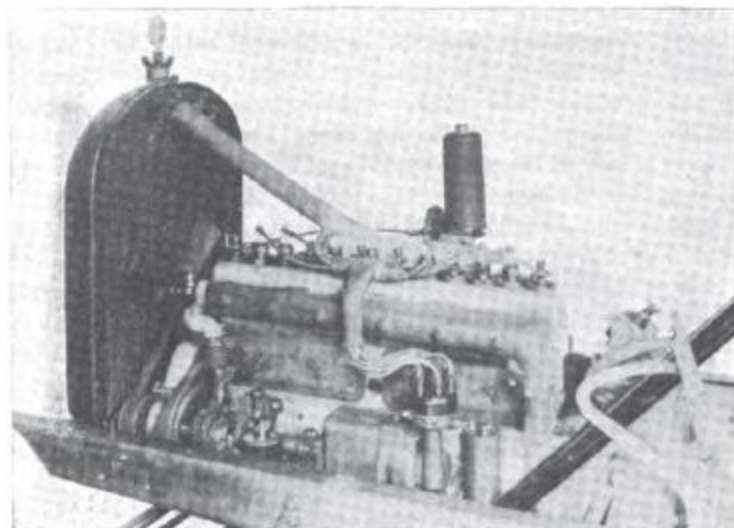


Chassis of Louis Chevrolet's new American six, showing low hung frame. The appearance of sturdiness strikes one's eye

American Six Design of L. Chevrolet

Heavy Frame and Carefully Designed Load-Carrying Parts Make Sturdy Car



The motor of the American six is designed with a view of minimizing all possible weight, yet maintaining maximum strength

Comfort and Nicety of Detail Sought for in Design of This \$1285 Job

THE American six, made by the American Motors Corp., Plainfield, N. J., is a new car of moderate price and strong distinctiveness produced under the aegis of Louis Chevrolet. Louis as a motorist of very many years standing is well able to appreciate the many little things that go to providing the ultimate owner of a car with real contentment; he knows just what gives annoyance when neglected and the car itself is proof of the extreme practicalness of its engineer.

The price of \$1285 is sufficient to enable great care to be given to detail in addition to providing the best of main chassis units, it permits the body to be nicely furnished, well upholstered and thoroughly comfortable; most of all, it allows the engineers to make their own designs wherever they feel that they cannot purchase a stock article as good as they could make it.

As an example, the engine is specially designed for the car, though the gearset and the axles are stock products. The frame is one of the strongest and most rigid of any car in its class and all the brackets, spring hangers, etc., are secured with particular care. It is a car which ought never to rattle or squeak and should be almost as good after a year's hard use as when

it was first turned out of the factory. Weight has been studied also, and it is stated that the finished car is very light for its power.

The engine has the popular dimensions of 3 by 5 in., and is an L-head type without a detachable head, there being large valve caps, those over each exhaust valve having a substantial priming cock. As an example of detail it is noteworthy that the cylinder which carries the pressure connection for the Carter fuel feed has a tee fitted in the valve cap so that the advantage of a cock is not lost even on one cylinder. The accessories such as the Gray & Davis generator, ignition unit and starter, are grouped around the cylinders with due regard for their accessibility, the Zenith carburetor bolts right against the cylinders, the gland of the water pump and the fan belt adjustment are all within easy reach after lifting the hood.

Regarding the water pump, this delivers to the front end of the cylinders, and one of the clever ways in which weight has been saved is here apparent. Saving weight is largely a matter of making one part do the work of two, so the water pipe which conducts the cooling fluid from the pump to the cylinders is a casting which also

serves to carry the fan spindle, as can be seen in the illustration.

The cylinders are all one casting, but this does not include any part of the crankcase, the latter being all of aluminum, for lightness sake. Platforms of aluminum carry the electrical units, the Gray & Davis timer being combined with the generator and the coil unit set alongside it. The starting motor is also on a platform where it is well out of the water and dirt which would reach it in a lower position. It should be noticed that the electrical accessories are so mounted that they do not interfere with the accessibility of the valve tappets, which are easily got at by removing pressed steel covers.

Lubrication is on a rarely used system, but a very good one, as the cams and tappets are a prime consideration. Nothing contributes more to a noisy engine than wear of the valve operating parts, so the American six has the camshaft inclosed in a tunnel and the oil is pumped to this in such quantities that the lower ends of the tappets are dipping in the lubricant. Thence it overflows into splash troughs beneath the connecting rod lower ends, and these splash it up into deep gutters on the

crankcase webs that conduct a copious supply to the main bearings. There are three of the latter, and the shaft is $1\frac{3}{4}$ in. in diameter; large enough to guard against vibration even at high speeds. There is a big oil filler cap accessibly located on the side of the crankcase, and alongside it is a wire attached to a float which shows the oil level in the crankcase pump, so that the level can be read while pouring in the oil, a thing which is not by any means true of all motor cars.

The Borg & Beck dry disk clutch is used and this has multiplying levers incorporated within it, so that a very light pedal pressure is enough to release; at a guess the pressure is between 30 and 40 pounds only and any woman could operate the clutch without the least difficulty. The accelerator pedal also has an easy action, and the gearshift lever is brought to a position within a natural grasping reach, so that changing from one gear to another is about as easy as it could be. The brake lever is placed far enough from the gear lever to prevent any possibility of a mistake, but near enough to be within equally easy reach.

Geared to $4\frac{1}{2}$ to 1 on high the American six is able to tackle most road conditions on high, but the facile gearshift is a great advantage when an exceptional grade is encountered. There are, of course, three speeds, and the gearset itself is very compact, being as light as possibly consistent with ample strength. Back of the gearset there is a tubular propeller shaft with two universals carrying the drive to the Salisbury rear axle, upon which the brake equalizers are mounted, this again eliminating an assembly which would otherwise have to go upon the frame as a separate part. From the hand brake lever a single, straight rod goes right to the back axle without any other frame attachments; from the brake pedal there is a rod to a swinging lever depending from a cross member, and then another rod to the axle, the reason for using the lever hung from the frame being to give the brake a smoother action,