Cackarda WOTOR CARS 1909













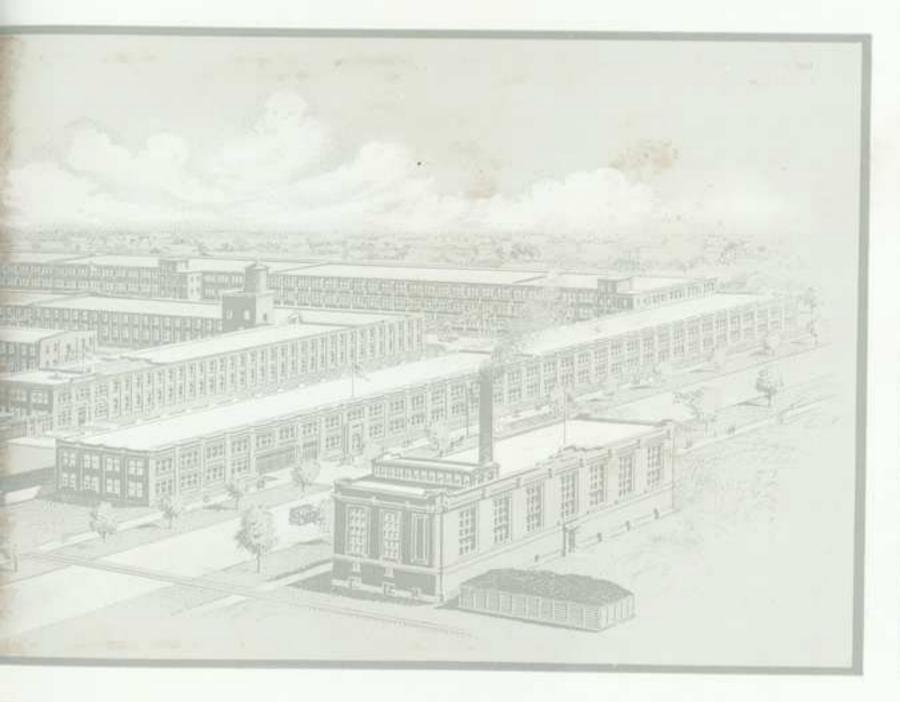


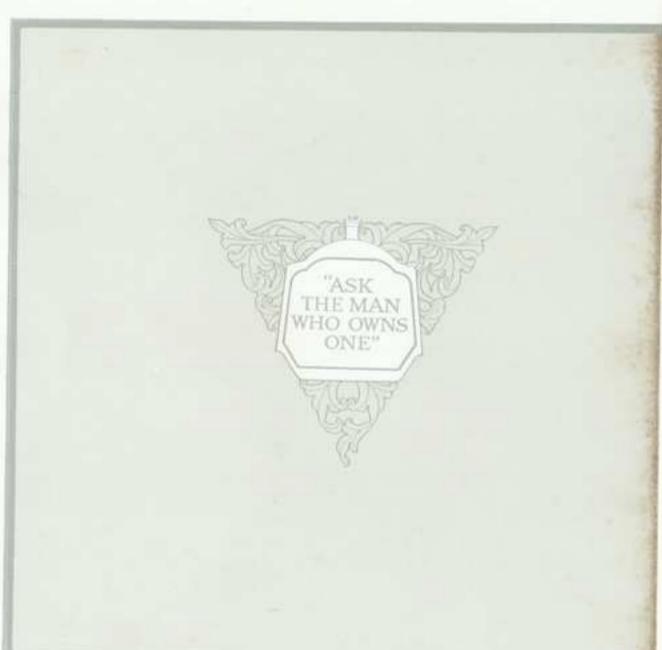


















PACKARD "THIRTY" 1909

A MOTOR CAR CATALOGUE



PACKARD MOTOR CAR COMPANY

DETROIT, MICHIGAN

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PACKARD "THIRTY" 1909

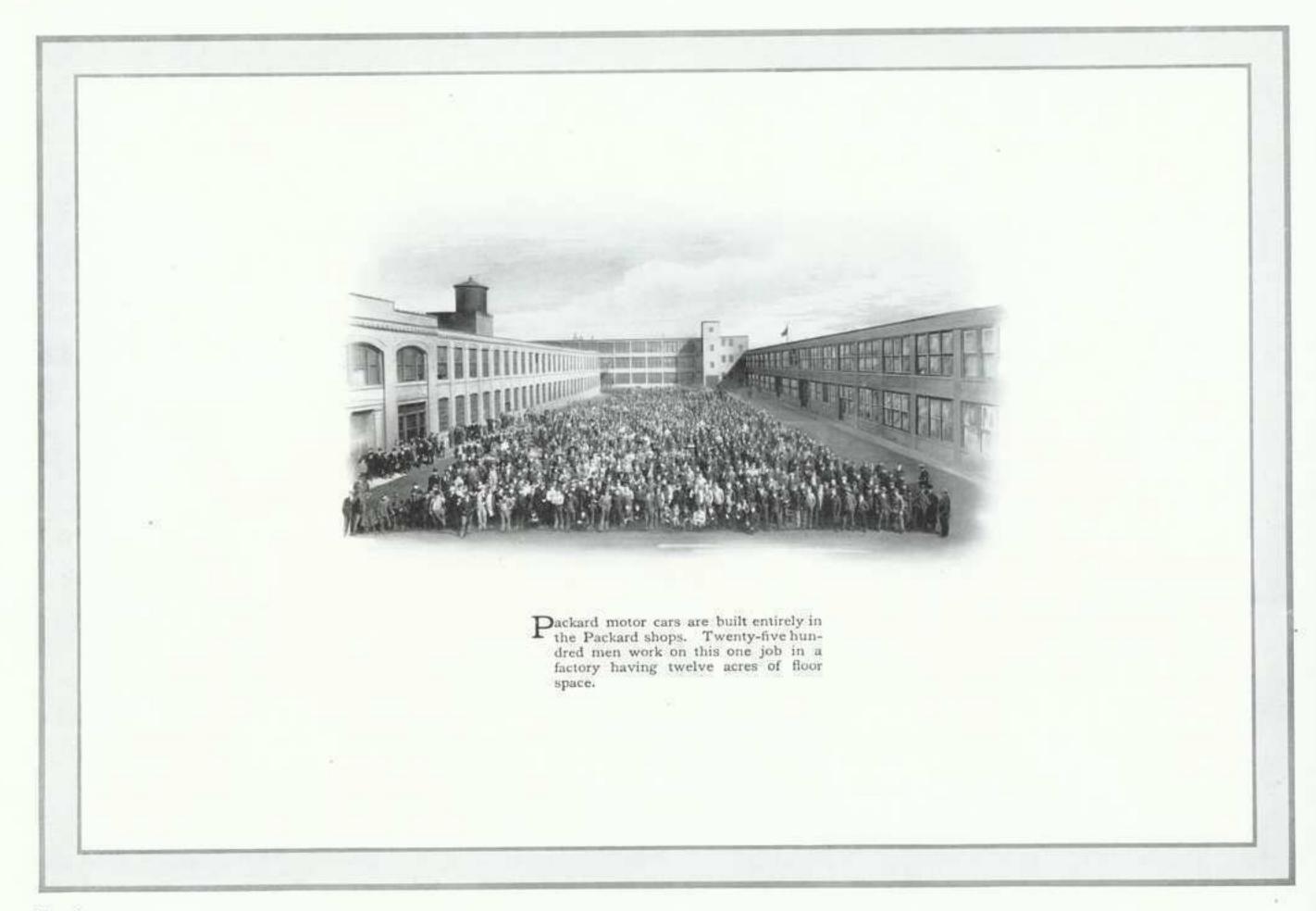
THE 1909 Packard "Thirty" is the masterpiece of the largest exclusive motor car factory in the world. In design, it represents the most advanced engineering practice. In production, it represents the best procedure of an unrivaled manufacturing organization.

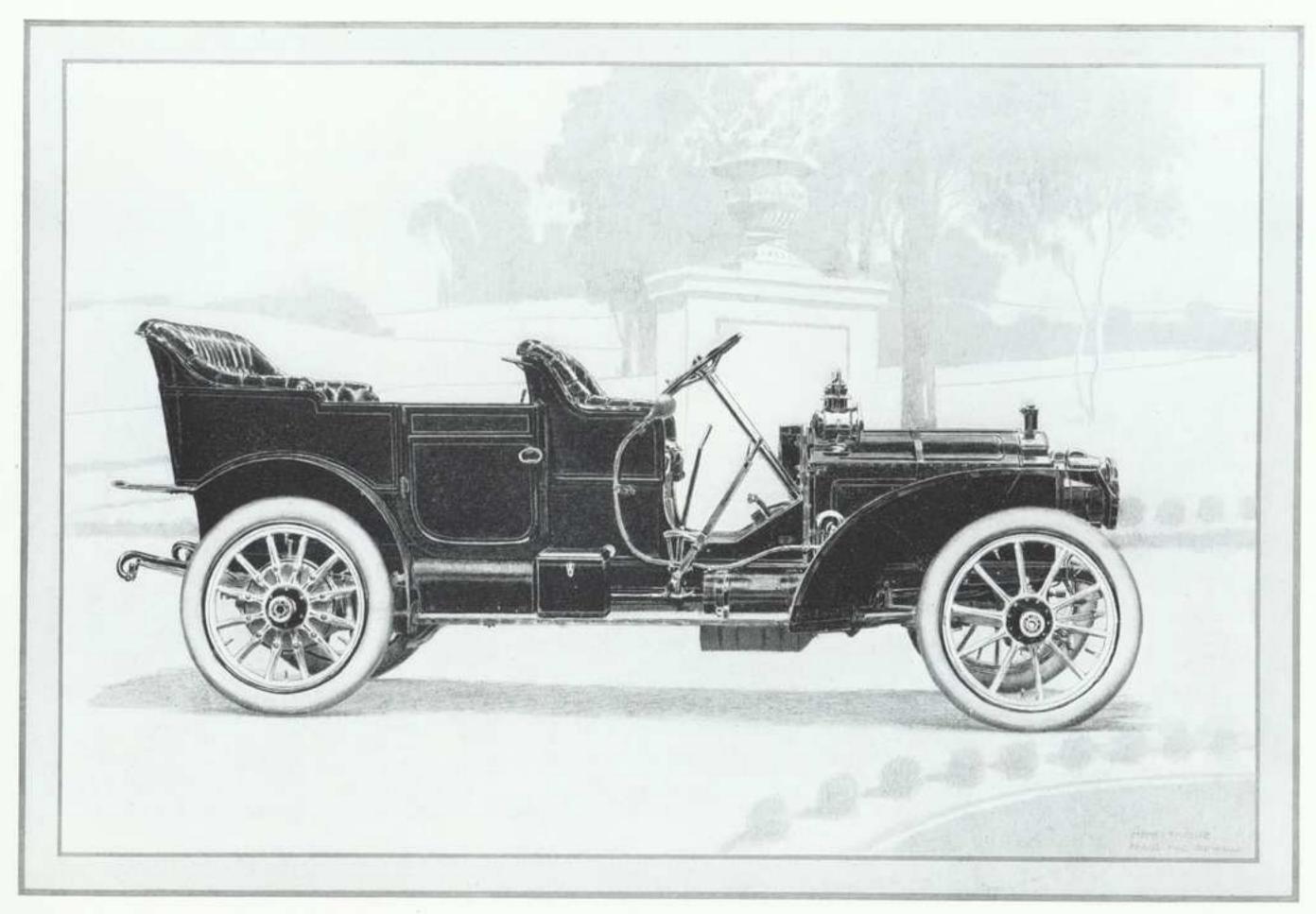
No good feature has been lost in the evolution of the Packard during the eleven years of this company's progress. The 1909 Packard "Thirty" is the development of the preceding model. In principle it is unchanged. Its manufacture has reached a stage where the whole Packard organization is concentrated on the refinement and betterment of detail. Improvement not apparent to the casual observer may be in the selection of an especial metal for a certain part; in the shape or size of some other part; in the simplifying of some important unit, or in the provision of some added convenience for the user. No change has been adopted until it has been thoroughly tested in long, severe road trials. Corresponding progress has been made in the actual manufacturing methods to obtain extreme accuracy in production, inspection and assembling.

The car complete is a vehicle that is capable and efficient in all kinds of motoring. As a touring car, a runabout, a limousine, a landaulet, or with a close-coupled body, it is the same Packard "Thirty," in the form which best suits the individual owner.

That the Packard Motor Car Company has built well in its consistent, unremitting advancement is shown by the fact that eighty-five per cent. of all Packard purchasers still drive their original cars. Thus the Packard motor car has become distinguished.

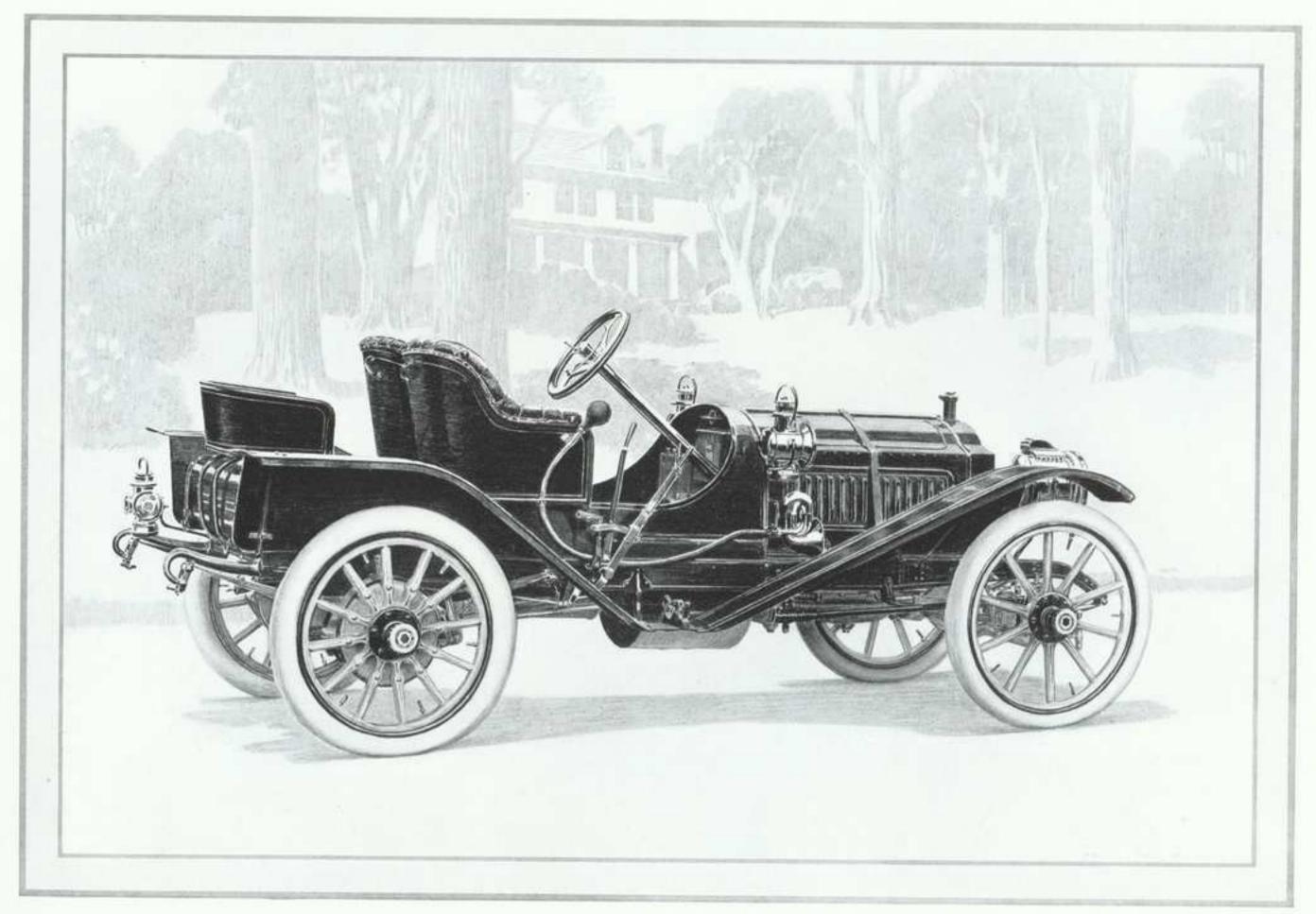
The 1909 Packard "Thirty" will increase the fame of its name.





PACKARD "THIRTY" TOURING CAR, IN STANDARD FINISH AND EQUIPMENT

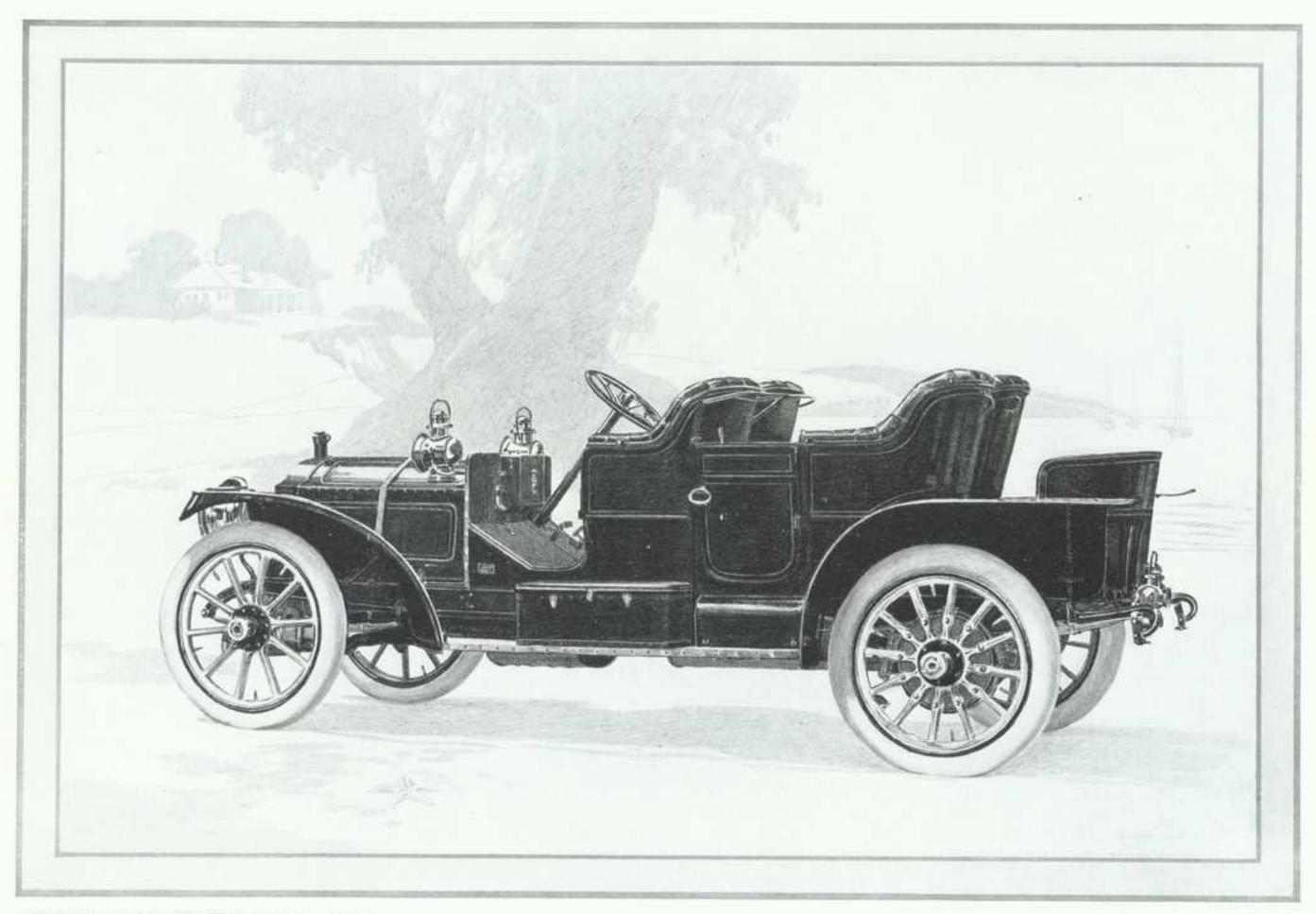




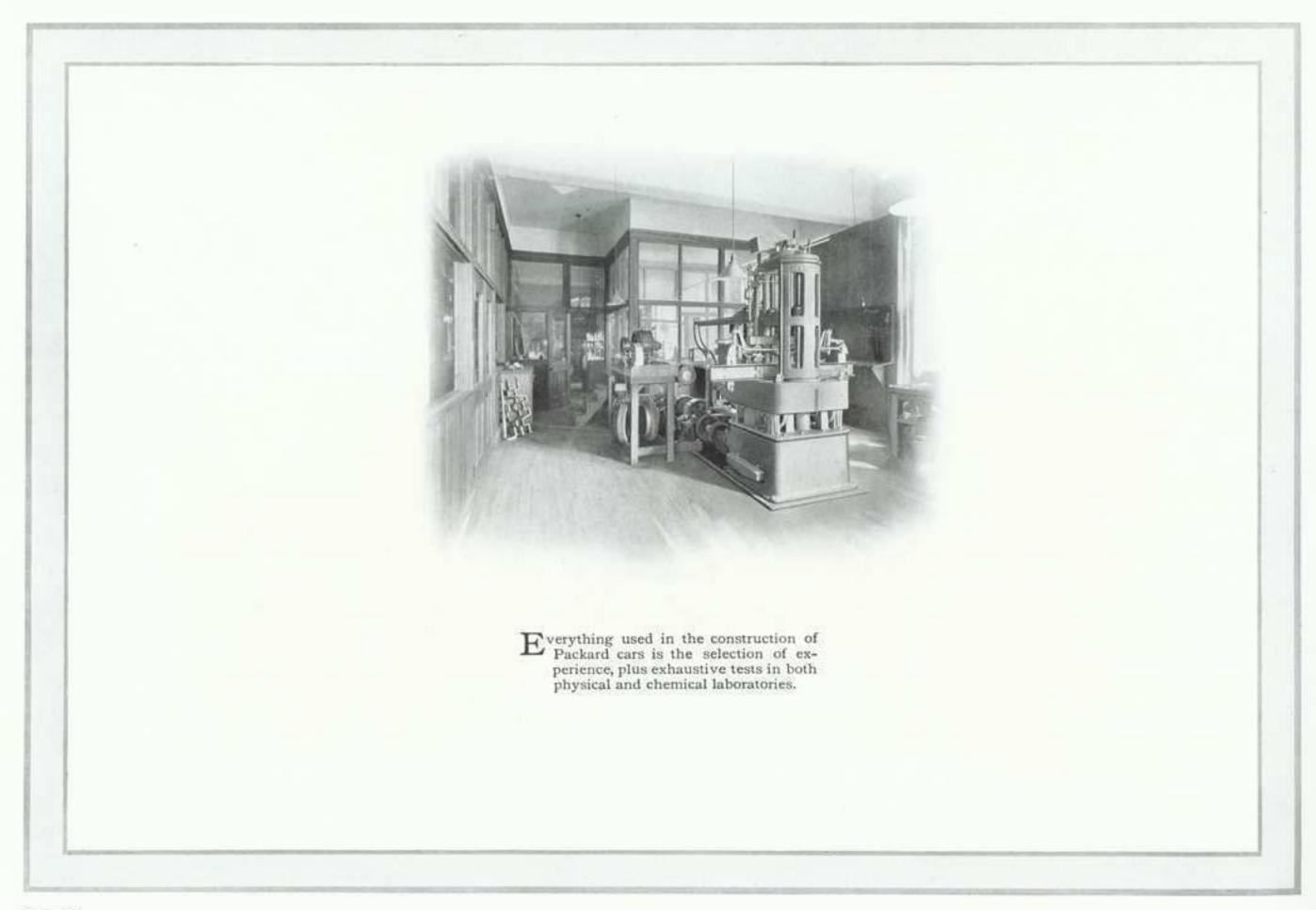
PACKARD "THIRTY" RUNABOUT, IN STANDARD FINISH AND EQUIPMENT

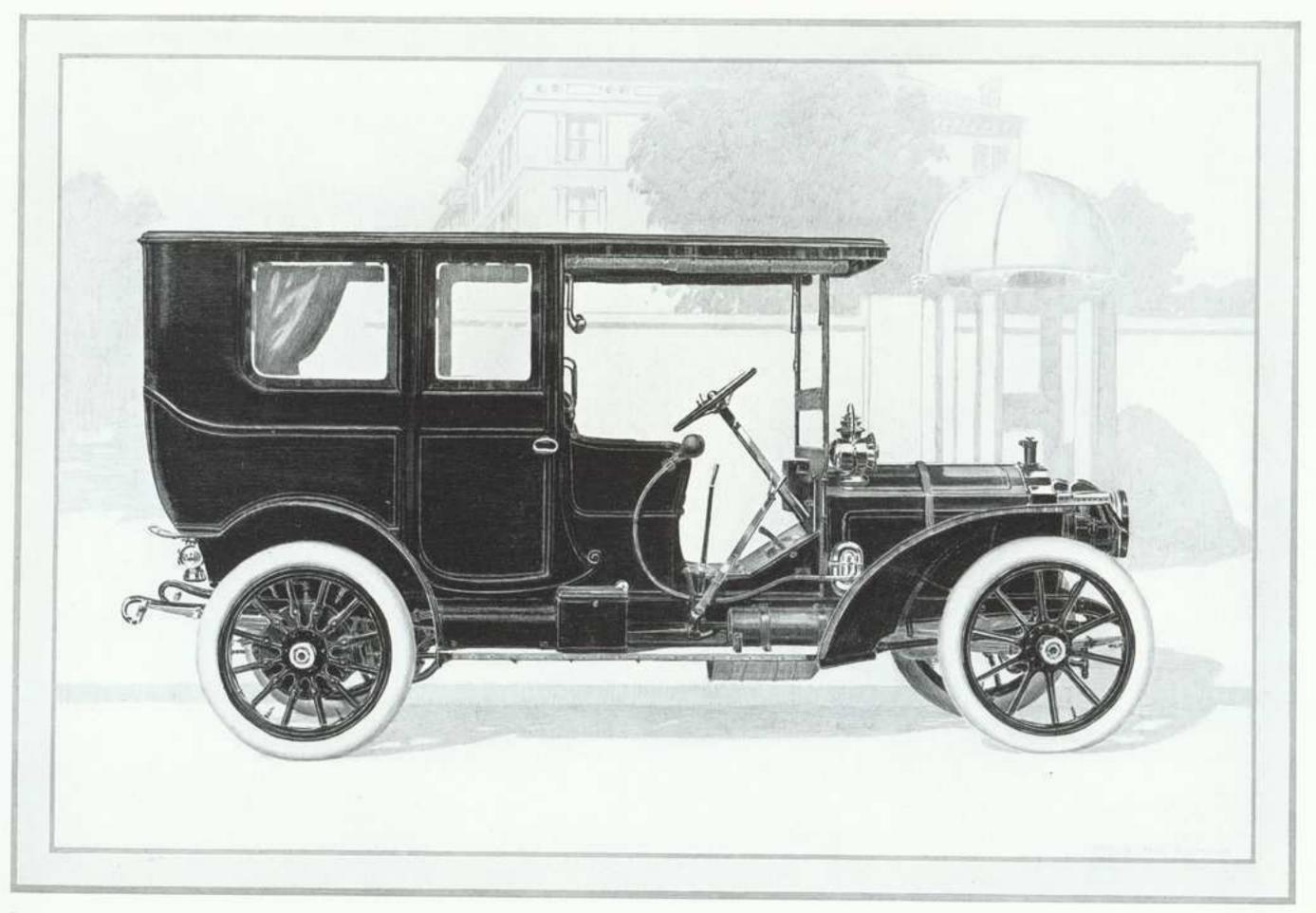


The arrangement of both general and private offices provides plenty of light, plenty of room and plenty of air for an efficient executive organization.



PACKARD "THIRTY" WITH CLOSE-COUPLED BODY, IN STANDARD FINISH AND EQUIPMENT

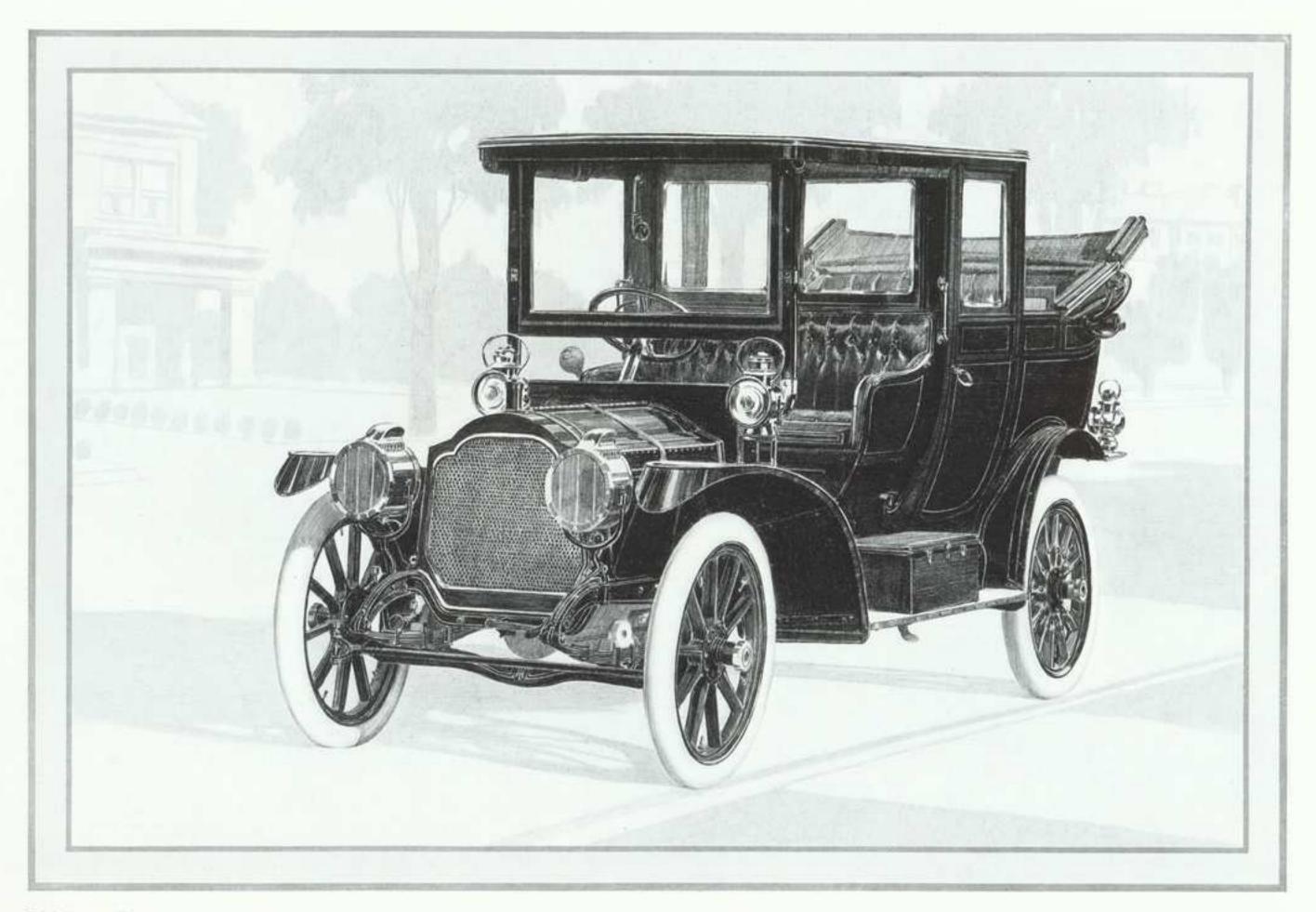




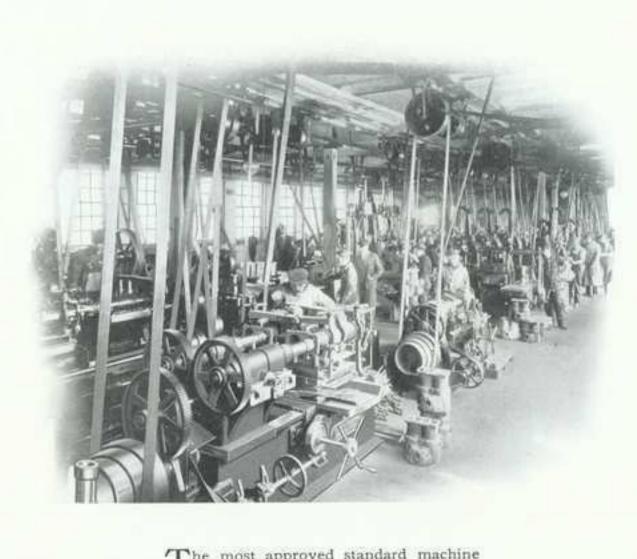
PACKARD "THIRTY" WITH LIMOUSINE BODY, IN STANDARD FINISH AND EQUIPMENT



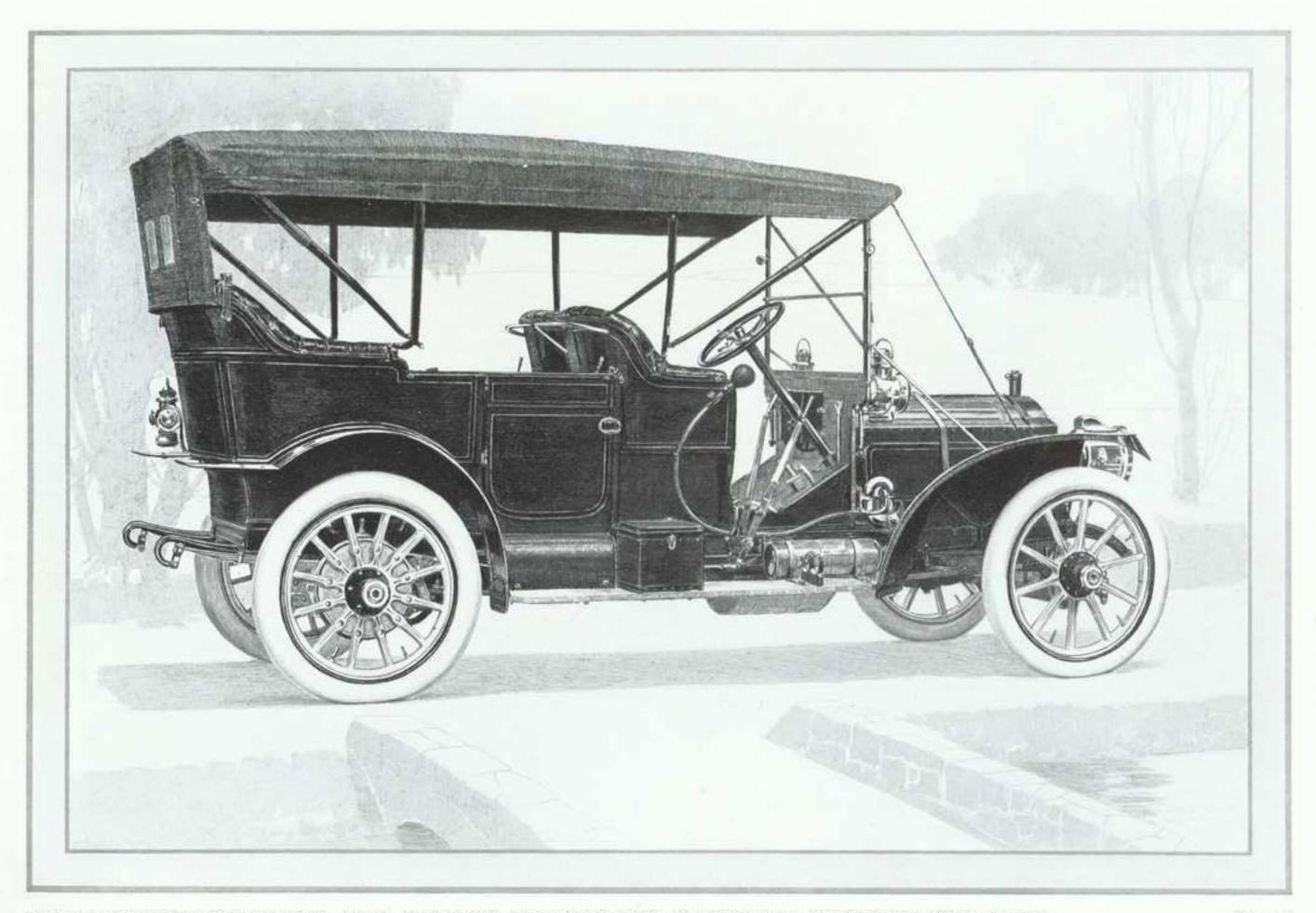
The busy drafting room reflects the energy of the engineering department in its never-ending work of development.



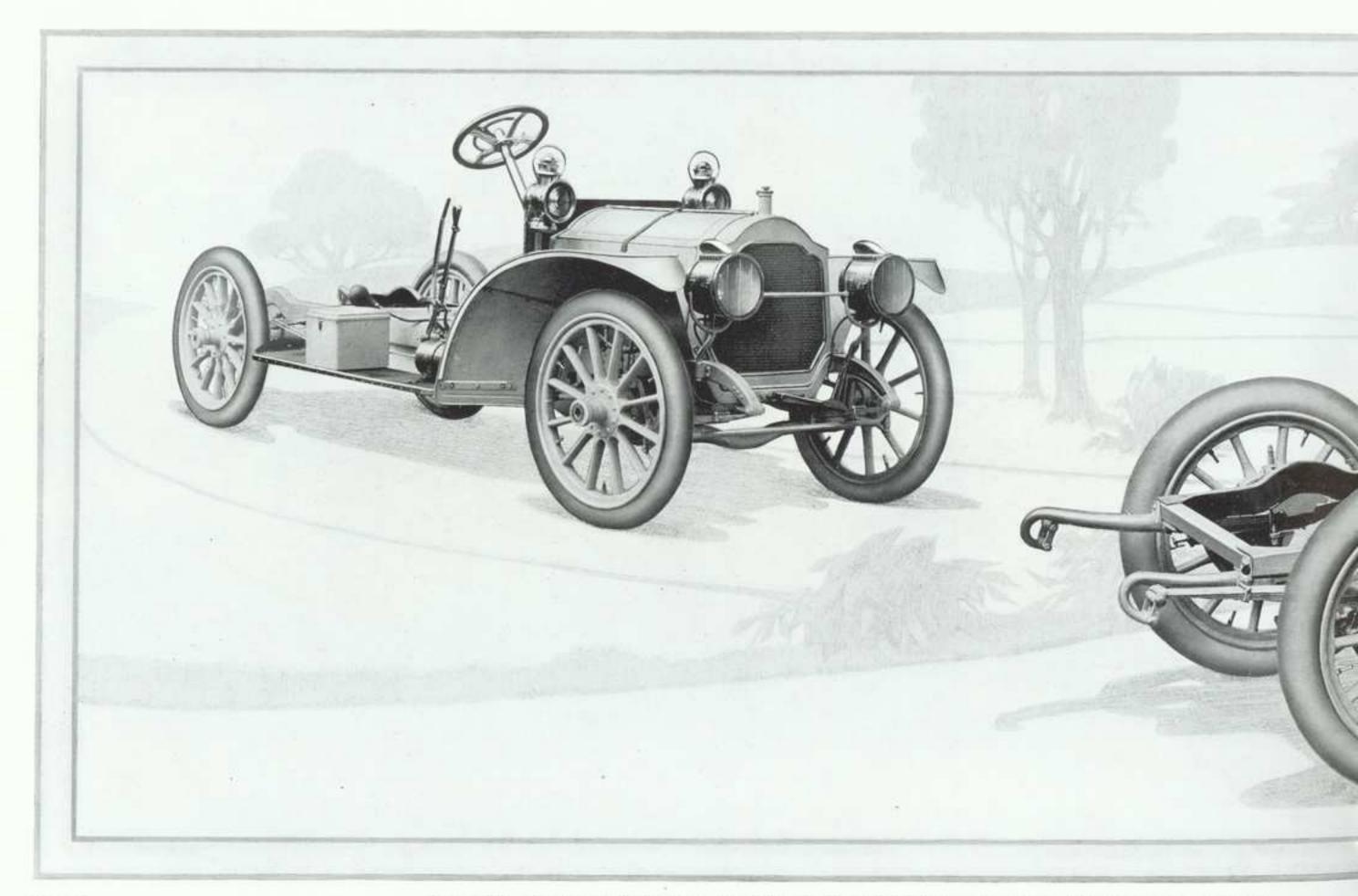
PACKARD "THIRTY" WITH LANDAULET BODY, IN STANDARD FINISH AND EQUIPMENT



The most approved standard machine tools are supplemented by many special machines designed to render the best service in making Packard parts.

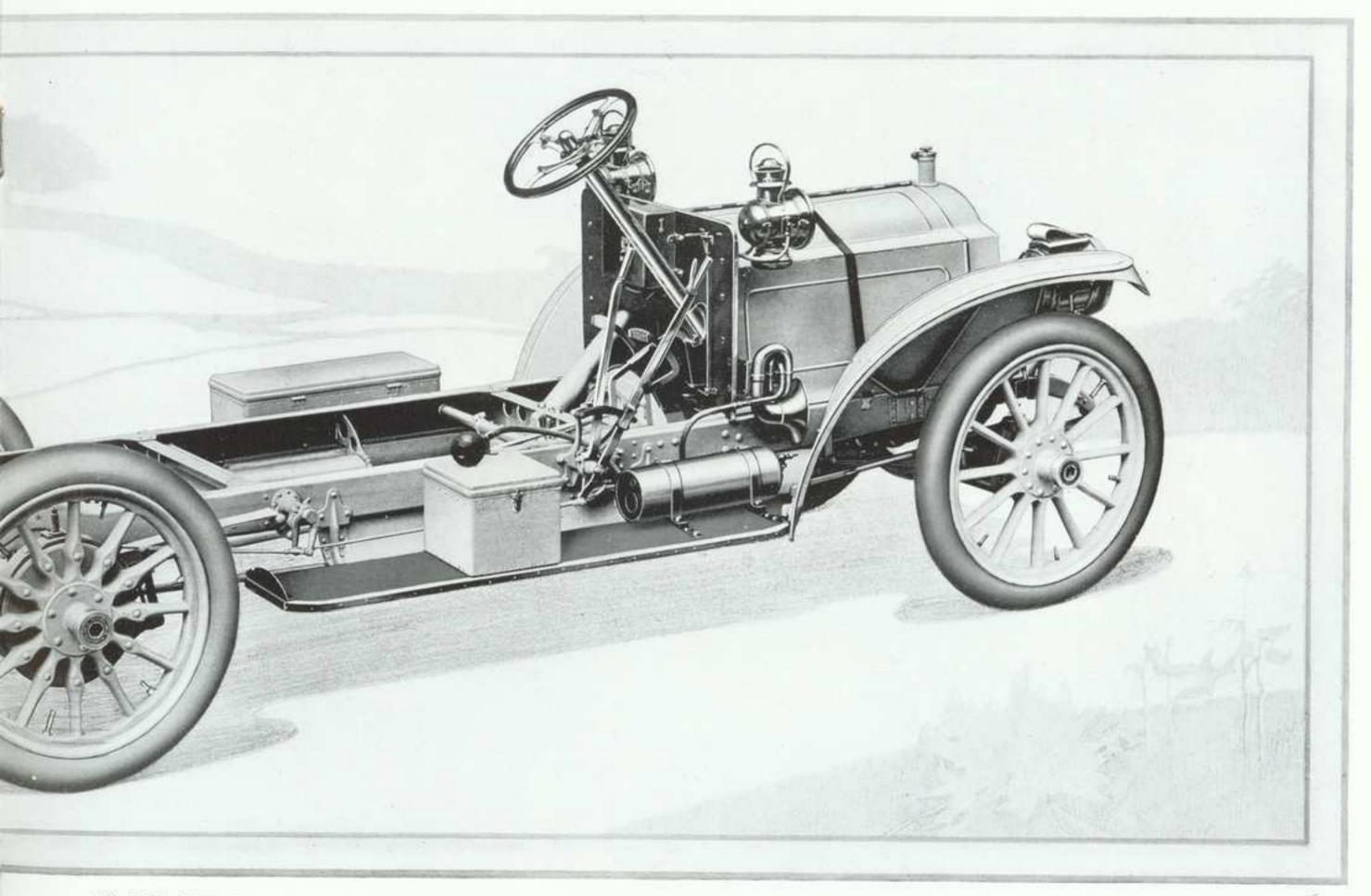


PACKARD "THIRTY" TOURING CAR, WITH EXTENSION CAPE CART TOP AND PACKARD ADJUSTABLE WIND SHIELD

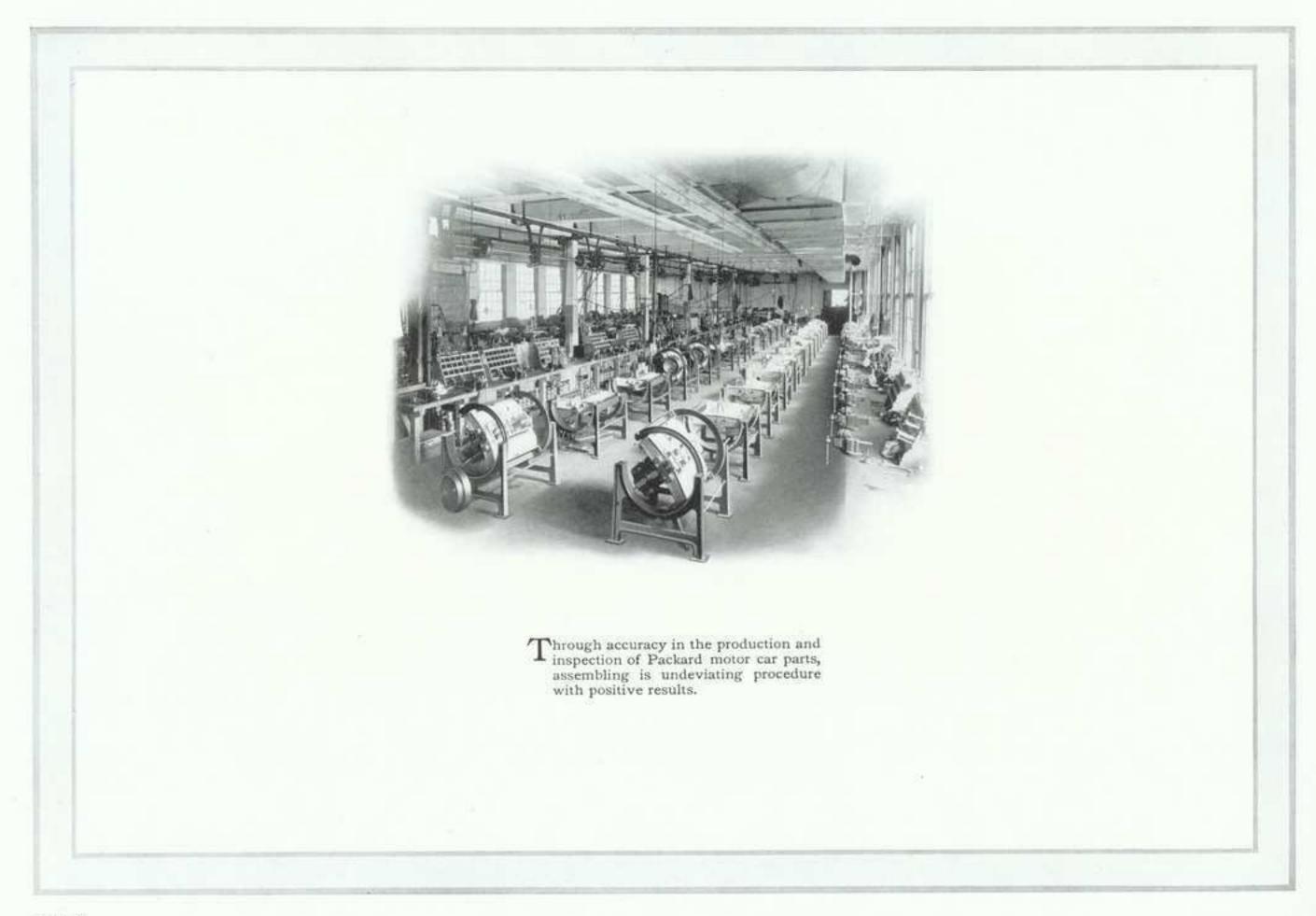


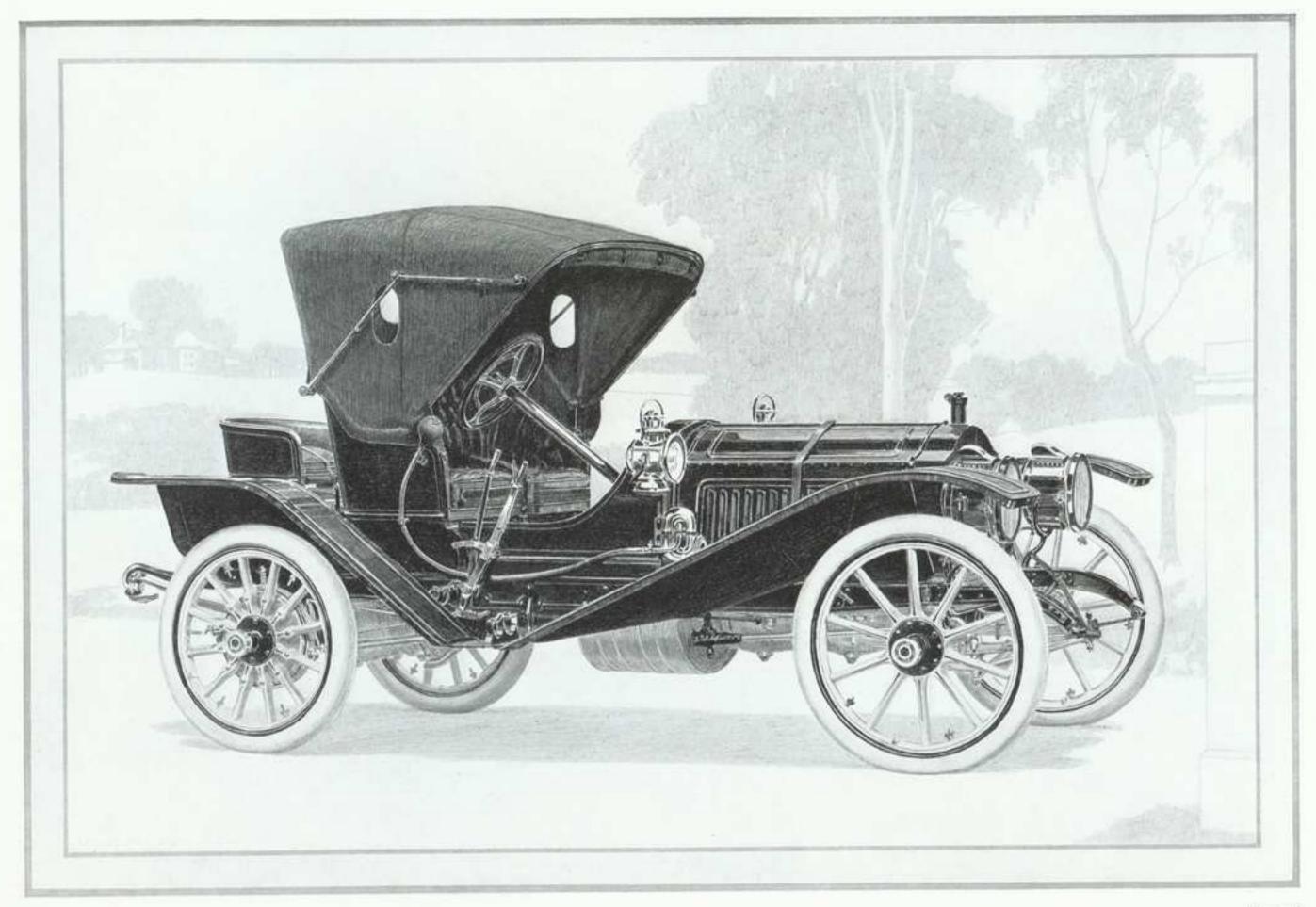
Page 16

PACKARD "THIRTY" STANDARD CHASSIS, IN PRIMING COAT AND WITH STANDARD EQUIPMENT

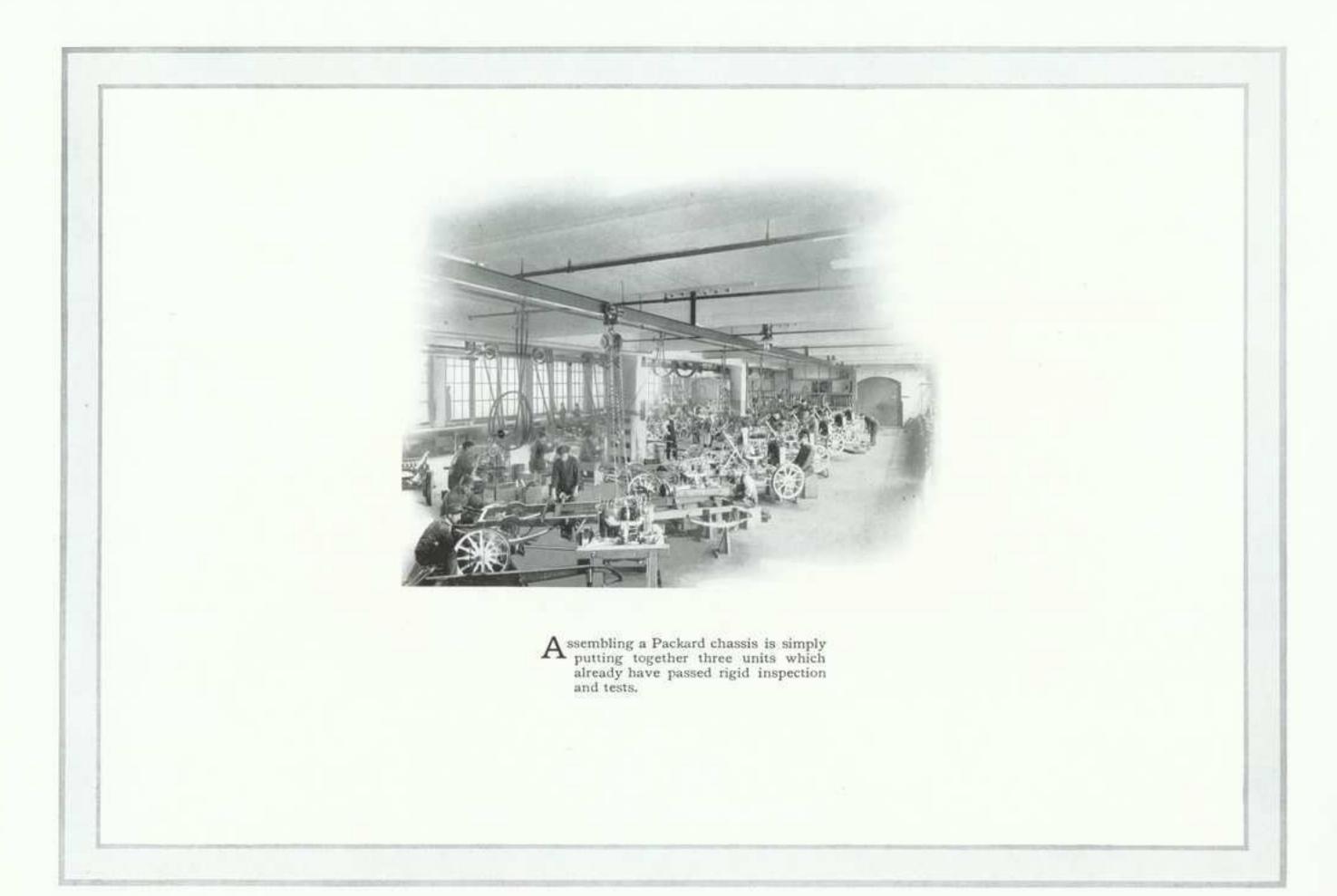


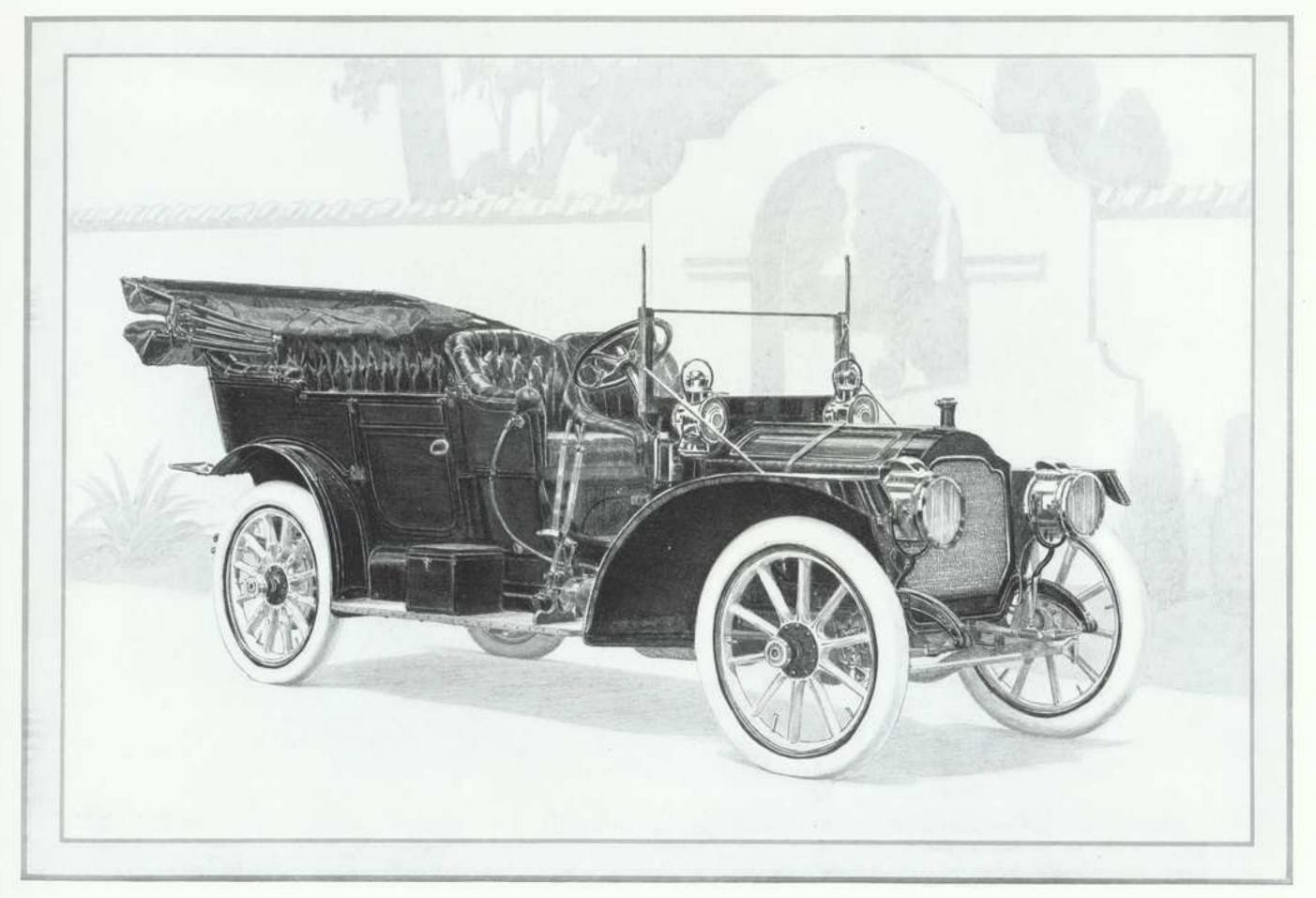
TO THIS MAY BE FITTED A TOURING, CLOSE-COUPLED, LIMOUSINE, LANDAULET OR SPECIAL BODY





PACKARD "THIRTY" RUNABOUT, WITH VICTORIA TOP

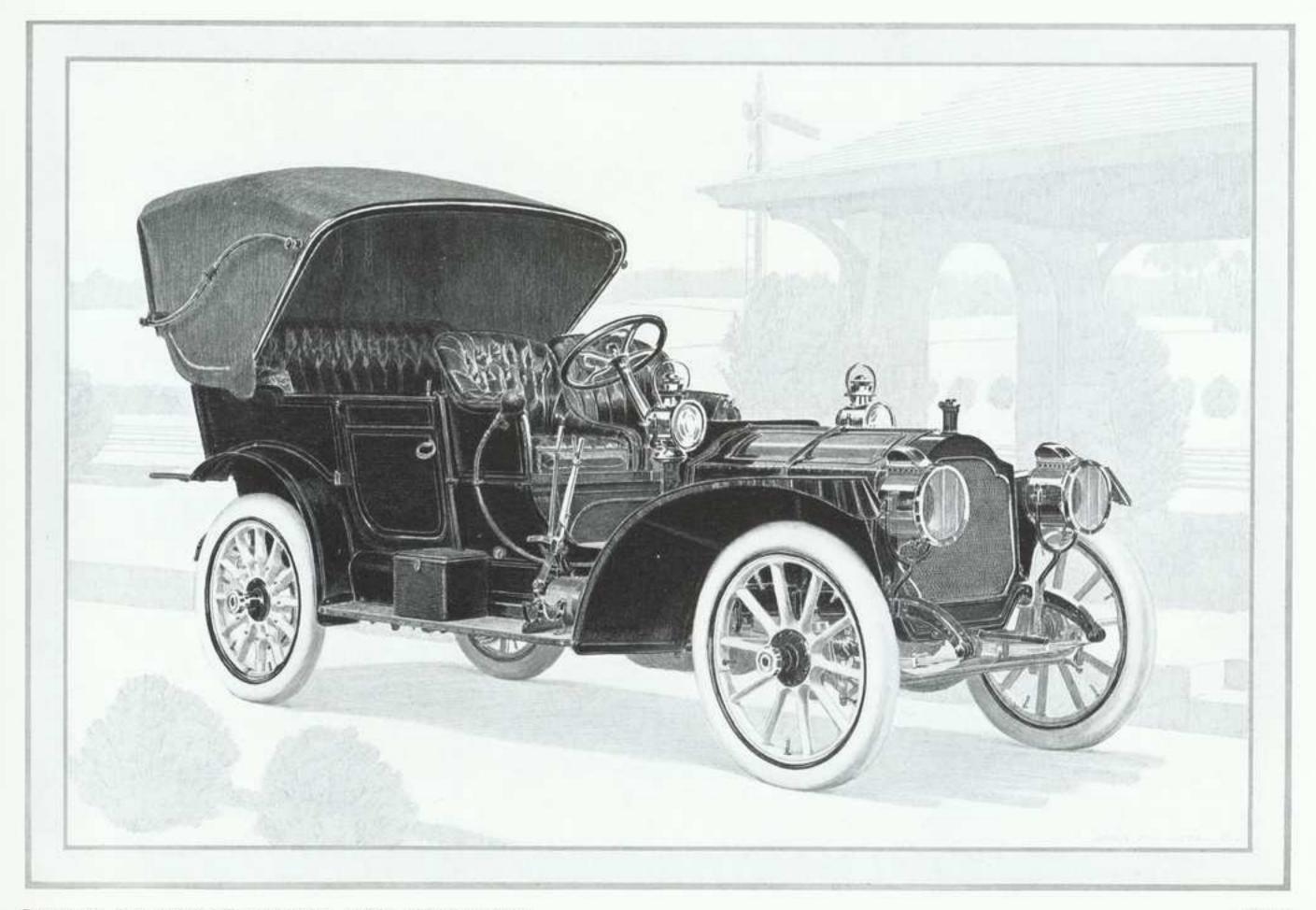




PACKARD "THIRTY" TOURING CAR, WITH EXTENSION CAPE CART TOP AND PACKARD ADJUSTABLE WIND SHIELD FOLDED



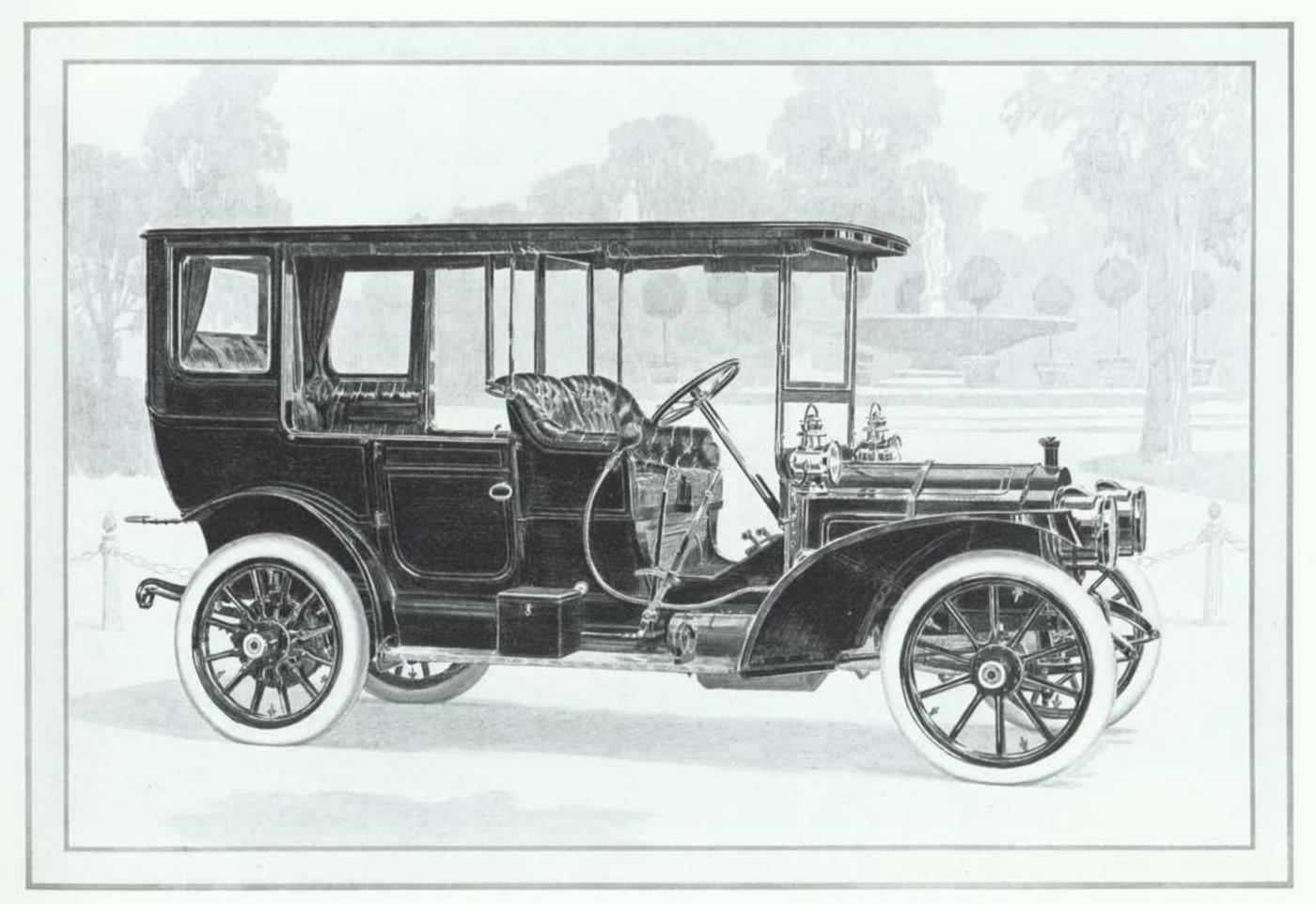
All finished chassis are given thorough road tests by a corps of carefully trained, expert testers.



PACKARD "THIRTY" TOURING CAR, WITH VICTORIA TOP

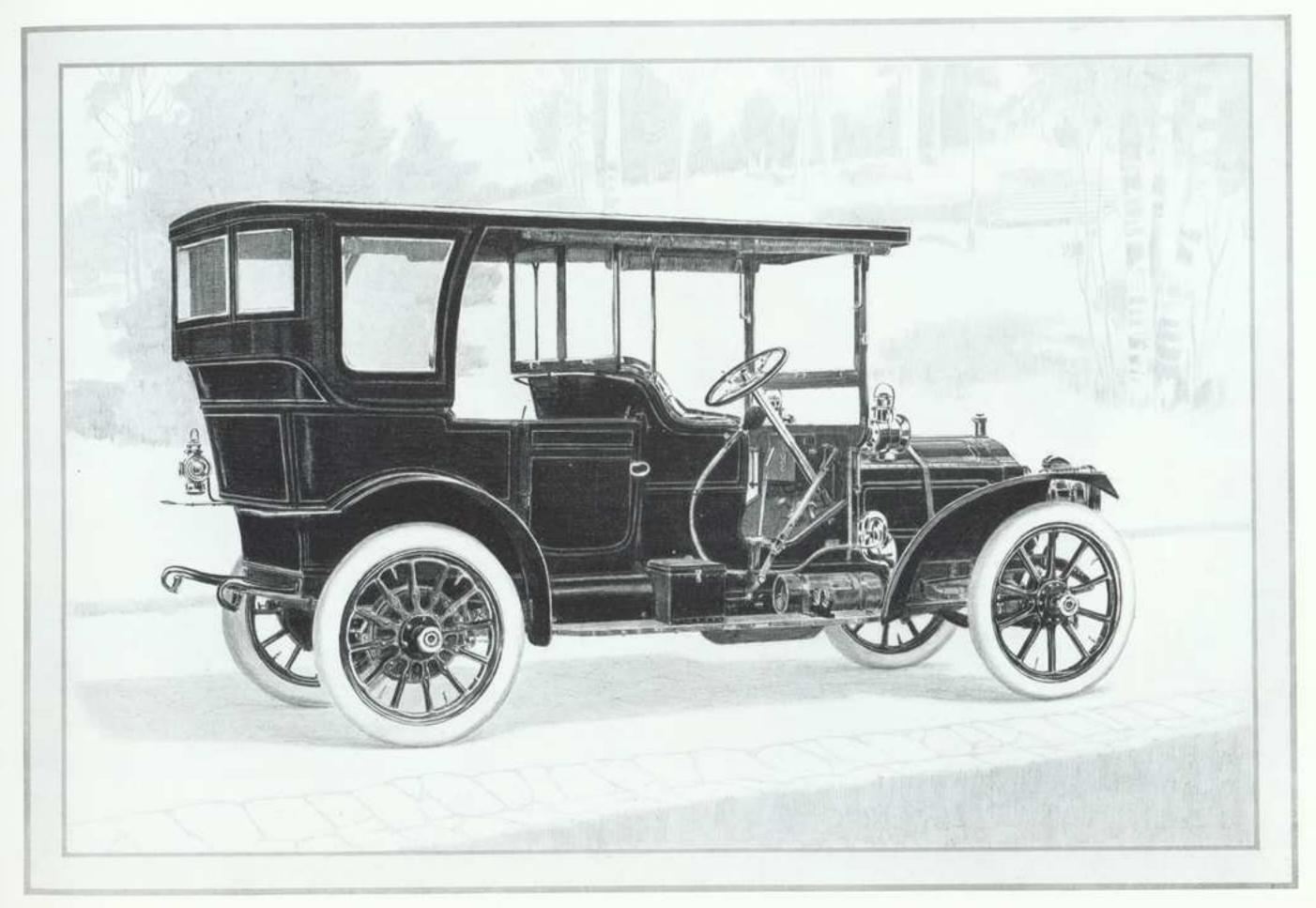


The Packard body building shops are among the largest in the world and exemplify the best practice of the art.

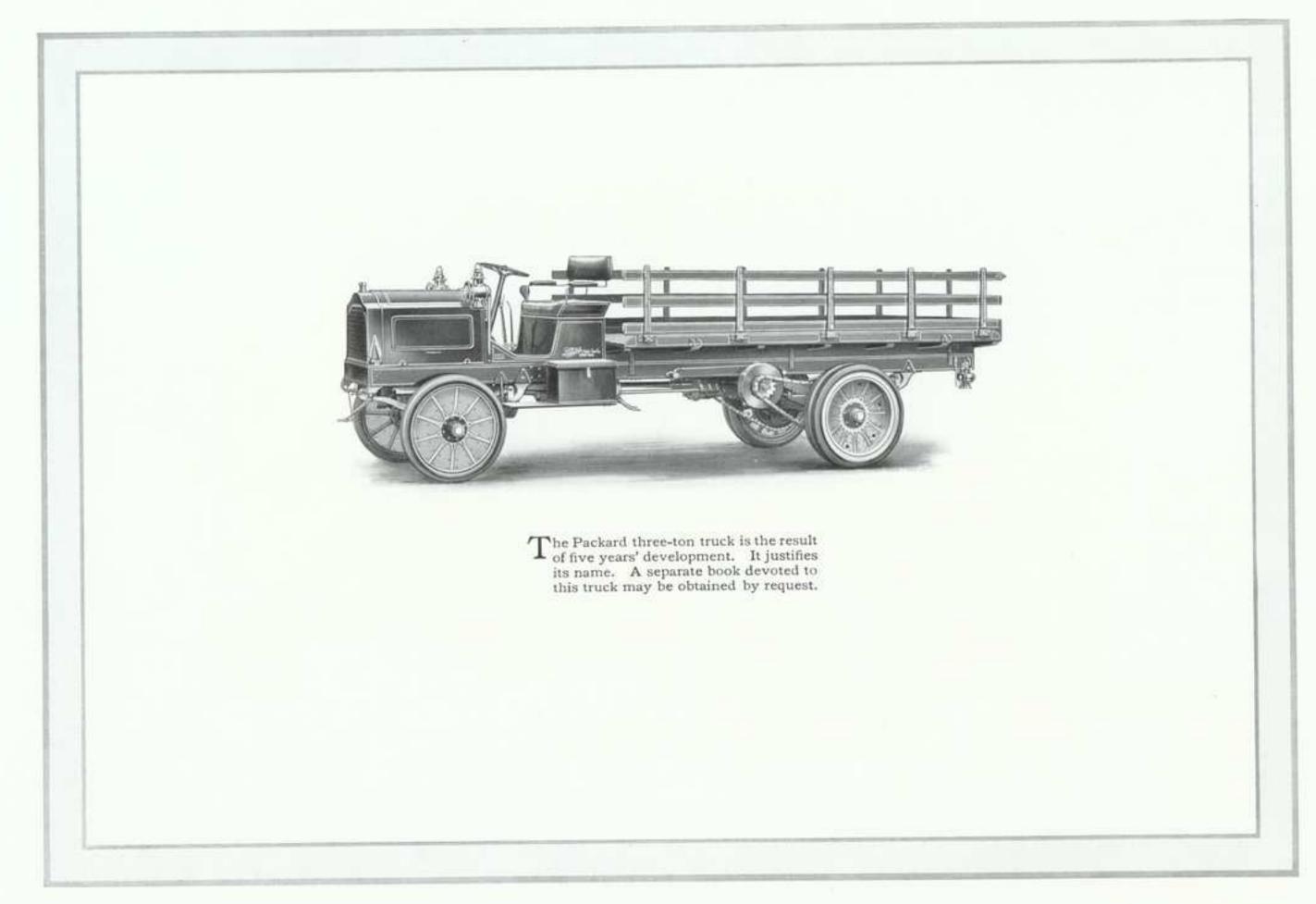


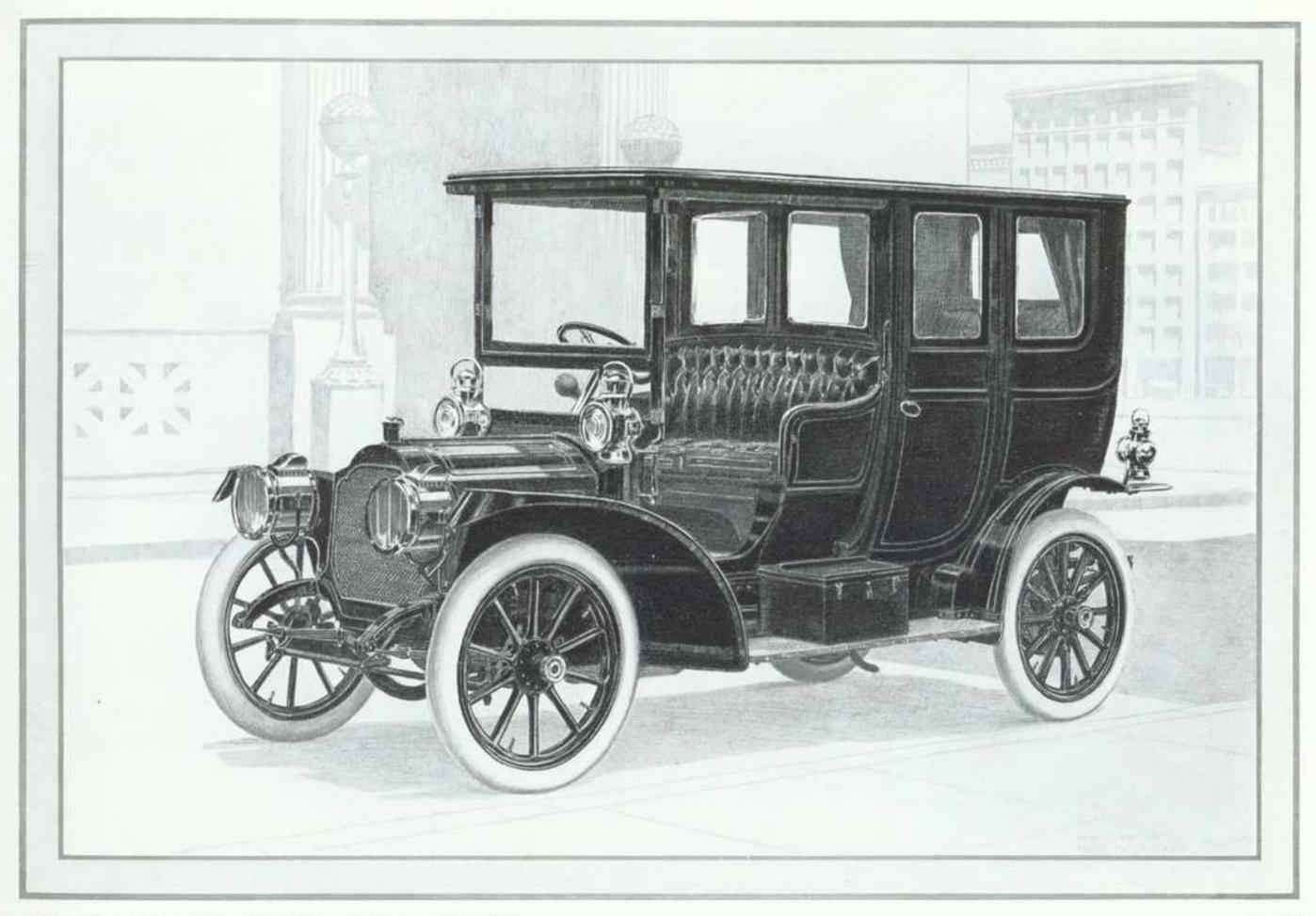
PACKARD "THIRTY" WITH DEMI-LIMOUSINE BODY, IN STANDARD FINISH AND EQUIPMENT





PACKARD "THIRTY" TOURING CAR, WITH FULL GLASS BACK CANOPY TOP, IN STANDARD FINISH AND EQUIPMENT





PACKARD "EIGHTEEN" LIMOUSINE — A NEW TOWN CAR
A special book devoted to this car may be obtained by request

DESCRIBING PACKARD "THIRTY" 1909

MOTOR Four-cylinder, vertical, water cooled; 5-inch bore by 5½-inch stroke; 30 horsepower by European rating.

CYLINDERS Cast in pairs, with water jackets and valve chambers integral.

Castings for cylinders, exhaust manifolds, pistons, and piston ring blanks made in France from especially adapted gray iron. Pistons ground and fitted with four ground rings. Cylinders, pistons, and rings lapped together with polishing agent to obtain perfect fit.

CRANK SHAFT Noted for extreme accuracy due to special manufacturing and inspection methods. All bearing surfaces ground. Runs on three large bearings, bushed with Parsons white brass. Connecting rods are drop forgings. Crank-pin bearings bushed with Parsons white brass and piston pins with Packard special bronze.

VALVES Inlet and exhaust valves on opposite sides of cylinders; all mechanically operated and interchangeable. Cam shafts enclosed within motor crank case; fully protected from dirt and certain of lubrication. New system of cam shaft drive gears, insuring long life and silent running. All cam shaft, as well as magneto and water pump gears, contained in separate, but integrally-cast oil-tight extension of crank case.

CRANK CASE Cast of special aluminum alloy in three horizontal sections.

Uppermost section forms engine base and is supported directly on side members of main frame of car. On each side between the transverse supporting arms is a horizontal, integrally-cast web entirely enclosing space between motor and frame, thus affording complete protection to motor, magneto, and other parts. Crank shaft bearings held between uppermost and middle sections. Extreme rigidity of main bearings obtained by massive webs. Bottom section is an oil well, easily removable for inspection or adjustment of connecting rods, cam shafts, etc., without disturbing crank shaft bearings. The crank case is divided into front and rear compartments by a central partition which supports middle crank shaft bearing.

CARBURETOR Special Packard design and construction; float-feed, aspirating nozzle type, with automatic auxiliary air inlet. The cylindrical and vertical mixing chamber has aspirating nozzle in lower portion and butterfly throttle above, to control quantity but not quality of mixture. Auxiliary air inlet is a poppet valve under control of adjustable coil spring and automatically governs intake of air to keep mixture at correct proportion for all engine speeds. Spring tension to suit different atmospheric

conditions is regulated by small lever on dashboard. Carburetor is kept at uniform temperature by warm water circulating through a jacket surrounding mixing chamber. For starting in cold weather there is provided a primary air intake shut-off.

MOTOR COOLING Water circulation positive by means of gear-driven centrifugal pump. A special feature of this pump is its hydraulic pressure lubricated thrust bearing. Radiator is of cellular type, combined with tank. Forced draft to increase cooling efficiency obtained by belt-driven ball-bearing fan adjustably mounted on the front of motor base.

IGNITION Jump spark; current obtained from imported Eisemann lowtension magneto, mounted on left side of motor bed and direct
gear-driven by enclosed gears. Fulmen imported storage battery, for starting
motor from seat, is always in reserve. Transformer coil for magneto current
and vibrator coil for battery current arranged as unit in box on dashboard,
with single hand lock-switch between. Commutator for battery primary current on vertical shaft at rear of motor and driven from cam shaft by enclosed
bevel gears. The distributor, high-tension wires, and spark plugs are common
to both magneto and battery systems. Universally jointed knife switches.

LUBRICATION By splash, from crank case to cylinders and all motor bearings. Oil pumped separately to front and rear compartments of crank case, in each of which is maintained an independent level of oil. Double plunger oil pump, with adjustable strokes, accessibly located at left of motor and driven by worm on exhaust valve cam shaft. Oil is pumped from a vertical copper reservoir close to and between the pairs of cylinders, so that oil will be warm and kept in fluid, easily-flowing condition even in coldest weather. Two drip sight feeds on dashboard. Crank case drain cocks have anti-clogging devices.

MOTOR CONTROL Motor speed regulated by an effective and easily controlled hydraulic governor incorporated in water-circulating system and acting directly on butterfly throttle. A pedal cuts the governor out of action for instantaneous acceleration and high speed-running. The throttle also is under control of hand lever on steering wheel. Another lever on steering wheel advances and retards spark.

CLUTCH Packard type internal-expanding clutch, which insures gradual engagement. Expanding ring within fly wheel rim actuated by adjustable screw-and-nut device.

TRANSMISSION Propeller shaft, connecting clutch with transmission gear, has effectively encased universal joints at each end. The speed-changing set, bevel-gear final drive and differential gear are contained within a rigid aluminum housing, forming a rear axle unit. The housing is internally ribbed and provided with inspection holes. The differential gear unit is supported by its own bearings, so that the live rear axle may be withdrawn without disturbing the gears. Three forward speeds and reverse are obtained by sliding gears, third speed forward being direct drive. Gear shifting is easily and progressively accomplished, as the actuating slide rod is annularly grooved to correspond with spring-retained spacing dogs, which determine correct positions of gear engagement. The single speed-change lever gives the reverse by a lateral movement. All gears in the transmission, final drive, and differential, as well as the rear axle, run on imported, annular ball bearings.

BRAKES Four brakes, all acting on rear wheel brake drums. Externalcontracting brakes operated by a pedal for regular use; internalexpanding brakes operated by emergency hand lever. A drum disc entirely encloses and protects each internal brake. This system obviates the use of braking power on the transmission.

STEERING Large hand wheel, with worm-and-sector gear. Worm and sector forged integrally with respective shafts. Large, rigid steering column. Steering spindles and jaw type yokes are drop forgings. Steering connecting rod, between hand wheel gear and steering knuckles, is placed above front axle, to minimize jar on the hands. Steering knuckles have imported ball thrust bearings. All steering connections have grease cups and steering rod universal joints are encased.

RUNNING GEAR FRAME Channel section, pressed steel; arched above rear axle to provide increased spring action without raising body. Top and bottom flanges of side bars have integral gussets for reception of cross members. All rivet and bolt holes are drilled in rigid jigs.

SPRINGS Four wide, semi-elliptical; front, 40 inches long; rear, 56 inches long.

AXLES Front axle, steel tubing of large diameter and heavy gauge. Stationary sleeves of rear axle are steel tubes pressed into and riveted within flanged collars bolted to differential housing.

WHEEL BASE 1231/2 inches; tread, 561/2 inches.

TIRES Front, 36 by 4 inches, rear, 36 by 41/2 inches.

TANKS Copper gasoline tank under front seat; reserve gasoline supply contained in main tank and available by means of convenient gasoline valve. Total capacity, 21 gallons. Capacity of water-circulating system, 5 gallons. Capacity of copper oil tank, 1 gallon.

BODY Capacity of standard touring body seven persons, tonneau having two folding seats. Body made of sheet aluminum panels over wood frame work. Seats upholstered in black hand-buffed leather, over curled hair, and with spiral spring support throughout. Tonneau provided with brass foot rail, coat rail, and pockets for goggles, maps, etc.

BONNET Aluminum, opening from either side and readily removable; secured by hand latches and leather strap.

FENDERS Aluminum. Front fenders easily detachable and provided with integral aprons, preventing mud and water from splashing between fenders and car. Metal apron between frame and running board on both sides.

STANDARD FINISH Entire body, bonnet, and frame, Packard blue, with black moldings and fine cream-yellow striping. Wheels, axles, springs, and other running gear parts below frame, cream yellow, striped with Packard blue.

STANDARD EQUIPMENT Two Packard Special gas head lamps; gas tank; two side oil lamps; one rear oil lamp; horn, tube, and bulb; complete set of tools; front and rear storm aprons; irons for extension cape cart top; tire repair outfit, including jack and pump; irons for carrying two extra tires.

PRICE In standard finish and equipment, \$4,200.

RUNABOUT Wheel base 108 inches, instead of 123½ inches. Motor and driver's seat farther back on frame than in touring car, to properly distribute weight. Steering post has greater rake. Divided front seat lower. Gasoline tank is on rear of frame and has capacity of 27 gallons; gasoline feed by simple automatic pressure system. Rumble seat above gasoline tank. Standard tire equipment: front, 36 by 3½ inches; rear, 36 by 4½ inches.

OTHER BODIES The close-coupled body and the limousine and landaulet bodies are fitted to the standard chassis.









