

1914 Chevrolet "Royal Mail"

CHEVROLET "ROYAL MAIL", 1914

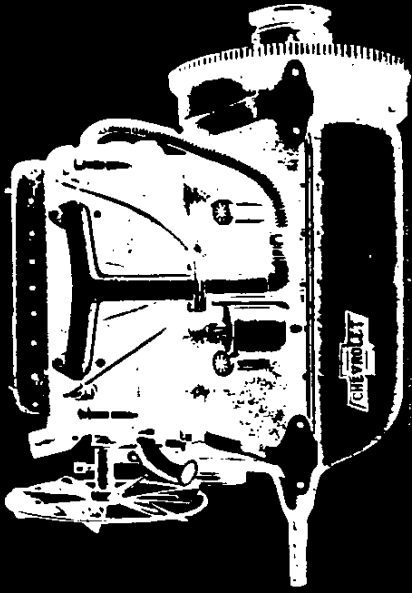
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IT'S A FACT:



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MOST presentations and announcements deal in generalities. Much space is consumed in featuring large factories, perfected organizations, etc. Facts and real information are frequently lacking. It is our purpose to present herein facts and real information of value to our dealers and prospective customers. "No chain is stronger than its weakest link." No motor car is better than its motor.

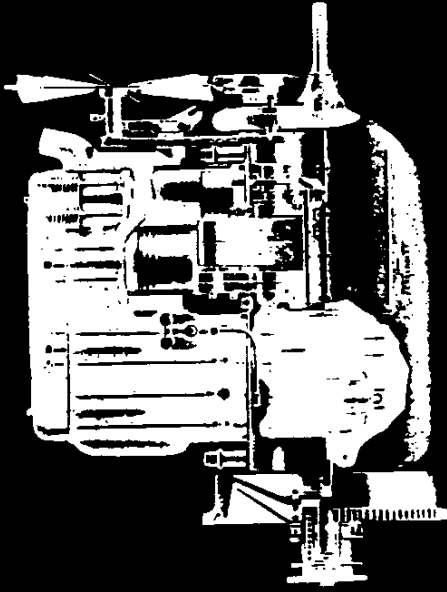


Intake side of the famous Chevrolet Motor. Four cylinders, valve-in-head type. The most powerful motor (size considered) in the world.

In the first place, it is of the celebrated valve-in-head type. It is *different* from the ordinary valve-in-head motor, having a detachable head (containing all of the valve mechanism) which can be easily disconnected, permitting the grinding of the valves and removal of carbon at the bench.

It is *different* from the ordinary valve-in-head motor in that it has no valve cages, doing away with 64 unnecessary parts, very materially reducing the weight and permitting direct cooling of the valves. It is *different* from the ordinary valve-in-head motor in that it is built with Doehler bronze back bearings. *the best bearings money can buy.* It is *different* from the ordinary valve-in-head motor in design, balance, proportions and accuracy of timing, resulting in a motor which produces more power for its size and weight than any other motor in the world.

It is *different* from the ordinary valve-in-head motor in that it has a very much smaller cylinder bore; but with proper port areas, perfect vaporizing of fuel and our peculiar method of vacuum exhaust, we obtain more mileage per gallon of gasoline than any other motor of its size yet produced.



Exhaust side of Chevrolet Motor showing the valves, pistons, crank shaft, clutch and cooling system.

It is *different* from the ordinary valve-in-head motor in that there is the utmost accessibility to magneto and generator, with no heat interference to destroy the efficiency of these important instruments; the exhaust pipe also carries the heat away from the toe-board and floor-boards, making the front part of the car most comfortable and requiring no ventilation.

It is *different* from the ordinary valve-in-head motor in that the wiring is enclosed in flexible metal tubing, preventing any burning of the wires or soaking with oil to cause short-circuiting. The system of wiring is entirely new and is not used on any other car on the market at the present time.

It is *different* from the ordinary valve-in-head motor in that we use the world's standard Zenith carburetor, the simplest in construction, most efficient and economical ever designed, enabling us to obtain a mileage of 26 1/2 to 30 miles per gallon.

Because of these differences the Chevrolet motor should have your consideration. "As a rifle is to a shotgun, so is the Chevrolet to any other motor built."

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The Clutch Collar

The clutch collar used on the Chevrolet is one of the greatest refinements made in automobile construction in the last ten years. This is a patented device, owned by the company, covered by eleven claims, used exclusively on the Chevrolet car. It cannot be found on any other car at any price. The clutch collar is usually the most annoying and the most expensive small part of a motor car, and has more to do with the satisfactory running than any other.

By reason of closeness of fit, constant pressure and centrifugal action, the ordinary clutch collar is almost impossible to lubricate, causing heating and burning out of the clutch collar, cutting of clutch hub, making impossible the easy shifting of gears. By the use of our internally lubricated clutch collar, the defects above mentioned are eliminated and the expense of frequent replacement is entirely done away with.

Our collar is a cored bronze casting, holding about a cupful of oil. Through the shell at proper distances special wood plugs are inserted, extending into the oil receptacle, through which plugs the oil exudes (or sweats), delivering the oil to the center of the clutch hub, the centrifugal motion carrying it to the outside, preventing friction, heating and cutting. The collar carries sufficient oil for about two months' use and can be easily refilled through a cover in the top of the casting. *This of itself is worth the price of the car.*

Transmission

The transmission is practically noiseless on all gears which are made of nickel steel, heat-treated. The shafts and bearings are most liberal, the shifting device positive and easy to operate. The transmission is designed to handle with a liberal factor of safety a motor developing fully 40 h-p.

Brakes

Attention is called to the size and construction of the brakes used on the "BABY GRAND" car. Rarely do you find such generous braking surface in a car of this size. A powerful car requires good and efficient brakes.

Steering Gear

Safety first!

The steering gear is so designed, so reinforced and of such quality of material that the maximum safety of the occupant of the car is at all times assured. It will please us to have you compare our steering gear with that used in any other medium-priced automobile made in the United States.

Axles

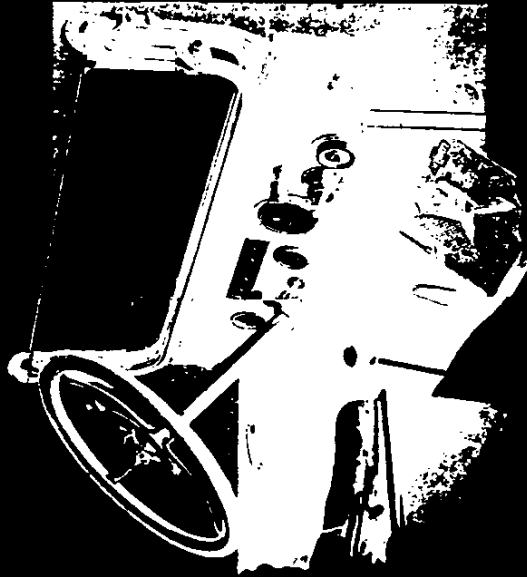
Our axles are made of the best materials—heat-treated by special process and of sufficient strength to carry 75% overload in weight and power. To convince yourself, look at the size of the pinion gears and the thickness of the ring gears in the differential and the size of the axle-shaft in the Chevrolet "BABY GRAND."

Spring Suspension

The springs, of highest quality steel, are arranged to carry the load *between the axles*, with the center of gravity so well maintained that the car holds the road beautifully at all speeds, and at the same time "rides like a cradle."

The "BABY GRAND" is every inch a car, complete in every detail, of sufficient wheelbase, 106 inches, to insure perfect riding qualities. A fine, luxurious, five-passenger car of sturdy construction, *not for one year and then the scrap-heap*, but a car built for ten years of service, and economical from that standpoint. A good, substantial car cannot be built of extremely light weight. The Chevrolet has the weight necessary for continued and satisfactory service. The Chevrolet car has no superior in hill-climbing ability, and few at any price exceed it in speed performance.

One of the remarkable features of the Chevrolet car is that, regardless of its size, weight and performance, the motor is not as large as in the small ---- car. This indicates that the motor design must be quite perfect and that other startling claims made by us can be substantiated.

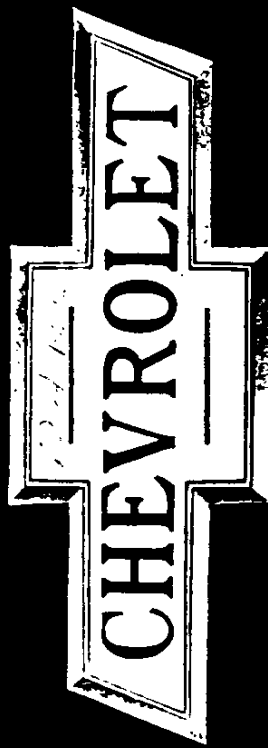




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1914-1915-1916



Baby Grand Touring Type H-4

Specifications, Chevrolet "Baby Grand"

MOTOR—Four-cylinder, valve-in-head $3\frac{1}{8}$ -inch bore, 4-inch stroke.
CYLINDERS—Cast en bloc, with upper half of crank case. Head detachable.
VALVES— $1\frac{1}{2}$ -inch enclosed.
CONNECTING ROD BEARINGS— $2\frac{1}{8}$ x $1\frac{1}{2}$, Doehler bronze back.
CRANKSHAFT BEARINGS—Front $2\frac{3}{4}$ x $1\frac{1}{2}$; center 2 x $1\frac{3}{8}$; rear $3\frac{7}{8}$ x 2 .
CENTER MAIN BEARING—Doehler bronze back.
CAMSHAFT BEARINGS—Front $2\frac{9}{16}$ x $1\frac{1}{16}$; center 2 x $1\frac{3}{8}$; rear $1\frac{7}{8}$ x $1\frac{1}{4}$.
OILING SYSTEM—Splash with positive pump; individual oil pockets for each connecting rod dipper. Sight feed on dash.
CARBURETOR—Zenith improved double jet.
IGNITION—New improved Connecticut igniter system.
CLUTCH—Cone leather faced, with adjustable compensating springs.
TRANSMISSION—Selective type, three speeds forward and reverse.
COOLING—Thermo-syphon system, radiator of extra size, with large overhanging tank carrying head of water over valves at all times.
REAR AXLE—Semi-floating type. Heat-treated shafts running on Hyatt roller bearings. Gear 4 to 1.
FRONT AXLE—Drop forged, I-beam, with integral yokes, tie-rod ends and steering spindles. Wheels fitted with large cup and cone ball bearings.
BRAKES—Service, external contracting; emergency, internal expanding; 12-inch brake drums.
TIRES— 32 x $3\frac{1}{2}$ inches, *non-skid on rear*.
DRIVE—Left-side, center control.
STEERING GEAR—Worm and worm wheel, 17-inch steering wheel with inserted spider.
GASOLINE SUPPLY—16-gallon tank hung on rear of car, pressure feed with automatic check valve.
BODY—Five-passenger touring type, streamline with deep cowl and instrument board. Extra wide doors with *concealed hinges*.
FINISH—Chevrolet Brewster green.
WHEELBASE—106 inches.
EQUIPMENT—Mohair tailored top and side curtains—windshield—three lamps. Single-wire lighting system is used with both small lamp and large lamp in the headlight. This does away with the necessity for sidelights. Electric horn—speedometer—demountable rims, with extra rim—tire irons—license holders, complete tool equipment.

CHEVROLET MOTOR COMPANY

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STANDARD EQUIPMENT

Demountable Rims
Non-Skid Tires on Rear Wheels
Tire Irons
License Brackets Front and Rear
Complete Tool Equipment

PRICE

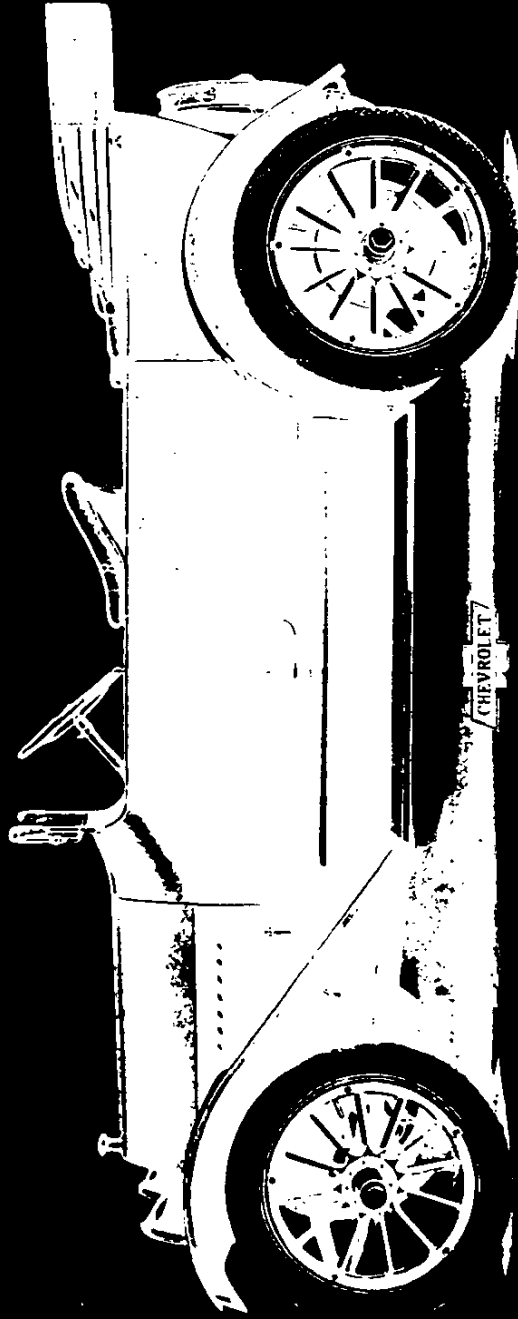
Including lighting and starting system.

\$750.00

C. O. B. Flint, Mich.

Chevrolet "Baby Grand"

"The Product of Experience"



STANDARD EQUIPMENT

Mohair Tailored Top, with Cover and Side Curtains
Windshield
Speedometer
Electric Horn
Complete Lamp Equipment

NOTE

Auto-Lite, two-unit starting and lighting system used

Body Features

The body of the "BABY GRAND" is made of metal, with steel sills and door-posts, giving sufficient strength to the sides to withstand the pull of the top when raised and the weight and drag of the top when lowered. It allows perfect fitting doors and prevents rattles, which are so objectionable in cheaply made bodies. The doors are hung with concealed hinges.

Particular attention is called to the body lines. There is something distinctively individual about the Chevrolet "BABY GRAND" body with its very handsome Brewster-green finish, neat lines and clean-cut appearance. No expense has been spared in the design and materials used in its construction.

A detail of the body which should not be overlooked is the nicked hood ledge on the front side of the dash, providing a proper support for the hood when raised and preventing the marring or scratching of the body.

Attention is also called to the quality of the upholstering in Chevrolet models. We use high-grade buffed leather with curled hair, also the best springs obtainable for the cushions. This combination insures to the owner of a Chevrolet car a comfortable, easy-riding car, together with beautiful body lines and finish.

We manufacture in our own shops our tops, covers and side curtains of high-grade mohair top material. Each top and set of curtains are tailored and individually fitted.



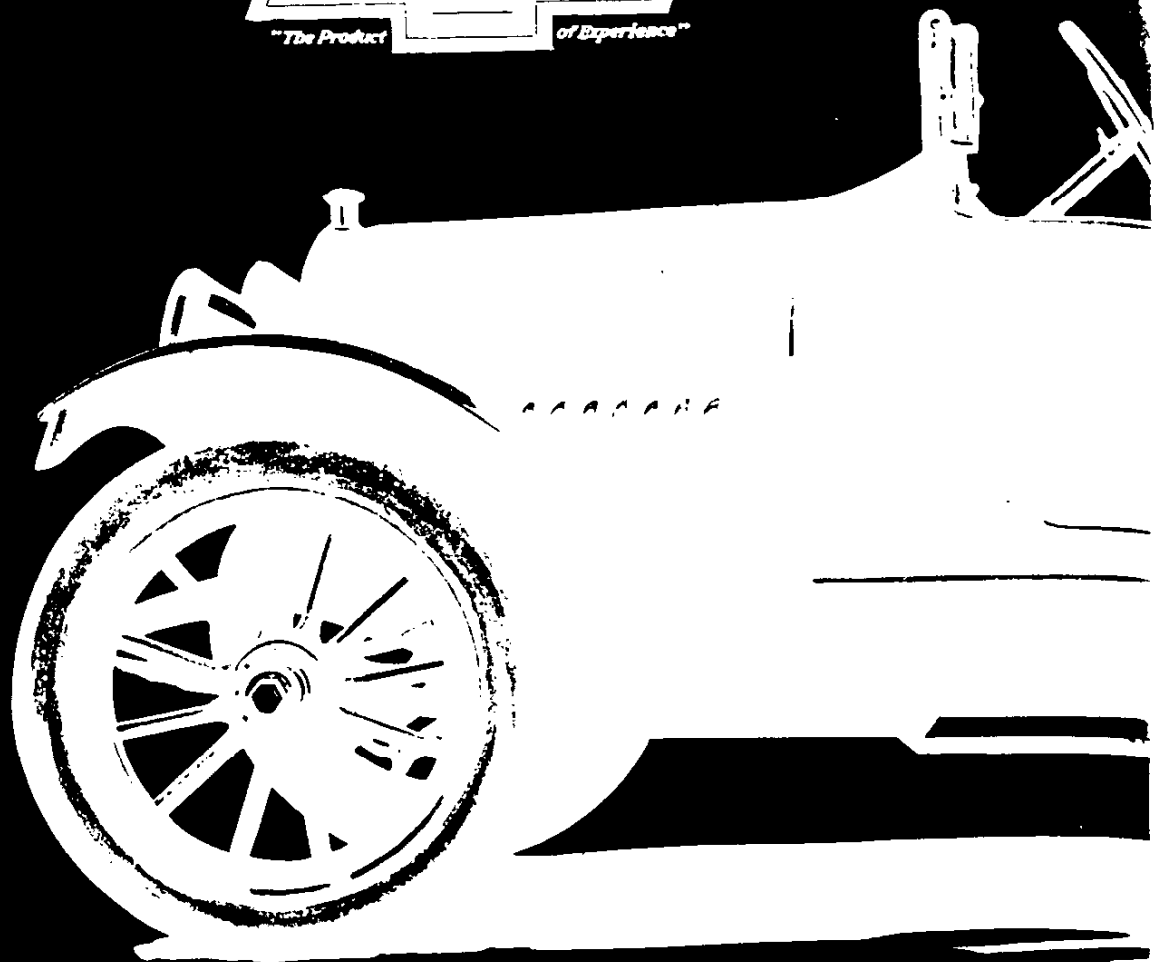
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CHEVROLET

"The Product

of Experience"



The *CHEVROLET Valve-in-the-Head* motor is of the four-cylinder, four-cycle type, 3 $\frac{1}{8}$ " cylinder bore and 4" piston stroke, which give the right combination of power at very low as well as high speeds; also noted for its flexibility, silence and durability.

The cylinders are cast "en bloc" integral with the upper half of the crank case, resulting in remarkable rigidity. The joint at the base of the cylinder is eliminated and the cylinder resistance load is spanned to the crank case walls and bearings through continuous walls properly placed to distribute each strain. The strain on each cylinder is greatly reduced because of the support given by the adjoining cylinders.

The *CHEVROLET Valve-in-the-Head* motor is different from the ordinary valve-in-the-head motor inasmuch as it has a removable cylinder head in a one-piece casting, carrying the spark plugs and valves, which can be easily taken off, permitting the grinding of the valves and removal of carbon. It is different from the ordinary valve-in-the-head motor in that it has no valve cages, therefore reducing the weight and permitting direct cooling of the valves and stems, as the valve seats are entirely surrounded by water. The cylinder head is secured to the cylinder casting by eight bolts, the joint being made tight by a copper and asbestos gasket. Two cast-steel arms support the motor. The attachment of the motor is by two long through bolts in each arm, which bolts also retain the crank shaft bearing cap, both ends fastened with cotter-pinned nuts. The arms are securely bolted to the side members of the chassis frame. This form of suspension insures practically all the advan-

H-4 Baby

Complete with Electric Start

tages of the so-called "three-point" method, without any of its disadvantages of instability, vibration and undue wear.

Pistons are of special grey iron, very light, ground and carefully fitted. Three piston rings to each piston. Piston pins, hardened and ground, are clamped in connecting rods and rotate in the piston. Connecting rods are steel forgings. The bearings are the best that money can buy. *Does Bronze Backed*, 2 $\frac{1}{8}$ " long by 1 $\frac{1}{2}$ " diameter, die cast babbitt. The crank shaft is a steel forging supported in the bearings; front, 2 $\frac{3}{4}$ " long by 1 $\frac{1}{2}$ " diameter, die cast babbitt; center, 2" long by 1 $\frac{3}{4}$ " diameter; *Bronze Backed*; rear, 3 $\frac{1}{8}$ " long by 2" diameter, die cast babbitt. All bearings are split, which allow them to be taken up or new ones easily inserted. Cam shaft is a steel forging with cast integral, three plain bearings. Front, 2 $\frac{3}{8}$ " long by 1" diameter, center 2" long by 1 $\frac{3}{8}$ " diameter; rear, 1 $\frac{7}{8}$ " long by 1 $\frac{1}{4}$ " diameter; driven by helical cut gear bolted to flange on cam shaft.

Lower half of the crank case is pressed steel, secured to the lower half of the cylinder casting with bolts close together, the joint being made tight with sheet cork.

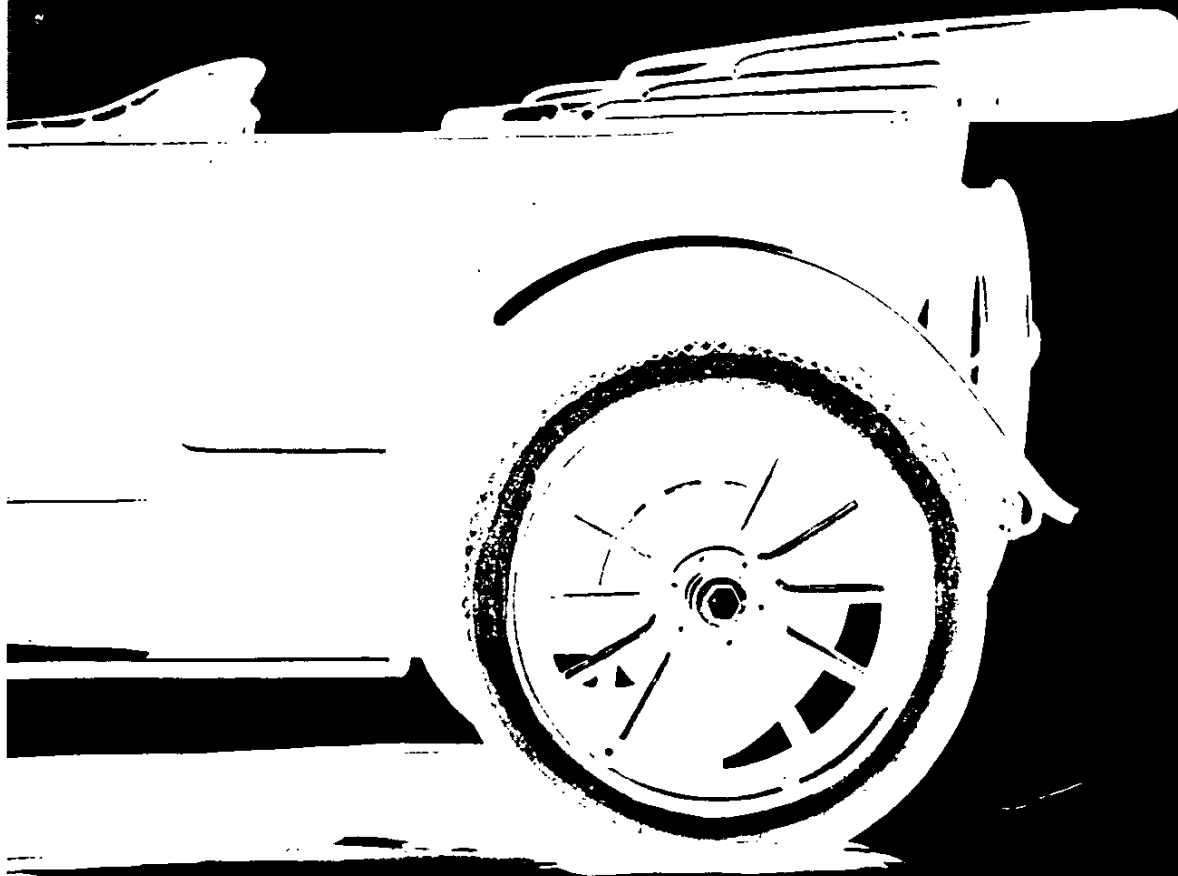
The valves are 1 $\frac{1}{2}$ " in diameter, having steel stems



CHEVROLET

"The Product

of Experience"



and Touring

\$750 f.o.b. Flint, Mich.

iron heads. A removable nickel-plated cover affords accessibility to valve mechanism.

The advantages of the *Chevrolet Valve-in-the-head* motor over the *L* or *T*-head type is the absence of pockets or corners, which makes possible the full machining of the combustion chamber, gives less tendency to carbonization, the straight cylinder assures an absolutely consistent operation as all cylinder surfaces are exactly alike and each cylinder will handle its charge in exactly the same way at all speeds. It cleans or scavenges the cylinders of unburned gas more completely on the exhaust stroke of the piston, being forced straight out through the exhaust valve at the top of the cylinder. Therefore, the fresh gas introduced through the inlet valve on the next charge finds a perfectly clean cylinder which naturally produces a greater compression and a correspondingly greater piston pressure when fired, resulting in a motor which produces more power per size and weight than any other Motor in the world. It has a smaller cylinder bore than the ordinary valve-in-the-head motor, but with proper port areas, and perfect vaporization of fuel, we obtain more mileage per gallon than any Motor of its size produced. Special attention has been given to accessibility to generator, with no heat interference to destroy the efficiency of this important instrument. The

exhaust pipe also carries the heat away from the toe board and floor boards, making the front part of the car most comfortable and requiring no ventilation.

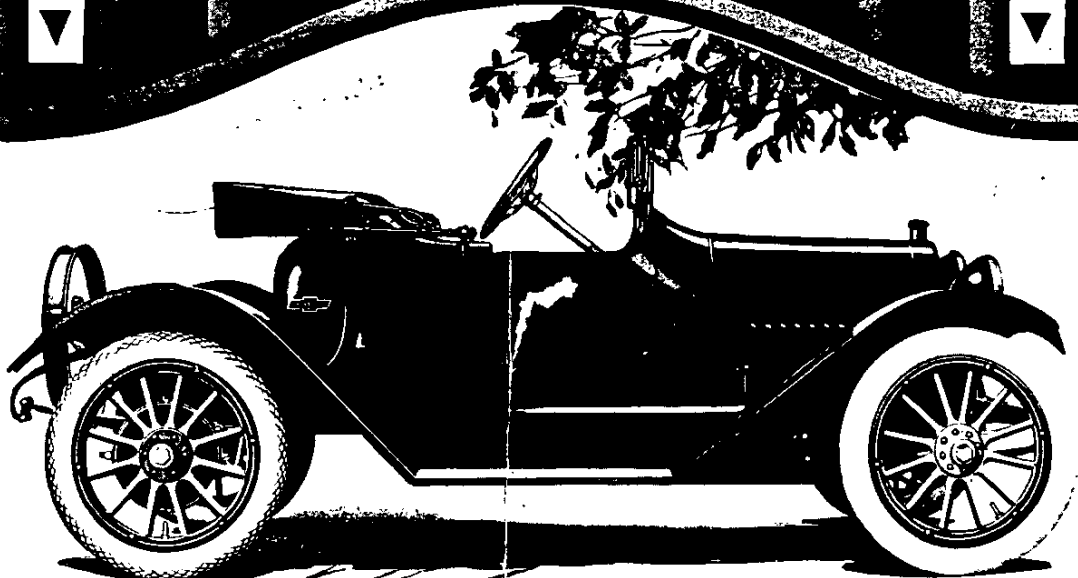
CARBURETOR—We use the world's standard, Zenith improved double jet carburetor, the simplest in construction, most efficient and economical ever designed. Intake manifold of seamless steel tubing. Carburetor is aided by the utilization of heated air taken from a jacket on the exhaust manifold through a flexible tube to the carburetor air intake.

LUBRICATION—Circulation of the oil is by means of a gear pump operated by the forward end of the magneto shaft, which takes its oil from the lowest part of the crank case and forces it through a pipe to the oil sight gauge on the cowl dash, where the circulation can be observed by the driver. From the oil sight the oil returns through a distributing pipe enclosed within the crank case, to individual oil troughs into which the connecting rod dippers dip at each stroke, and splash the oil over the interior of the crank case, cylinders, pistons and pockets above the crank shaft bearings which lead to the bearings. Cam shaft bearings receive oil by wicking from the crank shaft bearing pockets and by splash, the excess oil falling back to the reservoir to be used over again.

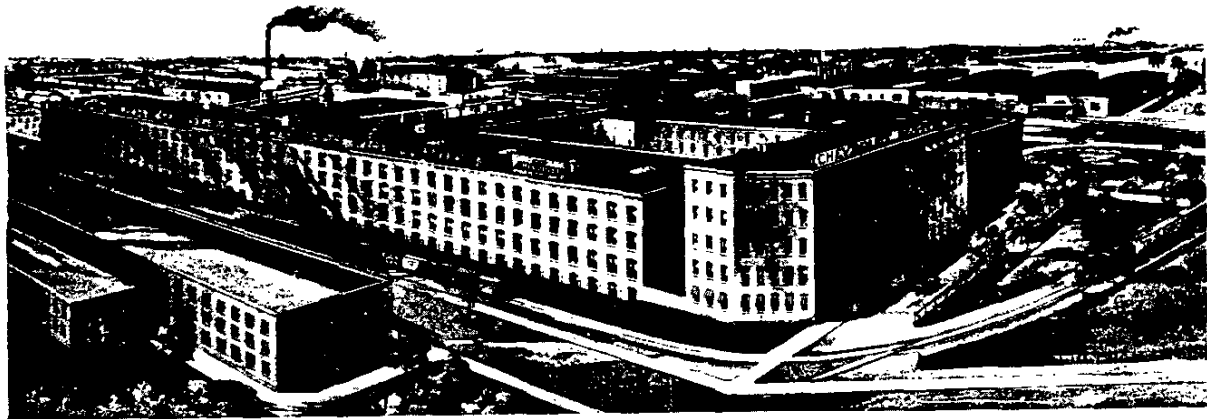
THE CLUTCH COLLAR—The clutch collar used on the Chevrolet is one of the greatest refinements made in automobile construction in the last ten years. This is a patented device, owned by the company, covered by eleven claims, used exclusively on the Chevrolet car. It cannot be found on any other car at any price.



CHEVROLET



Royal Mail Roadster



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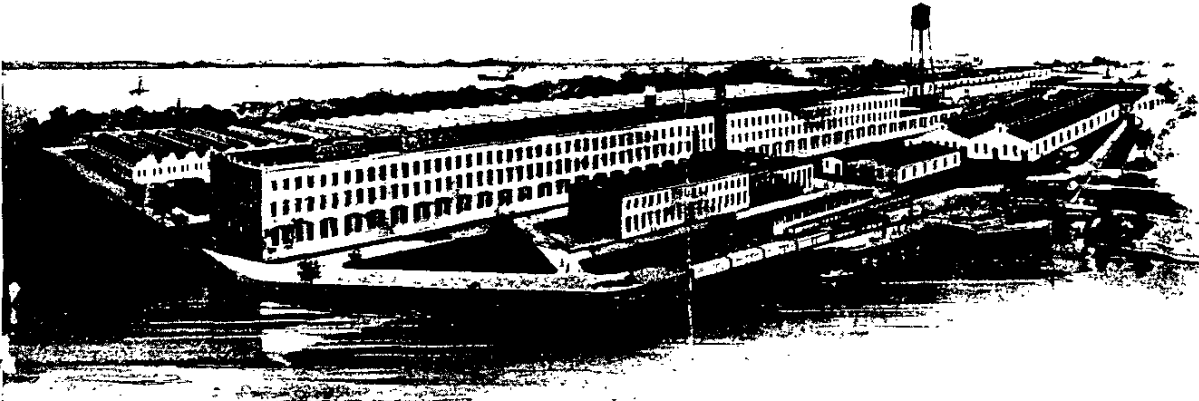
The cylinders are cast "enbloc" integral with the upper half of the crank case, resulting in remarkable rigidity. The joint at the base of the cylinder is eliminated and the cylinder resistance load is spanned to the crank case walls and bearings through continuous walls properly placed to distribute each strain. The strain on each cylinder is greatly reduced because of the support given by the adjoining cylinders.

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and valves, which can be easily taken off, permitting the grinding of the valves and removal of carbon. It is different from the ordinary valve-in-the-head motor in that it has no valve cages, therefore reducing the weight and permitting direct cooling of the valves and stems, as the valve seats are entirely surrounded by water. The cylinder head is secured to the cylinder casting by eight bolts, the joint being made by a copper and asbestos gasket. Two cast steel arms support the motor. The attachment of the motor is by two long through bolts in each arm, which bolts also retain the crank shaft bearing cap, both ends fastened with cotter-pinned nuts. The arms are securely bolted to the side members of the chassis frame. This form of suspension insures practically all the advantages of the so-called "three-point" method, without any of its disadvantages of instability, vibration and undue wear.

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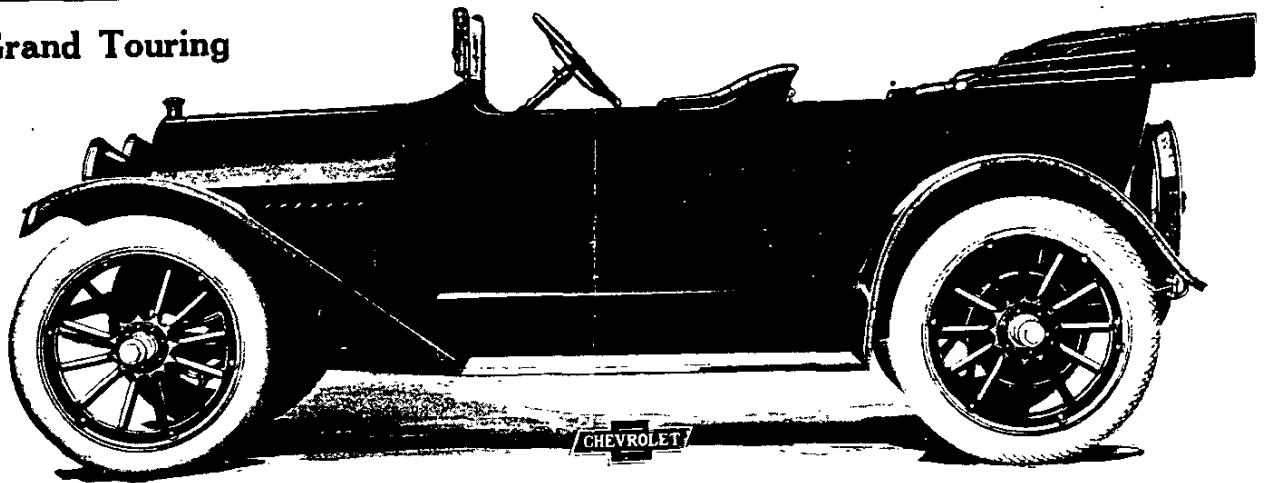
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Baby Grand Touring



COMPANY IS TO BUILD A GOOD MOTOR CAR TO SELL AT A

are clamped in connecting rods and turn in piston. Connecting rods are steel forgings. The bearings are the best that money can buy. **DOEHLER BRONZE BACKED**, $2\frac{1}{8}$ " long by $1\frac{1}{2}$ " diameter, die cast. The crank shaft is a steel forging supported in three bearings; front, $2\frac{3}{4}$ " long by $1\frac{1}{2}$ " diameter, die cast; center, 2" long by $1\frac{1}{2}$ " diameter; **BRONZE BACKED**; rear, $3\frac{1}{8}$ " long by 2" diameter, die cast. All bearings are split which allow them to be taken up or new ones easily inserted. Cam shaft is a steel forging with cams integral, three plain bearings. Front, $2\frac{1}{8}$ " long by $1\frac{1}{2}$ " diameter; center, 2" long by $1\frac{1}{2}$ " diameter; rear, $1\frac{1}{8}$ " long by $1\frac{1}{4}$ " diameter, driven by special cut gear bolted to flange on cam shaft.

Lower crank case is pressed steel secured to the lower half of the cylinder casting with bolts close together, the joint being made with sheet cork.

The valves are $1\frac{1}{2}$ ", having steel stems with nickel-plated iron heads. A removable nickel-plated cover allows instant accessibility to springs and rocker arms.

The advantages of the **CHEVROLET VALVE-IN-THE-HEAD** motor over the L or T-head type is the absence of pockets or chambers, which makes possible the full machining of the combustion chamber, gives less tendency to carbonization, and the straight cylinder assures an absolutely consistent motor as all cylinder surfaces are exactly alike and each cylinder will handle its charge in exactly the same way under all speeds. It cleans or scavenges the cylinders of burned gas more completely on the exhaust stroke of the piston which forces it straight out through the exhaust valve at the top of the cylinder. Therefore, the fresh gas introduced through the inlet valve on the next charge finds a perfectly clean cylinder which naturally produces a greater expansion and a correspondingly greater piston pressure when fired, resulting in a motor which produces more power for its size and weight **THAN ANY OTHER MOTOR IN THE WORLD**. It has a smaller cylinder bore than the ordinary valve-in-the-head motor, but with perfect

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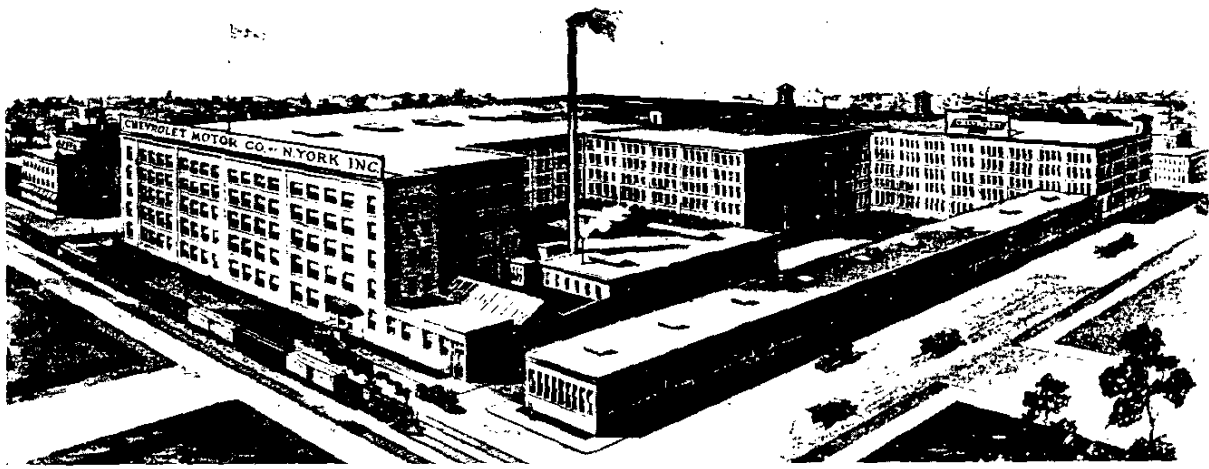
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TRANSMISSIONS—It is of the selective type sliding gear in which the changes may be made from any gear direct to any other. Gears and shafts are made of special alloy heat-treated steel. Three speeds forward and one reverse. Main and clutch gear shafts revolve on three large annular ball bearings; countershaft revolves on plain bronze bearings. The complete transmission is encased in a dust and oil-tight cast iron housing of great accessibility, supported by four bolts secured to frame cross members. The transmission is designed to handle with a liberal factor of safety a motor developing fully 40 horsepower.

AXLES—The front axle is drop-forged I-beam section with integral yokes and spring seats, tie rod ends and steering fingers are also drop forged steel. Steering spindles and joints of steering connections consist of heavy bolts with plain bronze bushings, held secure by cotter-pinned nuts; substantial, simple and well lubricated.

The rear axle is extremely strong, light, and of simple construction of the semi-floating type. The drive shafts revolve on very large and long Hyster roller bearings. The thrust re-action from the bevel gears and road wheels is taken on large thrust ball bearings of special design. The bevel pinion shaft revolves on two large New Departure ball bearings which provide for both thrust and radial loads. The gears and shafts are of special selected and heat-treated alloy steel. The rear axle housing has been designed for maximum sti-

CHEVROLET MOTOR COMPANY, FLINT, MICHIGAN



REASONABLE PRICE

ness without sacrificing accessibility or entailing great weight.

The driving thrusts from the rear wheels are transmitted to the frame of the car through the rear springs. The torque reactions from the bevel pinion and brakes are provided for by a triangular torque rod of tubular construction which swivels on a long, through bolt in the rear axle housing and extends forward from the rear axle terminating in a ball and carried between spring cushions, suspended from a substantial support carried by the frame cross member. The spring seats of the rear axle are carried in bearings surrounding the axle tubes, and ample provision is made for lubrication.

SPRINGS—The springs are of special alloy steel, equipped with rebound clips, carefully proportioned to suit the load to be carried, with a view of obtaining a maximum of easy riding qualities. The front springs are semi-elliptic, 1 $\frac{3}{4}$ " wide by 36" long. The rear springs are $\frac{3}{4}$ " elliptic, 1 $\frac{3}{4}$ " wide by 48" long. Rubber bumpers are provided on front springs.

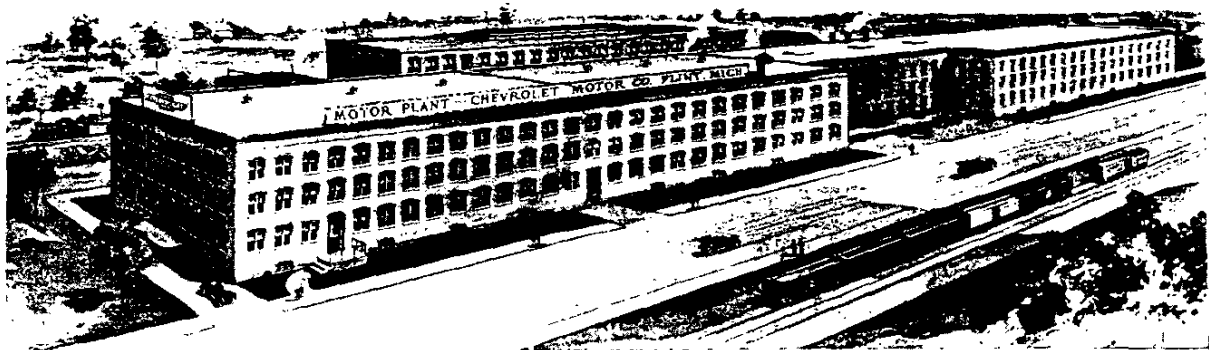
STEERING GEAR—The steering gear is designed especially for durability combined with ease of operation. It is of the worm and worm-gear type, the working parts being mounted in a substantial housing with ample bearing surface and means for positive and thorough lubrication, equipped with ball thrust bearings. Steering wheel is 17" in diameter, the spider being inserted in a wood rim.

BRAKES—A powerful car requires good and efficient brakes. On the Chevrolet two independent sets of brakes are provided, one set expanding against the inner faces of the 12" diameter by 1 $\frac{3}{4}$ " face pressed steel drums, and the other contracting against the outer faces. The friction surface of the brakes are lined with asbestos fabric built on a foundation of woven wire.

The CHEVROLET is just what its builders have designed it to be—a high class, fine, luxurious car.

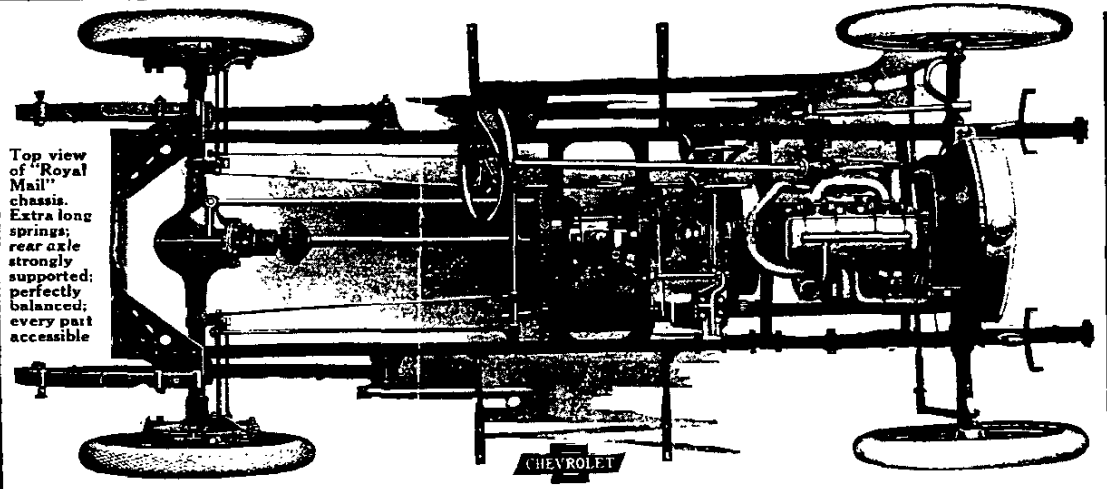
The CHEVROLET has the weight necessary for continued and satisfactory service.

The CHEVROLET car has no superior in hill climbing ability, and few at any price excel it in speed performance. Look into our proposition. Ride in the car. We are willing to abide by your verdict.



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THE POLICY OF THIS COMPANY IS TO BUILD A C



Top view of "Royal Mail" chassis. Extra long springs; rear axle strongly supported; perfectly balanced; every part accessible

Standard Equipment—Mohair tailored top, dust hood and complete set of side curtains; ventilating rain-vision windshield. Sears-Cross speedometer, pockets in the doors. Extra demountable rim, tire carrier in rear, set of tools, pump, tire repair kit, jack, electric horn, Prest-O-Lite tank, and five lamps. Robe rail on touring car.

CONDENSED

Motor—Four-cylinder, four cycle, over-head valve type, $3\frac{1}{8}$ " bore by 4" stroke.

Cylinders—Cast enbloc with upper half of crank case. Head detachable.

Valves— $1\frac{1}{2}$ "—mechanism enclosed.

Connecting Rods—Steel forging; bearings $2\frac{1}{8}$ " by $1\frac{1}{2}$ ", die cast, bronze backed, babbitt lined.

Crank Shaft—Steel forging, three plain bearings; front, $2\frac{3}{4}$ " by $1\frac{1}{2}$ "; center, bronze backed, 2" by $1\frac{3}{4}$ "; rear, $3\frac{1}{8}$ " by 2".

Cam Shaft—Steel forging, cams are made integral; three plain bearings; front, $2\frac{3}{8}$ " by $1\frac{3}{8}$ "; center, 2" by $1\frac{5}{8}$ "; rear, $1\frac{1}{8}$ " by $1\frac{1}{4}$ ". Driven by helical gear bolted to flange on cam shaft.

Lubrication—Self-contained, constant level, splash system, with distributing pipe enclosed within crank case, oil circulated by gear pump. Individual oil pocket for each connecting rod dipper. Sight feed on dash.

Carburetor—Improved double jet, Zenith. Pressure feed by automatic pump on Baby Grand. Gravity feed direct from tank on Royal Mail.

Ignition—Simms high tension magneto.

Cooling—Thermo-syphon system, radiator of a large capacity with excess circulation, in conjunction with belt-driven fan and ventilated hood.

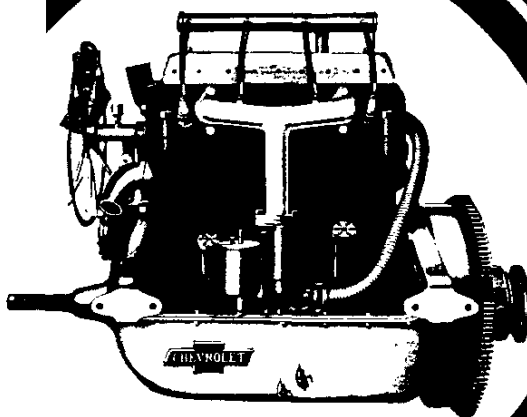
Clutch—Large, leather faced, pressed steel cone; springs under leather to prevent harsh action.

Transmission—Sliding gear, selective type, three speeds forward and reverse. Running on annular ball bearings.

Drive—Shaft, two universal joints, the forward telescopic, each enclosed in housing and running in oil bath.

Front Axle—Drop forged, I-beam with integral yokes, tie rod ends and steering spindles. Wheels fitted with cup and cone ball bearings.

Rear Axle—Semi-floating type, heat-treated axle shafts, running on Hyatt roller bearings. Gear ratio 4 to 1.

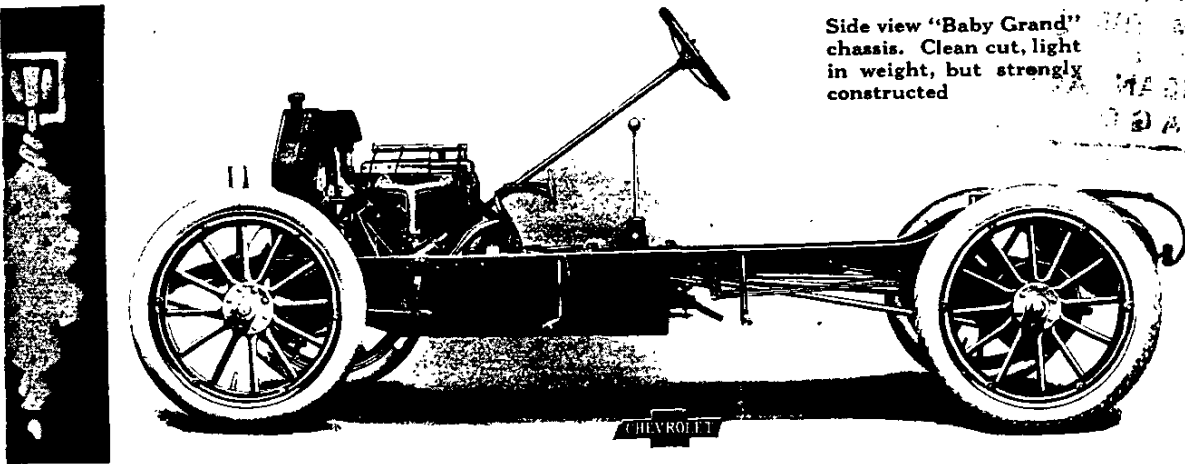


Intake side of the famous Chevrolet motor—four-cylinder, valve-in-the-head type. Bronze backed bearings

CHEVROLET MOTOR

1
2

GOOD MOTOR CAR TO SELL AT A REASONABLE PRICE



Side view "Baby Grand" chassis. Clean cut, light in weight, but strongly constructed

SPECIFICATIONS

Brakes—Emergency, internal expanding; service, external contracting; direct on rear wheels, 12" by 1 $\frac{3}{4}$ " drums.

Wheels—Wood, artillery type, fitted with demountable rims, large hub flanges.

Tires—32" by 3 $\frac{1}{2}$ ", Goodyear; Non-skid on rear.

Steering Gear—Worm and worm gear, adjustable with ball thrust bearings. 17" steering wheel with inserted spider. **LEFT DRIVE.**

Control—Lever for gear changes, conveniently located in center of body. **CENTER CONTROL.** Friction retained spark and throttle levers on top of steering wheel. Independent foot accelerator and muffler cut-out. The left pedal for clutch and service brake; right pedal for emergency brake.

Frame—Pressed steel, channel section, extra strong.

Springs—High quality spring steel, heat-treated; front, semi-elliptic, 36" long, 1 $\frac{3}{4}$ " wide; rear, $\frac{3}{4}$ elliptic, 48" long, 1 $\frac{3}{4}$ " wide.

Wheel Base—106".

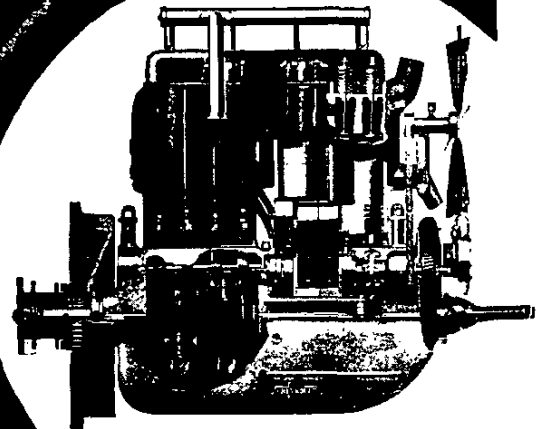
Tread—56" (60" special when desired).

Body—Streamline body with deep cowl and extra wide doors, good wide seats and ample leg room. Baby Grand five-passenger touring type, 16 gallon gasoline supply tank at rear of frame. Royal Mail 2-passenger roadster type, 20 gallon gasoline tank on rear deck. **CONCEALED HINGES.**

Finish—Baby Grand Touring: Chevrolet gun-metal color on body and wheels, or Chevrolet Lake red color on body and wheels; black chassis and fenders. Royal Mail Roadster: Chevrolet gun-metal color on body and wheels; black chassis and fenders.

Price—Baby Grand touring car, \$875.00. Royal Mail roadster, \$750.00. F.O.B. Flint, Mich.

Extras—Electric Auto-Lite starting motor with Bendix automatic screw pinion drive and lighting system with generator; two large size, high-grade, double bulb, electric head lamps; electric tail lamp; all operated by switches on instrument board, and L. B. A. storage battery, \$110.00. When thus electrically equipped, Auto-Lite generator, Connecticut coil and distributor are used for ignition instead of magneto. All instruments illuminated by electric dash light with extension cord for trouble lamp.



Inside view of Chevrolet valve-in-the-head motor showing the valves, pistons, crank shaft, clutch and oiling system. The most powerful motor (size considered) in the world

COMPANY, FLINT, MICHIGAN

STANDARD EQUIPMENT

Demountable Rims
Non-Skid Tires on Rear Wheels
Tire Irons
License Brackets Front and Rear
Complete Tool Equipment

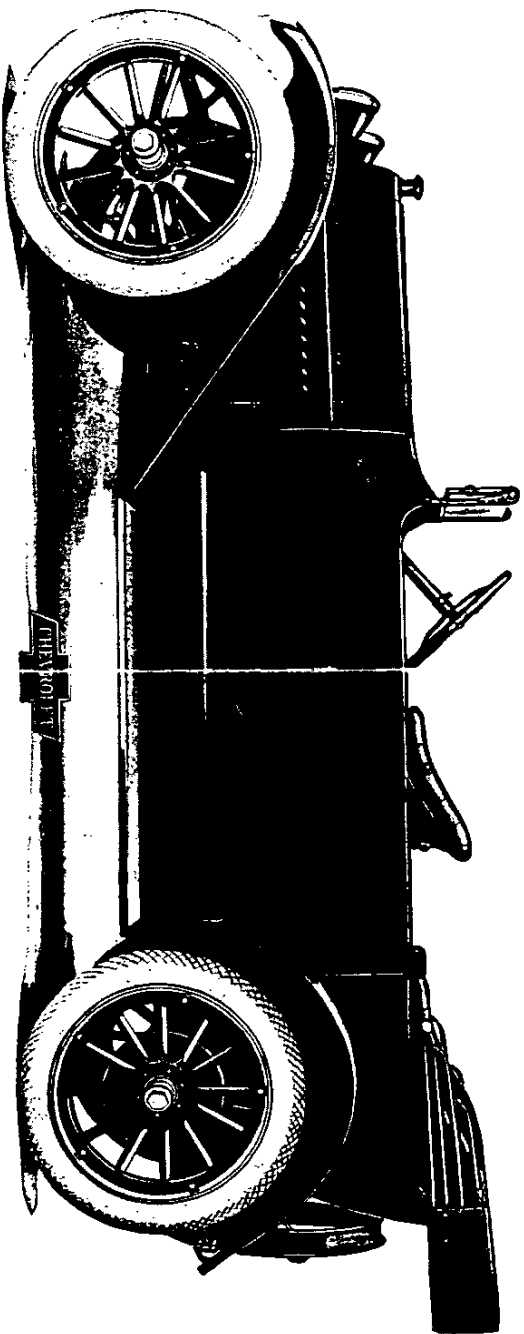
Including lighting and starting system.

\$750.00

f.o.b. Flint, Mich.

Chevrolet "Baby Grand"

"The Product of Experience"



STANDARD EQUIPMENT

Mohair Tailored Top, with Cover and Side Curtains
Windshield
Speedometer
Electric Horn
Complete Lamp Equipment

NOTE

Auto-Lite, two-unit starting and lighting system used

Body Features

The body of the "BABY GRAND" is made of metal, with steel sills and door-posts, giving sufficient strength to the sides to withstand the pull of the top when raised and the weight and drag of the top when lowered. It allows perfect fitting doors and prevents rattles, which are so objectionable in cheaply made bodies. The doors are hung with concealed hinges.

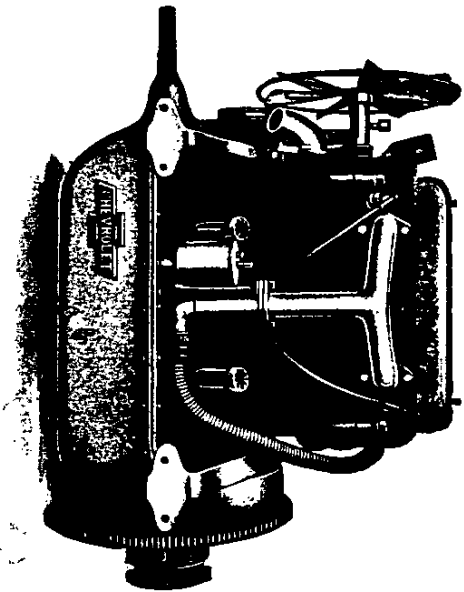
Particular attention is called to the body lines. There is something distinctively individual about the Chevrolet "BABY GRAND" body with its very handsome Brewster-green finish, neat lines and clean-cut appearance. No expense has been spared in the design and materials used in its construction.

A detail of the body which should not be overlooked is the nicked hood ledge on the front side of the dash, providing a proper support for the hood when raised and preventing the marring or scratching of the body.

Attention is also called to the quality of the upholstering in Chevrolet models. We use high-grade buffed leather with curled hair, also the best springs obtainable for the cushions. This combination insures to the owner of a Chevrolet car a comfortable, easy-riding car, together with beautiful body lines and finish.

We manufacture in our own shops our tops, covers and side curtains of high-grade mohair top material. Each top and set of curtains are tailored and individually fitted.

***MOST** presentations and announcements deal in generalities. Much space is consumed in featuring large factories, perfected organizations, etc. Facts and real information are frequently lacking. It is our purpose to present herein facts and real information of value to our dealers and prospective customers. "No chain is stronger than its weakest link." No motor car is better than its motor.*



Intake side of the famous Chevrolet Motor. Four-cylinder, valve-in-head type. The most powerful motor (size considered) in the world

In the first place, it is of the celebrated valve-in-head type.

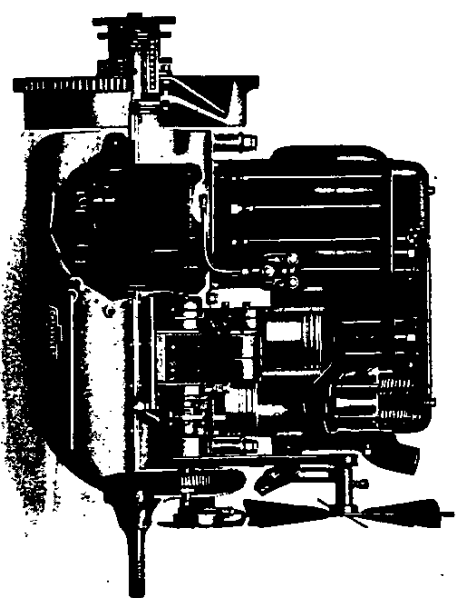
It is *different* from the ordinary valve-in-head motor, having a detachable head (containing all of the valve mechanism) which can be easily disconnected, permitting the grinding of the valves and removal of carbon at the bench.

It is *different* from the ordinary valve-in-head motor in that it has no valve cages, doing away with 64 unnecessary parts, very materially reducing the weight and permitting direct cooling of the valves.

It is *different* from the ordinary valve-in-head motor in that it is built with Doehler bronze back bearings—the *best bearings money can buy*.

It is *different* from the ordinary valve-in-head motor in design, balance, proportions and accuracy of timing, resulting in a motor which produces more power for its size and weight *than any other motor in the world*.

It is *different* from the ordinary valve-in-head motor in that it has a very much smaller cylinder bore; but with proper port areas, perfect vaporizing of fuel and our peculiar method of vacuum exhaust, we obtain more mileage per gallon of gasoline than *any other motor of its size yet produced*.



Exhaust side of Chevrolet Motor showing the valves, pistons, crankshaft, clutch and oiling system

It is *different* from the ordinary valve-in-head motor in that there is the utmost accessibility to magneto and generator, with no heat interference to destroy the efficiency of these important instruments; the exhaust pipe also carries the heat away from the toe-board and floorboards, making the front part of the car most comfortable and requiring no ventilation.

It is *different* from the ordinary valve-in-head motor in that the wiring is enclosed in flexible metal tubing, preventing any burning of the wires or soaking with oil to cause short-circuiting. The system of wiring is entirely new and is not used on *any other car on the market at the present time*.

It is *different* from the ordinary valve-in-head motor in that we use the world's standard Zenith carburetor, the simplest in construction, most efficient and economical ever designed, enabling us to obtain a *mileage of 26½ to 30 miles per gallon*.

Because of *these differences* the Chevrolet motor should have your consideration. "As a rifle is to a shotgun, so is the Chevrolet to any other motor built."

The Clutch Collar

The clutch collar used on the Chevrolet is one of the greatest refinements made in automobile construction in the last ten years. This is a patented device, owned by the company, covered by eleven claims, used exclusively on the Chevrolet car. It cannot be found on any other car at any price. The clutch collar is usually the most annoying and the most expensive small part of a motor car, and has more to do with the satisfactory running than any other.

By reason of closeness of fit, constant pressure and centrifugal action, the clutch collar is almost impossible to lubricate, causing heating and burning out of the clutch collar, cutting of clutch hub, making impossible the easy shifting of gears. By the use of our internally lubricated clutch collar, the defects above mentioned are eliminated and the expense of frequent replacement is entirely done away with.

Our collar is a cored bronze casting, holding about a cupful of oil.

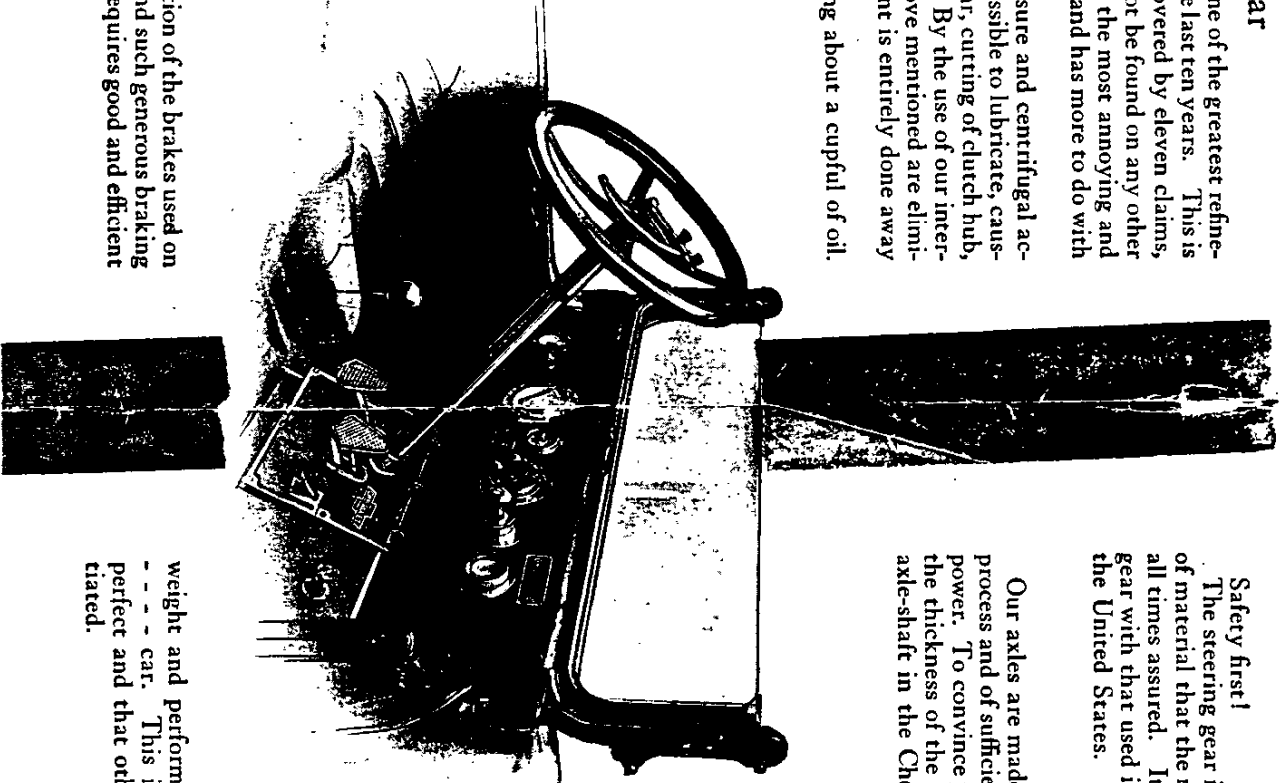
Through the shell at proper distances special wood plugs are inserted, extending into the oil receptacle, through which plugs the oil exudes (or sweats), delivering the oil to the center of the clutch hub, the centrifugal motion carrying it to the outside, preventing friction, heating and cutting. The collar carries sufficient oil for about two months' use and can be easily refilled through a cover in the top of the casing. *This of itself is worth the price of the car.*

Transmission

The transmission is practically noiseless on all gears which are made of nickel steel, heat-treated. The shafts and bearings are most liberal, the shifting device positive and easy to operate. The transmission is designed to handle with a liberal factor of safety a motor developing fully 40 h.-p.

Brakes

Attention is called to the size and construction of the brakes used on the "BABY GRAND" car. Rarely do you find such generous braking surface in a car of this size. A powerful car requires good and efficient brakes.



Safety first!

The steering gear is so designed, so reinforced and of such quality of material that the maximum safety of the occupant of the car is at all times assured. It will please us to have you compare our steering gear with that used in any other medium-priced automobile made in the United States.

Steering Gear

Axles

Our axles are made of the best materials—heat-treated by special process and of sufficient strength to carry 75% overload in weight and power. To convince yourself, look at the size of the pinion gears and the thickness of the ring gears in the differential and the size of the axle-shaft in the Chevrolet "BABY GRAND."

Spring Suspension

The springs, of highest quality steel, are arranged to carry the load *between the axles*, with the center of gravity so well maintained that the car holds the road beautifully at all speeds, and at the same time "rides like a cradle."

The "BABY GRAND" is every inch a car, complete in every detail, of sufficient wheelbase, 106 inches, to insure perfect riding qualities. A fine, luxurious, five-passenger car of sturdy construction, *not for one year and then the scrap-heap*, but a car built for ten years of service, and economical from that standpoint. A good, substantial car cannot be built of extremely light weight. The Chevrolet has the weight necessary for continued and satisfactory service. The Chevrolet car has no superior in hill-climbing ability, and few at any price excel it in speed performance.

One of the remarkable features of the Chevrolet car is that, regardless of its size, weight and performance, the motor is not as large as in the small car. This indicates that the motor design must be quite perfect and that other startling claims made by us can be substantiated.

Specifications, Chevrolet "Baby Grand"

MOTOR—Four-cylinder, valve-in-head $3\frac{11}{16}$ -inch bore, 4-inch stroke.
CYLINDERS—Cast en bloc, with upper half of crank case. Head detachable.

VALVES— $1\frac{1}{2}$ -inch enclosed.

CONNECTING ROD BEARINGS— $2\frac{1}{8}$ x $1\frac{1}{2}$, Doehler bronze back.

CRANKSHAFT BEARINGS—Front $2\frac{3}{4}$ x $1\frac{1}{2}$; center 2 x $1\frac{3}{4}$; rear $3\frac{3}{8}$ x 2.

CENTER MAIN BEARING—Doehler bronze back.

CAMSHAFT BEARINGS—Front $2\frac{9}{16}$ x $1\frac{5}{16}$; center 2 x $1\frac{3}{4}$; rear $1\frac{7}{8}$ x $1\frac{1}{4}$.

• OILING SYSTEM—Splash with positive pump; individual oil pockets for each connecting rod dipper. Sight feed on dash.

CARBURETOR—Zenith improved double jet.

• IGNITION—New improved Connecticut igniter system.

CLUTCH—Cone leather faced, with adjustable compensating springs.

TRANSMISSION—Selective type, three speeds forward and reverse.

COOLING—Thermo-syphon system, radiator of extra size, with large overhanging tank carrying head of water over valves at all times.

REAR AXLE—Semi-floating type. Heat-treated shafts running on Hyatt roller bearings. Gear 4 to 1.

FRONT AXLE—Drop forged, I-beam, with integral yokes, tie-rod ends and steering spindles. Wheels fitted with large cup and cone ball bearings.

BRAKES—Service, external contracting; emergency, internal expanding; 12-inch brake drums.

TIRES—32 x $3\frac{1}{2}$ inches; *non-skid on rear*.

DRIVE—Left-side, center control.

STEERING GEAR—Worm and worm wheel, 17-inch steering wheel with inserted spider.

GASOLINE SUPPLY—16-gallon tank hung on rear of car, pressure feed with automatic check valve.

BODY—Five-passenger touring type, streamline with deep cowl and instrument board. Extra wide doors with *concealed hinges*.

FINISH—Chevrolet Brewster green.

WHEELBASE—106 inches.

EQUIPMENT—Mohair tailored top and side curtains—windshield—three lamps. Single-wire lighting system is used with both small lamp and large lamp in the headlight. This does away with the necessity for sidelights. Electric horn—speedometer—demountable rims, with extra rim—tire irons—license holders, complete tool equipment.

CHEVROLET MOTOR COMPANY

OF NEW YORK, INCORPORATED

Fifty-seventh Street and Eleventh Avenue, NEW YORK CITY

