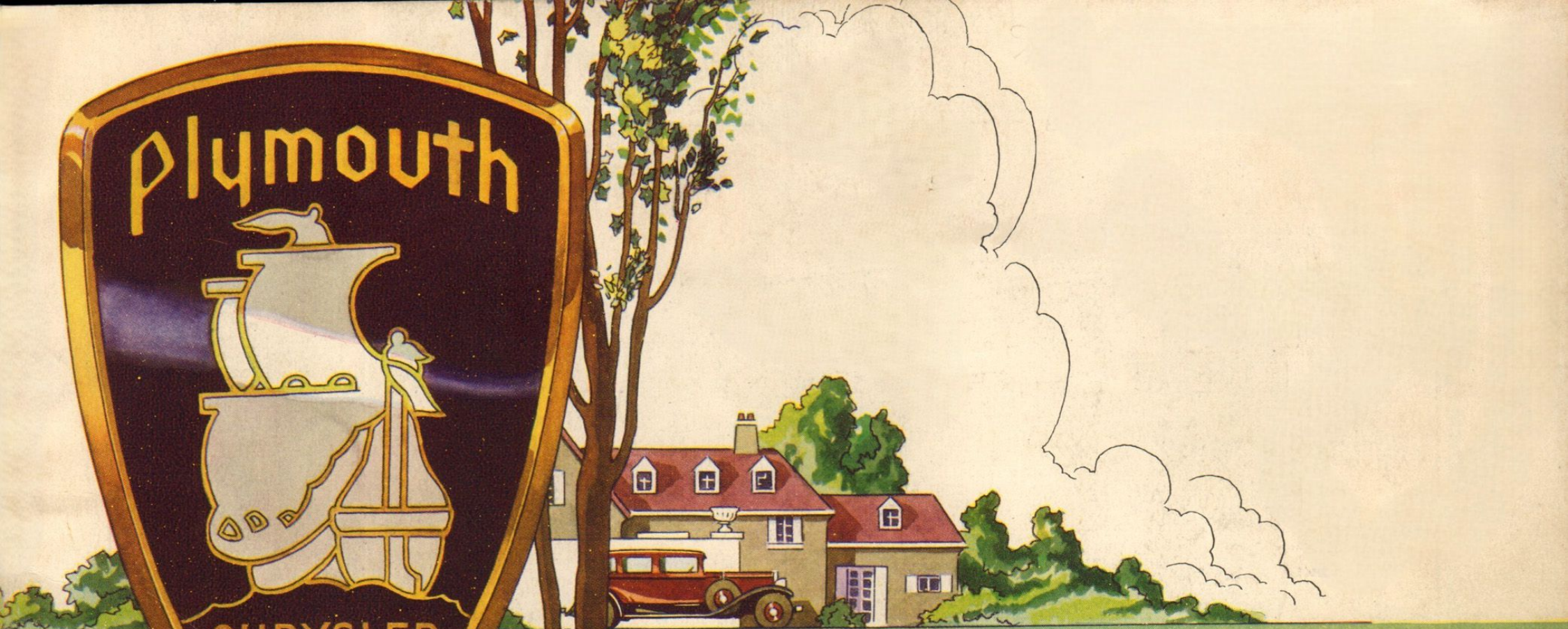
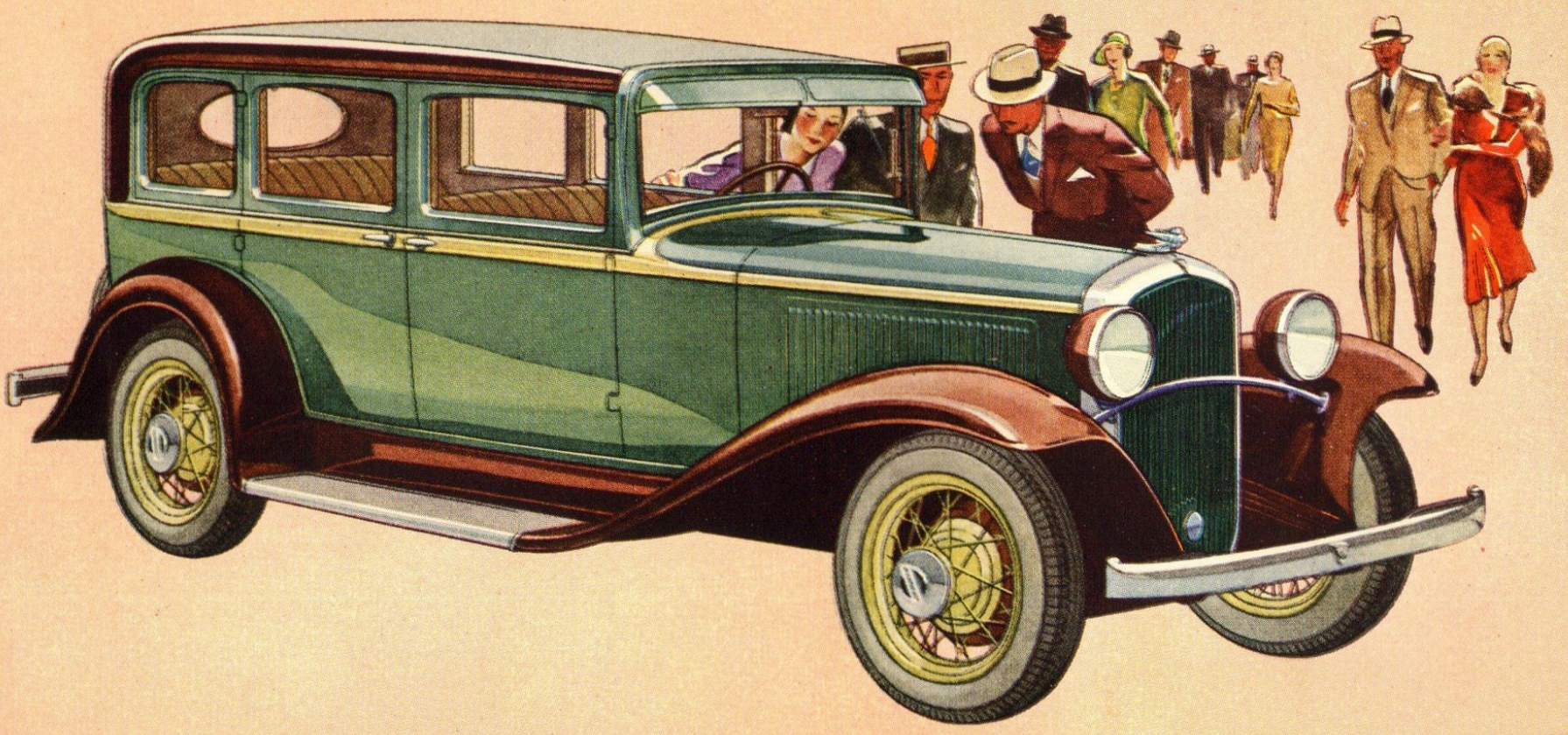


PLYMOUTH

CHRYSLER MOTORS PRODUCT

with FLOATING POWER

and FREE WHEELING



The New Plymouth Sedan

The Smoothness of an Eight . . . . the Economy of a Four

THE SMOOTHNESS OF AN EIGHT—ambitious phrase and yet, a true description of the most amazing thing about this amazing new Plymouth.

"The Smoothness of an Eight"—engineers have now reached the heart of the smoothness problem in four-cylinder engine design. The last vestige of difficulty has been wiped away. To the simplicity and economy of Plymouth's great four-cylinder engine has now been added the *Smoothness of an Eight.*

Had this remarkable Plymouth discovery been made some years ago the whole trend of automobile design might have been different—so great are the benefits. It restores to high favor the four-cylinder engine. It enables the four to compete in smoothness as it already does in speed, power and pick-up. It exalts the traditional quality of four-cylinder economy.

Properly this great achievement is brought to you in a Plymouth car that has been quite generally redesigned. A new outward appearance of lowness and comfort, of speed and safety, of power. New operating advantages.

Examine this new Plymouth carefully. As you do so remember, Plymouth is the largest car in the lowest price field—and product of Chrysler Motors' *fine building!*

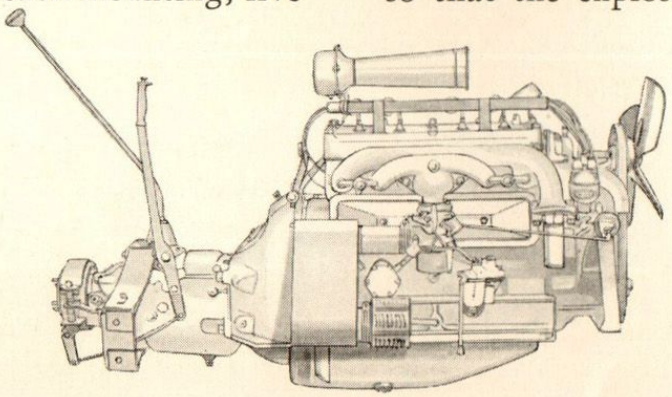
FLOATING POWER

An amazing Plymouth development

THE new engineering principle which produces this remarkable smoothness in the Plymouth has been called Floating Power. The engine literally does float in the chassis with the freedom and mobile stability of a dock or raft or pontoon bridge. It floats on rubber supports which function, however, in a way that rubber engine mountings were never before employed.

Instead of trying to dampen out engine impulses in the usual manner, the Floating Power principle allows the engine to rock on its natural axis. The Plymouth engine mountings—and there are only two—are so placed that the engine, if it were free to rotate, would do so in perfect balance. At each mounting, live rubber, nearly an inch thick, allows the engine to rock on this natural axis, thus dissipating the impulses of its explosions.

Without Floating Power, engines are mounted at three or four points to the car frame, any tendency to move being resisted by these mountings. And, since with every explosion the engine does tend to move, this constant resistance at the points of suspension on the car frame sets up the vibration which is so annoying in most cars. Rubber inserted at these conventional mounting points, serves as insulation but does not eliminate vibration.



In addition to Floating Power, Plymouth has developed an amazingly smooth engine through the use of a heavy (44-pound) crankshaft, statically and dynamically balanced, a balanced flywheel and extraordinarily large main bearings. The light alloy pistons and connecting rods are matched in sets to assure even loading of the crankshaft. The manifolding is balanced so that the explosion of each cylinder exerts the same force on the crankshaft.

These precautions, this fine designing and careful building, produce a balanced engine, and consequently insure longer engine life.

Balance also contributes greatly to the brilliant speed, the sensational getaway, the amazing pick-up of the new Plymouth. Stop-watch speeds of 65 to 70 miles per

hour. From a standing start to 40 miles per hour in 9.7 seconds!

Plymouth performance is more thrilling than ever before. The same size engine now develops 56 brake horsepower! And, since the engine is not increased in size, this greater power is secured without sacrifice of the famous Plymouth economy.

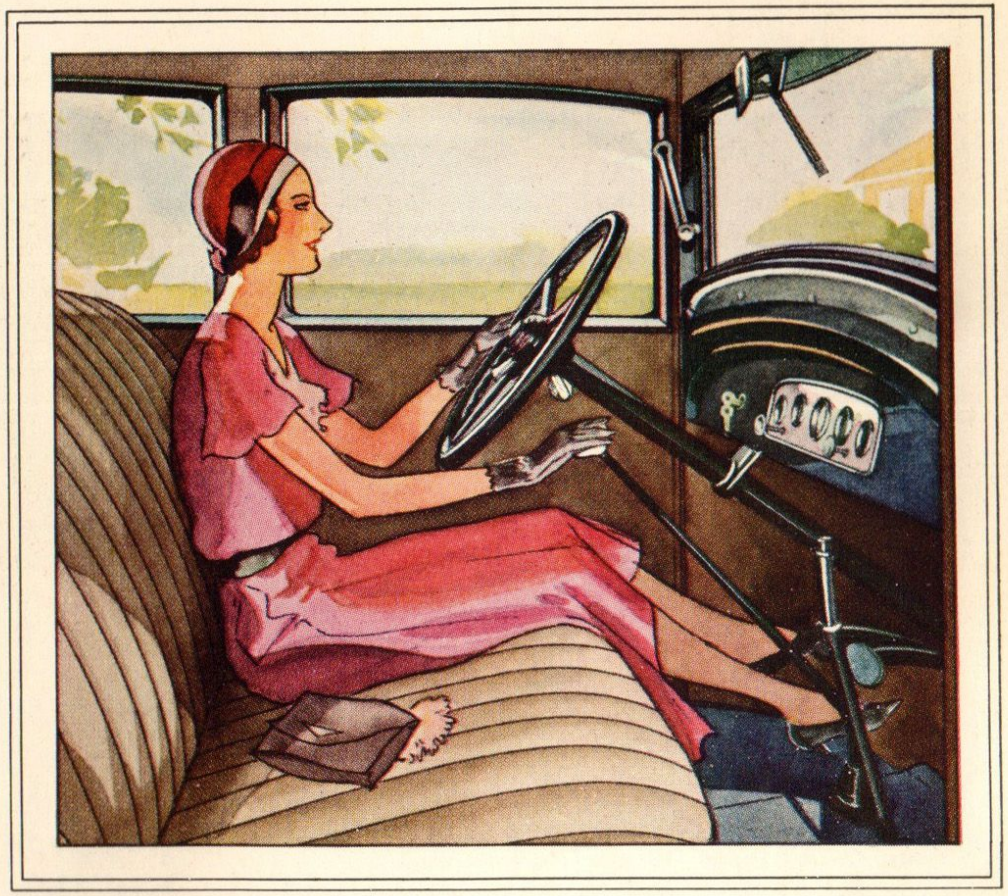
Plymouth economy is the logical outcome of balance and precision. A *fuel pump* affords an even supply of gasoline; the famous *high-turbulence*, high-compression Silver Dome head breaks up the fuel into a fine, even mixture of air and gas, giving the utmost power. The *four* rings on the *aluminum alloy* pistons maintain compression efficiency at a high point.

FREE WHEELING

With the delightful smoothness of Floating Power, the new Plymouth combines Free Wheeling as standard equipment! This sensational feature gives you automatic coasting *when you want it;* enables you to shift to any forward speed without *using your clutch*. By means of a control button on the dash you cut in Plymouth Free Wheeling or drive without it. A new driving thrill is in store for you in Plymouth Free Wheeling.

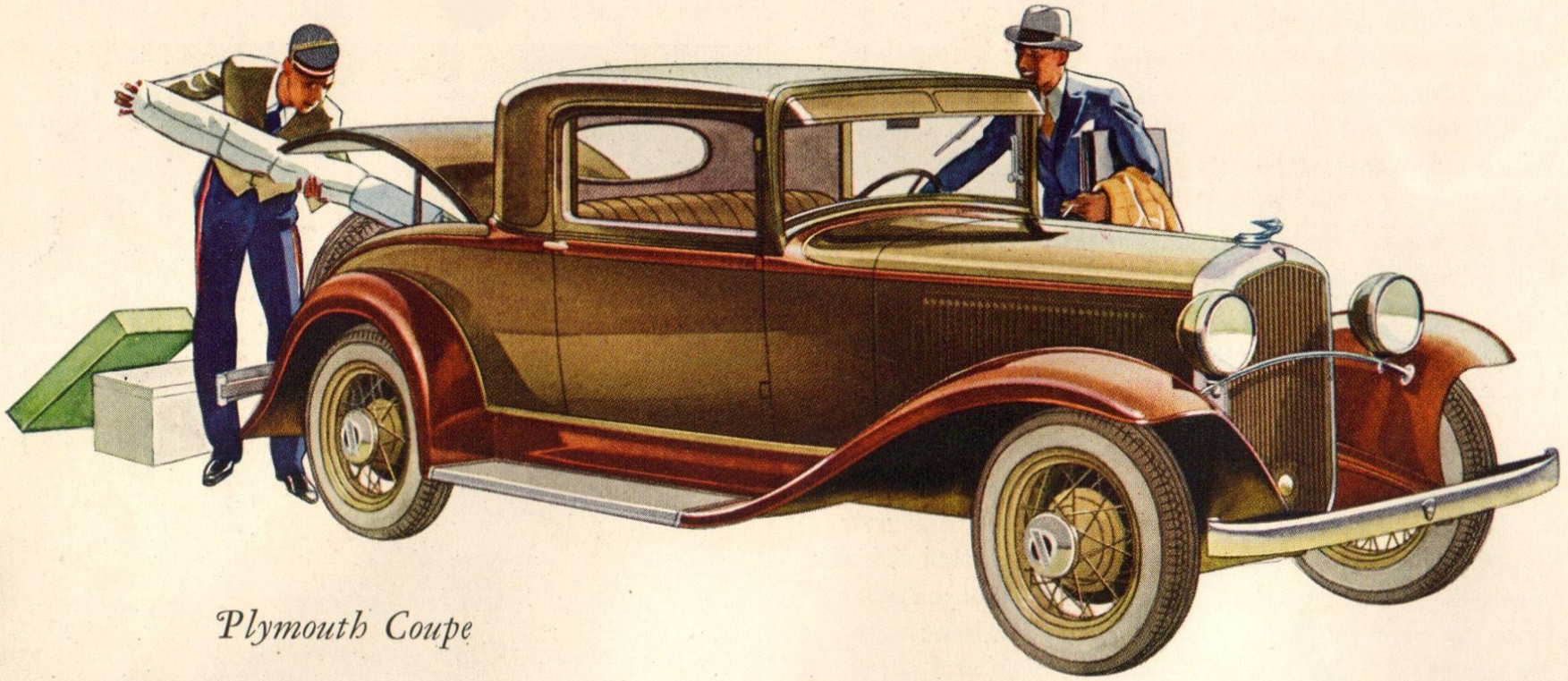
EASY-SHIFT TRANSMISSION

In the new Plymouth, Free Wheeling is used with a remarkably efficient Easy-Shift transmission that banishes all clashing of gears, all grinding, all noise or trouble in the gear-shifting. With Free Wheeling locked out, this Easy-Shift transmission enables you to shift noiselessly from second to high or from high to second at 35 or 45 miles an hour.



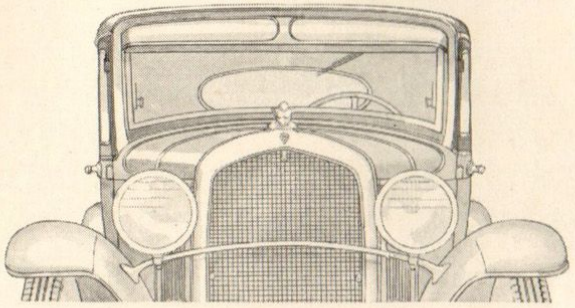
You can drive more smoothly and quietly than ever before. In emergencies requiring the greater pick-up of second you can quickly change from high to that gear and dash forward with power to spare. For the greater braking action of your engine in second, you can shift without hesitation or loss of time.

Here are operating conveniences and comfort features previously to be found only in cars of far higher price!



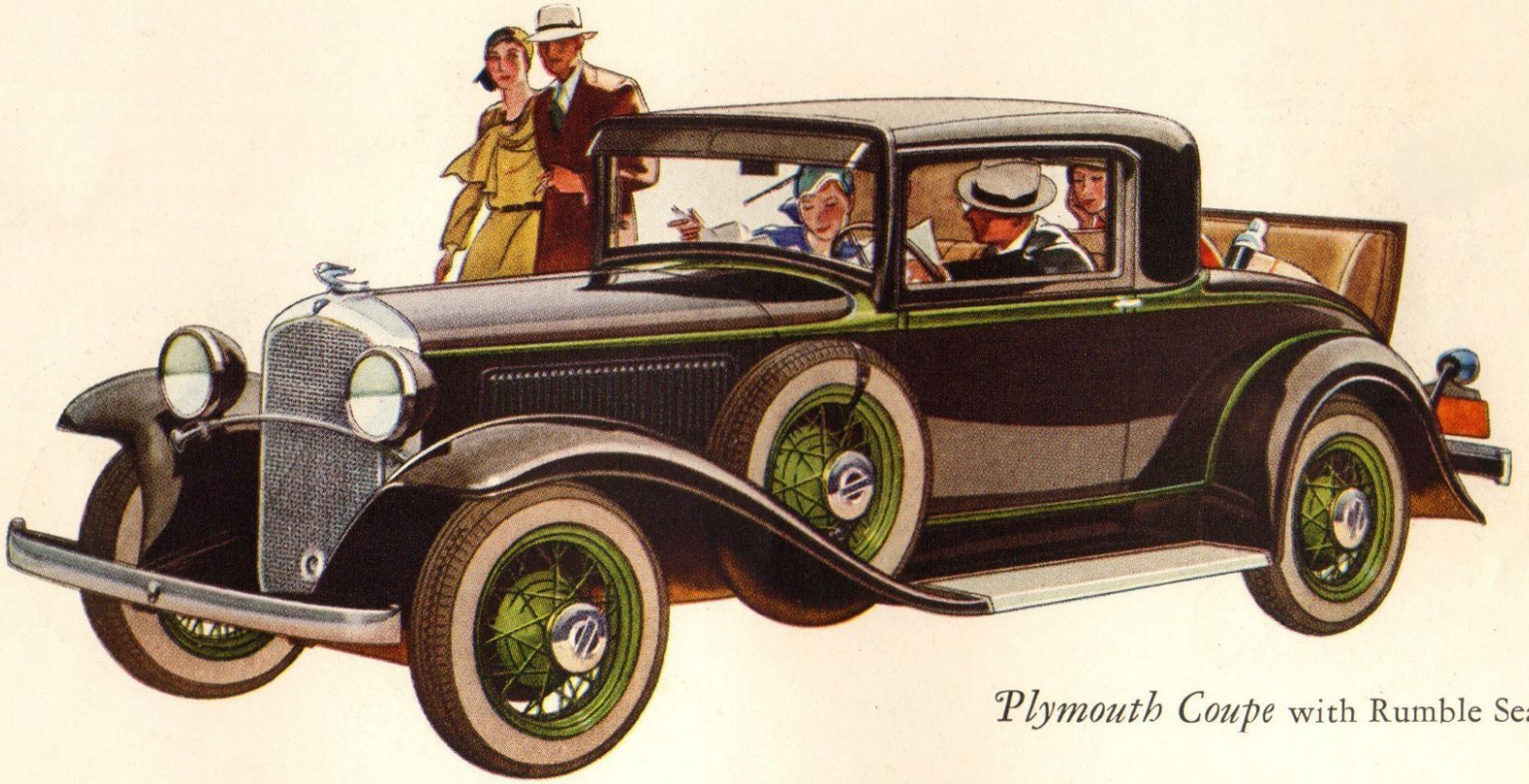
Plymouth Coupe

BEAUTY, though rare, need not be expensive. Plymouth now proves this . . . Rightly has this new Plymouth been termed the most beautiful low-priced car in the world. Its beauty of line was developed by some of the world's foremost designers working without restraint, in regard either to type of material or any tradition of what always "had been."



Look at this car. Observe the perfect harmony of line, the perfection of detail, the brilliant style. Here is grace and elegance which could not be bettered for many times the price!

Here is a beauty design whose very basis is new—a chassis which is lower than the usual chassis producing an unusually long, low, beautiful car.



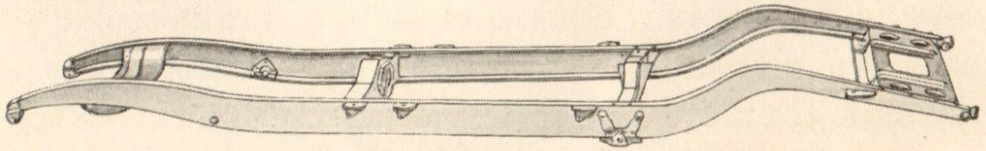
Plymouth Coupe with Rumble Seat

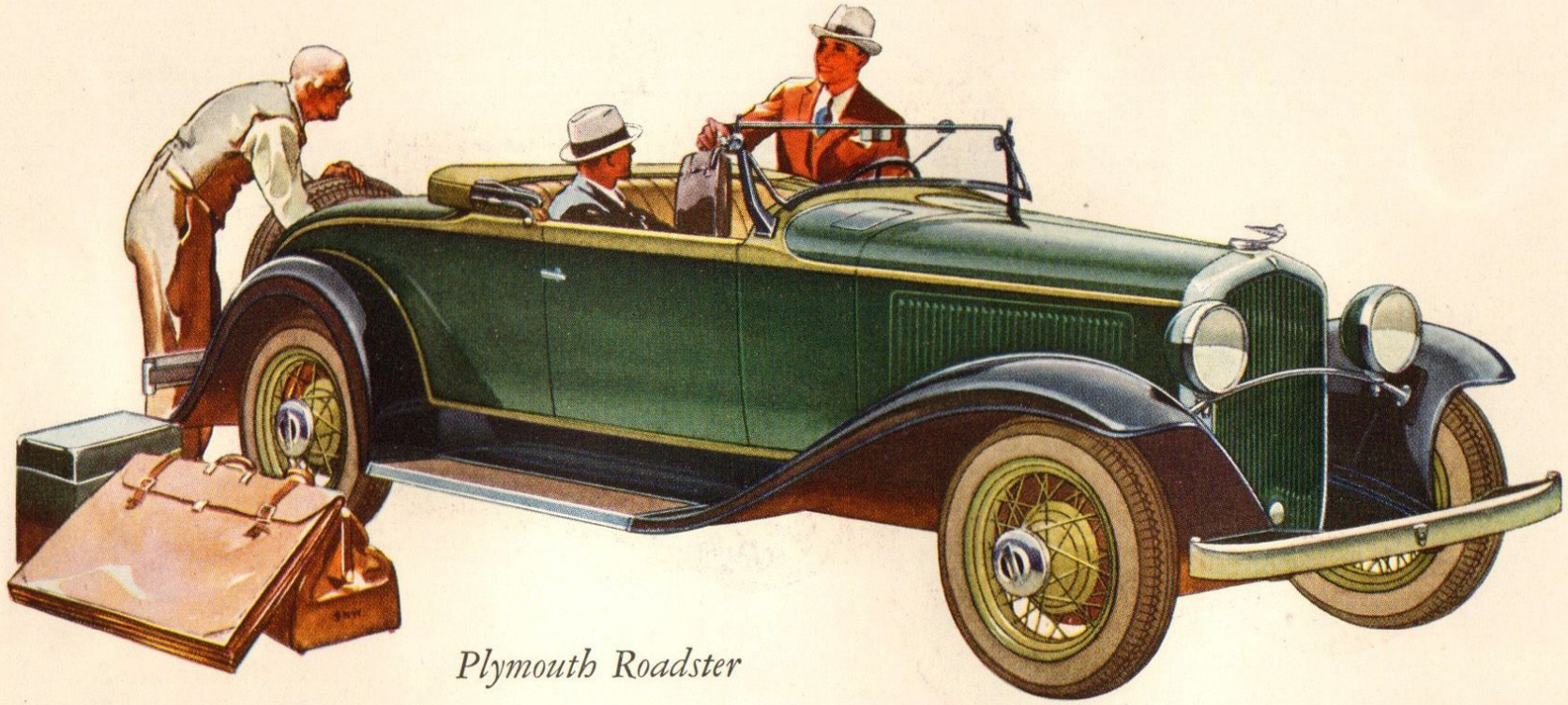
THAT look of speed, power, and also safety, of the new Plymouth, was achieved by the use of a double-drop frame.

This new frame has a "kick-up" at both ends, over the front axle as well as over the rear axle. It brings the car's center of gravity lower—much lower—so that, although Plymouth has the greatest head-room of all low-priced cars, it is much lower, much more comfortable, far safer.

Fast driving on winding roads is thus made less dangerous and all driving more comfortable than in other low-priced cars.

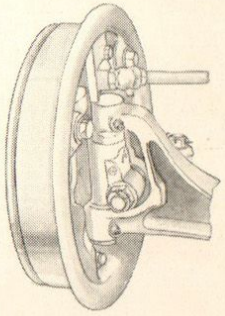
Plymouth's double-drop frame represents a tremendous advance in low-priced cars.



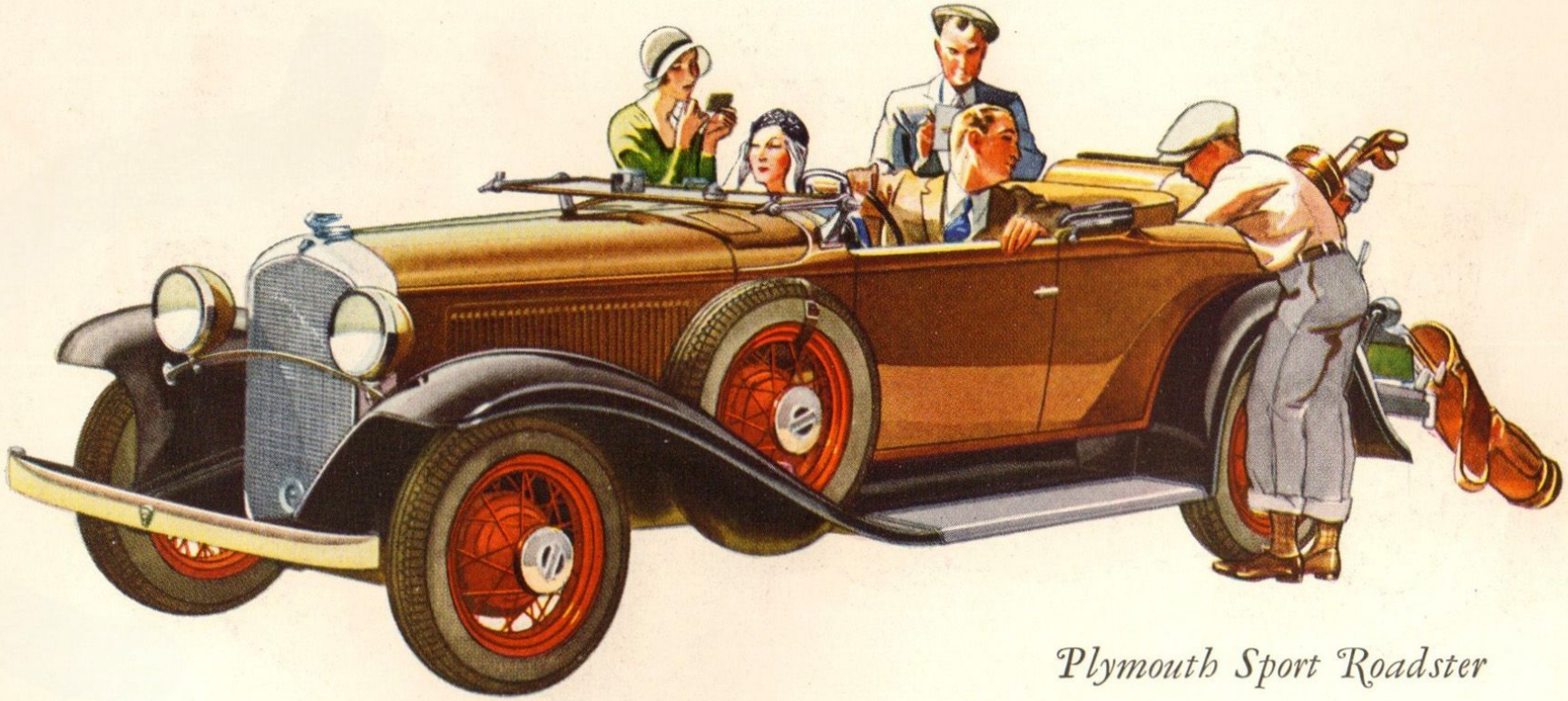


Plymouth Roadster

HYDRAULIC BRAKES—exactly the same type brakes as are used on many of the industry's finest cars—are used on the new Plymouth. There are no finer, safer, surer brakes to be had. Plymouth hydraulic brakes are always equalized because the pressure on your brake pedal is transmitted to the four wheels through the fluid in the brake system, and it is a fundamental law of physics that pressure exerted on a column of fluid is transmitted equally in all directions. Thus brake action is uniform and wear on brake facings and tires is likewise uniform. This is important from the standpoint of economy as well as safety.



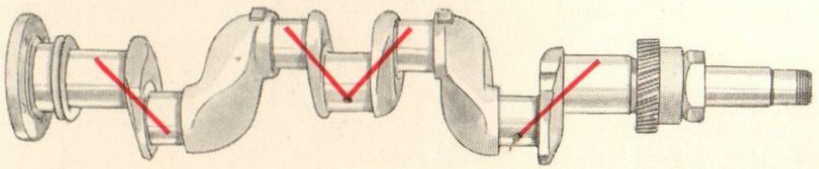
And as these brakes are of the internal expanding type they are weatherproof—facings are shielded from rain, from freezing, from dust and grit—long lived, sure, quick-acting.



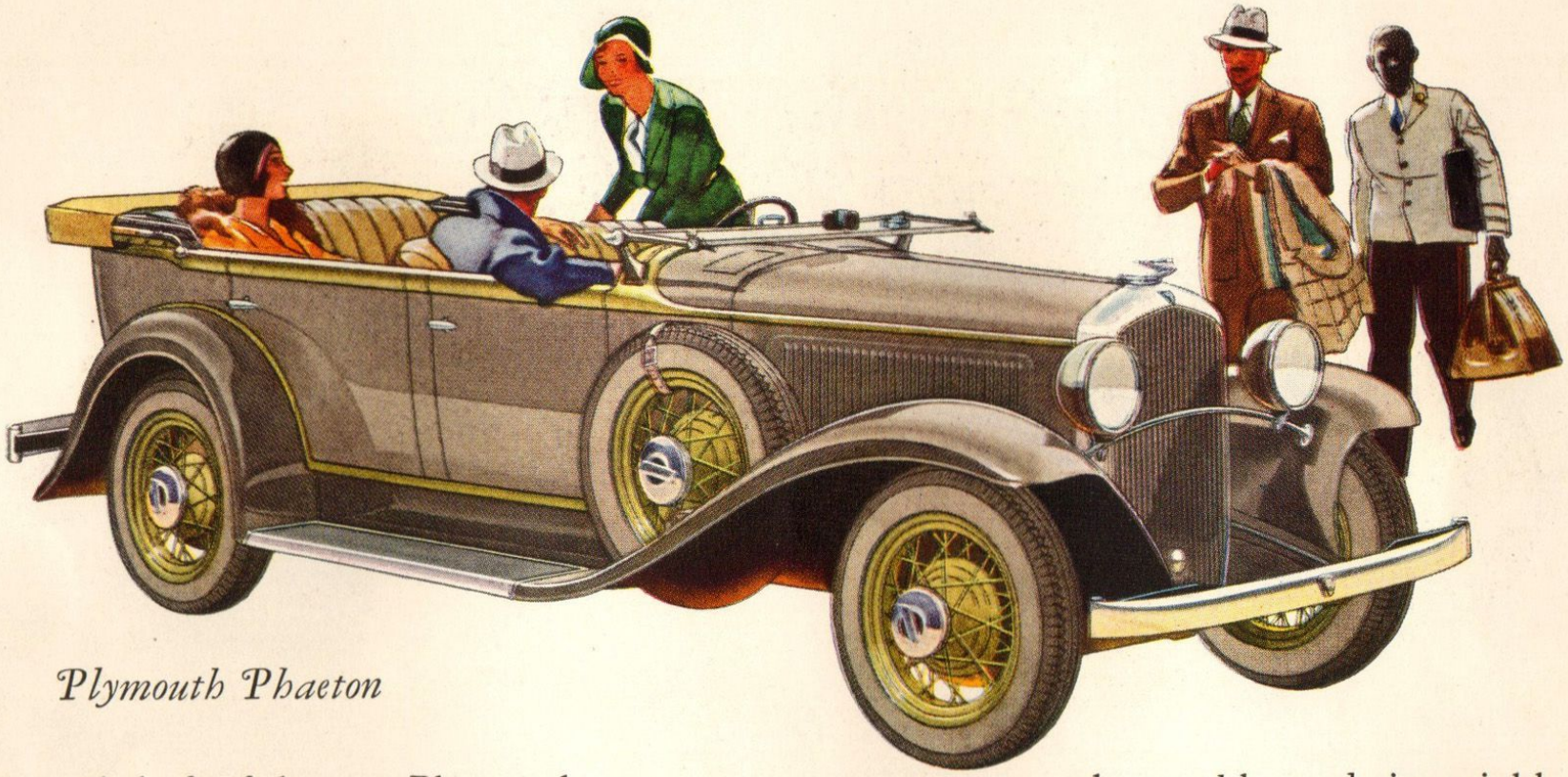
Plymouth Sport Roadster

MILE after mile of sustained high speed is possible with the new Plymouth because it has the fine car feature known as full-pressure engine lubrication.

The oil is forced, under 35 pounds of pressure, to all engine bearings. This is positive lubrication, a tremendous advance over the splash type common in low-priced cars.



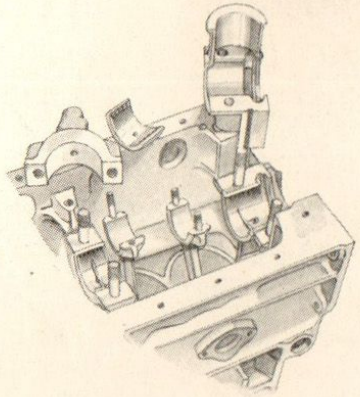
The oil is circulated by a pump *outside the engine*, which cools it and sends it through passages *drilled* in the cylinder block to main bearings and camshaft bearings, through the *drilled* crankshaft to connecting rod bearings, through the connecting rods to cylinder walls and pistons. This is positive lubrication, for *long life!*

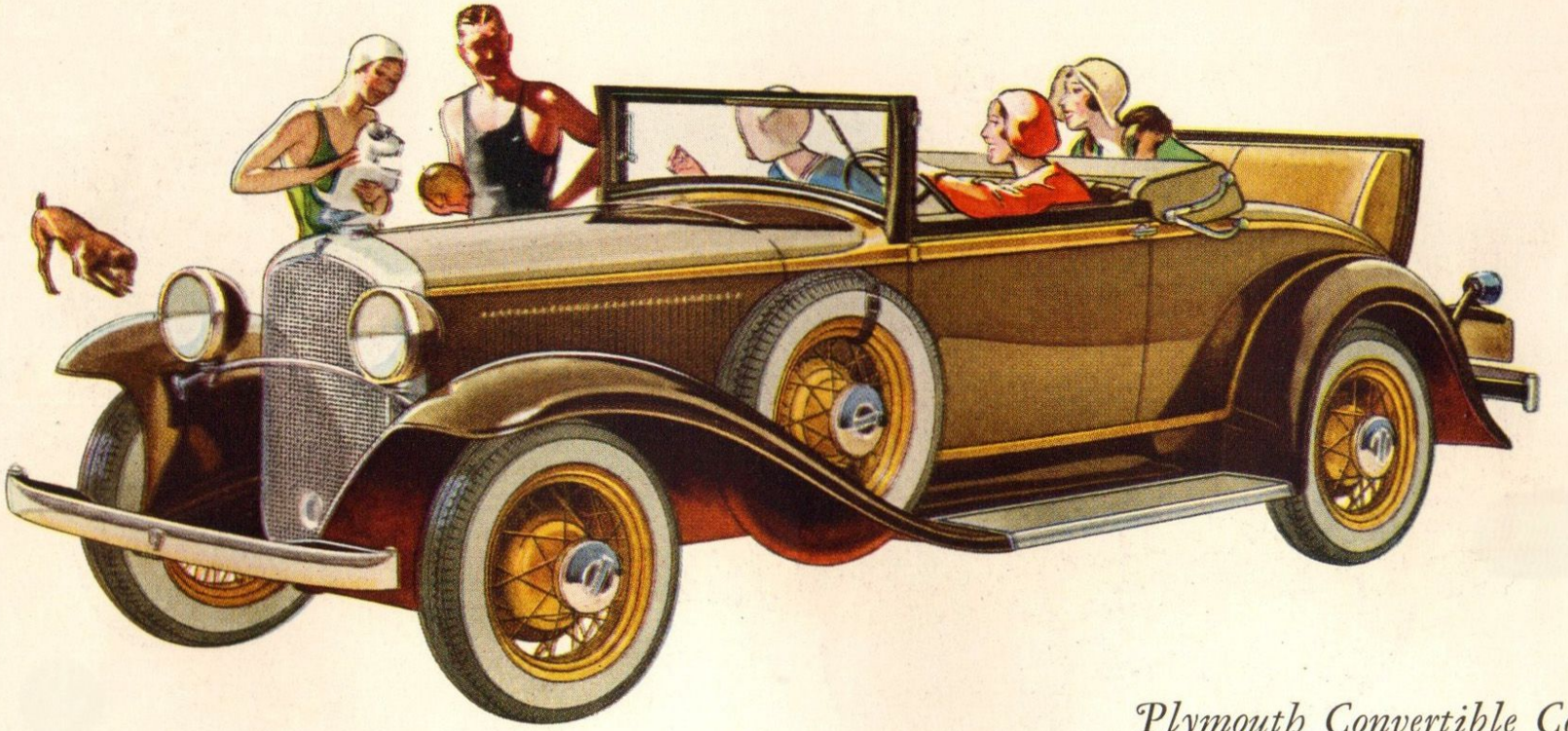


Plymouth Phaeton

THE large crankshaft of the new Plymouth is supported by main bearings of the precision-type as used in the very highest-priced cars.

They are called by that name to distinguish them from fitted bearings commonly used in low-priced cars. As the result of their design and the fineness required in their making, they are interchangeable and invariably fit into the bearing seats. Shims are not used in Plymouth main bearings, bearing wear is so slight as to be imperceptible even after twenty-five thousand miles. The smooth engine operation of the new Plymouth is thus a permanent quality and periodical "take-up" is abolished. *A distinctive feature of economical upkeep!*

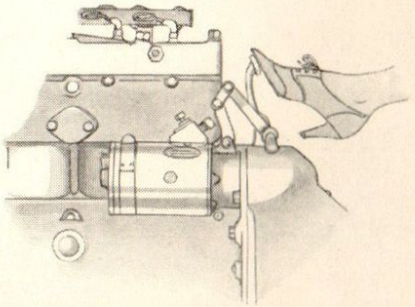




Plymouth Convertible Coupe

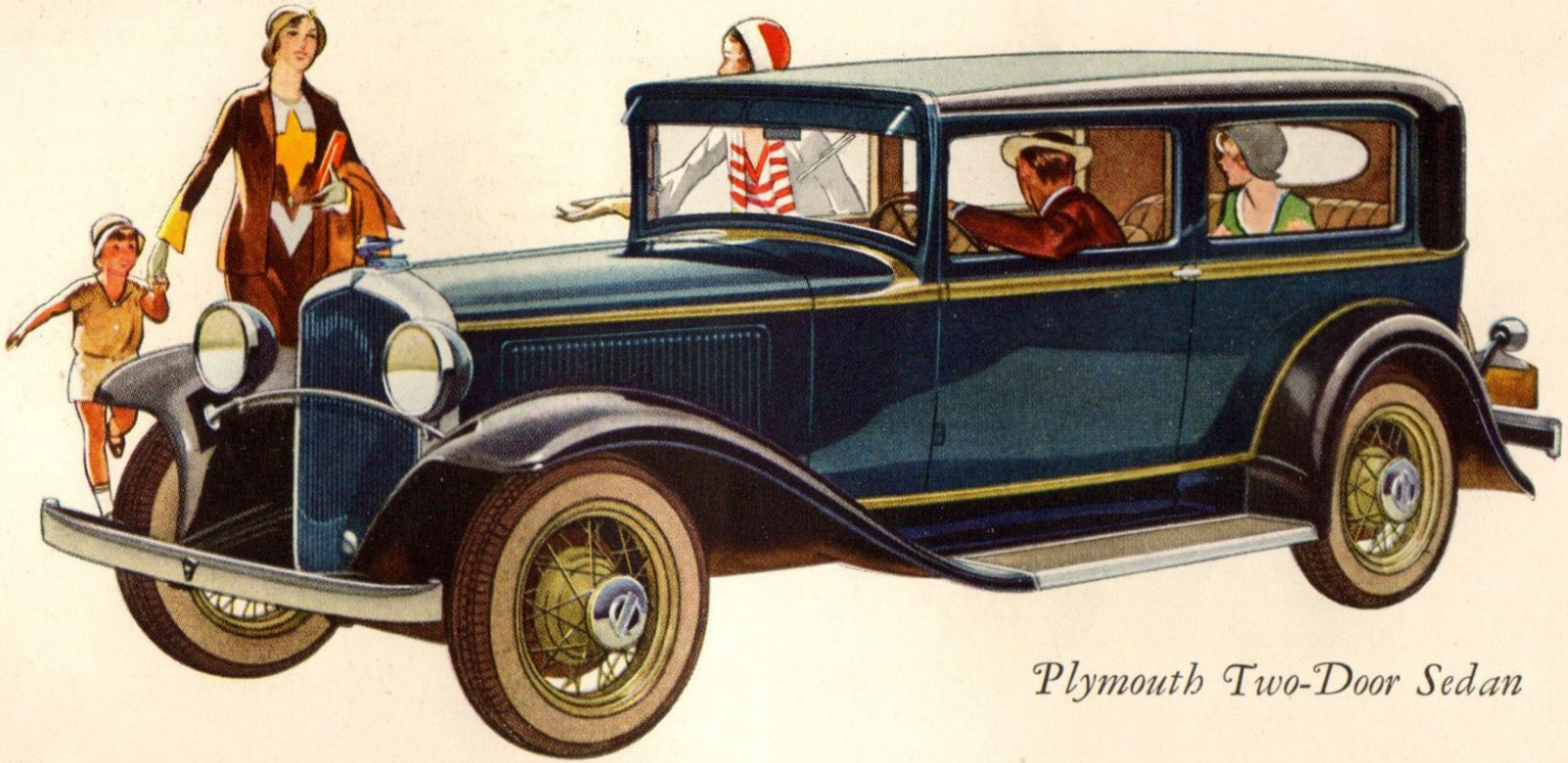
In the new Plymouth you will never have "locked starter" . . . Because the pinion is fully engaged with the flywheel before it begins to revolve, the starter in this new Plymouth will not stick. It will not break flywheel teeth.

This Plymouth starter gives you positive starting action. No more false starts.



No more ineffectual whirrings. You step on this starter and hold your foot there until your engine really is running.

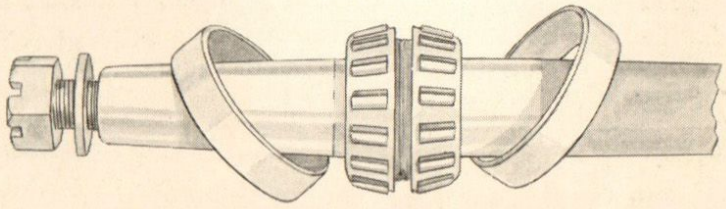
You will find, too, that aside from the fine new effectiveness of this starter, the new Plymouth is remarkably quick at starting—with consequent saving of gasoline as well as battery wear.



Plymouth Two-Door Sedan

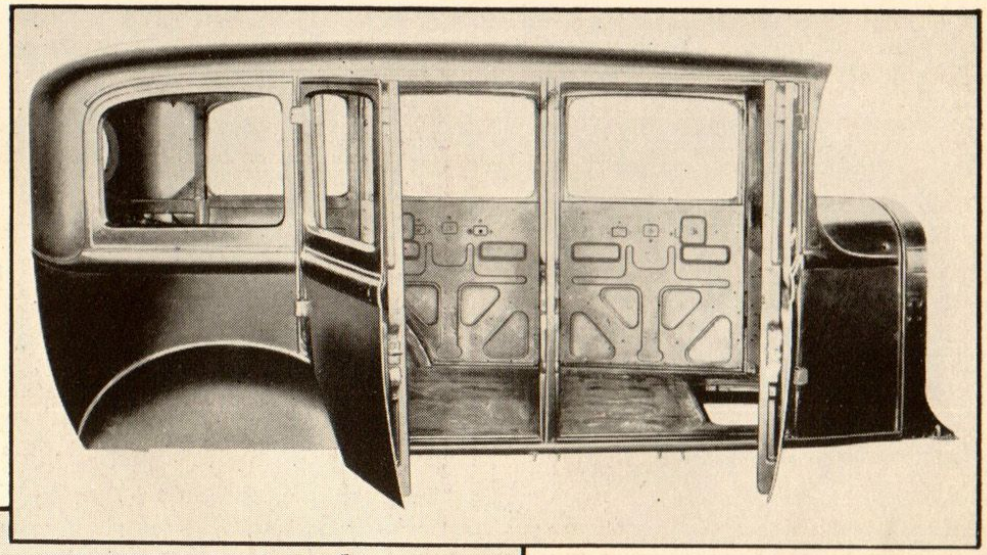
A NOTABLE array of the finest ball and tapered roller bearings made, bespeaks the high quality of the new Plymouth. They are the same type and quality used in the finest cars built, for the bearing needs of all cars are the same. Size only may vary according to load weight.

In the new Plymouth there are 24 ball and roller bearings—two tapered roller bearings in each wheel, eight in the rear axle assembly alone. This generous use of highest quality antifriction bearings throughout the chassis is typical of the quality and high standards of manufacture used in the new Plymouth. Not only bearings, but every material used is of the best for long life, low upkeep costs and owner satisfaction!

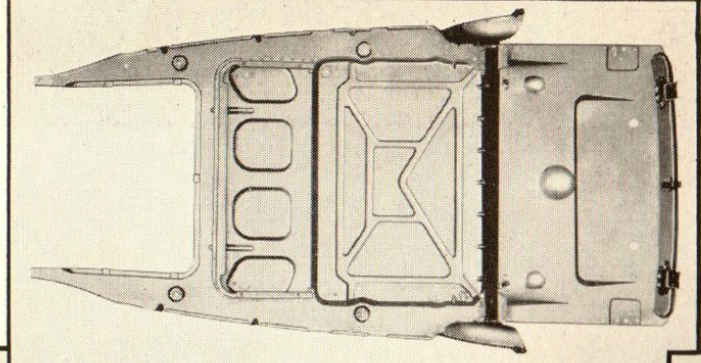


And SAFETY-STEEL BODY CONSTRUCTION

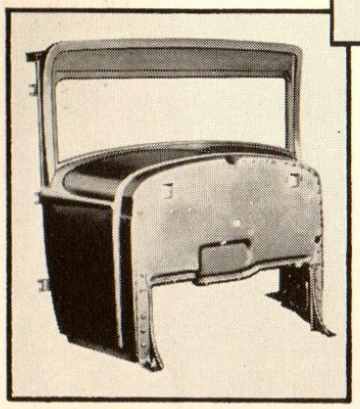
The beauty of the new Plymouth's body is safeguarded by an all-steel construction. The quietness of that body is insured for you by the absence of joints. The entire body is electrically welded into one sturdy unit; it will not spring out of line. The doors will not warp or swell or sag. There are no screws to get loose or fall out of dried wood. The body of the new Plymouth is fire-safe and practically crash-proof. A solid, rigid, permanently quiet body — *Safety-Steel!*



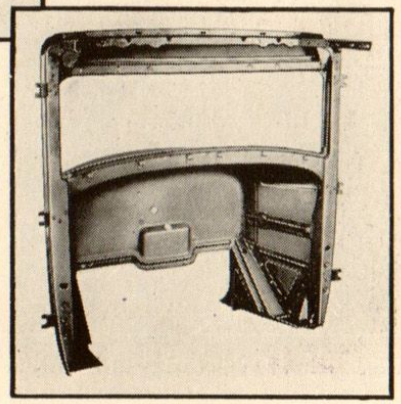
Huge presses form this body in sections which are welded together, making the body a single, rigid unit.



The floor is one single steel stamping, specially formed for rigidity. Welded to front, sides and back, it adds materially to the strength and rigidity of Plymouth's Safety-Steel body.

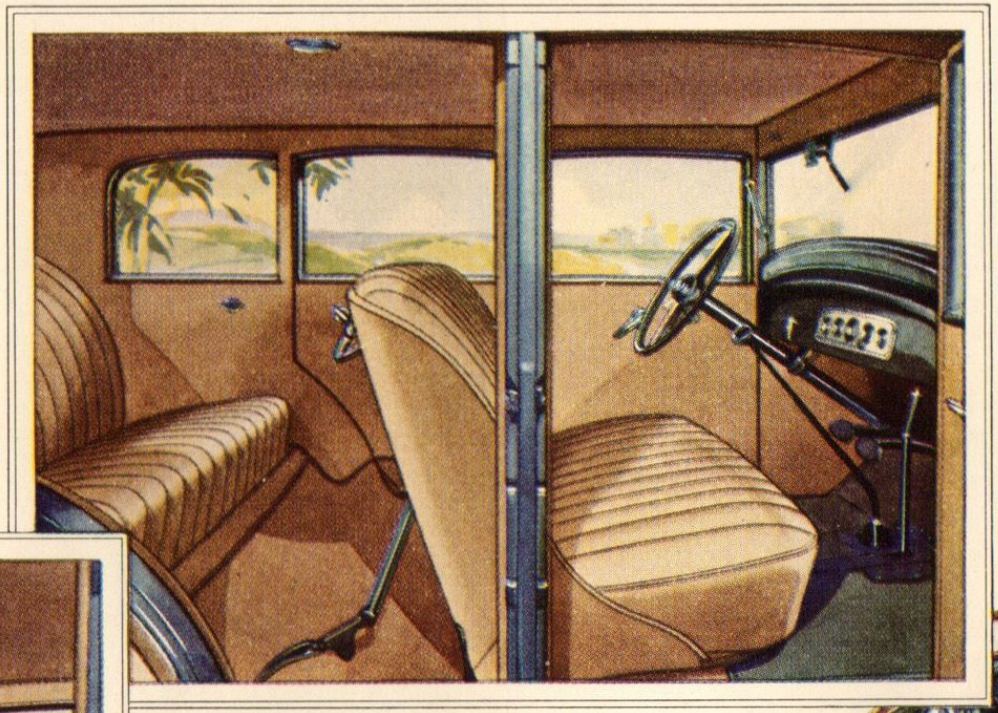


Safety-Steel affords more roominess in the body—less bulk, less weight, but greater strength.

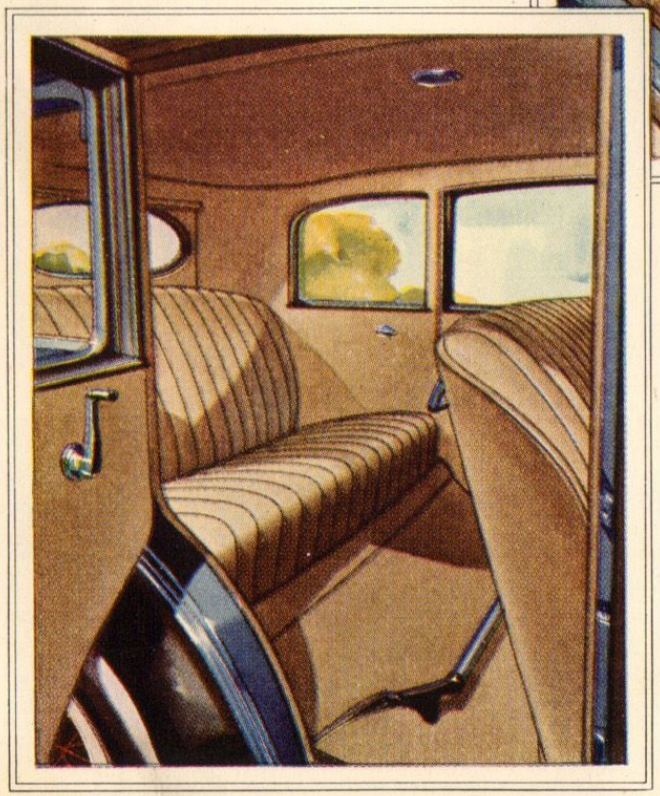


The element of human error is reduced to a minimum in these machine-made bodies with a uniformly fine product the result.

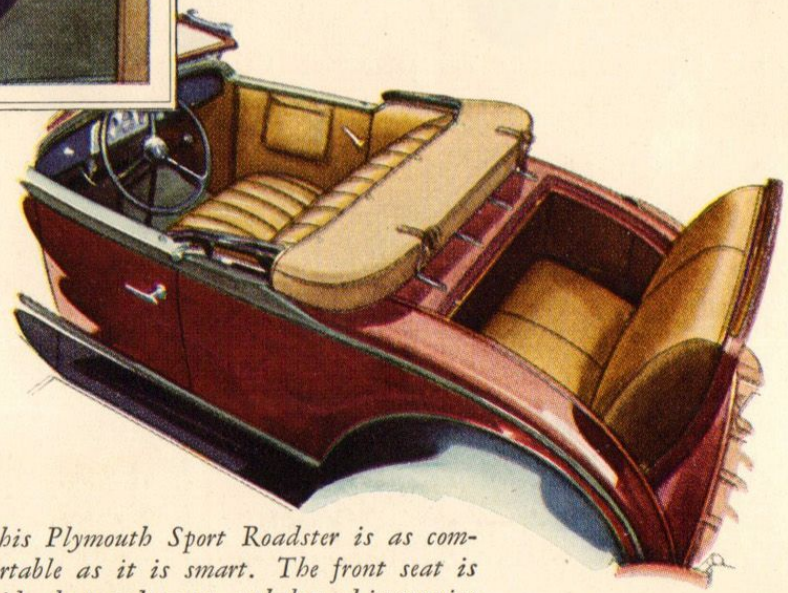
Spacious Bodies with Large Windows and Charming Upholstery



The driver's seat is a model of convenience. It is easily adjustable to the requirements of the driver. The thin-grip, easy-to-hold, steering wheel carries horn button and light controls at its center. Dash instruments are conveniently grouped in a beautiful chromium panel, indirectly lighted by an individually controlled dash light. The instrument board, header and garnish moldings are in rich, walnut finish.



The spacious interior of the sedan is charmingly upholstered in fine, narrow-plaited broadcloth, with metalware of an ultra-modern pattern. The doors are extra wide, windows are unusually large, and all side windows lower with quick-acting crank-type regulators. Rear compartment has a comfortable foot rest, swinging robe rail, dome light and silken roller curtain at the rear window.



This Plymouth Sport Roadster is as comfortable as it is smart. The front seat is wide, deep and roomy, upholstered in genuine leather. The rumble seat, likewise, is roomy and comfortable, with deep soft cushions.

SPECIFICATIONS

AXLE, *Rear*—Semifloating, pressed-steel housing. Drive gear and pinion, spiral bevel type. Gear ratio, 4.33 to 1. Axle shaft: forging of high-alloy chrome-nickel steel, heat-treated, 1⅜" diameter at outer bearing end.

AXLE, *Front*—Heat-treated, I-section drop forging. Adjustable tapered roller wheel bearings. Ball thrust bearings at steering knuckle head.

BODIES—"Safety-Steel". Specially designed for strength and quietness.

BRAKES, *Service*—Plymouth, 4-wheel hydraulic, internal-expanding, weatherproof. Drums, 11" inside diameter; brake facing, 1½" wide.

BRAKES, *Parking*—External-contracting on drum mounted at rear of transmission. Drum, 6" diameter; brake band, 2" wide.

CARBURETOR—Plain-tube type with single adjustment for idle speed. Equipped with acceleration pump, air cleaner and intake silencer.

CLUTCH—Single dry-plate type with twin discs. Spring center driven disc, 8⅞" in diameter with asbestos composition fabric facing riveted to each disc.

COOLING SYSTEM—Pump circulated. Water capacity 3½ gallons (3.02 imperial gallons; 13.72 liters). Extra large water areas in cylinder block for efficient cooling. Cellular radiator with detachable shell. 4-blade 16" fan driven by V belt. Quickly adjustable to take up wear of belt. Temperature indicator on instrument panel.

ENGINE—L-head type, water-cooled. Bore, 3⅝"; stroke, 4¾"; S. A. E. horsepower, 21.03; developed horsepower, 56; piston displacement, 196 cu. in. Full force-feed lubrication to all crankshaft, camshaft, connecting rod bearings and timing gears. Positive spray from metered hole in connecting rod lubricates cylinders and valve mechanism. Oil capacity, six quarts (5.667 liters). Three-bearing crankshaft. Aluminum alloy pistons. Crankcase ventilation with air cleaner. Two-point suspension in rubber for Floating Power.

ELECTRICAL SYSTEM—Single-wire system. Generator: third-brush regulation, six-volt type. Starting motor: six-volt type, mechanically engaged before revolving. Battery: six-volt, 84-ampere-hour capacity. Ignition: top outlet waterproof distributor and coil; full automatic mechanical spark advance and vacuum controlled spark retard at idle speeds.

FRAME—Drop center, pressed steel, wide flange. Channel, 5½" deep. Flanges, 2⅛" wide at center section. Four cross members.

FUEL SYSTEM—Fuel drawn from supply tank by fuel pump, mounted on right side of engine, driven from crankshaft. Fuel filter. Fuel tank mounted at rear of frame; capacity, 12 gallons (10 imperial gallons; 43.4 liters).

OVER-ALL LENGTH—With bumpers, 170".

SPRINGS—Semielliptic. Front: length, 35½"; width, 1¾". Rear: length, 53½"; width, 1¾". Self-adjusting shackles.

STEERING GEAR—Semi-irreversible, worm-and-sector type. Adjustable for wear. Steering arm, drop forging, heat-treated. Three-spoke thin-grip wheel, 17" diameter.

TRANSMISSION—Easy-Shift constant mesh, three-speed selective sliding-gear type. Unit with engine. All gears are chrome-vanadium steel.

FREE WHEELING—In all forward speeds, cam and roller type, controlled by button on instrument board.

WHEELS—Five wire wheels, spare mounted rear; or artillery type wood wheels with spare rim. Balloon cord nonskid tires, 4.75/19.

INSTRUMENTS AND EQUIPMENT—Hydraulic shock absorbers on all springs. Instrument panel includes speedometer, ammeter, oil pressure gauge, electrical gasoline gauge, temperature indicator, ignition switch, choke and throttle control buttons, free-wheeling control—all indirectly lighted. Horn button, light control, at center of steering wheel. Equipment includes automatic windshield cleaner, rear-vision mirror, magnetic horn, stoplight, full set of tools on all models.

NOTE—All specifications subject to change without notice.—*Plymouth Motor Corporation, Detroit, Mich.*