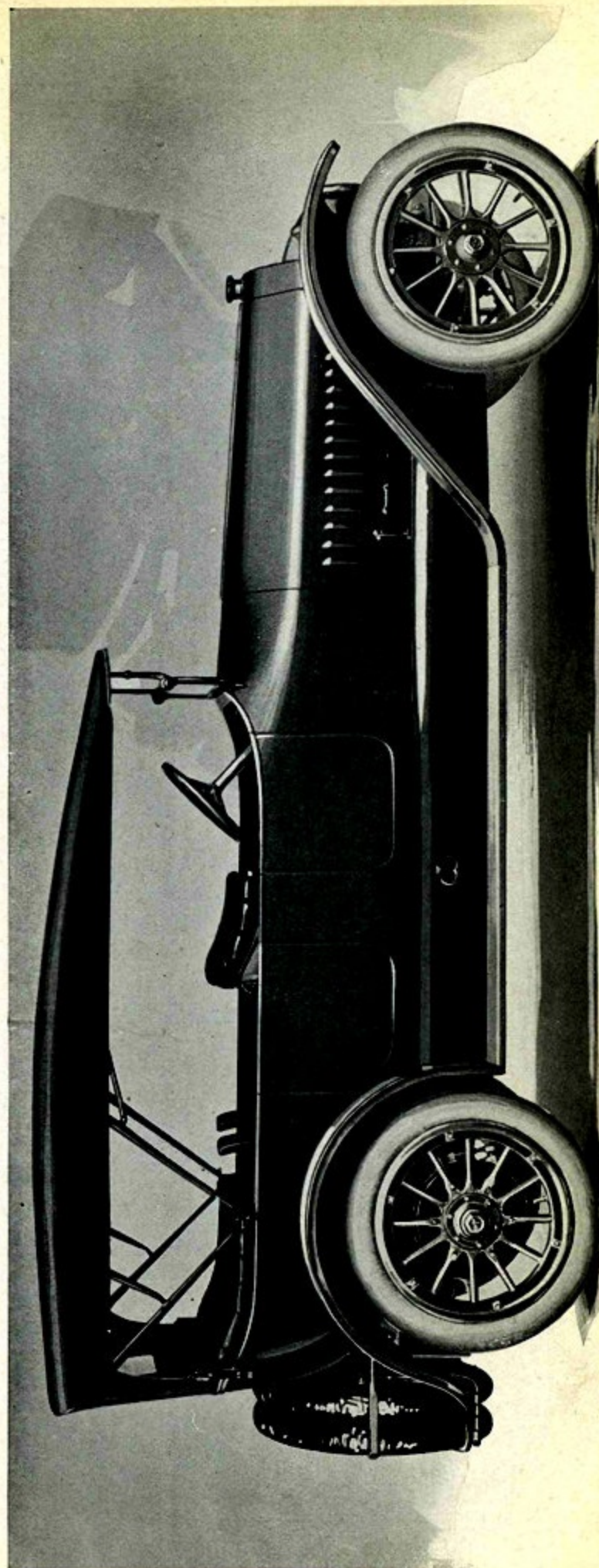
**Rims**—Firestone demountable (Q. D.) rims. Extra rim included. Double tire carrier on rear of car.

**Frame**—Pressed steel, 5-inch channel section. Well braced and strong. Curved up over rear axle to allow low suspension of body. Frame narrowed in front to permit the short turning radius of thirty-three feet.

**Springs—Front**, semi-elliptic. Fitted with special lubricant pockets on each leaf, which keep springs quiet. Length 38 inches. **Rear**, National (flat) cantilever; attached rigid on rear axle, swiveled to frame at center and "linked" in front, giving rocker effect and soft riding qualities. Length, 51 inches.

**EQUIPMENT—Top**, one-man top made of "Never-leek," waterproof material, fitted with jiffy curtains. Ventilating and rain-vision type of *windshield*. *Speedometer* (Stewart), driven from drive shaft. *Horn*, underhood electric, with large button in center of steering wheel. *Tire Pump*, mounted on motor, long tube to reach all tires, equipped with tire gauge. *Tire Carrier* (for two tires) in rear. *Gasoline gauge* on tank. Full complement of *tools*, carried in specially-fitted pocket located in the front door; neat lock on flap protects the tools.

**PRICE AND COLOR**—All prices are F.O.B. Indianapolis. "Highway Six" touring car, \$1690. Two extra folding seats \$30 additional. "Highway Six" roadster \$1690. Standard color, National blue (very dark) body and wheels.



NATIONAL "NEWPORT" SIX. SIX-PASSENGER. \$2500

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## NATIONAL "NEWPORT" SIX

THE "Newport" Six is a larger car than the "Highway" Six. It is made in three bodies, five-passenger and six-passenger touring cars and a three-passenger roadster.

The past season there were orders for the "Newport" Six far in excess of the factory production. Seldom has a car had such remarkable success. Although a new series, the "Newport" Six is already a proven car, well settled in the good graces of the select coteries of the fashionable and wealthy.

This car is especially stylish; that is why we have called it the "Newport." It is a design of much distinction, and is manufactured with great care, even to minutest details.

In a car which is to last a number of years there must be classic elements of design which will endure in spite of the faddish style changes that are occurring constantly in all works of art. In the National "Newport" design there is an elegance which will withstand passing styles.

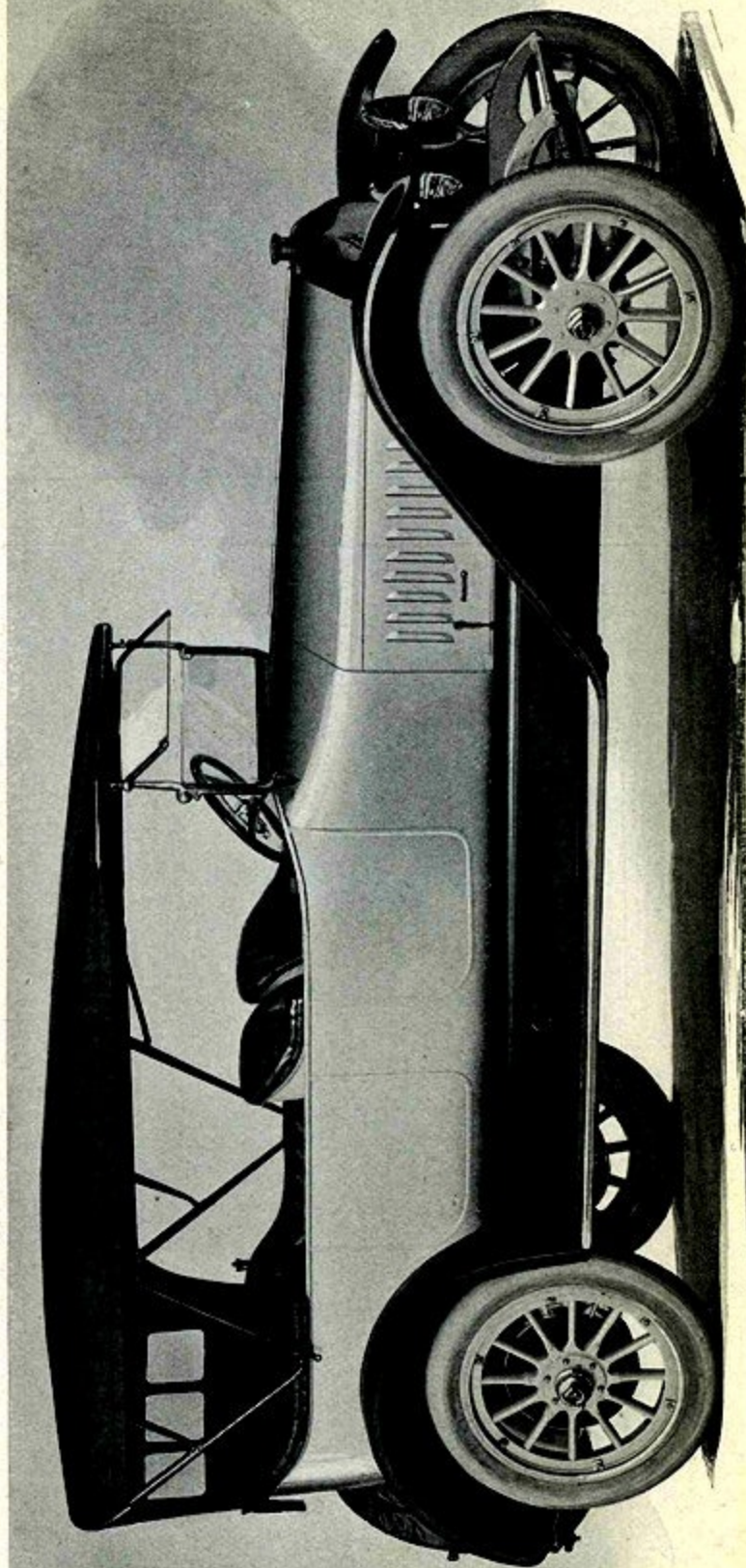
The "Newport" is a large, comfortable car, in which there has been little effort to save space for the sake of economy. The 134-inch wheelbase allows plenty of room in front apartment and tonneau.

The motor develops 61 horsepower.

### "NEWPORT" SIX SIX-PASSENGER

THE "Newport" Six six-passenger, with divided front seats, is the largest of National touring cars. It may be converted instantly into a four-passenger car by folding the two extra arm-chairs snugly into the back of the front seats.

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NATIONAL "NEWPORT" SIX. FIVE-PASSENGER. \$2375. WITH TWO EXTRA SEATS, \$2400

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There is a world of room in the front compartment of the "Newport" six-passenger. The leg room corresponds to the leg room allowed in roadsters, rather than to the usual cramped condition of front apartments in touring car bodies. The passageway between the front seats makes individual chairs for the forward passengers. No more comfortable car exists in the world.

### "NEWPORT" SIX FIVE-PASSENGER

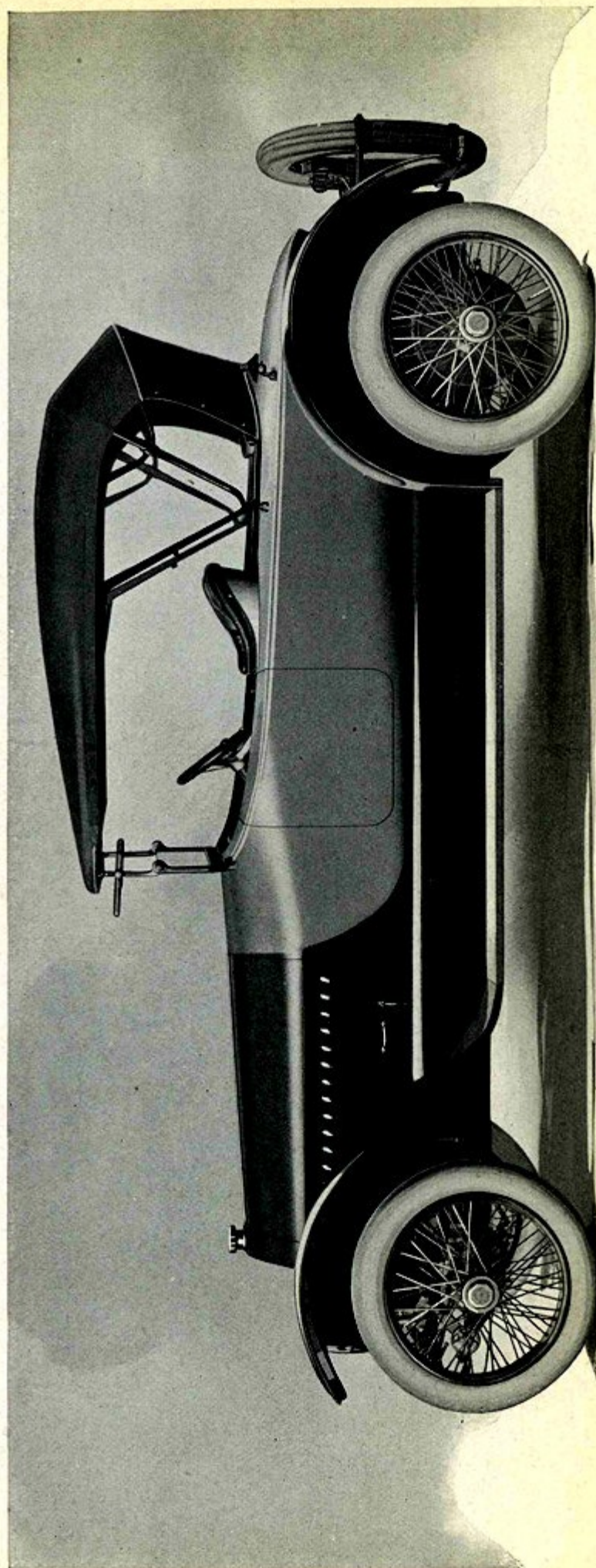
THE "Newport" five-passenger is slightly more conservative than the six-passenger. It is not quite so low and not quite so rakish. The seats are higher, and the rear seat is broader. The five is an all-around family car, seating five passengers comfortably. For a slight addition to its cost it may be obtained with two extra emergency seats.

The National Company adopted aisleway front seats three years ago and has used them successfully since that time. That the design has been practical is evidenced by the extent to which it has been copied. Entrance to the "Newport" Six may be made at any one of four doors. In winter months, a closed car effect may be obtained by making permanent the jiffy curtains in the rear, the rear seat passengers using one of the front doors and the aisle-way.

### "NEWPORT" ROADSTER THREE-PASSENGER

THE National "Newport" roadster is of nautical design, and its appearance is suggestive of a cruiser-like power and smoothness.

It is unusually capacious for a roadster. There is a world of room in each of the three large seats. The third passenger is made fully as comfortable as the two forward passengers. It is a "homey," sit-around-and-talk seating arrangement.



NATIONAL THREE-PASSENGER "NEWPORT" SIX ROADSTER. \$2375. REGULAR EQUIPMENT WOOD WHEELS, WIRE WHEELS EXTRA

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## SPECIFICATIONS

### NATIONAL "NEWPORT" SIX

**MOTOR**—*Cylinders*—L-head, cast en bloc. Size  $3\frac{3}{4} \times 5\frac{1}{2}$ . Removable top cover to allow free access to water-jacket space. Valves all on right side.

*Horsepower*—National "Newport" Sixes develop up to 61 horsepower. Piston displacement, 364 cubic inches.

*Pistons*—Each piston is fitted with three rings. They are unusually light in weight. Corresponding weight has been added to the crank case and crank shaft, which makes the National motor light and economical but solid and sturdy in operation.

*Crank Shaft*—Four bearings. Size: front  $2 \times 3\frac{1}{8}$ ; two in center  $2 \times 2\frac{1}{2}$ ; rear  $2\frac{1}{8} \times 4$ .

*Lubrication*—Of the self-contained positive feed type, the oil being pumped to top of main bearings. From there it overflows into pockets in bottom of crank case, into which the connecting rods dip. Pockets have overflow holes which allow the oil to drain back into reservoir beneath, so that a constant level of oil is maintained.

**IGNITION AND CARBURETION**—*Carburetor*—Rayfield. Warmed by hot water jacket; also hot air. "Choking" is practically impossible. Dash adjustment and primer for cold weather use are conveniently located. Force gasoline feed from 21-gallon tank in rear.

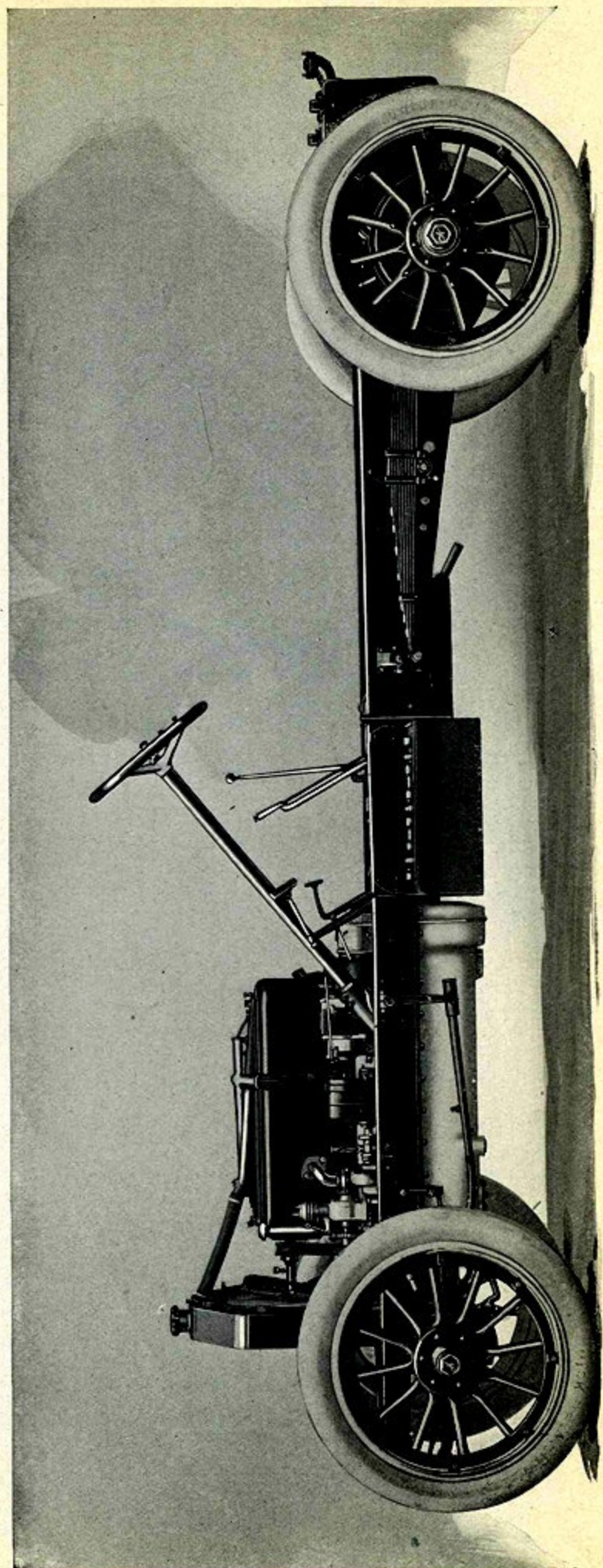
*Ignition*—Supplied by a reliable high-tension magneto, the most positive ignition to be had. Entirely separate and independent of electrical equipment.

**CLUTCH AND TRANSMISSION**—*Clutch*—Aluminum cone, faced with durable material, operating in fly-wheel of motor.

*Transmission*—Selective type. - Three forward speeds. Large broad-face gears. Annular ball-bearings throughout.

**ELECTRICAL SYSTEM**—*Lights*—Conveniently controlled by one switch on the dash. The two powerful headlights are also fitted with small bulbs, thus giving two sets of lights in front. Lighting system is entirely automatic. Westinghouse system. Dynamo is separate from starter motor, eliminating possibility of troublesome "shorts." Battery is concealed behind running board splash and accessible by means of easily removed cover.

*Starter*—Westinghouse separate unit system. Built and guaranteed by the well-known Westinghouse company. Starting is effected by a small but powerful electric motor geared to the fly-wheel. The engagement is mechanical, automatically made by pressing small push-button on the car floor. Ammeter on dash.



NATIONAL "NEWPORT" SIX CHASSIS. 134-INCH WHEELBASE

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## SPECIFICATIONS

*Continued*

**AXLES AND BRAKES**—*Front*—I-beam, one-piece steel forging. Large adjustable roller bearings in hubs. Ball thrust bearings at top of steering knuckles.

*Rear*—Full-floating axle with large roller bearings. Driving pinion and ring gear have spiral cut teeth. These helical bevel gears are silent.

*Drive*—From motor to rear axle by straight line shaft. Strong torsion member relieves shaft from strains.

*Brakes*—National brakes stop car gently, without jerks or noise. Service brakes easily operated by foot pedal. Contract on rear wheel drums. Size 16 x 2¼. Emergency brakes are instantly applied by convenient hand lever. Internal expanding type.

**WHEELS, FRAME AND SPRINGS**—*Wheelbase*—134 inches.

*Tires*—On Five-passenger and Roadster: Size 36 x 4½. On Six-Passenger, 37 x 5. Option of Firestone, Goodrich or U. S.

*Rims*—Firestone demountable (Q. D.) rims. Extra rim included. Double tire carrier on rear of car.

*Frame*—Pressed steel, 5-inch channel section. Well braced and strong. Curved up over rear axle to allow low suspension of body. Frame narrowed in front to permit short turning radius.

*Springs*—*Front*, semi-elliptic. Fitted with Hartford shock absorbers. Have special lubricant pockets on each leaf, which keep springs quiet. Length 40 inches. *Rear*, National (flat) cantilever; attached rigid on rear axle, swiveled to frame at center and "linked" in front, giving rocker effect and soft riding qualities. Length 53 inches.

**EQUIPMENT**—*Top*, one-man top made of "Never-leek," waterproof material, fitted with jiffy curtains. Ventilating and rain-vision type of *windshield*. *Speedometer* (Warner), driven from drive shaft. *Horn*, underhood electric, with large button in center of steering wheel. *Tire Pump*, mounted on motor, long tube to reach all tires, equipped with tire gauge. *Tire Carrier* (for two tires) in rear. *Gasoline gauge* on tank. Full complement of *tools*, carried in specially fitted pocket located in the front door; neat lock on flap protects the tools.

**PRICE AND COLOR**—All prices are F.O.B. Indianapolis. Six-passenger, \$2500; Five-passenger, \$2375, with two extra seats, \$2400; Roadster, \$2375. Standard color, National blue (very dark) body and wheels.

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## THE NATIONAL COMPANY

**T**HE National Motor Vehicle Company has been building motor cars for over fifteen years, which makes it a pioneer in the automobile field. The ownership and management of the National Company have not changed hands in these fifteen years, and many of the department heads and factory foremen have been with the company all this time.

The National Company is a big, reliable organization, with a large, modern, well-equipped factory, recently doubled in size by the erection of a two-acre (two-story) addition of reinforced concrete and steel. It is a company financially strong, operated under consistent and conservative business policies, and enjoying a high credit rating.

The business man who takes the "manufacturer behind the car" into consideration when making his purchase will be made comfortable in his selection of a National car by his knowledge of the solidity of the National Company. It will assure him that the value of his own car will not be precipitated downward someday by the sudden "disappearance" of its manufacturer; and it will assure him also of a continued service, which is of considerable importance these days in the choice of an automobile.

The development of the National car has been slow and scientific. No sporadic, mushroom improvements are made over night for the mere sake of sales impetus. The same conservatism that pervades the business administration of the National Company prevails throughout the National factory.

### National Motor Vehicle Company

Indianapolis, Indiana, U. S. A.

*Sixteenth Year*

Cable Address: "Automobile," Indianapolis  
W. U. T. Code

A B C Code (4th Edition)



*National*