

# An Entirely New AUSTIN EIGHT

Famous Seven to be Superseded by an Essentially Modern Design

## SMALL CAR HISTORY

The Austin Seven, now superseded by the new Eight here described, was the pioneer of the smallest car class, and when it was originally produced some seventeen years ago was regarded as a risky experiment or even with tolerant amusement. Nevertheless the car was destined to make motoring history and to bring pleasure and benefit to thousands upon thousands of new and old motorists. It is interesting to look back at the birth of the Austin Seven in 1922, in order to see how it grew up to its final stage.

A full description of the first Seven appeared on pages 180-182 of "The Autocar" for July 28th, 1922. The car then was a little open two-seater with "occasional" seating capacity at the back of its body. It had a four-cylinder side valve engine of only 698 c.c., with a two-bearing crankshaft, and developed about 10 b.h.p. at 2,400 r.p.m., reaching rather over 3,000 r.p.m. as a maximum. The gear box provided three speeds, 4.25, 8.25 and 14.5 to 1, and the price was £225.

That was the Austin Seven in the bud. In seventeen years it grew in size and ended by carrying a four-seater saloon body, with an engine which had increased to 7.8 h.p. rating (747.5 c.c.) and which had a three-bearing crankshaft. It was able to develop 17 b.h.p. at 3,800 r.p.m. Four speeds were provided, 5.125, 8.51, 13.53 and 22.4 to 1. The weight of the once "baby" car had become 12½ cwt., and the price for a saloon was £122, or, for the Open Road tower, a type equivalent to the first open model, £115. In fact, roughly speaking, the weight had been doubled and the price halved.

SEVENTEEN years is a very long time for any individual model of a motor car to carry on without basic change. This record of the famous Austin Seven is one of which Lord Austin, who designed it himself, may well be proud. But the time has now arrived for that good little friend of motoring to retire, having provided by its life history the experience from which a new small car, the Eight, has been evolved and prepared ready for immediate production. The Seven and the Big Seven will no longer be made, and the new car takes their place henceforth.

In style a genuine four-seater, offering increased luggage accommodation, the new Eight has a most attractive appearance, both outside and within, and will

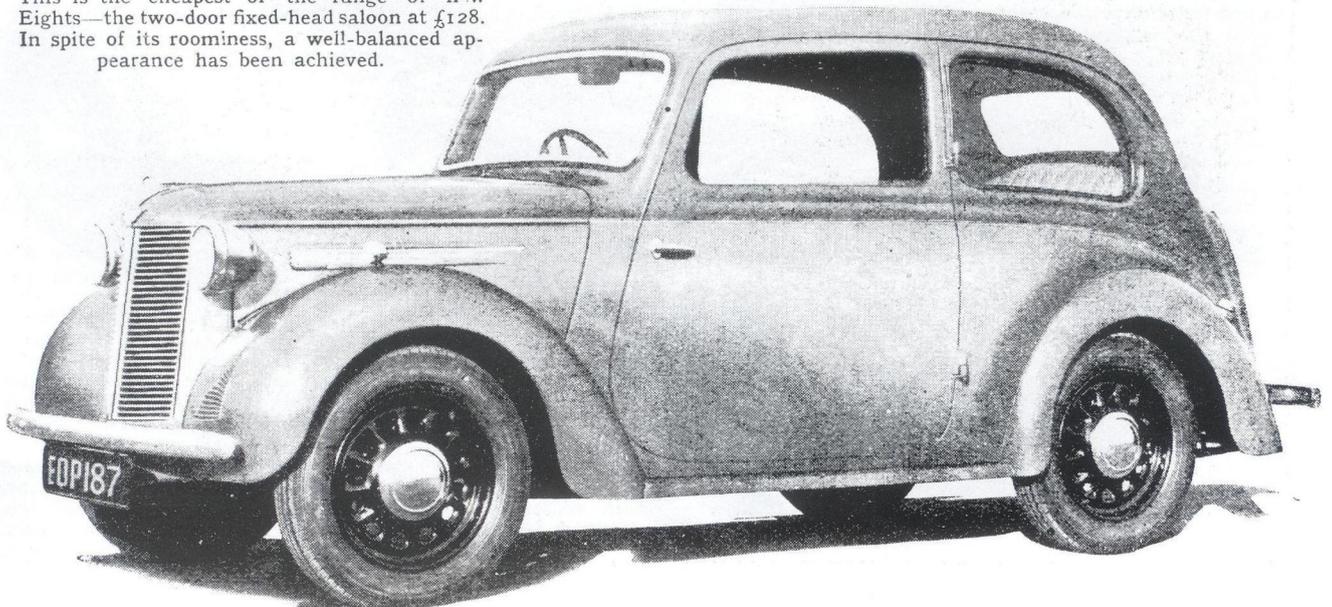
be available in six models, priced as follows: two-door fixed-head saloon, £128; two-door sliding-head saloon, £139; four-door fixed-head saloon, £139; four-door sliding-head saloon £149; open two-seater £132 ros.; and open four-seater, £135.

Leading features of the new design include an all-steel saloon body of graceful shape, a rigid deep-section "platform" type of box-section frame which is reinforced by the body structure, extra long road springs and forward flexible mounting of the engine for good weight distribution. The specification in brief is: Engine, four cylinders, 7.99 h.p., 56.77 x 89 mm. (900 c.c.) with side valves, three-bearing crankshaft and unit 4-speed gear box. Spiral-bevel final drive, half-elliptic springs, Girling brakes. Wheel-

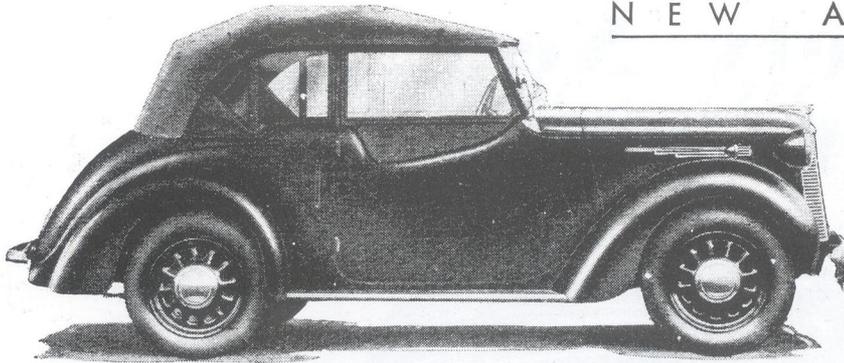
base 7ft. 4½in., track (front) 3ft. 8in., (rear) 3ft. 9in., overall length 12ft. 5in., width 4ft. 8in., height 5ft. 3in. Luggage space is 6 cubic feet, and the total weight 14¼ cwt.

The coachwork is mounted well forward, or rather well between the wheels, so as to obtain comfortable riding for the rear seats, room for good-size doors on the four-door model, and luggage capacity in the tail. This disposition extracts the maximum body room from a fairly short wheelbase. Although the four-door saloon is attractive there is something about the balance of the two-door type which has an even stronger appeal to the eye, due perhaps to the longer windows. Incidentally, windows are carried well back, with the result that

This is the cheapest of the range of new Eights—the two-door fixed-head saloon at £128. In spite of its roominess, a well-balanced appearance has been achieved.

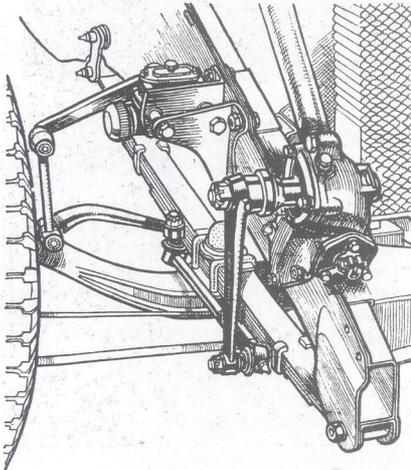


## NEW AUSTIN EIGHT



A new open car that should prove popular—the Austin Eight two- or four-seater tourer. With hood erected and screens in position, excellent protection is afforded. Note the wide door for easy entry.

rear-seat passengers are given a particularly bright outlook on the world. At the front of the body there is a generous length of tapered and rounded bonnet, terminating, not in the familiar Austin radiator, but in an entirely new grille with horizontal louvres divided by a vertical bar. Although it is quite new, this front still suggests that the car is a real Austin and not some unfamiliar make, which is certainly a clever touch,



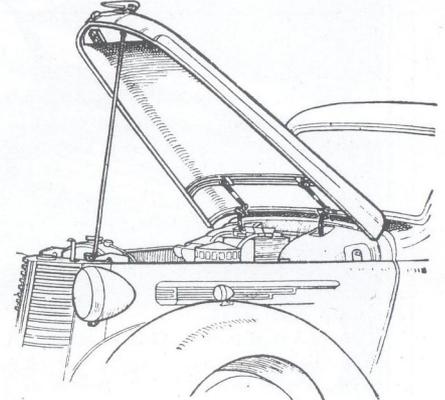
Front axle details: forward-mounted steering box and drop-arm linkage, semi-elliptic spring, rubber cushioned, and piston-type shock absorber.

helped possibly by the latest design of Austin badge. To give access to the engine, the top of the bonnet lifts up, around a hinge line parallel to the windscreen. Normally the bonnet sides are bolted in place, but they can be removed if desired.

Domed wings harmonise with the body lines, and although the body is about as wide as the wheel track, running boards are not entirely dispensed with, for narrow boards join the tail of the front wing to the front of the rear wing on each side. These running boards are not so wide as to interfere with that ease of ingress or egress which is characteristic of the modern low-floored car, but are wide enough to be very effective for keeping the car clean, which is a decidedly important function of running boards generally.

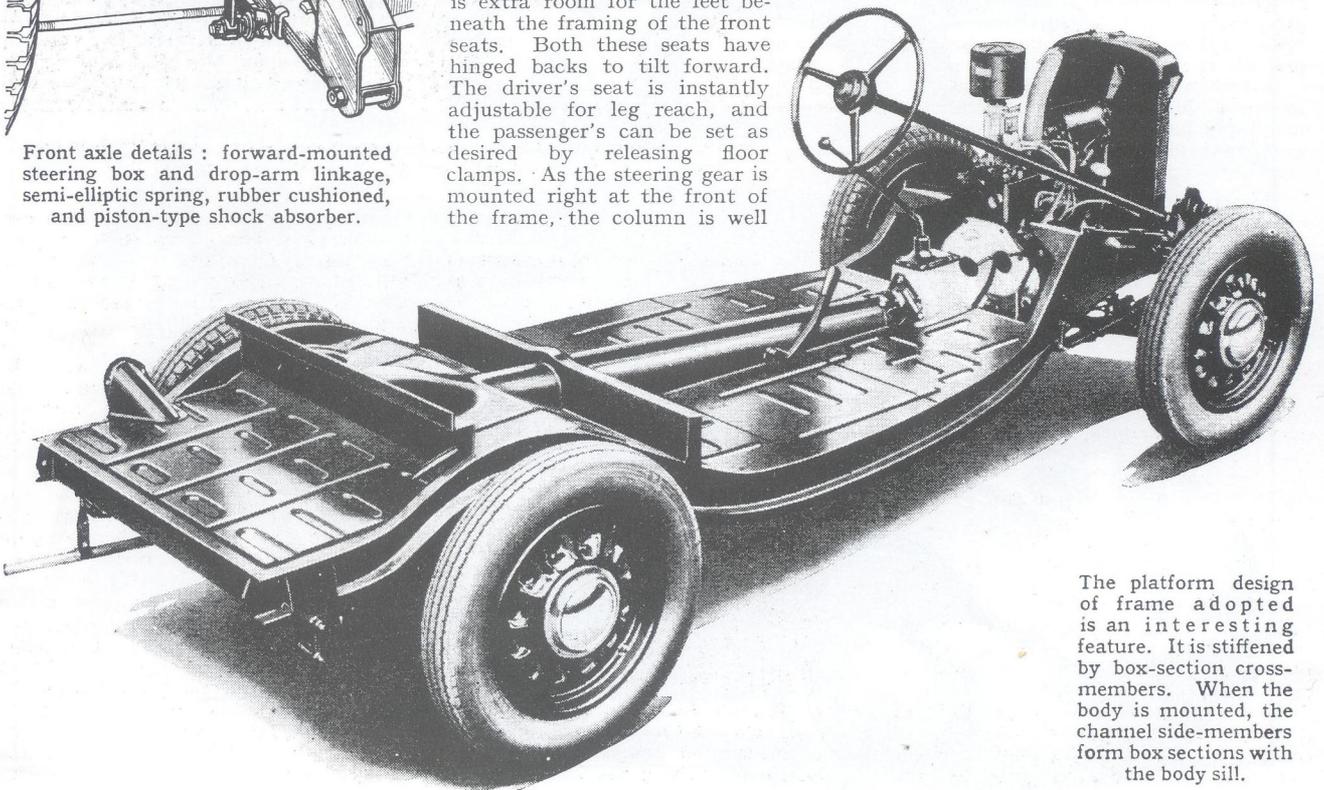
Within the body there is ample room for four full-size persons. The back seat is 45 in. wide over the arm-rests, and the seat cushion 20½ in. deep, which is generous. The actual seating position is generally comfortable and there is extra room for the feet beneath the framing of the front seats. Both these seats have hinged backs to tilt forward. The driver's seat is instantly adjustable for leg reach, and the passenger's can be set as desired by releasing floor clamps. As the steering gear is mounted right at the front of the frame, the column is well

raked and thus the steering wheel comes into a comfortable position for the driver. By reason of the proportions of the front of the car and the slope of the bonnet, forward visibility is good, and improved sideways visibility is secured because the front screen pillars are tapered to present minimum obstruction and reduce the "blind spot" to a narrow field. In



The top of the bonnet lifts for access to the engine, a rod holding it in place; bonnet sides can be detached if required.

front of the driver are grouped the large-dial instruments and the left side of the scuttle affords a cubby hole of quite unusual depth. The windscreen is operated through a centrally placed winding handle and can be opened up almost to the horizontal. All the control handles for the drop windows, and for the sliding roof on models so fitted, are conveniently placed. Lancegaye toughened glass is fitted throughout. Another attractive



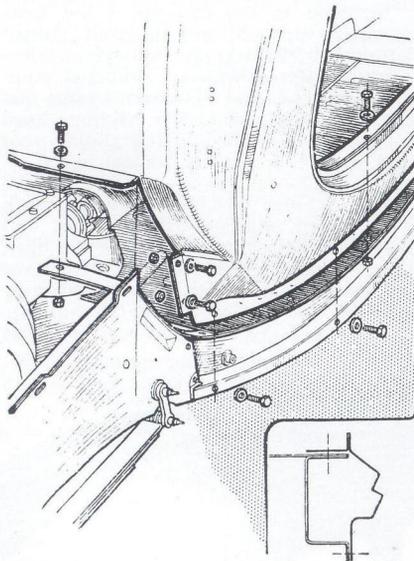
The platform design of frame adopted is an interesting feature. It is stiffened by box-section cross-members. When the body is mounted, the channel side-members form box sections with the body sill.

FIRST DESCRIPTION

feature of the interior is the trimming, which is carried out decidedly neatly.

At the back of the saloon body is an inbuilt luggage container. Its lid may be opened horizontally when extra luggage is to be carried externally, but the interior affords about 6 cubic feet, sufficient accommodation for normal purposes. The spare wheel is carried horizontally beneath a hinged floor in the boot. Although this arrangement may entail removing luggage in order to extract the spare wheel, the luggage container is frequently used, and the need for a spare wheel arises rarely.

On the open models the luggage space is reached from inside the body on the four-seater by lifting out the rear squab, and the spare wheel is accessible through a detachable panel at the rear. Separate accommodation is provided for the side-screens. These open models have a distinctly attractive air and are as well proportioned as the closed cars. They are equipped with a sports type of wind-screen which can be dropped flat forwards if desired, and the all-weather equipment of hood and side screens is



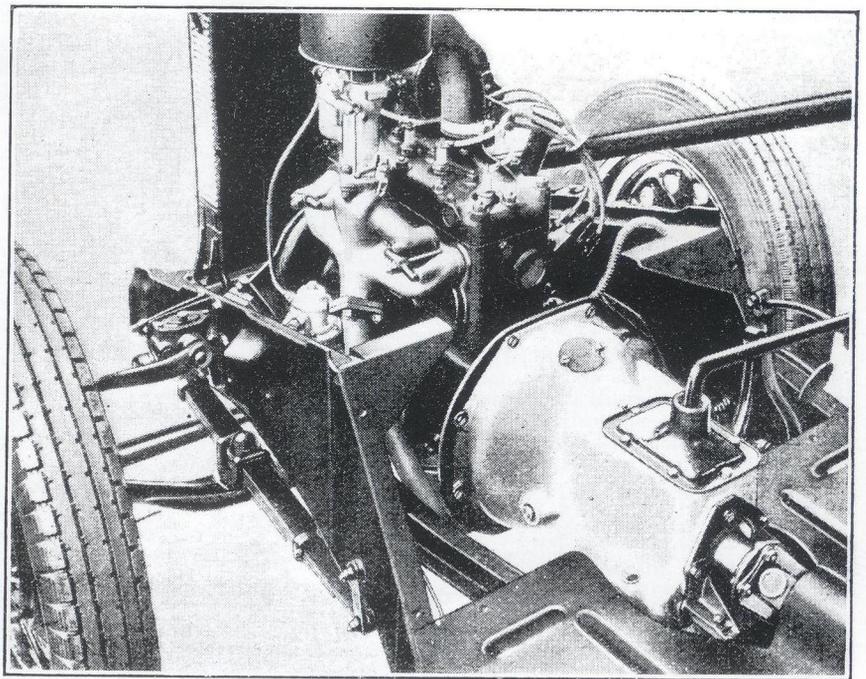
How the body sills are bolted to the flanges of the frame channel side-members to form a box-section when in position. The dotted lines show which bolt holes on the body correspond to those on the chassis.

arranged to be completely stormproof.

When the design of the new car is examined as a whole it becomes apparent that careful thought and skilful specialist work has been applied to the problem of keeping constructional weight down whilst increasing carrying capacity. The requisite strength has been obtained by decidedly clever disposition of metal throughout the chassis and body. How well this research work has succeeded may be judged by the fact that the new "Eight" weighs only a few pounds more than the Big Seven which it displaces, although it is a more spacious car.

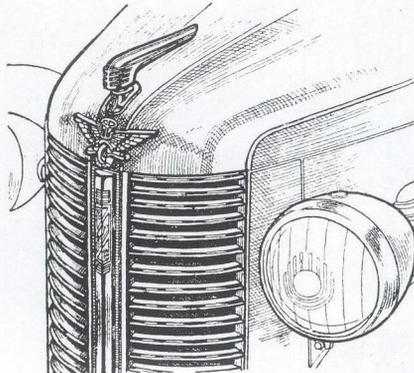
As a major example of the lines of development, the inter-relationship of the frame with the body may be cited. This is not a "frameless" car, but the

frame is designed to be amply strong at the front end, and to be reinforced by the intrinsic rigidity of the steel body structure over the remainder of its length. This frame has therefore extra deep box-section side-members swelling to their maximum girth at the point where the scuttle of the body is positioned, and from that point rearward they are of a channel section which is automatically converted to box by the sills of the body, these sills being bolted to the top, and to the lipped-over bottom, flanges of the channel. On the open cars the side-members are boxed all the way. The frame rises in arches over the front and rear axles and is swept downwards in the middle to provide the

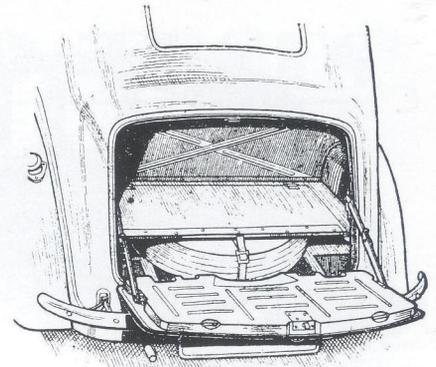


The compact Eight engine is mounted well forward on rubber. An extra deep box-section of the frame is employed at the front to give rigidity.

low floor level for the body. Another important feature of the frame is that it is built with a steel floor from scuttle to rear seat back as a part of its permanent construction. The floor is a piece of



The famous Austin emblem is unchanged on the modern grille, while the surmounting design is a disguised handle for raising the bonnet lid.

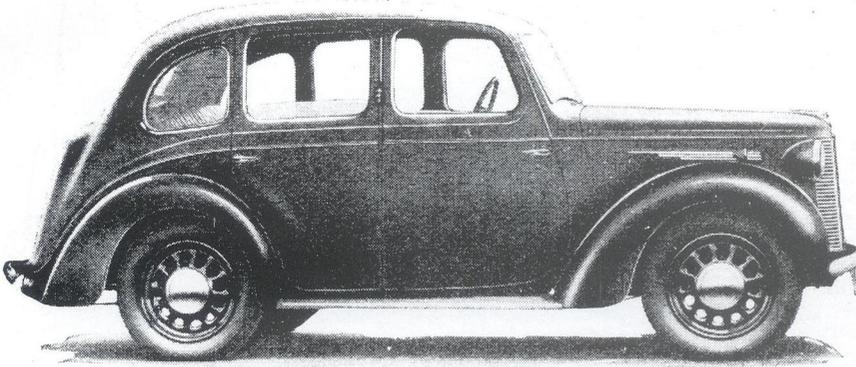


The spare wheel is mounted below the luggage boot and secured with a strap, and the lid of the boot serves to accommodate extra luggage.

clever pressed-steel work with box-section cross-members pressed in position and welded up. It includes a tunnel for the propeller-shaft, and is considerably fluted to add stiffness and prevent resonance. The chassis presents an unusually neat appearance, because it looks like a clear platform, with the transmission and brake connections out of sight, but accessible from beneath.

Two more features of its construction need mention. The side-members extend right to the back, whilst at the front they are further stiffened by diagonally placed box-section runners, which terminate in a main cross-member and form a cradle for the rear mounting of the power unit. This mounting is of the flexible floating type, consisting of a pair of diagonally placed rubber blocks at the front end, and a rubber pad at the rear, these points being arranged to lie in a plane passing through the centre of the gravity of the unit.

There is much clever detail work. There is not a malleable iron bracket to be seen; pressed steel is utilised in con-

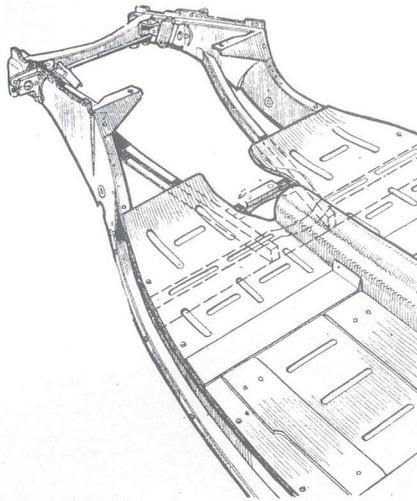


The four-door six-light Austin Eight saloon which sells at £139 with a fixed head and £149 with a sliding roof.

junction with welding, so as to obtain simplicity of manufacture, and the necessary strength with minimum weight. One instance of ingenuity is to be found in the radiator grille. The vertical centre bar is drawn as a double channel, the sides of the structure are channels, and the horizontal louvres are dropped into these channels rather after the fashion of the laths of a venetian blind.

Beneath the one-piece bonnet is a four-cylinder engine of the traditional Austin character, sturdy, simple, and arranged with an eye to accessibility for maintenance. This engine is not entirely a newcomer, being a development of that fitted to the Big Seven. It develops over 27 b.h.p. at 4,400 r.p.m. and is of monobloc construction with a detachable cylinder head, and inclined side-valves. Both the crankshaft and the camshaft are carried in three bearings and these, together with the big-ends, are of the Vandervell steel-backed type with split bushings. For the camshaft a roller chain drive is employed. Lubrication is force-fed to all the main bearings by a gear pump driven from the camshaft. Both exhaust and inlet manifolds are on the left side of the engine, the inlet being of the "hot spot" type, and fed from a Zenith down-draught carburettor, which is fitted with an air silencer and is supplied with fuel from the six-gallon rear tank by an AC pump. The electrical installation is 6-volts, with battery ignition, and 14 mm. K.L.G. plugs. Cooling is thermo-syphon, and a fan is fitted.

In unit with the engine is a single



Frame details at the front of the new Eight, showing the platform floor.

dry-plate clutch with a spring drive, and a four-speed gear box with synchromesh on second, third and top. The over-all gear ratios are: First, 21.6; second, 13.08; third, 8.23; and top, 5.357 to 1. Transmission is by means of an open Hardy Spicer propeller-shaft with needle-bearing universal joints, to a spiral-bevel final drive contained in a pressed-steel rear-axle casing, having splined detachable axle shafts.

For the suspension, half-elliptic springs, damped with Luvax piston-type hydraulic shock absorbers, are employed. These springs have Silentbloc bushes at the anchorage points, with adjustable lubricated bushes in the shackles.

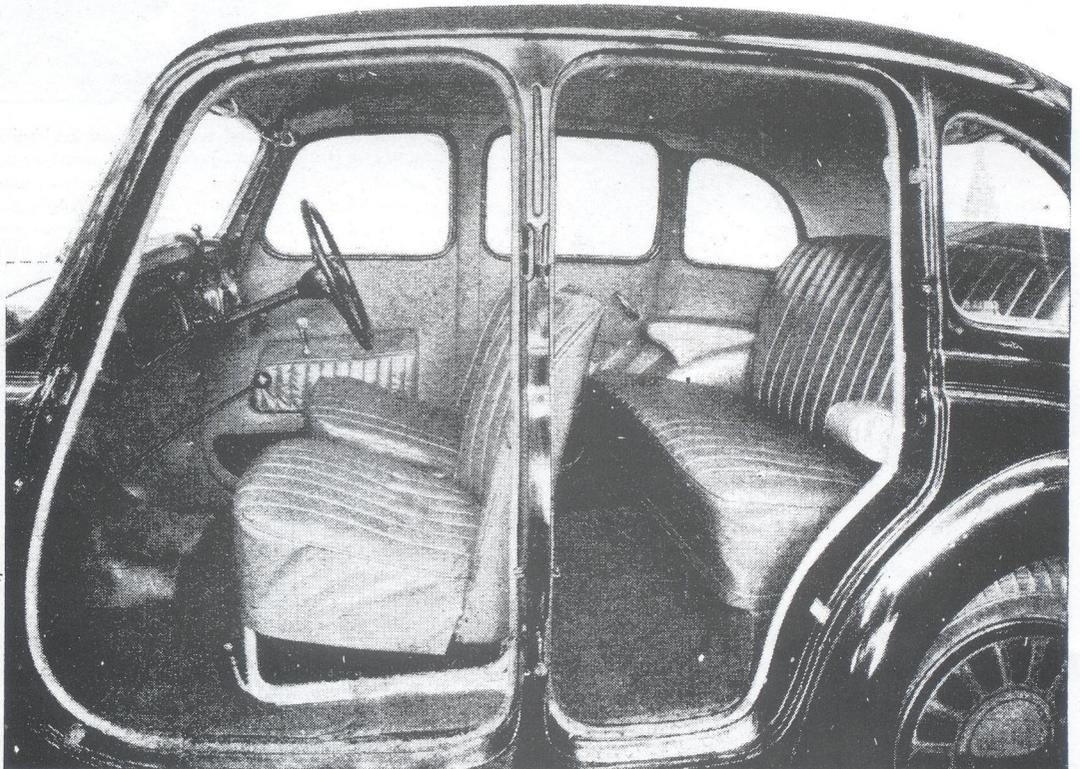
Girling brakes are fitted, and have the characteristic wedge-and-roller shoe expansion, tension operating rods, and balance-lever compensation. A form of spring compensation is used between the front and rear. Pedal and handbrake operate on all four wheels.

Mounted well forward, the steering gear is of the Austin hourglass worm and sector type. The track rod is in front of the front axle. All the steering connections are the Thompson self-adjusting type. The road wheels are large-centre "easy clean" detachable, and are shod with Dunlop 4.50 by 17 tyres.

Included in the equipment are foot-operated dip and switch head lamps, automatic-return traffic indicators, electric windscreen wipers, combined stop and tail-light, and illuminated large-dial instruments, whilst the sliding head models have a flush-fitting sliding roof and leather upholstery for the seats.

The choice of colour schemes for the saloons is: blue with blue trimming, black with brown, maroon with maroon, and grey with light blue, whilst for the open cars the colours are: Maroon with fawn trimming, black with fawn, and grey with light blue.

A Road Test of this car will be found on page 311.



The interior of the four-door six-light Austin Eight. The upholstery is leather and the front seats are tubular with room for the rear passengers' feet below them.