

Stearns

SLEEVE VALVE
SIX CYLINDER

QUALITY MOTOR CAR CO.
322 CHERRY AVE. N.E.
CANTON, OHIO

Motor Cars

Model C

THE F.B. STEARNS COMPANY
CLEVELAND OHIO

The
New 6-Cylinder
Stearns-Knight
Motor Cars



"The White Line Radiator Belongs to the Stearns"

The F. B. Stearns Company - Cleveland, Ohio

The New Stearns-Knight Six

The Result of Concentrated Effort

THE pre-eminent motor cars of Today are those built by the pioneers of the industry—organizations that, by reason of concentration of effort, have endured and prospered through the years. The F. B. Stearns Company has been a notable exponent of the policy of concentration.

The first Stearns car, built *twenty-five* years ago, was, like all other cars of its time, an experiment—but not for long. Its builders immediately concentrated every effort and facility upon the weakest point and soon the defect was turned into an advantage. Likewise each and every part of the car was developed to its maximum strength and efficiency.

In this way The F. B. Stearns Company developed many outstanding and permanent improvements, months, and even years, ahead of other manufacturers.

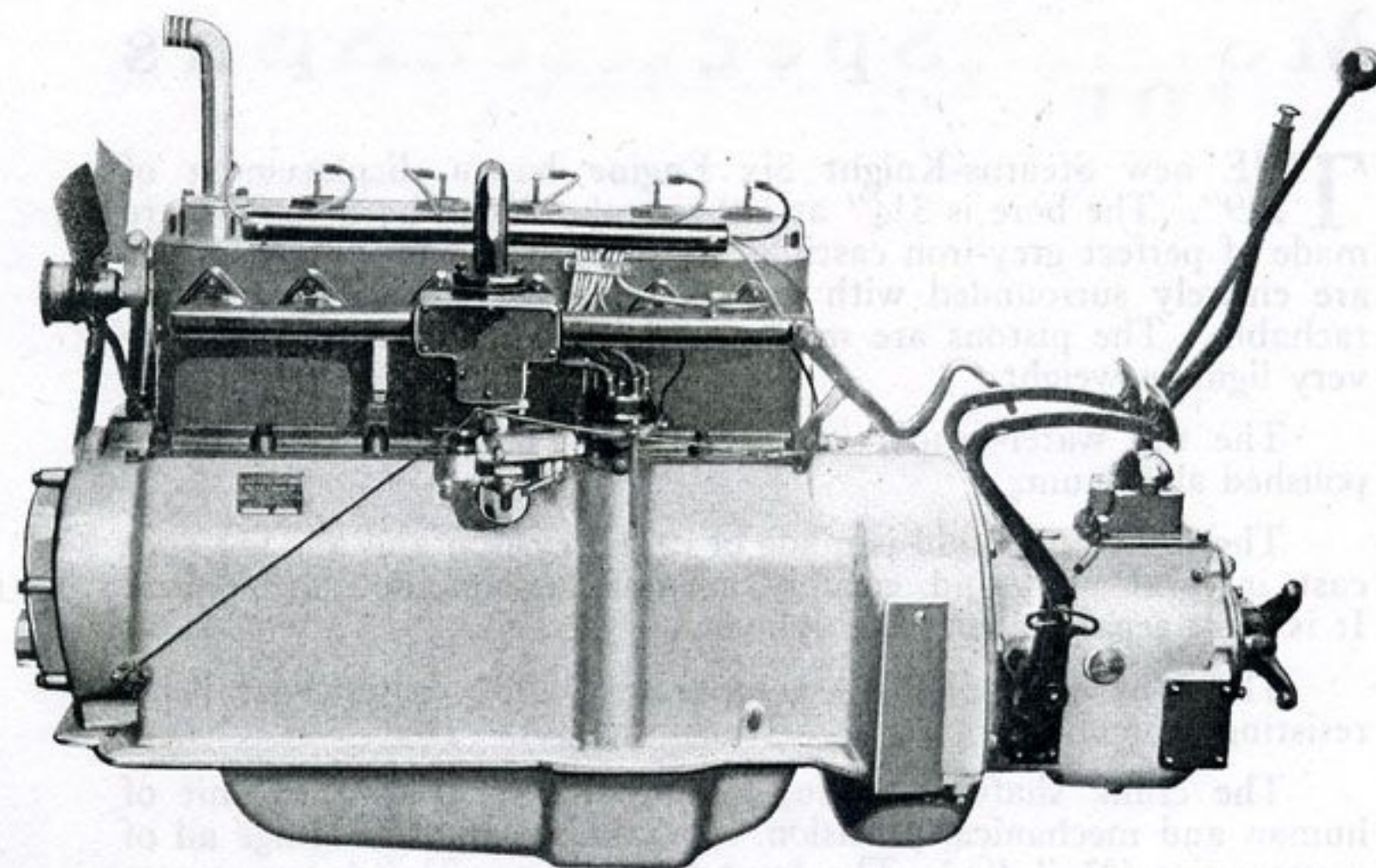
The first Stearns motor was a *good* motor. Aside from minor improvements no radical changes were made for several years. In 1909 The F. B. Stearns Company conducted very thorough and exhaustive tests of the sleeve-valve type of engine, the invention of C. Y. Knight. These experiments proved conclusively that the sleeve-valve principle is the greatest advancement ever made in gasoline engine construction.

Therefore, in 1911, The F. B. Stearns Company announced to the world that it would be the first in America to adopt and build the Knight Motor. Within a few months after this announcement the demand for Stearns-Knight Motor Cars was greater than the supply, and this condition has obtained from that day to this.

However, The F. B. Stearns Company realized that there are certain advantages in 6-cylinder construction, and that many buyers prefer this type regardless. Therefore, the management of The F. B. Stearns Company began many months ago to experiment with a 6-cylinder engine equipped with sleeve-valves. When the first engine was tested it was discovered that for some peculiar reason it developed no vibration at any speed.

Believing this unheard-of feature to be merely a coincidence, another 6-cylinder Stearns-Knight Engine was built and tested, and likewise found to possess this seemingly impossible quality. Since then, hundreds of these remarkable motors have been built and tested on the block and in actual road service, and none has developed the slightest trace of periodic vibration.

And so, at the close of The F. B. Stearns Company's first quarter-century of building fine motor cars it finds itself, by reason of its policy of concentration, in possession of the solution of one of motordom's most perplexing engineering problems, and therefore on the threshold of a great leadership, which we shall ever strive to maintain.



The New 6-Cylinder Stearns-Knight Engine

THE above illustration shows the general appearance of the new Stearns-Knight Engine. Merely to state that it is an achievement does not tell of the years of experience and experiment that are back of its creation.

The New Stearns-Knight Six has all the advantages over other 6-cylinder types of motors that the Stearns-Knight Four has over other 4-cylinder types. The smooth, silent flow of its great power, the rapidity of its acceleration, the complete absence of vibration, are features so evident that they force exclamations of wonder and admiration from all who see it in operation



*A starter that does not need "help" from the hand crank in zero weather.
An ignition system built by a firm that knows what the words "accuracy" and "synchronism" mean.
A cooling system that cools.
A 12-volt one-wire electrical system that is appreciated when starting in zero weather.*

Motor Specifications

THE new Stearns-Knight Six Engine has a displacement of 249". The bore is $3\frac{1}{4}"$ and the stroke 5". The cylinders are made of perfect grey-iron castings and are cast en bloc. All barrels are entirely surrounded with water. The cylinder heads are detachable. The pistons are made of nickel and aluminum and are very light in weight.

The top water-header is likewise detachable and is made of polished aluminum.

The intake manifold is made of cast grey-iron and has hot spot cast integral with and entirely surrounding manifold at center. It is built separate from the cylinders.

The exhaust manifold is a separate casting coated with heat-resisting enamel.

The crank shaft is a drop-forging machined to the limit of human and mechanical precision. It has four main bearings all of a super-size ($2\frac{3}{8}"$ dia.). The front bearings are $2\frac{3}{8}"$ long; centers $1\frac{15}{16}"$ long and rear $3\frac{1}{2}"$ long (with babbitted-bronze shells.)

The eccentric shaft is $2\frac{1}{16}"$ in diameter and is supported by four bearings, one of which is $1\frac{3}{8}"$ long; three are $1\frac{3}{4}"$ long. The eccentric shaft is driven by $1\frac{1}{2}"$ x $\frac{1}{2}"$ pitch silent chain.

The connecting rods are drop-forgings. Large ends are $2\frac{3}{8}"$ in diameter, by $1\frac{3}{4}"$ in length, with babbitt cast directly in rod. Rods are "I" section and carefully balanced.

The crank case is made with deep section walls, and is well-ribbed.

The oil-pan is made of pressed steel and is tapered from ends to center where oil-pump is located. The oil pan is provided with integral splasher-plates to prevent slushing of oil, and to strengthen pan. The oil will not overflow splasher plates.

The bearing-caps are well ribbed and dowelled in crank-case.

All oil pressure adjustments made from outside of case.

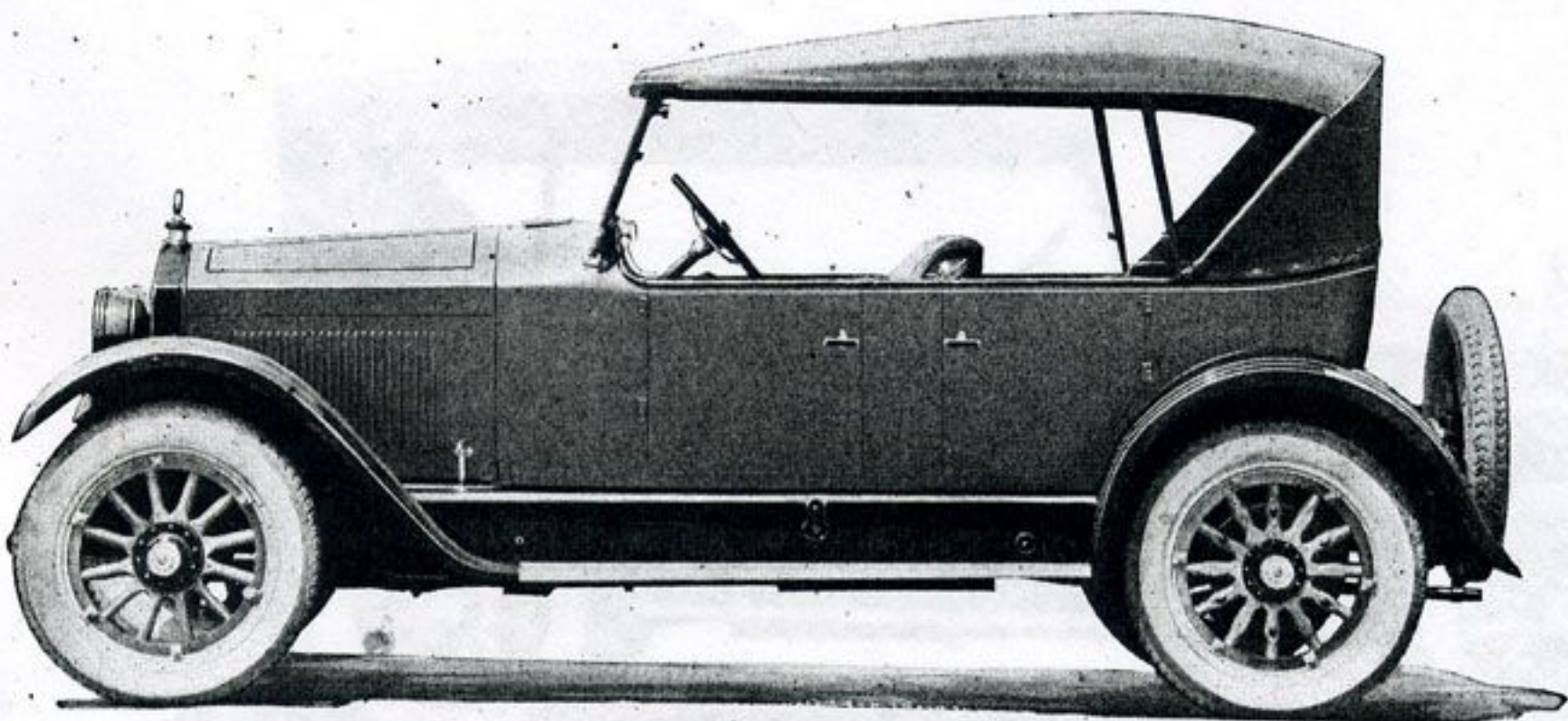


*A motor that stays quiet, that does not require frequent "tappet adjustments" to keep it so.
A motor that actually improves with use.
A motor that will not require "tuning up" after every unusual effort.*

Four-passenger Sport

THIS is the model that has grown more popular each year. It is our response to the demand for a car of sporty appearance, together with dignity and refinement.

Like other Stearns-Knight models it has gracefulness of line, enduring power and long life.



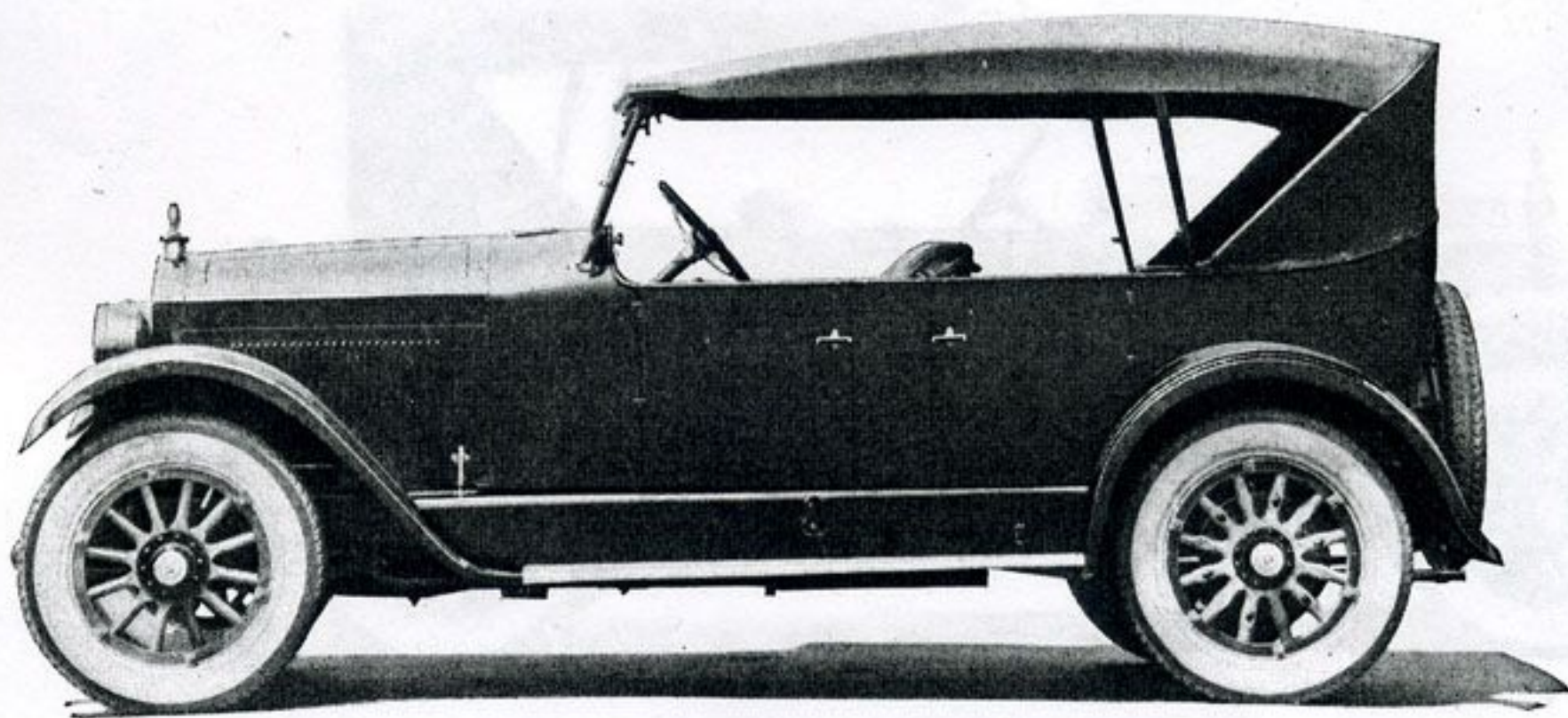
*A horn whose sound is distinctive—either warning, or requesting the "right of way".
Springs to which the word "breakage" is a remote term.
Springs of few yet wide leaves, all made of chrome vanadium steel.*

Five-passenger Touring Car

THE 6-cylinder Stearns-Knight Five-Passenger Touring Car is an outstanding example of the efficient and dependable motor car. It is also the car of economy. It combines practically all the good features of the various 6-cylinder Stearns-Knight models. It has ample room for five passengers—with comfort for every one.

This model is the appropriate car for the family. It is roomy, graceful in line, easy to handle, comfortable to ride in, and in every respect is as fine a vehicle as is possible. No motor car Today offers more true value for every dollar invested.

It is built to wear—and it does. For like its 4-cylinder mate, the 6-cylinder Stearns-Knight Engine improves with age. The motor does develop more power. It gains in flexibility, smoothness and silence, characteristics that belong particularly to the Stearns-Knight.



A foot-brake that can easily "lock the wheels" with surprisingly little effort and throw, and of a size that does not require frequent relining.

A steering "hook-up" that takes the road shocks before they reach the driver's hands.

Five-passenger Brougham

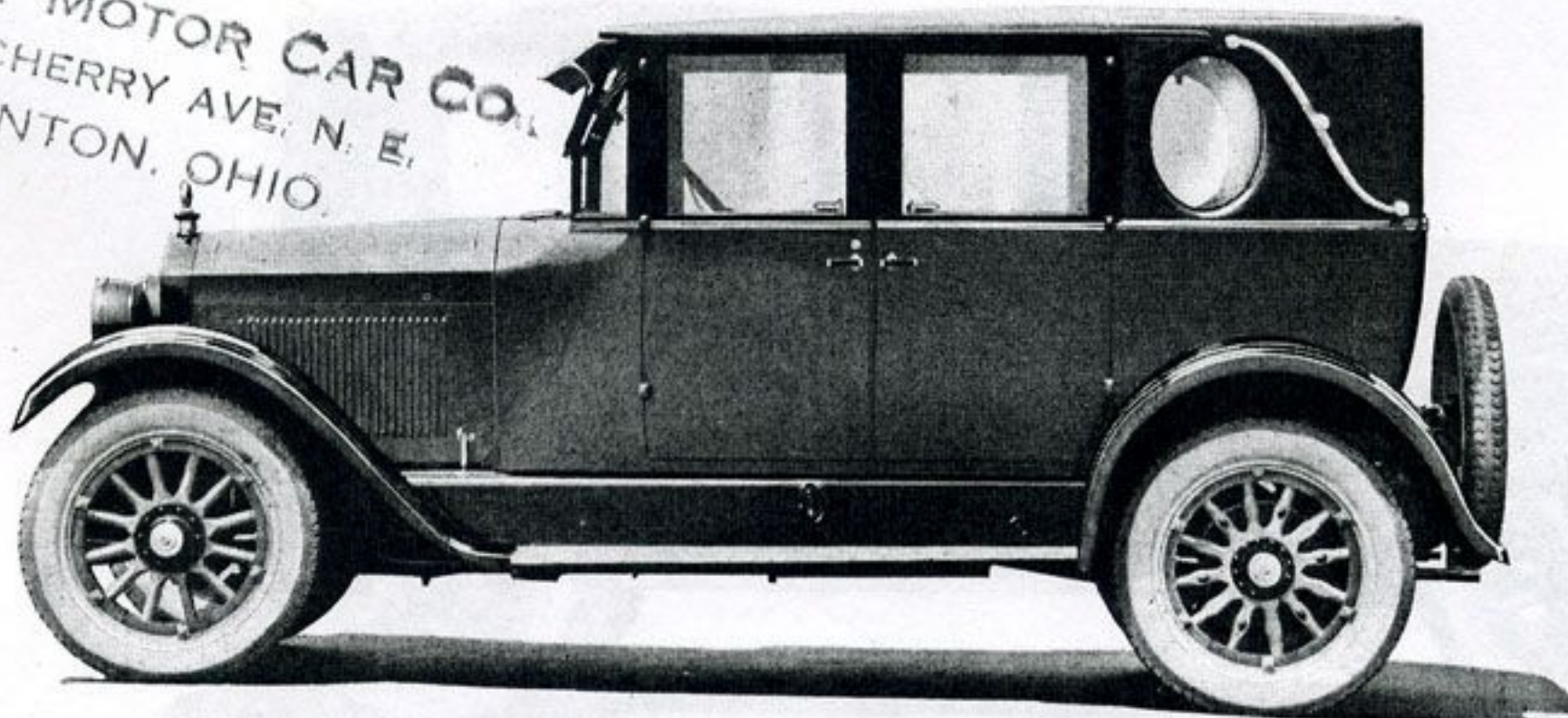
FIVE people can ride in comfort in this trim-looking enclosed car. The full-width rear seat, with its unusually high back, gives roomy comfort. Wide doors make all seats easily accessible.

The special construction of the windshield is clever and most practical. It makes possible the kind of vision obtained in an open model. This casting extends from the cowl to the top and carries plate glass that fits perfectly.

It tends to accentuate the low appearance of the whole car—an effort often sought for in motor cars but seldom obtained. To the low hung appearance is added general sturdiness and compactness.

The back is designed with an attractive Laundaulet effect and is covered with a fine grade of black leather.

FROM
QUALITY MOTOR CAR CO.
322 CHERRY AVE. N. E.
CANTON, OHIO.



Brake shafts, clutch shafts and all moving or oscillating levers are equipped with oil-less bearings.
Wheels having more hub bolts and brake-drum bolts than ordinarily seen, positively locking the hubs to the wheels.
Spring eyes equipped with flanged bronze bushings—each flange presenting a large flat bronze bearing surface to the shackles and hangers, preventing rapid wear and practically eliminating shackle slap.

Sedan

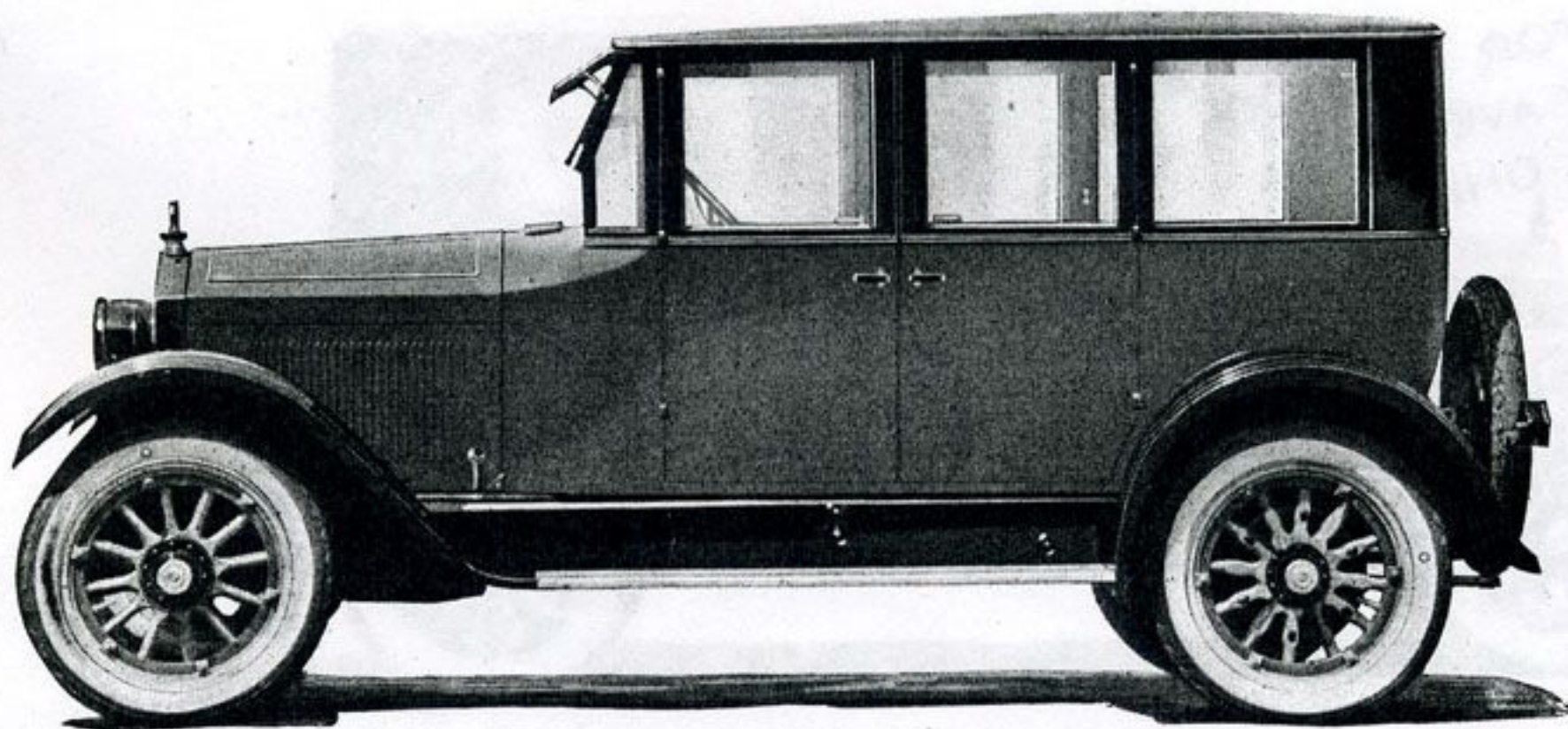
THIS stalwart and handsome sedan is the most popular of all closed models for varying conditions of weather—and deservedly so.

The great ease and flexibility of the Stearns-Knight vibration-less engine makes this Sedan ride with all the comfort of a Pullman car. In it, comfortable riding reaches the maximum.

It is a car that will attract nothing but the most favorable comment wherever it is driven—whether on unfrequented roads or along the city boulevards.

This car not only appears commodious, but actually is. Five persons can ride in this car in comfort.

Windshield construction is the same as used on other closed models illustrated herein.

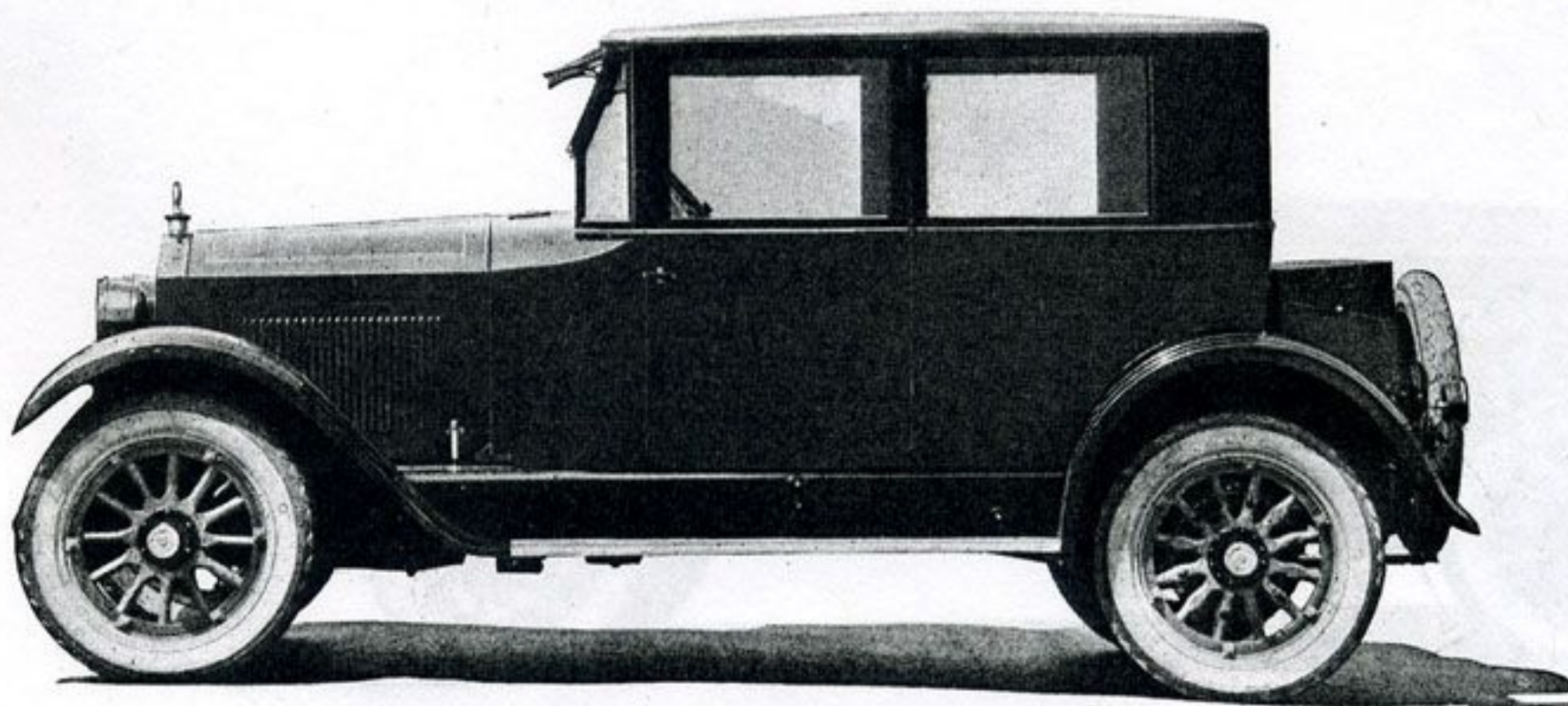


*A starter that does not need "help" from the hand crank in zero weather.
An ignition system built by a firm that knows what the words "accuracy" and "synchronism" mean.
A cooling system that cools.
A 12-volt one-wire electrical system that is appreciated when starting in zero weather.*

Coupe Brougham

FOUR people can ride in comfort in this trim-looking enclosed car. In the front are individual pullman seats side by side which, with its unusually high back gives roomy comfort. Two wide doors make all seats accessible.

Note that the windshield on this model is the same as used on other models illustrated herein and makes possible the kind of vision obtained in an open model.

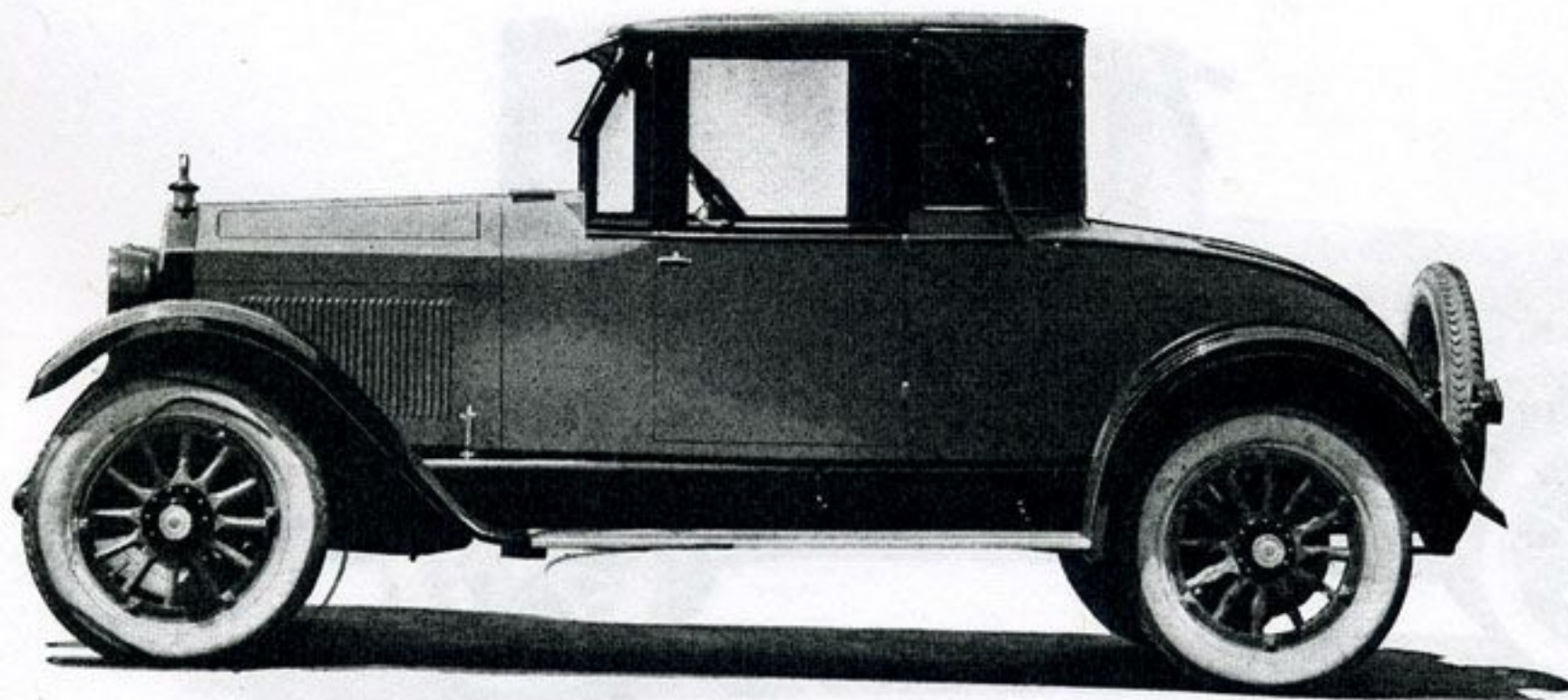


*A motor that has plenty of reserve power and is applied in a "smooth flow" when needed.
A motor supported on a "flexible" 3 point support giving rigidity, yet flexibility.
A motor built entirely in our own factory.*

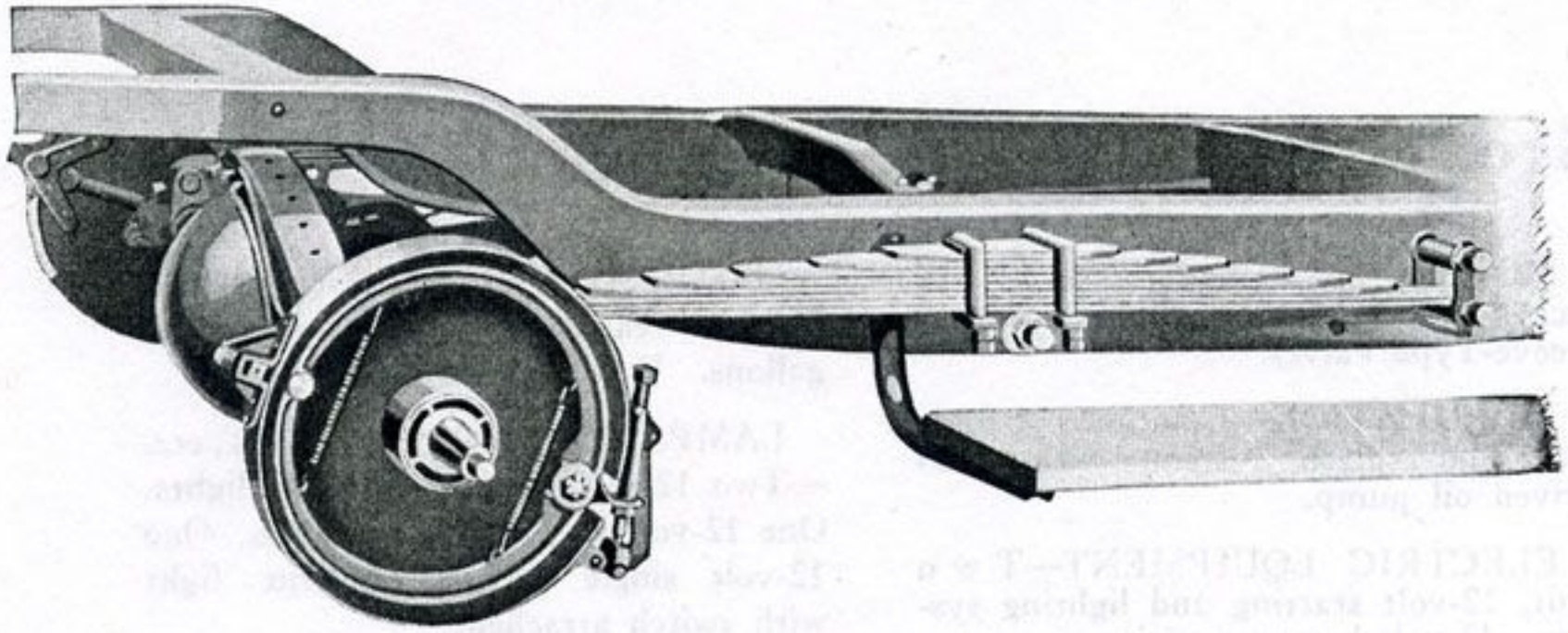
Sport Coupe

IN THIS Sport Coupe the business or pleasure seeking person will find a car that is unsurpassed for convenience. It offers carrying capacity for two passengers. This model has clear vision type of windshield as on all Stearns closed models illustrated herein.

The arrangement of this striking model is ideal for the professional man or woman.



*Brake shafts, clutch shafts and all moving or oscillating levers are equipped with oil-less bearings.
Wheels having more hub bolts and brake drum bolts than ordinarily seen, positively locking the hubs to the wheels.
Spring eyes equipped with flanged bronze bushings—each flange presenting a large flat bronze bearing surface to the shackles and hangers, preventing rapid wear and practically eliminating shackle slap.*



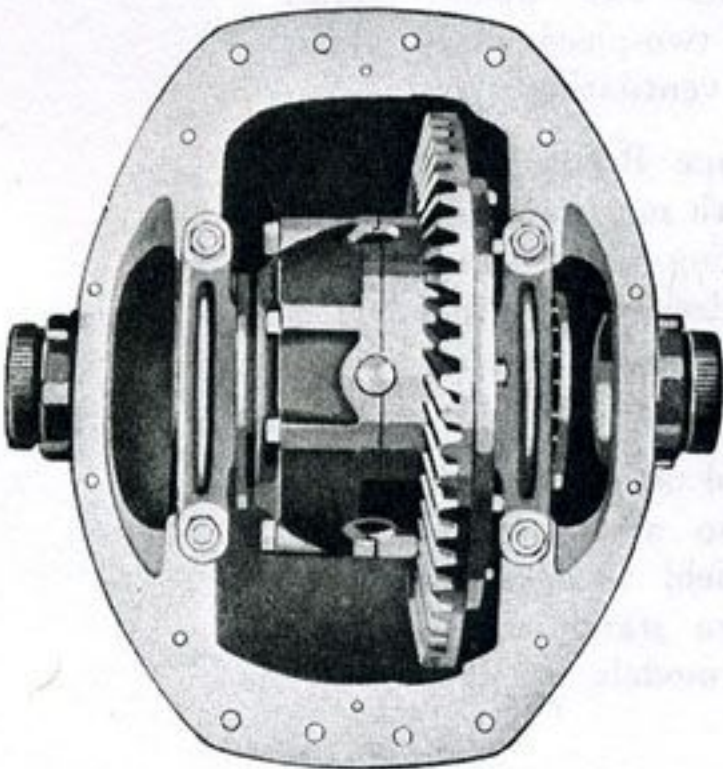
Spring Suspension and Brake Mechanism

IN THE 1925 models the spring suspension is of the semi-elliptic front and cantilever rear types. All chrome vanadium steel. Front springs are $2\frac{1}{2}$ inches wide by 40 inches long. Rear springs are $2\frac{1}{2}$ inches wide by 50 inches long. The result is a car of exceptionally smooth riding qualities such as to convey, to a remarkable degree, the sensation of flying through air.

Both brakes act directly on the rear hub drums. The foot brake is a contracting band on the outside of the drum while the emergency is an internal expanding shoe operated by a hand lever.

Four Wheel Brakes

Note that four wheel Hydraulic Brakes can be supplied on any of the models illustrated herein at a nominal extra charge. Price will be quoted you by distributor. We have adopted the Lockheed Hydraulic Brakes, due to the extreme simplicity, having no rods or joints to oil and grease assuring equal braking power on all four wheels.



Differential

The driving gears are cut with spiral bevel teeth and are quiet under all driving conditions.

The differential gears and casings are all forged nickel steel. A long pressed steel torque member is secured to this axle at its center, the forward end being hung by means of a ball and socket to one of the cross members. This torque arm takes care of the driving and braking torque.

*A horn whose sound is distinctive—either warning, or requesting the "right of way".
Springs to which the word "breakage" is a remote term.
Springs of few yet wide leaves, all made of chrome vanadium steel.*

Stearns Motor Car Specifications

MOTOR—Six Cylinder. Bore $3\frac{1}{4}$ inches. • Stroke 5 inches. Stearns Sleeve-Type Valves.

LUBRICATION—Combined force feed and splash system, with gear-driven oil pump.

ELECTRIC EQUIPMENT—Two unit, 12-volt starting and lighting system. 12-volt battery ignition system.

COOLING—Water circulated by centrifugal water pump through cellular type radiator.

CLUTCH—Dry disc.

TRANSMISSION—Three speeds forward. One reverse. Direct drive on third speed.

CONTROL—Gear shift and emergency brake lever in center. Steering gear, brake, clutch and accelerator pedals on left-hand side.

AXLES—Front: I-beam section steel forging with ball thrust-bearings on steering knuckle and taper roller bearings in hubs. Rear: Pressed steel housing, with forged steel hubs keyed direct to axle shafts.

WHEELS—WOOD—Artillery type, equipped with Firestone straightside demountable rims.

WHEEL BASE—121 inches.

TREAD—56 inches.

TIRES—32 x $4\frac{1}{2}$ Cord. Safety tread all around.

SPRINGS—All springs made of chrome vanadium steel. Front: Semi-elliptic, $2\frac{1}{2}$ inches wide by 40 inches long. Rear: Cantilever, $2\frac{1}{2}$ inches wide by 50 inches long.

GASOLINE TANK—With gauge. Held at rear of chassis. Capacity 15 gallons. Vacuum feed system.

LAMPS, TOOLS, EQUIPMENT, etc.—Two 12-volt double bulb head lights. One 12-volt single bulb tail light. One 12-volt single bulb instrument light with switch attached.

All cars are supplied with suitably mounted ignition and lighting switches, fuse box, ammeter, speedometer, tire carrier, number brackets, together with complete tool equipment, starting crank, pump, etc.

TOP—All tops supplied with door-opening curtains. Plate glass window in rear curtain. Tops are built of very best black rain-proof material suitably lined and supported.

VENTILATOR—In cowl on all models. Operated from instrument panel.

WINDSHIELD—All open bodies equipped with two-piece plate glass, rain-vision and ventilating type.

COUPE—Coupe Brougham and Sedan equipped with sun shade and a clear vision ventilating type windshield strictly Stearns design. All other bodies equipped with two-piece plate glass, ventilating type.

Clock mounted on instrument board, combination stop and tail light, automatic windshield cleaner and rear vision mirror are standard equipment on the different models.

A foot-brake that can easily "lock the wheels" with surprisingly little effort and throw, and of a size that does not require frequent relining.

A steering "hook-up" that takes the road shocks before they reach the driver's hands.