# Entirely New Austin Eight



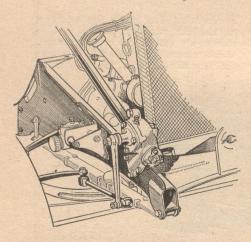
MODERNISTIC. A pleasing new front arrangement is a feature of the Austin Eight, in which the grille is built up of ten die-cast segments

The Motor

The four-door saloon which is available with fixed or sliding head (prices £139 and £149 respectively).

ANY new design by a company that looms so large in the motoring world as Austin of necessity commands attention. In the case of the latest type, interest is reinforced by the fact that it replaces one which has been continuously produced for 17 years and which, by the force of its example and the popularity of its imitators, has changed the whole picture of English motoring in this period.

The model to which we refer is, of course, the Austin Seven, and the new car is termed the Austin Eight. Fur-



The steering employs the usual Austin hour-glass worm and sector, and is anchored at the front extremity of the frame. Many Interesting Features in a Model Available with Open and Closed Bodies to Replace the Seven and Big Seven

thermore, when we say "new car" we are referring to a construction which is in no way a modification of the previous type but a completely fresh conception involving radical departures in many directions.

Powered by a four-cylinder sidevalve unit of 900 c.c., with a bore and stroke of 56.77 mm. by 89 mm., the car has a four-speed gearbox, pressedsteel platform-type frame, sturdily reinforced at the front end, semi-elliptic springs front and rear, forward mounted steering box and a range of saloon and open bodies which combine comfortable seating, large luggage accommodation and thoroughly attractive and flowing lines.

#### Six Models

There are six models, of which the lowest priced is a two-door fixed-head saloon at  $\pounds 128$  and the same model with sliding head and real leather upholstery is  $\pounds 139$ . The saloon can also be had in four-door form with fixed head at the same price, a sliding head on the four-door model costing a further  $\pounds 10$ , making a total of  $\pounds 149$ .

In addition to these closed cars there are two very attractive open models, one of which is a full four-seater priced at  $\pm 135$ , and the other has a rear compartment arranged for luggage only and is priced at £132 10s.

Reference to the pictures will show that externally these new cars are entirely unlike any previous Austins. The radiator, for instance, is now built up as a convex grille, an interesting constructional method being employed in which the die-cast horizontal slats by Wilmot Breeden are assembled in five separate sections. The bonnet has fixed sides and an alligator-type top, this latter incorporating a safety catch so that in the event of the main lock becoming loose it is impossible for the bonnet to fly up and obscure the driver's forward view. Unlocking of the bonnet top is ordinarily done by twisting the radiator motif, lifting the bonnet a little and then undoing the safety catch.

This revised radiator design has been coupled with forward mounting of the engine, this unit now being placed right between the front wheels. In consequence, although the rear seat does not extend beyond the rear axle with a car with a wheelbasc of 7 ft.  $4\frac{1}{2}$  ins., there is very reasonable leg room both front and back.

The front seats are the separate bucket type, the driver's being instantly adjustable and the passenger's being movable after undoing some n25

# THE AUSTIN EIGHT

A cutaway view of the Austin Eightengineshowing the large diameter threebearing crankshaft. The output of this unit is 27 b.h.p. at 4,400 r.p.m. ammeter, oil pressure gauge and fuel gauge.

The front windscreen can be opened to a wide angle. Although only a single wiper arm, driven by a remote motor, is fitted as standard provision is made for a second wiper arm, which can be fitted by the owner if needed. Both the windscreen and all the other glass in the car is of the Lancegaye toughened type.

Having thus briefly outlined the car as it will appear to the motorist in the showroom, let us now turn to some of the mechanical points in design which are of outstanding interest.

## Frame and Body Alliance

The first of these is undoubtedly the frame design and the way in which this by itself is allied to the body. The frame consists of a stressed platform reinforced by side members, which are boxsection from the scuttle forward and open-sided in the centre. The body shell fits outside these members and converts the open section into a box section when the whole is assembled



thumbscrews and setting to the required position. The rear seats are entirely orthodox, but to give the greatest amount of elbow room the body side is scalloped out above the armrest, the width at this point reaching the useful figure of 48 ins.

For so small a car the attention that has been given to luggage space is remarkable, and the boot not only accommodates the spare wheel but has an additional capacity of six cubic feet together with a rear panel which can be dropped down for luggage and can carry a further three-quarter cwt. of this if needed. For small articles there is an exceptionally deep cubby hole in the facia panel, the extent of this from the opening to the back being literally an arm's length. As an addition, it extends halfway across the facia and bulky objects can be accommodated in it.

The instruments themselves, which are on the right hand side immediately in front of the driver, consist of largediameter speedometer and a grouped

Commodious accommodation is a feature of the saloon coachwork, and there is plenty of headroom. Overall width at the rear is 48 ins.

> as one unit. This makes the body part of the car remarkably stiff with a thoroughly economical use of material which means light weight. To give the requisite stiffness to the forward

> > The pleasing lines of the saloon coachwork are shown to advantage in this view of the two - door model in which access to the rear seats is gained by wide doors and tilting front seats. Price £128; with sliding head, £139.

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In its touring version the Aus tin Eight will make a strong appeal to those withapreference for this type of coachwork.



Wide doors with cutaways provide easy entrance to the rear seats on the open fourseater model, which costs £135.

end of the car the depth of the frame just by the front spring rear shackle is quite exceptional, and in addition there are two forward projecting supports which can be seen in the drawing on page 125.

Largely as a result of this layout the total weight of the car is well inside 15 cwt. with full equipment.

Attached to the frame at the front are two long semi-elliptic springs which are damped by Luvax piston-type shock absorbers and are quite flat under load. The tips of the leaves are curved backwards to prevent spring squeak, and they are located by Silentbloc bushes at the front end and by shackles lubricated by nipples and adjustable for side play at the back.

## Axle Design

The front axle is the orthodox beam type but the rear axle is an entirely novel construction so far as Austin is concerned. The axle casing is made of two pressings which are welded together on the centre line, and the half-shafts are made with integral hub flanges and can, therefore, be readily withdrawn for inspection if required.

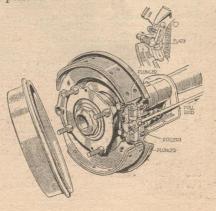
The rear springs are also semielliptics and are of the same general construction as the front springs, as also are the shock absorbers.

The brakes are of the full Girling type and 8 ins. in diameter.

It is interesting to note that despite

the low price of the car cast-iron brake drums are employed. A further interesting feature which contributes to remarkable short stopping distances is the compensation between the front and rear brakes whereby as the pedal pressure rises an increasing proportion of it is transferred to the front of the This is in accordance with a car. natural law which puts an increasing loading on the front wheels and ensures that the shortest possible stop can be made without locking the back wheels and thus precipitating danger of a skid.

Steering is by an Austin hour-glass worm and sector with Thompson selfadjusting ball joints in the linkages. The steering column has a good rake and the wheel comes into a comfortable position in relation to the driver. On

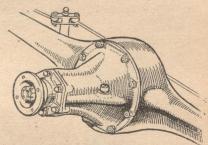


the open models large-diameter flexible wheels are available at an extra charge.

The power unit and gearbox are the only parts which bear any resemblance to previous Austin types of this size. The bore and stroke are the same as employed previously, as are the gear ratios, these being 5.3, 8.23, 13.08 and 21.6, second, third and top being syn-chronized. The engine develops 27 b.h.p. at 4,400 r.p.m. and has a large diameter counterbalanced crankshaft carried in three main bearings, these, together with the big-ends, being of the Vandervell steel-backed thinwall type. Side valves are employed, operated by barrel-type tappets and a downdraught carburetter Zenith receives fuel from an A.C. pump driven from the camshaft. Cooling is by thermo-siphon and the flow of air through the radiator is assisted by a fan.

#### Detail Equipment

Turning now to more detailed equipment the electrical department is by Lucas with six-volt battery, footoperated dip and switch head lamps, combined stop and tail lamp and com-



The rear axle casing is made of two pressings welded together on the centre line. (Left) The brakes are of the full Girling pattern with 8-in. cast iron drums.

pensated voltage control. The wheels are of the detachable large-centre type with Dunlop 4.5 by 17 tyres. The track is 3 ft. 9 ins. and the overall length 12 ft. 5 ins., so that despite its moderate weight the car is one of the largest in its class.

We regard this blend of modern engineering practice with the traditional Austin care and soundness in B27

TheMotor

# THE AUSTIN EIGHT

21 miles after a tea stop were covered in 30 mins. and 38 miles tucked away within the first hour.

Careful tests were made with a view to determining accurately the figures for petrol consumption and on one occasion a special small tank was rigged up and two tests were made at or near 30 m.p.h. and two with the cruising

> The luggage platform is hinged so that it can be lifted to facilitate the removal of the spare wheel.

speed maintained at about 40 m.p.h. In the former, the average speed from start to stop approximated 29½ m.p.h. and the consumption worked out at 47¼ m.p.g. and 48¼ m.p.g. respectively. On one faster run, which

The Austin Eight on the Road

manufacture and the selection of

material, as being one that must neces-

sarily result in a considerable popularity for this car and an increased

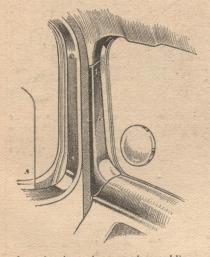
renown for the reputation of the

company.

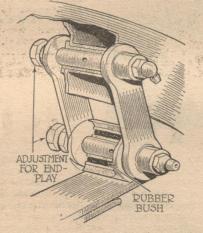
EXPERIENCE on the road with the new Austin Eight shows that it possesses a lively performance which will go far to enhance the popularity that should follow the accommodation and appearance offered at so moderate a price (which ranges from £128 for the two-door fixed-head saloon tried).

The best quarter-mile clocked at Brooklands gave a speed of 59.2 m.p.h. with a mean speed of 57.3 m.p.h. Performance enthusiasts will appreciate also the standing quarter-mile figure of 26 secs.

Cruising can be maintained at surprisingly high figures for so small a car and it is possible to put up an average of some 40 m.p.h. with the saloon —in fact, higher averages are even possible. On the return journey from Brooklands to the Midlands, the first



A twisted and tapered moulding strip on the side of the windscreen pillar gives it lighter and more graceful appearance.



# The springs have turned-back tips and are located with rubber bushes.

gave an average speed of just over 35 m.p.h., the consumption worked out at 42 m.p.g., whilst when an average of 40 m.p.h. was maintained, the consumption reading was 40<sup>1</sup>/<sub>2</sub> m.p.g. Truly economical motoring. During the tests two people were carried.

The trial comprised a 250-mile oneday run and a very marked impression was that the steering is well balanced between heaviness and lightness; it gives a degree of control which is very pleasant indeed and although fairly high geared, needing less than two turns from lock to lock, involves no labour to effect any change in direction. Furthermore, there was no trace of kick at the steering wheel.

Over the roughest roads the car rides steadily, gives a marked impression of stiffness and is commendably free from rattle or drumming. These qualities are tributes to the skill of design and practical construction of the body-chassis structure. Being fairly softly sprung, some roll is, of course, apparent on corners, as is inevitable on cars with reasonable headroom and narrow track. This does not result in loss of control and it is particularly noticeable that the straight ahead driving of the car is narrow and there is no tendency to wander at any speed.

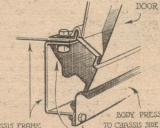
Braking, which is effected by Girling equipment, is light, progressive and effective, a figure of 91 per cent. being obtained by the Ferodo-Tapley meter.

The fore and aft compensation appears to work very well and there was certainly no tendency for the rear wheels to lock much in advance of the front ones. The clutch gave a smooth take-up from rest and the four-speed synchromesh gearbox had the usual Austin qualities of rapid change, coupled with absence of noise.

The pedal pressure for both feet is commendably low and the clutch travel normal. Driving in the rain we noticed that the windscreen motor was quiet and that the single arm gave an effective arc for the driver's vision. The clutch is pleasant to use and the gears are easy to engage.

Suspension characteristics are good, for it is possible to ride in the back seat without being jolted or shaken about even when a 50 m.p.h. cruising speed is maintained. A good feature of the bodywork is the ease with which one can get in and out of the car, the wide doors on the saloon tested making it particularly simple to gain access to the seats.

The elbow-room in the rear seat strikes one as being unusually large for a car of this horse-power rating, and in the front seats there is ample leg-room for the tallest man. The driver's seat adjustment is quick and positive, and even when far back, the steering wheel comes into good position on account of the unusual rake on the steering



CHASSIS\_FRAME

BODY PRESSING BOLTED TO CHASSIS SIDE MEMBERS SO AS TO FORM A BOX SECTION

STIFFENING. A sketch showing how the body sides are developed to form part of the frame, constituting a fourth side and turning it into box section throughout the whole of its length.

column, a feature mentioned previously in the test report.

This also keeps the column well clear from the pedals and avoids scraping the toes of one's shoes on the column, with consequent damage to shoe leather.

Altogether, we thought that this was a thoroughly likeable small car and one whose road performance fully reflects the skill of its design.

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# "THE MOTOR " SUMMARIZED TESTS

Condensed Reports of Road Tests which are Issued for the Guidance of Motorists Who are Now for the First Time Interested in the Purchase of a Small Car



# No. 1. AUSTIN EIGHT

T is fair to say that whereas the most recent Austin Sevens represented a small car which had grown up, the 8 h.p. recently introduced is a big car scaled down.

The 900 c.c. power unit, rated at 7.99 h.p., gives a performance in keeping with to-day's requirements, combining good acceleration with a maximum of nearly 60 m.p.h. This notwithstanding, the consumption remains economical, the figure being 36 m.p.g. under conditions which included a good deal of fast motoring and heavy traffic. So far as cruising speeds are concerned, 40-45 m.p.h. can be maintained easily and the car also proved quite capable of holding a steady 50-55 m.p.h. when conditions allowed.

#### Simple Gear Changes

The clutch is light and smooth in action; the gearbox is first-class, with synchromesh on the upper three gears. A useful consideration when passing

slower traffic is that silent gear changes can be made just as quickly as it is possible to move the lever.

The engine is not at its best from the point of view of smoothness under 15-20 m.p.h. on top gear, and although the gearbox is audible on the indirect ratios, it is not obtrusively so.

The brakes are particularly good, re-cording the unusually high efficiency of 95 per cent with a very light pedal pressure. The whole action of the braking system is a feature which should commend the car to a woman driver.

## Visibility and Window Space

The car has good visibility and immense window space. The driving mirror provides a really good view to the rear. The front bucket-type seats are easily adjustable and provide good support at the back. The rear seats provide plenty of room for two adults, and head room is good all round with sufficient legroom both at the front and rear. There is adequate space between the front seats.

There is a large single cubby hole and adjustable visor, while the model tested has a sliding roof.

Really bumpy road surfaces produce a tendency to pitching, but the action of the springs is soft and sufficiently well damped to ensure that the passengers are not jolted about unduly.

The steering is high geared yet is also

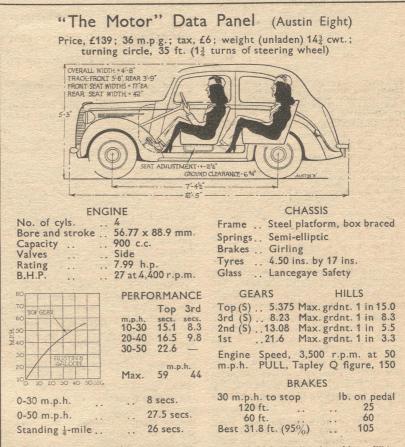
light in action. The driver is not conscious of directional feel, but there is, on the other hand, a complete freedom from road shocks.

Luggage accommodation merits special mention, the covered space being unusual for a small car and the lid making a carrier for further cases. The spare wheel and tools are carried in the boot, below the luggage.

The bonnet top is of the alligator type and there is no sacrifice of accessibility for items needing routine attention. Detachable side panels give even greater space for work to be done, if necessary.

A foot switch controls the dip-andswitch arrangement for the head lamps and ample illumination is provided for the speeds of which the car is capable. A six-volt equipment is used, with compensated voltage con-Self-cancelling indicators are trol. used.

Altogether the Austin impresses as a strongly constructed job which should uphold the reputation of the marque for reliable service over long periods.



SEATING.-Black figure portrays woman 5 ft. 5 ins. high. 26 ins. from hips. White figure shows 6-ft. man. 30-ins. from hips. Scale of drawing to actual size. HILL-CLIMBING.-Maximum gradients for each gear are shown. Where 1 in 6.5 is recorded the car will climb Edge, South Harting, Kirkstone and Rest and Be Thankhul Hills. (8) means that the gear is synchronized. BRAKES.-Scale gives distance in feet from 30 m.p.h. as determined by Ferodo-Tapley meter. Pressures needed to stop in shortest distance, in 60 ft. (normal short stop) and in 120 ft. or "slow up" are also shown. Average figures are 50 bb. for 60 ft., and about double for shortest; 100 lb. is the maximum pressure for average woman. In the 60-ft. and shortest-stop pressures are close together (e.g., 60 ft., 50 lb.-shortest, 72 lb.), the brake tends to fierceness.

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The Motor