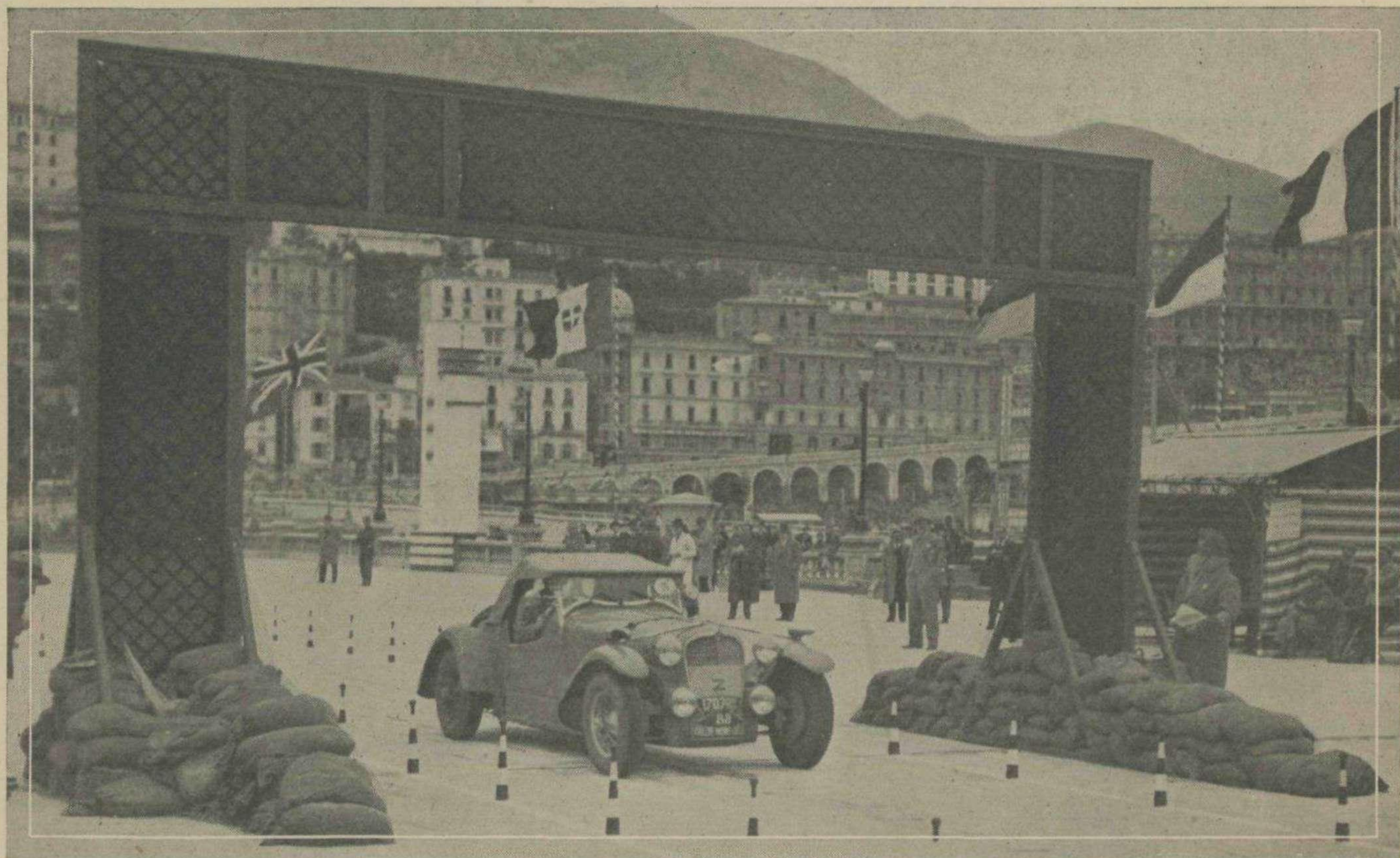


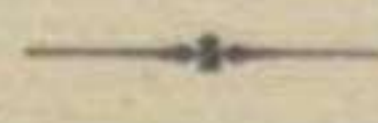
# MOTOR SPORT

INCORPORATING  
**Speed**

ONE SHILLING  
MONTHLY



## CONTENTS



The Rembrandt Meeting	...	...	...	...	1	A Brief Test of a V8 F.W.D. Cord	...	...	...	11
Details of an Ambitious Austin Seven Special	...	...	...	...	4	A Successful First Season	...	...	...	12
Great British Achievements—III	...	...	...	...	5	A Flying Officer's Cars	...	...	...	13
Real Racing for the Impecunious	...	...	...	...	7	A Year with an "1,100" Fiat "Balilla"	...	...	...	14
Sorting Out Speed!	...	...	...	...	9	Rumblings...	...	...	...	15
Another "Ideal" Design	...	...	...	...	10	Club News	...	...	...	16
Letters from Readers	...	...	...	...	17					

PRODUCTION FOR VICTORY . . .



Daimler Armoured Scout Cars with their famous Fluid-Flywheel Transmission served in North Africa, Sicily and Italy with distinction. Such is the testing of the peacetime Daimler to come.

**Daimler**  
*goes to war*

# MOTOR SPORT



OFFICIAL JOURNAL OF THE BRITISH RACING DRIVERS' CLUB

INCORPORATING **SPEED** AND  
THE BROOKLANDS GAZETTE

EDITORIAL OFFICES

21, CITY ROAD, LONDON, E.C.1

Telephone: CLerkenwell 1128

ADVERTISING OFFICES

54, BLOOMSBURY STREET, BEDFORD SQUARE, W.C.1

Telephone: MUSeum 0522



## POST-WAR SPORTS CAR DESIGN DISCUSSED AT THE REMBRANDT MEETING

ANOTHER vastly successful gathering of enthusiasts was held at the "Rembrandt," in London, on December 12th, and was a great credit to the organising trio, Rivers-Fletcher, Peter Clark and Bill Capon. Attendance was limited to 100 and profits went to the Royal Armoured Corps Comforts Fund. Everyone who is anyone in our world was present if he or she possibly could be, and a full list would be invidious, but we noticed George Monkhouse, Anthony Heal, F/O. Quiggin, F/O. Mallock, Lieut. Marcus Chambers, Sir Clive Edwards, Bart., Graham Dix, Leonard Potter and his lady, all the way from the Midlands, Lowrey, Klemantaski, Douglas Tubbs, Mrs. Ariel Clark, Mrs. Heal, Cresswell, John Cooper, Ballamy (earnestly filling a large and professional-looking notebook), Julian Fall, Orlebar and Mrs. Orlebar, Grosscurth, Holland Birkett, Fawcett, and the rest of those hyper-keen folk one expects to see at these meetings. Lord Brabazon of Tara took the chair at lunch, and said how happy he was to be with people who looked upon motoring as a sport. He recalled the "good old days" when he took a more active part in the Sport. [He drove a Minerva to victory in the 1907 Circuit des Ardennes and handled an Austin in the 1908 French G.P.] Lord Brabazon then paid a well-deserved tribute to Laurence Pomeroy for his articles in *The Motor*, which, he said, did so much to keep the sporting spirit alive, and he went on to say that he felt these meetings had a mission. The R.A.C. was crying out for new, younger blood on its committee, and enthusiasts should aim to get their representatives on this body and also on the Competitions Committee of the R.A.C. [We are glad Lord Brabazon emphasised the desirability of keeping faith with the R.A.C. We consider that Rivers-Fletcher would make a likely and eminently suitable

candidate, if and when we have an Enthusiasts' General Election.] Lord Brabazon then toasted the organisers, to which Peter Clark replied.

After lunch the promised discussion on the "ideal" production post-war sports car took place, with Laurence Pomeroy, Technical Editor of *The Motor*, in the chair. Peter Berthon, who largely designed the E.R.A. cars; Cecil Kimber, late Managing Director of the M.G. Car Company, Ltd., largest sports car manufacturers in the world; John Bolster, of sprint-course fame and as a builder of "specials" which worked; H. R. Godfrey, who, with Capt. Frazer-Nash, conceived the immortal G.N. and, much more recently, designed the H.R.G.; and Peter Monkhouse, who has thought, raced and commercially built and doctored racing cars ever since he left Cambridge, commenced and carried the argument. We report their findings

hereafter, with editorial comment within square brackets. We apologise to our readers for not including all the engine-points, as the discussion opened rather ahead of schedule, before we had arrived. And we apologise to any member of the brains-group whom we may have misreported, the discussion not being taken down verbatim, and the following matter having to be drastically condensed.

*Engine.*—Cecil Kimber advocated designing the engine as a racing unit and then de-tuning it and offering it in three forms: (a) unblown, but with proper provision for supercharging, (b) with low-pressure boost and normal compression ratio, to give good acceleration, and (c) with high-pressure supercharge and lowered compression ratio, for racing. He had run a car with low boost for a year and found it very satisfactory. Peter Berthon basically agreed, but said to achieve a high h.p. per litre was expensive, and reminded Kimber of the £400 price limit. He thought that using such engines in de-tuned form would put up the cost rather unnecessarily.

*Basic Type of Car.*—Pomeroy asked, was it to be like the converted Fords which used to rush up Simms, or like the 1½-litre Adler which did 100 m.p.h., but was no good for negotiating 6-in. banks? Monkhouse said you couldn't combine all these abilities in one design, and he would sooner see the car designed from the racing angle and used as a fast tourer than used for ferocious trials. Such a car could be easily used for sports-car racing. Godfrey agreed that to encompass too many aims was to come unstuck. He agreed with Monkhouse, and liked Bolster's reference to an agricultural sort of engine. A car built for racing and asked to suit all jobs wouldn't do anything very well, and the aim should be a car that would go from A to B over normal rough roads in the shortest possible time.

### THE PANEL

Peter Berthon, John Bolster, H. R. Godfrey, Cecil Kimber, Peter Monkhouse. *In the chair:* Laurence Pomeroy.

### THE IDEAL CAR

To sell for: £400. Genuine 85 m.p.h., or 95-100 m.p.h. with mild boost or streamlined closed bodywork. 2-litre engine, strong, independent chassis, with 4-speed synchromesh gearbox, or, as an extra, 5-speed Cotal with direct drive on 4th. Independent front suspension and De Dion rear-axle. Coil or torsion-bar springing. Weight: 17-18 cwt. as short open 2-seater or 22 cwt. as 4-seater closed car, with 10 per cent. reduction, if practicable. Function: To go fast from A to B, not to climb goat tracks.

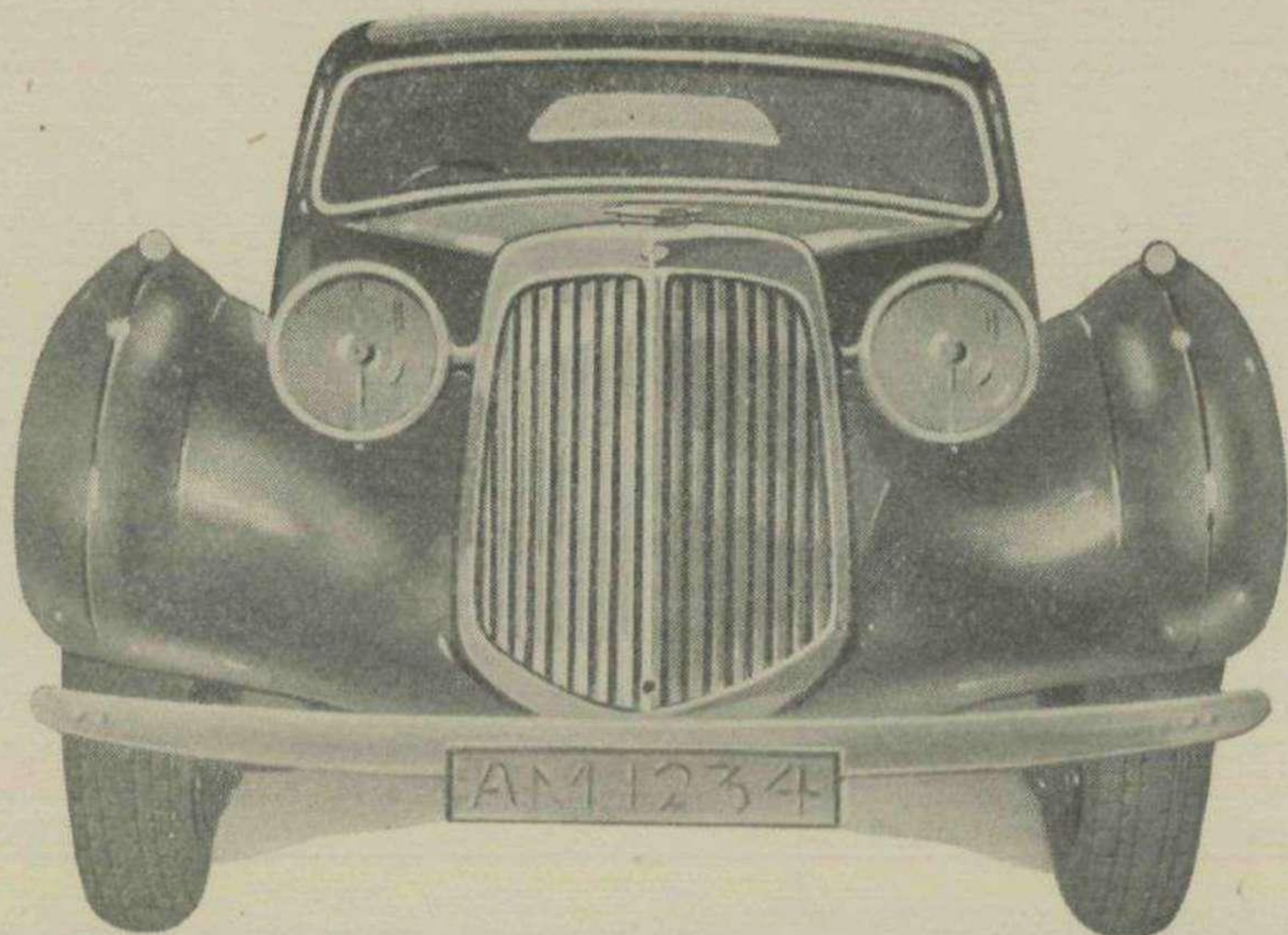
Streamlined types tended to inaccessibility. Bolster said he agreed absolutely with Godfrey, and thought preparation for any form of competition would ruin the car for fast road use, Concours d'Elegance especially! Pomeroy said that, nevertheless, Kimber had made very successful sports cars with engines as raced, and, in reply, Kimber said it was possible to sell fast sporting unblown cars for under £300. He once had such a car himself, which, with mild boost, would do 104 m.p.h. in closed form. Its engine used standard rods, crankcase and pistons, etc. In the case of Major Gardner's 200 m.p.h. M.G., standard valve-gear was used, and rods, cylinder head and valves were standard in all but materials, and the sodium cooling for the exhaust valves. He believed that it was best to start off with the right engine design, as it was then possible to vary it to suit all requirements; chassis and body would, of course, require major changes to keep pace with improved performance. Pomeroy recalled similar views held and practised by Riley, and called for Monkhouse's views, as he should know how standard engines stood up when raced. Monkhouse said obviously a racing engine used for touring was reliable and required the minimum of servicing, but not if used for unsuitable work, *i.e.*, trials. Bugatti, Alfa-Romeo, etc., sold touring cars based on their racing jobs. Pomeroy summed up by saying that not everyone could afford

the expense of having a complicated racing-type engine decarbonised, and he thought a simple 2-litre engine attaining 80-90 b.h.p. and capable of considerable development was called for.

*Bodywork.*—Pomeroy asked whether the panel would want more than one body type, and felt that the carriage-work should be a really well-engineered job. Monkhouse suggested a 2-seater short-chassis car, a 4-seater long-chassis, and just a chassis—on which clients could have bodies built. He also felt a drop-head coupé would be acceptable, especially on the blown chassis, but thought the average body of this type worse than an open car with good hood and side screens, unless it was a continental. Kimber agreed about the short 2-seater and long 4-seater, and also wanted a saloon, streamlined or otherwise, and a drophead. Godfrey said the body-builder just wouldn't save weight. He recalled the Lancia "Lambda" detachable top. Bolster liked the sort of drophead in which the head went down beneath the tail when folded. His ideal would be this sort of body with the head fully streamlined when erect. He objected to a super, super short-chassis job on the grounds that it wouldn't suit many people, but that hundreds would buy it to avoid taunts of, "Oh, you have only got the long-chassis job!" Berthon thought these bodies were all too "pre-war," and wanted "in-designed" bodies in one with the chassis. He called for modern

methods and modern materials, possibly plastics. The drophead was most difficult on a light chassis, and if a short-chassis car were offered it should be a light, open 2-seater. Pomeroy said it would be rather sad when the open 2-seater was passed by a streamlined saloon with the radio playing, which is what would happen [Lord Brabazon's very desirable streamlined 1,100 c.c. Fiat saloon stood without as if to bear him out]. It would not be much consolation then to say, "This is one of the team cars, old boy!" He reminded us that the two lightest cars per foot of wheelbase were the Citroen and D.K.W., one one-piece, the other of separate chassis/body construction. Kimber disliked the "one-piece" doctrine and thought the chassis should be made stiff enough to take any body. Godfrey agreed that there Kimber had a very strong point. Monkhouse thought the conventional-looking car would sell, whereas the public was hardly, yet, educated to streamlining.

*Weight.*—Berthon aimed at 22 cwt. for a 4-seater saloon and thought the open short 2-seater might come out at 17-18 cwt. Modern materials will not influence things much for some time yet, but the greater use of aluminium might give a further 10 per cent. reduction. Kimber agreed about modern materials. He felt that the 22-cwt. figure would be very, very difficult to attain, but not necessarily impossible—the Lancia "Aprilia," a 1½-litre [1.3-litre] weighed 18 cwt.



*"The great aim of culture, the aim of setting ourselves to ascertain what perfection is, and to make it prevail"*

*Matthew Arnold*

ASTON MARTIN LIMITED, FELTHAM, MIDDLESEX.

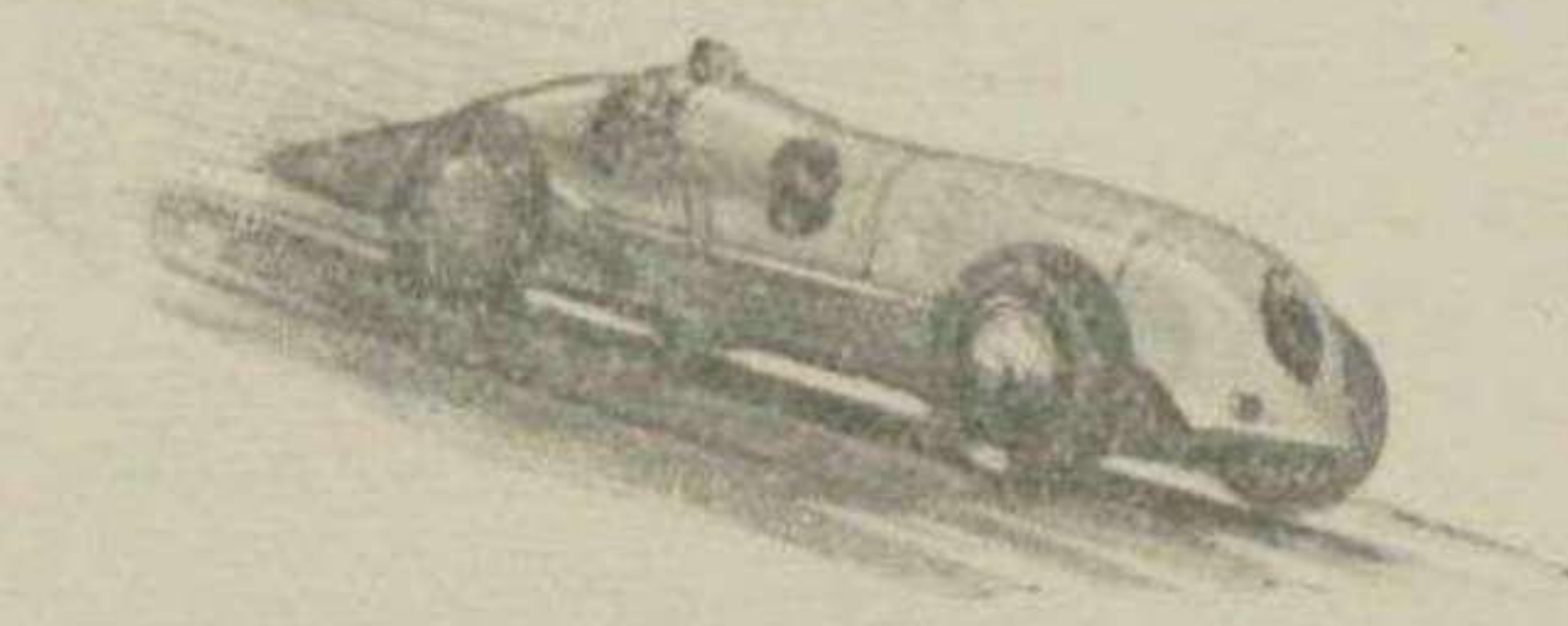
Telephone: 2291

Pomeroy called for Godfrey's opinions, as he once made cars weighing about one quarter of a ton! Godfrey said in those days you listed oil lamps, hood and screen as an extra, and if you had some trees and a supply of iron-alloy you could always make a motor-car. Accessories put up the weight. Bodies must not be too frail, as you push the car about by them. He would aim at 100 lb. per 100 c.c. to ensure reasonable urge, but felt that light alloys represent only a small proportion of the total of materials, and that not much weight can, therefore, be saved by using them. He would expect the 2-litre closed car to weigh not much more than 20 cwt.—the 2-litre B.M.W. saloon weighed 19 cwt. approximately—and a 1½-litre can be got down to 14½–15 cwt. Bolster, who, Pomeroy reminded us, built a 4-engined car weighing half a ton, thought one ton for a 2-litre car excessive. The E-type "30/98" Vauxhall, the "Light Sports" Railton, and various American contraptions built by his friends had 4-litre engines [the Vauxhall 4½-litre] and weighed only a ton. Monkhouse thought 18 cwt. should be possible, using light alloys. Pomeroy decided the car should weigh 17 cwt. as a fairly robust open job, and 2½ cwt. (or 10 per cent. less) in closed form. He remarked that in 2-litre form the "30/98" Vauxhall would not have weighed much less than a ton. The original "30/98" chassis was designed for a 3-litre engine with a gear-box-life of one minute, and was actually lightened for the 4½-litre engine—some of these cars run a bit longer than that even now!

**Gearbox.**—Bolster thought a Cotal quite the best box. Kimber greatly admired the Cotal box, but wide ratios, expense, weight of big-capacity batteries, etc., were against it. He had a 2-litre M.G. with a Cotal box, and in traffic acceleration was vastly improved. The German ZF box with electric synchromesh was even better. A £350 price limit might rule out such gearboxes, so he suggested good synchromesh, with a short, remote gear-lever rather than an American joystick. With electric boxes a safety governor was desirable in case the driver selected the wrong ratio, or reverse, at 80 m.p.h. [Why not a normal safety catch for reverse-position as well?] Berthon agreed the Cotal was a lovely box, but price, wide ratios and weight were against it. He advocated, therefore, a straightforward racing-type box, and synchromesh, with which Monkhouse agreed.

**Overdrive.**—Monkhouse was not in favour of overdrive. The principle was sound, but actuation was usually unreliable. [Our road-test experiences rather confirm this.] He preferred a change of ratio behind the gearbox. Berthon thought overdrive very desirable, but not of much use in England, where

an ordinary top gear with an indirect overdrive was more useful. Otherwise "low top" would be used mostly. [We agree. When guilty about fuel conservation when testing the Mk. V Bentley in 1940, we used indirect overdrive for appreciable distances over English main roads. There was a latent desire to use the direct lower top gear, but, actually, performance on overdrive, even up main-road gradients and when in a hurry, was perfectly adequate.] Bolster disliked automatically selected overdrives, which

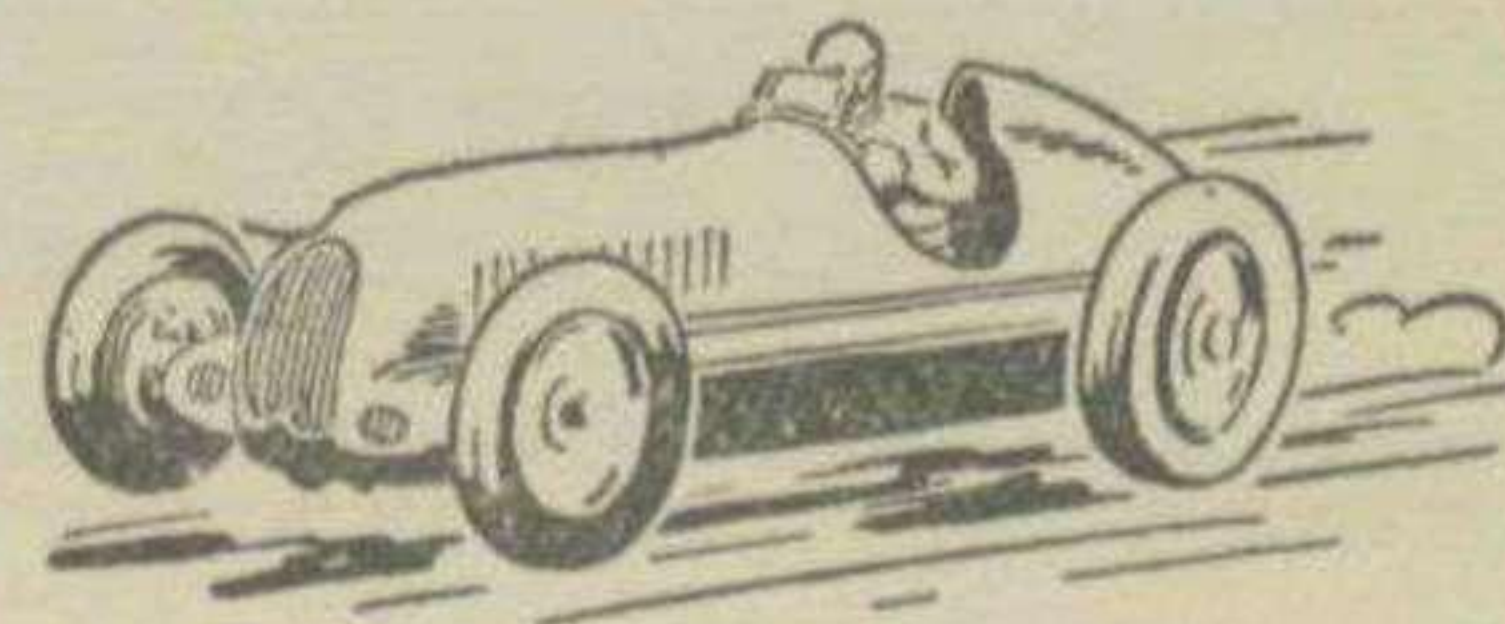
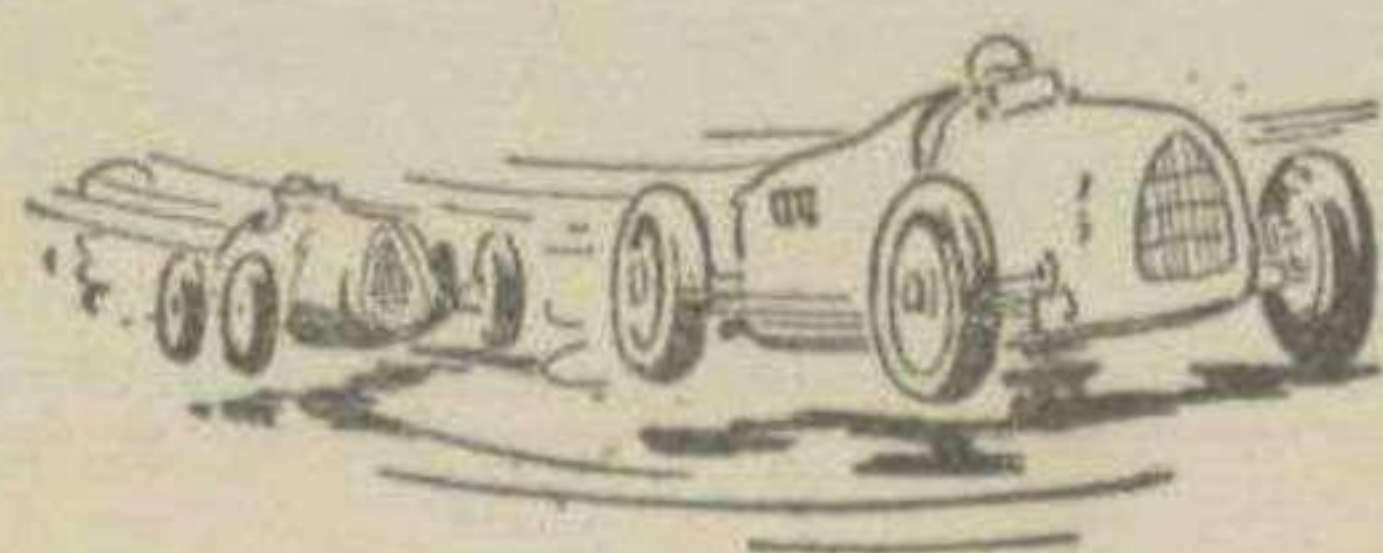


change up just as you go to pass another car. If scif-selecting they are good, and a Cotal box with overdrive is very pleasant. Kimber recalled using a form of overdrive in 1915, but had not had much experience of American practice. However, he had driven a Big Four Riley with Warner 2-speed gear and found it very, very pleasant indeed. He insisted on driver-selection.

**Rear Suspension.**—Pomeroy said the de Dion axle reduces wheel spin. A mild snag was the possibility of the wheels being driven into ruts by the springs. Monkhouse objected to the need to use universal joints needing lubricating and subject to wear. He preferred a rigid rear axle with torsion-bars inside a tubular frame. Kimber said the chief advantage of DeDion layout was reduction of unsprung weight. Having the drive on the frame was liable to result in body noise. He craved torsion-bar or coil-spring suspension. Berthon believed noise from de Dion layout could be overcome; it cost more than a normal axle, but it was money well spent. Godfrey, Pomeroy said, doesn't believe in springing, so his views were especially welcome! He said De Dion axles were ideal in theory, but with narrow track the universals became a problem. Bolster said he was prejudiced against chain drive (!) and liked a De Dion axle if the noise bugbear could be eradicated. A friend told him there were always sounds of whirling machinery beneath the back seat of the "Grosser" Mercedes, which is probably why Hitler always stands up. Pomeroy replied that the Horch is *not* noisy in that respect. Leaf-springing must go, and he advocated a De Dion axle, or, as an alternative, a light edition of orthodox axle. He reminded us that torsion-bars and coil-springs are one and the same thing.

The discussion was now thrown open, and the first query was, should a high-speed or a "woolly" engine be employed in the ideal sports car? Pomeroy said a 2-litre of the h.p. specified should be reliable and was chosen as more desirable than a 1½-litre.

Next query: Why not the layout as agreed upon but with front-wheel drive? Berthon said he would prefer a rear engine, and Kimber thought castor-action difficulties would be encountered with F.W.D. He reminded us that the sports-car owner is conservative and will not buy an unconventional car. Pomeroy said he would hope that the ideal design would make so much money for its sponsors that he would be able to buy a front-drive car of another make for himself. [He runs a D.K.W.] Anthony Heal then arose, and very ably more than saved the vintage situation! He criticised the proposed post-war sports car as not nearly fast enough. Fifteen-year-old cars could do equally well—he was thinking of the Vauxhall and Bentley of 1924–5. Surely some improvement from the users' point of view might be expected after 15 or more years? He felt that cheap American cars could equal the speed aimed at in this £400 design, and he doubted whether the acceleration would be any better than that of the Americans, either. He felt a sports car should present an *obvious* advantage to the owner over off-the-line productions. He would be willing to sacrifice pansy bits, radio and even the lid, to gain 20 m.p.h. over the Yanks, together with reliability and greater acceleration. His 1924 car has better acceleration than a Ford V8, and a 100 m.p.h. maximum, and unless he could be sure of 15 per cent. or 20 per cent. better performance from a post-war car he would remain faithful to the vintage types. Pomeroy commented that Heal's "30/98" Vauxhall, to-day, represents an investment of £2,000. If the proposed ideal car's price could be 20 per cent. above this figure they could guarantee Heal his required performance. Vintage car owners who pay £150 for a car are apt to forget that this is only possible because some muggins paid £1,500 for the car 10 years before. [It's still very nice for the vintage—the vintage car nearly always wins these arguments if the matter of financial outlay is brought in.] The proposed 2-litre would offer superior economy of running as compared to an American car. You had to be so brave to get quickly from A to B in an American—and Pomeroy said he'd tried them nearly all, except the V16 Cadillac. He could never guarantee to cover 200 miles in less than five hours in any of them, and rain made it worse from the feeling-of-security aspect. You couldn't see where you were going in these cars, but this was just as well, as you would be so unhappy if you could! [But we *have* put over 47 miles into an hour in a Yank of which we had had no prior experience—admittedly hating most minutes of it. And certainly you can see everything before, around, and above you from Heal's Vauxhall, and feel very safe withal.]



## Details of an Ambitious Austin Seven Special

THE Special with which I used to amuse myself before the war is one amongst many Austin Seven specials, but it was unlike most in a number of ways. Details of some of the more unusual alterations carried out may be of interest to MOTOR SPORT readers who are contemplating similar specials for use after the war. Incidentally, it has occurred to me that the ideal place for a spot of 750-c.c. racing would be the perimeter track of one of the many air-fields now springing up all over the country. It would be wonderful and inexpensive sport for the impecunious enthusiast. Perhaps other readers have similar ideas? The only snag I can see is the high accident rate likely on a track of this description!

This article is written entirely from memory after four years of war, in which most of my time is spent keeping pace with the inventions of the hated Hun, and I hope I will be forgiven if some of the technical details are a trifle vague or inaccurate—I haven't seen the car for three years.

Originally it started life as a 1928 baker's delivery van, with a long and honourable career behind it delivering pork-pies. Consequently, I bought it very cheaply, although the engine was still in good shape. We stripped the body off and dismantled the whole of the chassis, cleaning everything and rebushing where necessary.

It was decided that the Austin Seven wheelbase was too short and that the existing transverse springing did not lend itself to lowering. In any case the Austin standard front-end can never be made to steer or hold the road really well. So old Morris-Cowley chassis members were welded to the sides of the Austin frame.

A G.N. was found in a field near home and the owner gave me the complete issue, being only too pleased to see the last of it. We dismantled this one morning and loaded all the bits that mattered into the back of my sister's Morris Twelve, much to her annoyance, as some of them were rather dirty. The chassis frame we tied to the roof, thus conveying one complete G.N. (less engine and body) home in one day. Incidentally, it was quite untowable. The engine was beyond all hope, and was not an interesting type, so it was left hidden in a ditch.

The G.N.  $\frac{1}{4}$ -elliptic springs were attached to the Morris side members. The G.N. stubs were discarded and Austin Seven stubs welded into the G.N. axle, thus making the track about 6 in. wider than standard. The whole assembly was rather floppy, so two radius arms were made up from channel steel and bolted to the stubs and frame on each side. These looked very professional, as they were thoroughly drilled.

The Austin steering was discarded and an old type Talbot "10/23" steering assembly was procured complete from a breaker. The reduction box is carried on a bracket bolted to the new side members. The steering column is almost horizontal, and the large steering wheel set extremely comfortably, although there

The builder of which, now a Captain in the Royal Engineers, prefers to remain anonymous.—Ed.

\*\*\*

is very little room to get in and out of the car. The front brakes, of Bowden type, were taken from a crashed M.G. "Magna," as the old Austin cable system seldom compensated, owing to the wider track and lengthened wheelbase. It always chose the most awkward corners to lock, with startling consequences.

The effect of these alterations to the front-end was to shift the weight of the engine about 12 in. back from the front axle. This improved the road-holding and steering immensely. The radiator is about 6 in. behind the front axle and has greatly improved the general appearance of the car. The back-axle was lowered by flattening the springs. The rear brakes are standard Austin, the whole system being operated either by foot or by means of a horizontal lever about 2 ft. long outside the car. This latter gives immense leverage and is invaluable. The wheels, being 1928, had light spokes, and they soon collapsed when the urge was applied, so post-1930 wheels were fitted later. Motor-cycle-type tyres are used, studded at the rear and ribbed at the front.

The engine was stripped down and completely overhauled. New main bearings were fitted, the two-bearing crank being retained as I couldn't procure an "Ulster" engine cheaply enough. The big-ends were re-metalled and the block bored out 20 thou. Incidentally, the people who did it told me it was one of the hardest they had ever bored. Oversize "Extralloy" pistons were fitted, a high-lift overlap camshaft was obtained from Laystall's, and Terry "Aero" valve-springs were used. New valves were ground in to the existing seatings, which were in good condition. The usual port polishing was carried out. The Austin inlet manifold was retained and two Zenith downdraught carburettors bolted on to it.

Exactly how much was taken off the head I forget, but it was more than  $\frac{1}{16}$  in. Using a Klingerit gasket the compression ratio is around 8 to 1. I didn't think an aluminium head was worth the expense, as they don't improve performance very much and they invariably warp. Champion R3 or R1 plugs are used. The magneto is a special B.T.H. wound for high r.p.m.

The flywheel was turned down on a lathe until it was only about  $\frac{1}{8}$  in. thick. This proved disastrous, as the clutch springs proved too strong. Fortunately the crankcase stood the shock and my feet remained intact. It made the most expensive noise I have ever heard, and I thought the old two-bearing crank had given up the ghost at last. However, a new flywheel was fitted, again about  $\frac{1}{8}$  in. thick, except at the centre and outside of course. The first one broke where the flywheel is drilled and threaded for the withdrawal bolts. This may be of interest to other special builders, who

have lightened Austin flywheels, and I think it is probably quite an uncommon form of breakdown in the ordinary way.

In addition to the foregoing improvements the whole engine was assembled with great care and a lot of time spent on minor alterations and adjustments.

Originally the 3-speed gearbox was retained, operated by a remote change consisting of a large hinge and a cut-down G.N. gear-lever linked by a rod to the stub of the Austin gear-lever. This sometimes helped me into reverse when hurrying to change from 1st to 2nd. However, I never worried, as 3-speed boxes are cheap. Later, a 4-speed box replaced this arrangement, with a proper remote change.

An almost straight-through outside copper exhaust system from an H.P. was fitted.

Unfortunately I had no rev.-counter, but I think the engine in its final form probably got somewhere near the 6,500 r.p.m. mark. Fuel was the chief problem owing to the high compression ratio, but Cleveland Discol used to be satisfactory. The best fuel was 33 $\frac{1}{2}$  per cent. ethylbenzole-petrol. If I was using the car on the road I usually replaced the Klingerit with a standard gasket. Castrol "R" was used throughout.

The body was knocked up from multiply board, lath and fabric. The long bonnet ran from a standard Austin radiator (which I intended to replace) to a fabric scuttle flaired up to the steering wheel. The sides were cut away and the whole of the rear was taken up by a large petrol tank from the crashed M.G. "Magna." Two bucket seats, also from the "Magna," just fitted. Easily detachable motor-cycle-type wings are used, front and rear. The whole car is very low and really looks quite workmanlike. Petrol is pumped from the rear tank by pressure-feed, the pump being from an Austro-Daimler; in addition, there is a G.N. tank under the scuttle.

Final performance was fully up to expectations. Acceleration and road-holding, for which it was designed, were both excellent. No figures are available, but 50 m.p.h. in 2nd, using the 3-speed box, was quite common. We ran in several speed trials and hill-climbs with a certain amount of success, but there is seldom a special class for unblown 750s, so "firsts" were few.

Most pleasure was had on the road; we could beat most M.G.s and the like from the start up to about 60 m.p.h., usually to their annoyance. On long high-speed runs pre-ignition sometimes occurred, but I think it could have been cured by using a larger radiator, an alteration I had started on just before the war.

Needless to say the first time I ever took the car out a policeman spotted it and stopped me. He expected a rich haul, I have no doubt, but having checked such elementary things as licence, insurance, etc., and found all in order, he started peering around. The driving mirror and horn were both there, but eventually he spotted the rear number plate, which was not quite the correct size! Nevertheless, I hope to have my special on the road after the war is won.

# GREAT BRITISH ACHIEVEMENTS

IT is proposed to recount the four successive Bentley victories at Le Mans in 1927, 1928, 1929 and 1930. But it must be remembered that a private owner won at Le Mans in 1924, when Capt. J. F. Duff, partnered by F. C. Clement, brought their 3-litre to victory in the Grand Prix d'Endurance, and even this was not the first Bentley appearance there, because Duff and Clement had already put up a good show in the 1923 event, in which race their car suffered a considerable delay with a punctured petrol tank, but nevertheless was able to finish fourth. In 1924, however, the Bentley's petrol tank was protected from flying stones (which had caused the puncture the previous year) by a wire gauze covering and, moreover, front-wheel brakes had been added. There was a fairly large field and the Bentley's greatest rivals were Chenard-et-Walckers and Lorraine-Dietrichs, but the British car had the legs of its competitors, and won at an average speed of 53.75 m.p.h., covering 1,290.75 miles in the 24 hours.

In 1925 Duff and Clement again ran; also Kensington Moir and Dr. Benjafield, with another 3-litre. The cars were not successful, however, nor did they have any luck the following year, when the Bentley Company officially ran two cars, with another privately-owned model.

So we come to 1927, when the Bentley Company entered two of the well-tried 3-litre models, to be driven by George Duller, with Baron D'Erlanger, and S. C. H. Davis with Dr. J. D. Benjafield, and one of the new 4½-litre cars, to be driven by Capt. Woolf Barnato and F. C. Clement. No. 1, the new 4½-litre, was the first of these cars to be raced, and showed up very well in practice, although Capt. Barnato was unable to get to Le Mans, so that L. G. Callingham, who had previously had Bentley experience in the Six-Hour Race at Brooklands, was roped in as second driver with Clement. No. 2 was a new car, specially prepared for this event, and No. 3 was in actual fact privately owned, being the very car that carried No. 7 in the previous Le Mans race, when the same drivers, Benjafield and Davis, had put up a good show until the brakes gave out. This car was now, however, returned to the firm for this race so that it would come under team discipline. W. O. Bentley presided over all the team arrangements and was personally responsible for the tactics to be employed during the race. Although there was a good entry, it seemed obvious that the Bentleys would be favourites. Practice had shown them quite easily the fastest cars on the course, the drivers were good experienced men, and the whole team control and general turn-out was obviously very finished; this despite the fact that the cars were racing in a foreign country and a long way from their own works—a great disadvantage in itself.

The first 200 miles had to be covered with hoods erected. The Bentley team got away in fine style, Clement leading on the 4½-litre, followed by Benjafield and then D'Erlanger. For the first few hours everything went perfectly. The cars ran faultlessly and had a speed which would easily give them the race. Then came

## III.

### A. Rivers-Fletcher describes the Bentley successes at Le Mans.

★★★★★★★★★★★★★★★★

the terrible White House crash, which involved all the Bentley team, putting the new 4½- and 3-litre cars right out and badly crippling the one remaining—last year's 3-litre. The story of the crash must be well known to all readers of MOTOR SPORT, but I will recall it briefly. White House corner was a very fast curve, and the crash occurred in that very dangerous half light at dusk. A Schneider got into a bad skid coming out of the corner and swung round backwards into a brick wall, blocking most of the road and lying right in the path taken by the fast cars. The first car to come into sight was the "4½" driven by Callingham. He did what he could, but there was no room for him at that speed, and his car struck the outside of the corner and overturned, throwing him out on to the road, and still further blocking the way. The second car, No. 2, the 3-litre driven by Duller, crashed into the "4½," throwing Duller clear and making a seemingly impassable barrier of crashed cars, almost blocking the entire road. Next was Sammy Davis, with the last Bentley. As he came into the corner he caught sight of extra dirt on the road and, sensing a crash, this fine driver was able to apply his brakes just that split-second sooner, and although he, too, crashed into the other cars, he did so less furiously, and was later able to extricate his car and drive on slowly to the pits, where it was found that the car was in pretty bad shape. The frame was bent, the front axle was pushed back a long way on one side, the battery was loose, one headlamp smashed, and the off-side front wing bent sideways. Sammy Davis decided, however, to carry on with the car and, gradually went faster and faster as he conquered the odd steering and brakes, which were badly affected by the crash. Later Davis came in to refuel and handed over to Dr. Benjafield, who now had the unenviable task of discovering the tricks of the steering and brakes in the dark. There was a certain amount of trouble from the lighting, as the battery was still loose, but somehow or other Dr. Benjafield and Sammy Davis got that car through the night; even though torrential rain added to their difficulties. Moreover, the car was by now in second place behind Laly on an Aries. The Aries had a very great lead, however, and it didn't seem possible for the Bentley to catch it, but acting upon instructions from W.O. in the pit, the Bentley was speeded up as fast as they dared and they gained gradually on the Aries, whose pit was rather slow to notice the Bentley's increase in speed, and did not inform their driver until quite a lot of leeway had been made up. When the Aries came in to refuel, and Chassagne took over the wheel, a terrific scrap developed between this driver and Benjafield on the Bentley, a scrap which ended with the Aries blown up by the roadside, and the Bentley leading the race; so S. C. H. Davis and Dr. J. D. Benjafield

brought the crippled Bentley into first place at an average speed of 61.36 m.p.h., covering 1,472.6 miles, and won the Grand Prix d'Endurance. It had been a grand race and received great publicity.

In 1928 the Bentley Company again entered three cars, but this time they were all 4½-litres. No. 2, driven by Clement and Benjafield, and No. 3, by Birkin and Chassagne, were new cars, with better streamlined bodies, with a high curved rail joining the body between the front and rear seats, supporting a tonneau which merged into a new tail, in which was recessed the spare wheel. No. 4, Barnato's, was last year's "4½," which carried a 3-litre type radiator and long wings and running boards, in contrast to the short semi-cycle-type wings used on the other team cars. The spare wheel on No. 4 was carried on the scuttle. No. 2 was registered in England as YW2557, No. 3 YV7263, and No. 4 YH3196. All the cars carried very good head-lights, with a spotlight mounted centrally.

The cosmopolitan nature of the entry was increased by two Chryslers and a Stutz from America. Among the other starters were Aries, Lagonda and Alvis, but once again it seemed as though the Bentleys had the best chance, though they were conceding half-a-litre to the "Black Hawk" Stutz, to be driven by Brisson and Bloch.

In the opening rounds the Bentleys were able to out-distance all except the 5-litre Stutz, which seemed to be able to leave the "4½s." Laly's Aries was put out with big-end trouble and the two Lagondas were out in an unlucky crash. To start with, Birkin's new "4½" was the fastest of the Bentley team, but he had the misfortune to puncture a tyre on the off side of the course, and as the Bentleys were not carrying jacks, Birkin had to run on the rim for quite a considerable distance. He used a bit too much loud pedal and the rim collapsed, the car eventually coming to rest with a rear brake drum buried in the grass. Chassagne, the second driver, did good work to get the car going again, but No. 3 was now a long way behind. No. 2 Bentley, however, was leading the race, held by the Stutz in second place, with Barnato on No. 4 lying third. Before night the leading Bentley was in trouble with a broken oil pipe, but soon got going again, after losing first place to the Stutz. The pace was high and many cars were in trouble, No. 2 Bentley being put out by a most annoying spot of bother—lubrication trouble caused overheating, which caused the car to lose all its water, and the race rules prevented any replenishment before a certain number of laps had been completed, so, as this car had not yet gone the required distance, it had to be retired when it otherwise seemed as though it might have stood a good chance of winning.

This left only No. 4 Bentley in a strong position to challenge the Stutz, and it now increased speed and took the lead. The Stutz clung on valiantly for some time, but eventually gearbox trouble caused it to drop back. No. 3, which had been delayed so much earlier in the race, was being beautifully driven by Chassagne and Birkin and now stood a

chance of completing the set minimum distance scheduled for qualification for next year's Rudge Whitworth Cup. No. 4, safely in first place, carried on to win at 69.11 m.p.h., and No. 3 just qualified for next year's Cup by virtue of Birkin's final record lap in 8 min. 7 sec.

In 1929, as many as five cars were entered by the Bentley Company, headed by the new Big Six. This was a road-racing edition of the 6½-litre 37.2-h.p. 6-cylinder car which Bentleys had previously only marketed as a town carriage. It was to be driven by Barnato and Birkin and carried No. 1. No. 8 was a works 4½-litre, to be driven by Clement and Chassagne, No. 9, the veteran "4½" still carrying its 3-litre radiator and long wings and running boards, and driven by Jack Dunfee and Glen Kidston. Then, as a separate team, No. 10, the "4½" driven in the "Double-Twelve" race by S. C. H. Davis, was now to be handled by Benjafield and D'Erlanger, and the other "4½," with which Mrs. Victor Bruce had recently taken the 24-hour record at Montlhéry, was to be driven by Lord Howe and Rubin. All these cars got away well at the start of the race, headed by the new Six, with Birkin up. In the early part of the race the only cars that could live with the Bentleys were the Stutz team, handled by Bouriat, Eyston, and Benoist. Two white Chryslers, a Dupont, and the Lagonda team were all putting up a good show, but it was obvious to all and sundry that the Bentleys ought to win.

It transpired that it had not been possible to prepare the second team of Bentleys, Nos. 10 and 11, sufficiently thoroughly, and both these cars were in fairly early, No. 11 retiring with magneto trouble. This may seem rather odd, as the Bentleys always carried twin magnetos, but apparently the vertical drive shaft had broken, thus putting both magnetos out of action. The other Bentley's trouble was less serious, and this car was soon going well again. The Big Six, handled by Birkin, had broken the lap record at 79.78 m.p.h. After six hours, the four Bentleys were leading the race, followed by the Stutz and Chrysler teams, but the Stutz were having blower trouble, and the Chrysler, though running well, were just not up to the Bentley's speed. During the night the Bentley team were beset by a curious trouble, in that the bulb-holders in their headlamps worked loose and broke off, so that the cars were constantly in and out of the pits having this annoying trouble rectified.

The rest of the race was fairly uneventful for the Bentleys, because, although some of the cars were in and out of the pits with minor troubles, they had, in reality, such a huge lead over the rest of the field that they could well afford to take things easily, and the race proved a great triumph for the team. The four cars were slowed by team orders on the last lap and toured over the line in close formation—a most impressive sight. Birkin and Barnato averaged 73.62 m.p.h., with the Big Six covering 1,767.25 miles in the 24 hours. This also gave them the Rudge Whitworth Cup. Glen Kidston and Jack Dunfee were second with the veteran "4½," Benjafield and D'Erlanger third, and Clement and Chassagne fourth.

1930 proved a really good race. This year the Bentley Company entered three of the 6-cylinder 6½-litre cars, last year's winner to be driven by Barnato and Kidston. Clive Dunfee and Sammy Davies, and Dick Watney and Clement were handling the two comparatively new cars, which had been built for, and run in, the "Double-Twelve" at Brooklands a few months before.

The Hon. Dorothy Paget also entered three cars, these being the new 4½-litre supercharged cars driven by Birkin and Chassagne, Benjafield and Ramponi, and Jack Dunfee and Berris Wood. The idea of there being two Bentley teams rather complicated the control, and in the first instance there was no thought of running the two teams in liaison. The Bentleys, however, obviously had a great rival in the 7-litre Mercedes, to be handled by Caracciola and Werner. This car was larger than the biggest Bentley and supercharged into the bargain; moreover, it was of a well-proved type. From the Bentley prestige point of view, it was practically essential that a Bentley should win this race, as they had now built up a reputation for so doing, and had six cars of their own in the race against the lone German Mercedes. So "Tim" Birkin, who had charge of Dorothy Paget's team, very handsomely agreed to drive his car to the limit in the early stages of the race in order to push the Mercedes beyond its safe limit, Birkin, of course, fully realising that this would endanger his own chance of winning, or even finishing, the race. He and W.O. worked out a detailed plan of action for all the cars, and during the race itself this plan worked admirably. The Mercedes proved certainly as fast and probably faster than any of the Bentleys if the latter were driven at a speed that would ensure their finishing, but Caracciola endeavoured to hang on to the tail of Birkin, who was putting up a terrific performance. After an epic run Birkin was eventually put out with tyre trouble, and then Glen Kidston started to harry the Mercedes. Meanwhile Clive Dunfee, who had taken over from Sammy Davies on No. 3 Six, came down to the turn at Pontlieu too quickly and buried the car in the sandbank, so that it had to be retired, despite heroic work on the part of Sammy Davies, who tried to dig it out with a lamp glass; this, too, despite the fact that he was suffering considerable pain from pieces of glass in his eye from a stone which shattered his goggles during his spell at the wheel.

Again this year there were two Stutz cars driven by Philippe de Rothschild and Brisson, but although they and the rest of the field, including two English Talbots, were putting up a good show, they did not really present any serious challenge to the Bentleys and Mercedes. The blower Bentleys had considerable tyre trouble, the covers seeming to last only a few laps when the cars were driven really fast. One Stutz went out with a broken back-axle, and the other caught fire and was burnt to destruction, luckily without injury to the driver or anyone else. After about 40 laps had been covered, Barnato, in the veteran Big Six, was speeded up by his pit and began to challenge the Mercedes, which had held first place up to now for most of the race. Barnato soon passed, and in the ensuing

dog fight, which lasted for nearly five hours, the lead changed many times. Eventually, however, the Mercedes went out with dynamo trouble and reduced oil pressure. Evidently Birkin's harrying tactics in the earlier part of the race had played their part. Now that the Mercedes was out, it would obviously be Bentleys' race, and the team cars were slowed by instructions. The two Sixes carried on through the rest of the race with no trouble, although the blower cars were often in and out of their pits changing tyres. Glen Kidston and Woolf Barnato won the race at 75.87 m.p.h., covering 1,821 miles. Clement and Watney were second on another Six.

So much for a brief resumé of the Bentley successes at Le Mans. Duff's and Clement's win in 1924 set the seal of success on the 3-litre Bentley for ever. 1927 was famous for the historic White House crash, and the subsequent victory of a crippled car. 1928 saw the 4½-litre cars victorious for the first time. 1929 was, I suppose, a fairly easy race for Bentleys, and the first race in which the new Big Six succeeded, and 1930 gave Woolf Barnato his personal "Hat-Trick," and the same Big Six its second Le Mans victory. Great credit is due to the old Bentley Company, W.O., Woolf Barnato, and the rest of the Bentley boys. Bentleys, at Le Mans, have done more for Britain than almost any other team anywhere, and they have left a tradition and heritage of which we may feel justifiably proud.

It is sometimes said that the "Bentley Le Mans influence" on British sports-cars was "a bad thing" in that for many years afterwards it became the fashion to market large, heavy 4-seater sports-cars which often carried a mass of redundant equipment. It must be admitted that some very pseudo "Le Mans" cars were marketed at one time or another—but on the whole I feel that the influence was a good one, in that it gave us sports-cars which were at the same time very practical tourers and much more suited to everyday use than the narrow, pointed-tail 2-seaters, which would otherwise have probably become the vogue. Had this come to pass it would have reflected very seriously on the "one car man," though it would have had some advantages to the man who could have afforded to run a sports-car as a second string which need not be used for everyday work; in this case his sports-car would have been faster, but not, I think, so desirable a possession.

Having driven examples of all the different types of Le Mans Bentley I have come to the conclusion that I like the Big Six far and away the best. This type has an animal fascination all its own, with a smooth but colossal flow of power throughout its range. The general opinion at Bentleys used to be that the 4½-litre handled better at speed, and it was largely a matter of personal taste, but I was in the minority in preferring the Six.

I feel I should apologise for having written this article, as there are so many people better qualified to do so than I am, but your Editor asked for it. Finally, I hope I haven't cribbed too much from S. C. H. Davis's wonderful book, "Motor Racing." But without frequent reference to its pages I couldn't have completed the story of these great British achievements.



## Real Racing for the Impecunious

THERE is no possible doubt whatsoever that there existed in this country before the war a significant number of impecunious enthusiasts whose great aim was to do some real motor-racing. After the war we can expect the number to be, if anything, greater than before. Whether anything can actually be done for these folk remains to be seen, but at least some of the problems involved should be faced up to. Under the regime which prevailed up to 1939 the really impecunious driver was forced to concentrate on trials and the lesser sprint events, simply because he could not afford the entry fees, incidental expenses, and the sort of car required, for serious long-distance or even short-distance racing. And in sprint events he was obliged to run in classes which were usually very hotly contested, and in which inexpensive cars handled by beginners merely made a background.

Certainly club meetings at the Crystal Palace and Donington offered a break, but these events presented such an admirable opportunity of getting in some real high-speed racing for a modest outlay, that the impecunious, again, not only merely made the background, but were rather dangerously in the way. True, the M.C.C. offered its annual one-hour Outer Circuit event and the J.C.C. its excellent one-hour Brooklands run, replete with corners and as, in these events, you had merely to "beat the Club" to gain an award, everyone should have been happy. The fact was that these events still came out fairly expensive and did not compensate those who earnestly sought to "road race."

It must be remembered of the novice that he or she is desperately keen to see whether or not he or she has the ability to handle a racing car competitively, and is apt to regard the thing as a personal call; the more expert drivers, on the other hand, having proved themselves, can take a greater interest in proving their cars' performances over courses not calling for especial driving skill, or else you can argue that they habitually drive really rapid cars which remain intriguing to conduct on courses where the impecunious entrants' cars seem just too dull. That, then, is a brief picture of things as they were.

What is the solution? Holland-Birkett, captain of the 750 Club, has hit on a really good idea, which he outlined in a letter published in *MOTOR SPORT* in June, 1943. His suggestion was that the 750 Club should run events, road races if possible, confined to side-valve, unsupercharged, road-equipped cars.

That is a very sound suggestion indeed, if one bears in mind the original aim behind the formation of the 750 Club. This club was suggested by the Editor of *MOTOR SPORT* as likely to do good work by promoting mud trials and, perhaps, speed events, open only to Austin Sevens and similar small, inexpensive amateur-modified cars, so that drivers thereof could feel their way, as it were, in events in which competition would be really keen, instead of entirely out of proportion. It was felt that things like M-type M.G.

Midgets, Singer "Porlocks," Triumph Super Sevens, perhaps Fiat 500s, etc., should be let in to keep the Austin owners on their toes, so associate membership was introduced for this purpose. Phil Hunter came along willing to do all the hard work, and the thing came into being. One trial, on just these lines, was held before the war, and a speed trial would have been run if hostilities hadn't intervened. So Birkett's suggestion for unblown 750-c.c. racing is a logical outcome.

But it is very necessary, if it is to be made a success, that the wrong impression is not created. The idea of 500-c.c. racing has been discussed, but against the desirable facts of low first-cost, a new field of interest, and a class in which competitors, at all events for a time, should be well-matched, has come to be set the feeling that very soon moneyed entrants would be spending as much on these 500-c.c. racing cars as on bigger-engined jobs. That is where Birkett's limit of an unblown s.v. engine and road-equipment is so sane, although he emphasised that he is not against 500-c.c. sprint classes, as such. It does not entirely rule out the "expensive racing car in disguise," but it should go a whole long way towards it. You can drop a 2-seater body on to a racing chassis, but not so easily in the smaller classes, and as only very small prizes would presumably be offered for these races, people would not be encouraged to unsupercharge and re-body fast 750-c.c. cars for this purpose. Indeed, the beauty of the thing is becoming evident. The unblown 750-c.c. car has been seriously outclassed for some time, and apart from the impecunious owner who cannot afford to run in classic events, no one is likely to foster it—the blown single-seater is essential for satisfactory participation in ordinary 750-c.c. class events, and it doesn't easily detune to Birkett's specification.

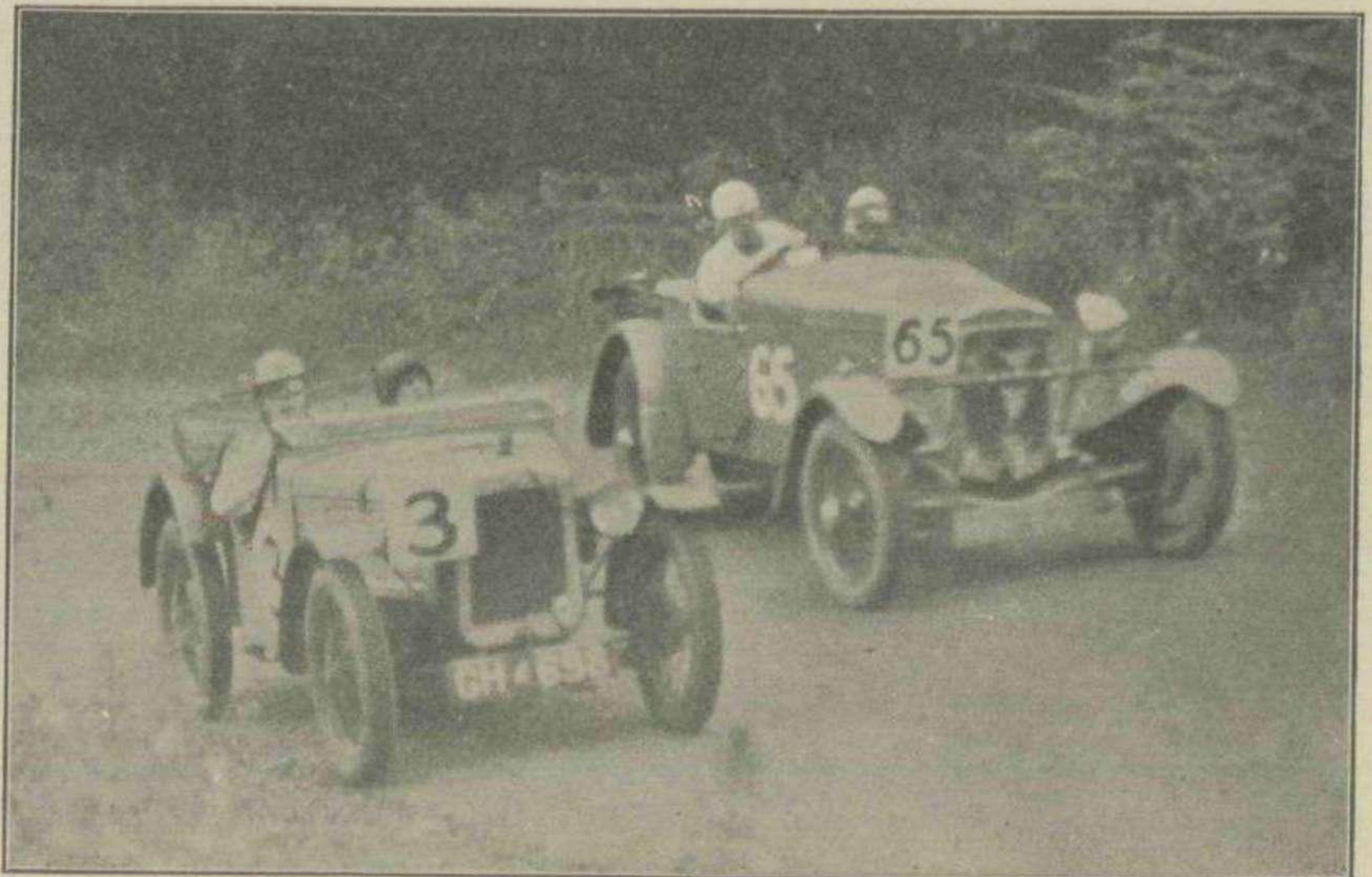
I think the thing might be rendered even more watertight by making pump fuel and ordinary-grade plugs compulsory, which should not try the scrutineer too far, and certainly the competing cars should be taxed for a quarter at least and driven to the course. Doubtless the R.A.C. would insist that wings be removed and no passengers carried, which is merely common sense.

The foregoing is Holland-Birkett's scheme. The Midland Motoring Enthusiasts' Club has rather different ideas, and these are set out by Kenneth Wharton (who used to race an Austin Seven at Donington, where he crashed badly about 10 years ago) as follows:—

"The possibility of racing unblown 750-c.c. cars for the impecunious amateur has been discussed in *MOTOR SPORT* from time to time, but, unfortunately, little progress has been made towards practical post-war plans for carrying out the suggestions. Recently I had the pleasure of meeting the Editor of *MOTOR SPORT* who feels that possibilities do exist, providing sufficient support is forthcoming.

"I would suggest some definite formula for the cars, and for the type of event which would appeal most to the competitors and to the public.

"My opinion is that touring cars, such as 'Ulster' Austins and J2 M.G. Midgets would prove unpopular, first, because many of them, particularly the former, are now in a state of antiquity; and it must be remembered that 10 years have elapsed since 'Ulsters' were built, and that few of them at the present time are safe to participate in open competition, unless kept solely for the purpose. Secondly, I can assure you, from personal experience, that for these reasons they are not at all popular with race organisers. Lastly, the public must be considered; it may be thought that this is not of very great importance, but, after all, they do make race meetings possible, and I cannot imagine for one moment their showing any great enthusiasm for cars of the above type.



An "Ulster" Austin Seven and a Frazer-Nash in one of the old J.C.C. High-Speed Trials, which used part of the Brooklands' approach roads.

"Therefore I would like to put forward the following suggestions: Cars to be of 750 c.c. maximum capacity, unsupercharged, single-seater bodies only, to be fitted with efficient four-wheel brakes. In order to prevent any serious troubles with specials, I would suggest a minimum weight of 5 cwt., as competitors might be tempted to construct cars below this figure. Should they do so, and the result not be a first-class engineering job, the consequences might prove disastrous. Fuel of any type may be used; a reverse gear must be fitted and the cars may carry any type of engine, e.g., 500 c.c., or a pair of 350 dirt-track J.A.P.s—in short, anything provided that it does not exceed 750 c.c.

I am confident that these cars would prove very popular and, provided that they are constructed on engineering lines, would be looked upon quite favourably by the racing authorities at Donington and Crystal Palace: the latter circuit, as mentioned by the Editor of MOTOR SPORT, is ideally suited to these small cars.

"Should anyone prefer to rejuvenate 'Ulsters' and such like, I would suggest two separate classes of events, as handicap racing spoils the fun, the two classes being as follows:—

- (a) Cars built up of components of one make only.
- (b) Out-and-out specials built to the designer's own ideas.

"In conclusion, I do not hesitate to

say that in my opinion road-racing and sprints would prove far more successful than 'dicing' old cars round a muddy field.

"These views have the full support of the Midland Motoring Enthusiasts' Club, who are most anxious to foster this particular branch of a very fine sport, and on their behalf I would welcome any suggestions sent direct to me, or through the Editor of MOTOR SPORT, as it is our wish that some definite plans may be laid ready for post-war motoring."

Certainly we prefer Birkett's scheme to Wharton's, but whereas the former visualises occasional races confined to 750 Club members, the latter is viewing the matter from the angle of fairly extensive national support. The chief objection raised against Birkett's scheme to date is, "Where will you get your racing?" As real racing is called for, with the cars allowed to reach their maximum of 70-80 m.p.h., and brake properly for the corners, "any old field" is no sort of answer, even if the R.A.C. ever sanctioned inflation of the oft-quoted but rather specialised C.A.P.A. happenings. Ring roads round airfields may never become available for the purpose and may not, anyway, be as suitable as some folk think. So the 750 Club would have to look to existing circuits. There seems no reason why Brooklands should not, just once, run a race for unblown 750s over the Campbell Circuit, as it once did for Fiat 500s and Talbot Tens, providing intending

entrants could promise safe cars. If the 750 Club invited the clubs which organise members' days at Donington and the Crystal Palace to its speed trials, it would probably be permitted to hold one scratch race per season at each venue, especially if some of the entry-fee takings were handed towards the general cost of such meetings. That, then, offers promise of three decent, if short, races on three decent circuits in the first season. Remember that the cars' owners are impecunious, that they use their cars on the road, and that they can also enter for ordinary trials and sprints and for other club races, and that might well suffice. It is difficult to see how it can be otherwise. If more frequent races are wanted, Wharton's scheme obviously "has it," because before the Brooklands, Donington and Crystal Palace organisers put over regular races for 750-c.c. cars, or 500-c.c. for that matter, they must be convinced that such cars will be fast enough and exciting enough to attract the "gate." If this could be proved to be the case, they might put over races for such cars, to attract new names, bolster-up flagging entry lists, and advertise a novelty. But fairly soon folk with over a thousand pounds to spend would produce cars so superior to those run by the more impecunious that interest would ebb, and as the performance of cars in the next-larger capacity class would invariably be just that much more

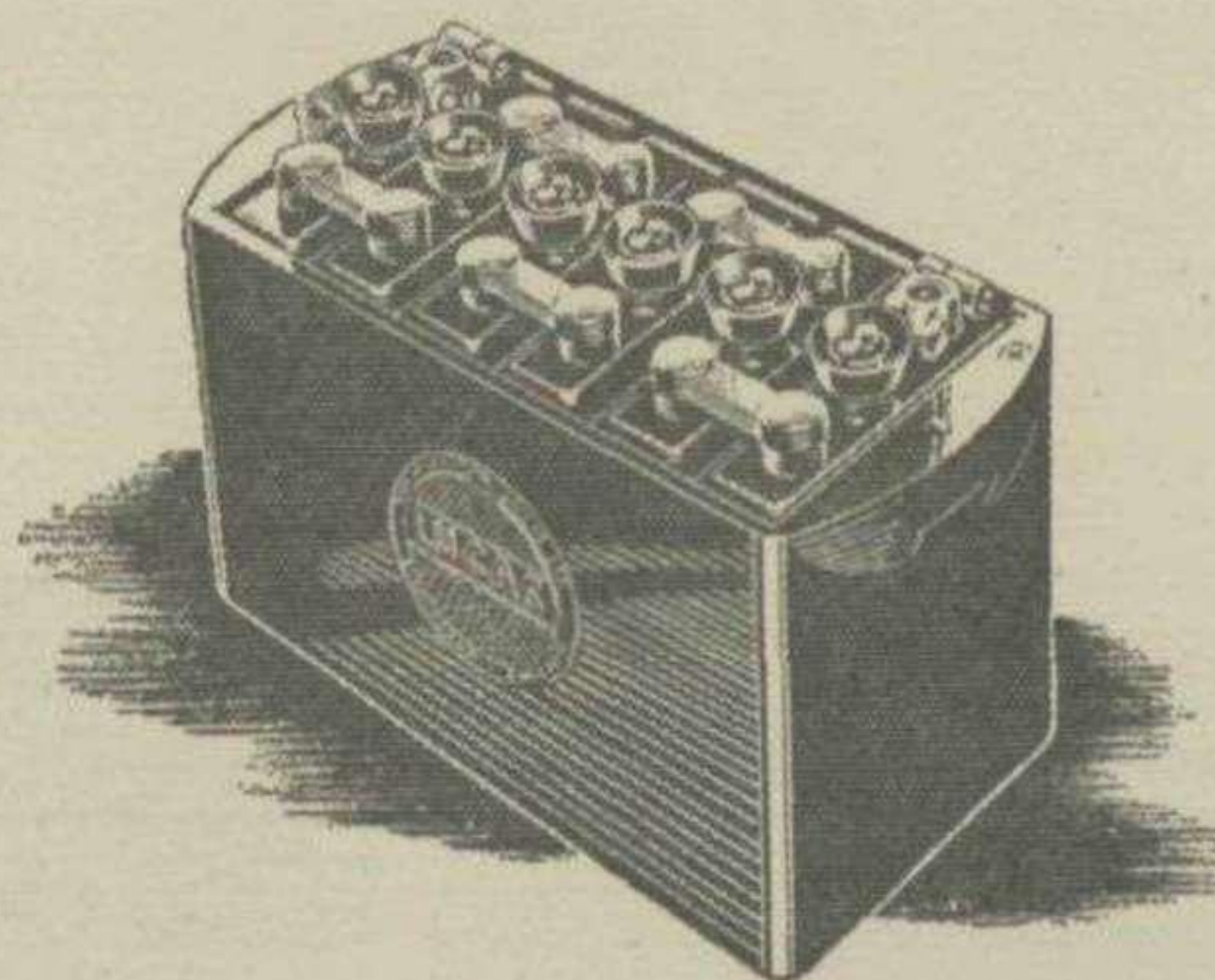
Every  
LUCAS

Battery

HAS TWO YEARS INSURED LIFE

Ask your local garage for full particulars  
or write for list of Agents and Battery  
Literature.

JOSEPH LUCAS LTD., Birmingham, 19.



spectacular, the beauty of the 750-c.c. class would doubtless wear thin both for organisers and entrants.

From road runs with Birkett in his "Ulster" Austin Seven when he has been in a professional hurry, I am convinced that an unblown 750, given draught carburation, a reasonable cylinder head, and a decent crank, and with sensible linings on its brakes, can be made to go quite fast enough to develop real driving skill and technique over a road course with fairly frequent and varied corners. Impecunious amateurs could display their tuning skill and their driving

ability amply, and quite inexpensively, given scratch races for road-equipped 2-seaters of this sort. If too much enthusiasm were shown, any such races the 750 Club managed to hold could be open by invitation only. I am sure this points the way to offering a certain amount of real racing each year to limited numbers of persons for a very modest outlay. So I hope S. H. Capon and his committee will try to further the possibilities of such racing after the war. Equally, I hope over-ambition will not kill the thing. Unless the 750 Club finds its own course, very frequent and very

long-distance events just won't be possible—even this Utopia would probably put entry fees much higher than is visualised by the present sponsor, because a club course would cost a dickens of a sum in upkeep. But run sensibly, and strictly confined to inexpensive road-worthy cars that would all be, roughly, equal in performance, there are, I feel, great possibilities of a certain amount of real racing for the impecunious after the war. Otherwise, 750-c.c. racing can only develop on Wharton's lines, and I suggest that not for long would it remain the undisputed pastime of the almost-broke.

THE next goal, after 120 m.p.h., is undisputably 150 m.p.h., not because it is more difficult to add 30 m.p.h. than, say, 25 or 35 m.p.h. to the two-miles-a-minute gait, but because we humans prefer "round figures." The Americans claimed that they had attained this sort of velocity by 1919, claiming 149.86 m.p.h. for De Palma's 12-cylinder Packard, and 156 m.p.h. for Milton's twin-engined Duesenberg in 1920. But these records, doubtless one-way runs, were never recognised by the A.I.A.C.R., and the first official record of 150 m.p.h. being exceeded came in March, 1926, when Campbell averaged 150.87 m.p.h. at Pendine with the re-streamlined V12 Sunbeam. The first man to exceed 150 m.p.h. for any distance was Norman Smith, with the "Golden-Arrow"-like Enterprize, powered by a Schneider Trophy Napier "Lion" engine, who averaged 164.08 for 10 miles in 1932. At this stage we should not overlook Mrs. Stewart's lap record at Montlhéry, made in 1930 with the little 2-litre Derby-Miller, at nearly 148 m.p.h. Stuck's 6-litre Auto-Union managed 151.55 for 50 miles in 1934, hampered, moreover, by Avus. The coveted World's "Hour" went at over 150 (152.12) in 1935—by Cobb's Napier-Railton. Over 500 miles, Eyston's unblown R-R "Kestrel"-engined f.w.d. "Speed-of-the-Wind" exceeded 152 on the Salt Flats in 1936. The same combination first exceeded 151 for 5,000 miles.

The next "landmark" is three-miles-a-minute, after we have disposed of the class 150s by saying that in 1935 the Class B One Hour record went to 152.15 m.p.h. (Jenkins-Duesenberg) and that Maserati has S.S. records in Class D at 155. There is also the 1½-litre Miller's 164 m.p.h. Curiously, no one exceeded 180 m.p.h. before the magic 200 m.p.h. was exceeded in 1927. It was not until 1936 that Caracciola and a Mercedes exceeded the target speed over 10 miles and again he then bettered 200. Moreover, over all greater distances this figure has yet to be reached, the nearest being the World's 200-Mile record, standing at 177.43 m.p.h. to the credit of Ab Jenkins and the "Mormon Meteor"—and it has stood since 1937. No one has approached this speed in the classes, unless they have also exceeded 200. So we come to 200 m.p.h., still a figure outside the realm of ordinary racing cars, whereas by 1934 the mono-

## SORTING OUT SPEED!

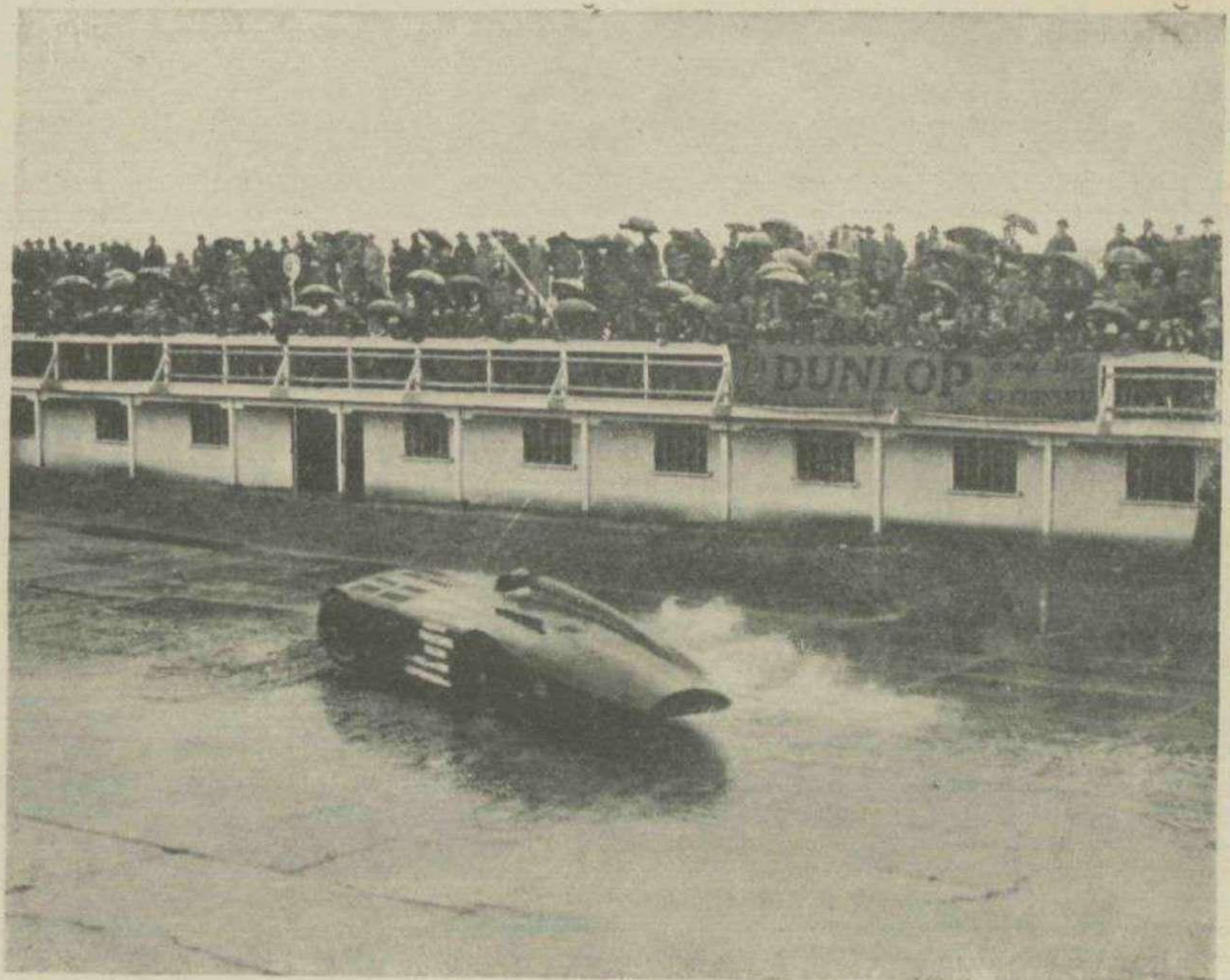
(Continued from the October, 1943, issue.)



posto Alfa could do about 150 m.p.h., and in 1937 Mercedes-Benz G.P. cars did nearly 190 m.p.h. on occasion. 200 m.p.h. was first exceeded at Daytona by Segrave's famous twin-engined 1,000-h.p. Sunbeam, which did 203.79 m.p.h. in 1927. We find that by 1936 Mercedes had exceeded 207 m.p.h. for 10 miles, and that the next year a 5-litre Auto-Union took records up to 10 miles, all at appreciably over 211 m.p.h., while 200 m.p.h. was

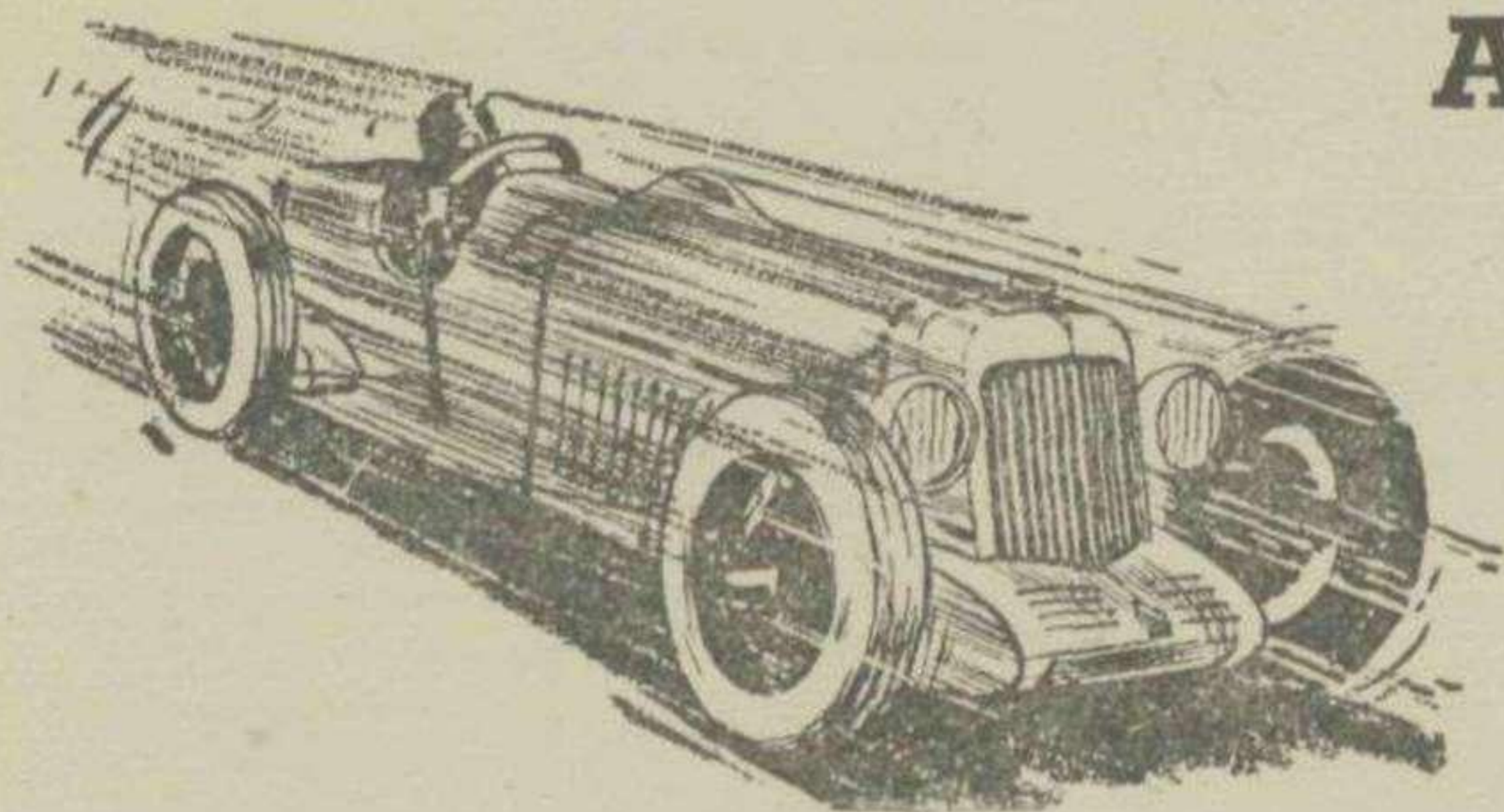
first exceeded by a 1,100-c.c. and 1½-litre class car (Gardner's M.G.) in 1939. Unofficially, the 3-litre Stutz "Black Hawk" did 200 in 1928. In 1929 the first British records were established at over 200 m.p.h.—by Campbell's Napier-Arrol-Aster at Verneuk Pan. The next jump is usually to 300 m.p.h. That speed was first attained by a motor-car in 1935, when Campbell did 301.13 at Bonneville in the Rolls-Royce "R" "Bluebird."

Nothing in the classes or long-distance categories touches that, excepting Eyston's 312 m.p.h. in Class A with 73½ litres of Thunderbolt No. 1 in 1936, Caracciola's speed of 268.9 in Class D in 1938, with 5.5 litres of Mercedes-Benz, and Cobb's 270 m.p.h. for 10 miles with the Railton in 1939. So we come to Cobb's magnificent absolute—369.7 m.p.h. with the twin Napier-engined 48-litre Railton, just before war broke out.



The 1,000-h.p. twin-engined Sunbeam was the first motor-car in the world to exceed 200 m.p.h.—at Daytona, in 1927. It is here being demonstrated by Segrave at a B.A.R.C. meeting, running on the rear engine only.

## ANOTHER "IDEAL" DESIGN



M. E. Nixon outlines what he wants after the war—and how he is actually building something approaching it.



INSPIRED by the invitation extended by the Editor at the end of Capt. Moon's excellent article in the September *MOTOR SPORT*, I have ventured to set down my requirements for a post-war sports car and how I am trying to meet them.

To my mind the first question to be answered in designing or buying a car is, "For what is the car to be used?" In my case the answer is: (1) for an everyday home to work and business running; (2) for evening and week-end pottering round country lanes and field tracks; (3) for social occasions; (4) for occasional road-burning expeditions to Scotland, Cornwall, etc.; (5) for mild competition work, M.C.C. trials and club race meetings.

Now this specification can be met by practically any car with pretensions to being a sports model, and the important thing is the emphasis placed upon each of the above items. In my case the pottering about the countryside, on and off the road, and the road-burning expeditions come first, although I must always have an answer to the press on the starter button on Monday morning.

What sort of car meets these requirements? My answer is a 2/4-seater roadster body, on a compact chassis, with an engine of moderate size, giving 100 m.p.h. whenever required, 75-80 cruising, and good acceleration. The whole to be reliable and easy to maintain, and light on the pocket. Dealing first with the body, as this will naturally affect the size of chassis and the b.h.p. to drag it along. If I am to drive for 400 miles off the reel at high speed, as I dared to on occasions before the war, I must have a really comfortable seat. There is the possibility of my finding someone mug enough to make a practice of coming with me, so there must be two comfortable seats. As I found the T-type M.G. Midget really comfortable over long distances, the front seat dimensions are taken from this. The two rear seats are for the people who insist on a lift home, and the A.C. hammock-type of occasional seat seems to fill the bill, especially as it could be made to fill the gap behind the front seats when the roof is down. The body should be wide enough to obviate the necessity of a cutaway, as low body sides are a nuisance when driving through rain. The roof should go up and down very quickly, if possible without the need for stopping the car, as I have found that one always says, "It's only a drip, it will leave off in a minute," and it never does. Winding windows help on social occasions in the winter and may make all the difference between a car being possible or impossible. In this connection I think a great deal can be learned

by studying the latest American roadsters, as they do this style of body very well, although they spoil it by putting it on a glorified cinema organ. Still, this is the type of body I have in mind, scaled down to a 2/4-seater, with all seats under the roof, said roof folding out of sight.

To proceed to the chassis. To accommodate the body outlined above a wheel-base of 9 ft. and a track of 4 ft. 3 in. would seem to be the minimum. The next question is what sort of chassis, and quite frankly I don't mind at all so long as it gives good results. Just before the war there were many different ideas on the subject, but there were no signs that any one idea was vastly superior to the rest. My own personal preference is for a chassis composed of two parallel box-section side members, perfectly straight, with a flat undertray to join them, dished to prevent drumming, tubular cross members and a propeller shaft housing strengthening the structure in the centre where the door space comes. For both front and rear suspensions I like the Porsche type suspension as applied to E.R.A.; steering by divided track rod. This chassis design is simply what I consider to give the best results, according to my calculations. But I would like to stress that I am ready to be convinced, by practical tests, of the merits of any other system. I have still to be convinced that, for British roads, the normal "carriage-type" suspension is out of date. With regard to the De Dion rear suspension, I don't think it has any merits for touring car use, and until the German technicians can be made to talk, I still doubt that it is essential to a racing car. If a car is to go into quantity production I favour a Bugatti rear-axle and central gearbox, with Porsche front suspension. For a quality car, Porsche suspension all round with gearbox and back-axle in one. If it is to be the best in the world let M. Bugatti design the chassis and take his word for it.

Coming next to the engine, there are many good reasons for making a standard chassis and back-axle ready to take any engine and gearbox the customer may want. It should be possible to make the type of car I have in mind weigh not more than about 20 cwt., and with moderate streamlining 100 b.h.p. should take this along at 100 m.p.h., and give real acceleration. But what sort of engine should one fit? An American with 3-speed box, a touring 3-litre engine with 4-speeds and synchromesh, a "hot" unblown 2-litre, or a blown 1½-litre with crash box? How many cylinders, and what about a pre-selector gearbox, Cotal or Wilson? I think this question of engine depends on many things, such as where one lives,

how much money one can afford, etc. While the type of body and chassis I have in mind may appeal to a great many people, sticking to one type of engine might cut down its supporters considerably. My own personal preference is for a 1½-litre 6-cylinder with twin camshaft mounted high in the block and operating the valves through rockers direct. This gives a hemispherical head, plugs accessible in the top of the head, and permits of lifting the head without disturbing valve timing. The blower should deliver at 10-12 lb./sq. in. pressure and be of the Roots type in order to give power low down. It should be possible to make the engine almost entirely of light alloys, and use wet liners. The gearbox could be of the Wilson self-change type, or a crash box, to suit individual preferences; I personally prefer the Wilson. The lubrication should be of the dry-sump type with the intake passing through the top cylinder coolant take-off pipe to give rapid warming up. The oil tank could be alongside the sump with an oil radiator forward with the coolant radiator.

The specification listed above comes down to a 1½-litre 6-cylinder supercharged engine, with twin high camshafts, Wilson box, independent suspension all round, hydraulic brakes, and a normal 9-ft. chassis carrying a 2/4-seater roadster body. The whole weighing about one ton. Ground clearance and turning circle to be adequate for trials' work. This is what I decided would be an adequate compromise for my post-war motoring needs, and at the end of 1941, as my T-type M.G. was beginning to show signs of "three years' hard," I asked myself what I should do about it. I tried a number of motor-cars, but either they were too expensive (all the B.M.W.), or, like a 1½-litre blown Alfa, too "vintage" to be good post-war motors. Then I came across the Atalanta-Talbot already described in *MOTOR SPORT*. This seemed to provide the answer, although the thought of the tax on 21 h.p. was not so good. Still, it joined the stable, and after a certain amount of running to get the hang of things, went into the garage for stripping and rebuilding. I was hoping to find time to do this myself, but have had to call upon E. R. Nicholl in my hour of need.

All this time I had the idea of substituting a smaller blown engine for the Talbot, but it was not until a recent visit to Nicholl's shop that I found the solution. It was a 2-litre supercharged Lagonda, and I fell for it right away; it had just the type of valve-operating gear I wanted, and is apparently the essence of reliability. Here was the solution to my problem. A 9-ft. Atalanta chassis, strengthened at the back to overcome the weakness of the frame aft the axle line, a blown 2-litre Lagonda engine, a Talbot pre-selector gearbox and the Abbott drop-head coupé body converted to a 2/4-seater with hammock-type rear seats. The tail has to be lifted to give a better streamline, and I have laid out a front-end on the lines of the "Le Mans" Bugatti. It only remains to put all the bits together!

## A Brief Test of a V8 F.W.D. Cord

AMERICAN automobiles do not usually appeal to the enthusiast, but we consider that the Cord is an exception, for its specification, embracing V8 4,730-c.c. engine, front-drive, independent front suspension by transverse leaf spring, concealed radiator and headlamps, and 4-speed electric-suction gearbox, renders it of more than passing interest. We still consider that it will not endear itself to all the categories of enthusiast who read MOTOR SPORT, but we do feel that it merits consideration amongst those who have decided that after the war they will derive the maximum of motoring satisfaction from a car of high performance and somewhat futuristic design. The Cord has the merit of being a proven type, which is more than will be true of any fresh designs of specialised type which may greet the armistice. Consequently, we approached Mr. Oscar Moore, of Purkess, Ltd., who deal in secondhand Cords, and asked him why he chose to represent such a large h.p. car in this heavily taxed isle. His comments appear hereafter: although we invited him virtually to a free advertisement, you will see that, very fairly, he discusses the cons as well as the pros.

♦ ♦ ♦

What's so fascinating about these Cords, anyway? You feel that a reply such as "The car feels just right; you know what I mean" is hardly adequate. The questioner expects something more definite. And it is so hard to analyse the good points because, taken one by one, they do not amount to much more than most big cars have got. It is the knitted whole that counts. But the Cord has got some things most others haven't got.

First, a big V8 engine of 4,730 c.c. and 39.2 h.p., turning comparatively slowly. It will run up to over 4,000 r.p.m.—over 5,500 when supercharged—and gives vivid acceleration on the second and third ratios of 5.85 and 3.88 to 1, but its great charm is the way in which it moves the car at 60 m.p.h. at 2,000 r.p.m. in complete mechanical silence on a whiff of throttle. This is achieved on a 2.75 to 1 top gear and, believe it or not, it is possible on this same ratio to come down to a walking pace and accelerate away without slipping the clutch, with no signs of distress. (This is not recommended, and is merely a stunt to show how flexible the engine is.) It is preferable to make use of the acceleration available on the lower gears, particularly second. This gear can be normally used for starting away on the level, and the car will go up to over 50 in it quite comfortably if desired: which just about leaves everything else behind.

Secondly, front-wheel-drive. The writer thinks that f.w.d. is right and believes that this is also the opinion of many expert designers. Only conservatism and cost have stood in the way of its universal adoption. A stranger driving the car in a normal manner would not realise that it had f.w.d., but if real "dicing" is to be indulged in, a slightly

different technique should be adopted on corners. It is simply a matter of pushing the throttle open in the turn and then the engine will pull the car round. Where a strange corner is inadvertently entered at much too high a speed it is possible to get the impression that the car is front heavy, but use of the accelerator always gets it round, and quite incredible things can be done on corners once you have got used to it. F.W.D. is definitely better on ice, too. The car's good cornering properties are assisted by the wide track and low seating position rendered possible by the absence of a propeller shaft. The springing is not at all normal American—much harder, with absence of roll, but gives a nice ride all the same. The steering and road-holding are good—very good. On a switchback road (such as between Basingstoke and Winchester), where speed in the high top gear can be raised above normal on the down slopes, it is possible to get a speedometer reading of about 150, and still be perfectly happy with both.

It is felt that the braking could be improved [(!)-ED.] by using larger drums. With the existing brakes careful maintenance is needed if the stopping power is to be kept sufficient to cope with really high speeds. On the other hand, all anchors can be thrown out at any speed you like and the car will pull up in a straight line.

We come now to the third way in which the Cord is different: the manner of gear-changing. This is done by an electric-cum-vacuum system. The gear is selected electrically, and the actual change is made by a vacuum cylinder. There is a small change-speed gate on the steering column just below the wheel and the lever of this is manipulated in the same way as the usual change-speed lever, with the difference that the actual change of speed will not take place unless the clutch is depressed. Intelligent pre-selection is all right, but the makers do not advise it because, possibly, they fear some sub-human wen will attempt to come down to second at 90, which might result in expensive noises, as the vacuum is quite powerful enough to pull the gear in. If one wishes to double de-clutch this is feasible, and helps the synchromesh as it does on most boxes.

Is all this reliable? Yes, it's pretty good. The only trouble that has been experienced has been due to dirty contacts in the switches, and these are not difficult to clean, nor is it frequently necessary.

The instrument board is most satisfying. It contains rev.-counter, electric clock, water thermometer and radio-tuning dial, in addition to the usual stuff, and these are arranged in a machine-turned, stainless-steel panel with concealed lighting. It has none of the pressed-tin effect usual in transatlantic cars, and is very beautiful in the day; at night it invariably calls forth exclamations of wonder. The built-in radio is a good one—if you like that sort of thing.

Now, what about the snags? Oh, yes, the Cord has snags, which are all the more irritating because it is so nearly perfect. The chief one is the lack of automatic

lubrication for the outer universal joints. This must be done by hand with a grease gun. It is not difficult, but has to be done pretty often, say, every 2,000 miles in winter and less often in summer and, if neglected, play develops which makes the joints noisy on the lock. The front hub nuts and wheel nuts must be kept very tight indeed, or the hub races will go and the wheel centres crack if fast cornering is indulged in. The engine is 100 per cent. reliable. Trouble is unknown, and an American correspondent working in a Boston service station speaks of mileages of over 200,000 without a rebore.

By the way, there is a persistent idea that the Cord Company is defunct. This is not so: spare parts are obtainable, and they plan to produce a new model after the war.

To sum up, it is not everybody's car. The cost of running such a large car would make it impossible for many, though the petrol consumption (14/16 m.p.g.) and the reliability and slow-wearing make it much cheaper than most high-performance motors.

But the fact remains that to handle a Cord is a unique experience in motoring. The most critical enthusiast with many years of experience, including all the "interesting" makes, never fails to enthuse over the Cord, and those interested in fast motors should certainly make a point of trying one once at least.

♦ ♦ ♦

We, ourselves, were able to take a very brief run in Mr. Moore's own 1936 Cord saloon, travelling five up. The day was bitterly cold, and the engine refused to warm up, but this did not prevent the car from holding 2,800 r.p.m. in top gear along the deserted Watford By-Pass. During this performance the speedometer indicated 105 m.p.h., on a 2.75 to 1 ratio, with 16 in. by 6 in. tyres; you can do the arithmetic for yourselves. The car cruises effortlessly at 70 or 80 m.p.h. at engine speeds that are reassuringly moderate. The riding is extremely interesting, being quite steady yet very comfortable, with a characteristic corner-to-corner dipping motion; only "stunt" deviations from the straight resulted in roll. The whole car is truly amazingly quiet, indeed, one of the most silent we have driven, and in view of the f.w.d. that was especially interesting. Wind noise was noticeably subdued. The broad, quite close-set, cloth-upholstered bench seats, front and back, were very comfortable and stamp an unusually pleasing note in an American car. The engine behaves as if it were invisible, and when idling is literally all but inaudible. The steering is exceptionally light, low-g geared and with no come-back motion, and the wheel, if of rather conservative diameter, is very sensibly placed. The tiny gear-lever is easy to use, but we did not have an opportunity of becoming accustomed to it in the short distance over which we took the controls—the long pedal movement of the clutch, the need to tread heavily and all the way down on the

brake pedal (the hydraulic reservoir was due for some more fluid), and the umbrella-handle hand-brake needed getting more accustomed to, before we should have felt quite happy conducting a Cord at high speeds—but, then, we have spent the last three years driving mostly vintage motor-cars. The forward vision is good, but would be better still if the central division of the slightly-V screen were dispensed with; the panels open when required. The stainless-steel fascia is pleasing, but it took us some time to distinguish between the various dials, as the four major ones are all of identical size. The concealed headlamps wind out

of the wings effectively, being controlled by separate, quite sizable handles, one each side of the instrument board. The exterior appearance of the Cord is very compact and well-balanced and should especially please folk who concur with service flats and films by H. G. Wells. Our necessarily very limited experience of the Cord was rendered more pleasurable by the presence of an American soldier who has two of his own back in the States—and who swears by them. The car tried was a Beverley sedan, on the 10 ft. 5 in. chassis, which cost £925 new; an 11 ft. chassis was also made. Supercharged models were available for £100

more than the normally-aspirated jobs, and we hope shortly to test one of these cars recently supplied by Mr. Moore to a client. The condition of the car we tried was an admirable testimony to the long-wearing qualities of Cords and, on the subject of their popularity, we were surprised to hear that some 700-800 were believed to have been sold in this country during the three or four years preceding the war. Those interested in this sort of motoring should not fail to contact Purkess, Ltd., 18, Carlton Road East, Wembley, Middlesex (Arnold 1962) and discuss this very modern car. It should be the post-war answer to a lot of people.

**I**N this country the h.p. tax has fostered small-engined cars and many enthusiasts have been unable to look beyond the 8-h.p sports car. Fortunately, we have developed some very efficient cars in this category and there is considerable satisfaction to be derived from recalling the successful debut of one such car—the 750-c.c. M.G. "Montlhéry Midget." In the 1930 J.C.C. "Double-Twelve" Race at Brooklands, Class H was won by a supercharged Austin Seven, at 64.97

## A SUCCESSFUL FIRST SEASON

were entered for the J.C.C. "Double-Twelve." Seven retired, but the remaining seven finished 1st, 2nd, 3rd, 4th, 5th, 6th, 13th and 18th in the general classification, Staniland and the Earl of March averaging 65.62 m.p.h. for 1,574 miles in the winning car, Gibson and Fell 64.94, Hamilton 63.21, Parker and Cox 62.81, and Black and Fiennes 62.46 m.p.h. When it is remembered that these M.G.s were unblown, their performance is little short of amazing. They again won the Team Prize, and Higgin set the Class H lap record to over 72 m.p.h. before retiring. Eleven of these M.G. Midgets, still unsupercharged and still with full equipment but now with uncowed radiators, started in the Irish Grand Prix at Phoenix Park. Nine finished the course within the time-limit, Norman Black winning at 64.76 m.p.h., Horton finishing 2nd at 63.88 m.p.h., and Major Gardner 3rd, at 63.83 m.p.h. The big cars had their race the next day, but Black's M.G. won the G.P. outright on handicap, by a margin of 11 secs.

was 3rd at 67.62 m.p.h., five seconds behind an Alfa-Romeo. "Hat-trick" in sports-car races in the first season! The production version appeared in 1932, cost £490, or £575 supercharged, and was capable of nearly 88 m.p.h. unblown. From it developed the supercharged J3 and J4 models, introduced in 1933-4. Some of these 750-c.c. M.G.s are in course of rebuilding by enthusiasts who have



*Norman Black, who was 2nd in the "Double-Twelve" and who won the Irish G.P. and the T.T. with a 750-c.c. M.G. in 1931. He now holds a very important appointment in connection with munitions control.*

m.p.h., this car finishing 7th in the general classification. M.G. Midgets finished 14th at 60.23 m.p.h., 17th, 18th, 19th and 20th, winning the Team Prize, but as they were of 850 c.c. they were, naturally, outclassed in the 1,100-c.c. category. In 1931 the 750-c.c. type C, or "Montlhéry" M.G. appeared, and no fewer than 14 of them

For the R.A.C. T.T. at Ulster 13 M.G. Midgets were entered, of which 11 were now supercharged, the blown version of the 750-c.c. having appeared in the L.C.C. Relay Race, when one team of such cars finished 7th, making fourth fastest average speed. In the T.T. Hamilton's car set up a Class H lap record of 70 m.p.h. before retiring, and Norman Black won the entire race, at 67.9 m.p.h., while Crabtree



*The Duke of Richmond and Gordon, who led the team of M.G.s which put up such a wonderful performance in the 1931 "Double-Twelve" Race.*

been lucky enough to find them—J. Baird-Smith has a J4, for instance, and G. V. Coles a J2 converted to J4 specification. Those who are seeking these cars may like to note that the registered number of the 1931 "Double-Twelve" winner was RX8621, Gibson's RX8623, Selby's RX8588, and Higgins's KF5114.

### A FLYING OFFICER'S CARS

*—continued from next page*

When my civilian days were numbered, the Fiat went the way of all cars. This was subsequently regretted, as it would have been a useful car in which to scuttle home on leave and the odd "48s."

As a means of transport purely, I purchased an elderly Hillman Minx, followed later on by a trusty Austin Ten; more recently my limited motoring has been done magnificently by a 1939 Morris Eight tourer.

Just now I am running an Alvis "Firefly" with pre-selector box. The

engine, and whole car in fact, seems very reliable, and the general handling, though heavy, is very satisfactory. I also have been working on a Speed 20 Alvis, and this is now in chassis form, the saloon body having been removed. I have rebuilt the engine in my spare time, but owing to lack of storage space, I must reluctantly part with this interesting chassis, a body for which I hoped to build myself.

Finally, a few months ago I came across an early supercharged 1½-litre Mercedes-Benz, of 1924 vintage, in absolutely marvellous condition throughout. I bought this car with ideas of

rebuilding, etc., but again lack of storage space and facilities decided me to dispose of it—a Flight Sgt. Pilot, who is the very essence of enthusiasm for vintage cars, now has it in safe keeping and works on it every time he gets any leave. Like hundreds of fellow-enthusiasts, I live for the day when we can fill up with Discol and zoom off to the seaside, or to Donington, or Shelsley once again behind the wheel of a real live sports car delivering plenty of "urge."

Till those happy times, MOTOR SPORT bridges the gap between those halcyon days and the shape of cars to come.

## A Flying Officer's Cars

LIKE so many others, I graduated to cars from motor-cycles, of which altogether I owned about twenty. The first was an Alldays-Allon, the last an "International" Norton.

But after eight years' hard continuous riding, summer and winter, all of which was pleasure-riding, and having partly satisfied my urge for speed in grass track and sprint events, with an Irish 200-mile road race thrown in, I began to crave something different. After all, I decided (or possibly the girl friend did) 2-wheelers are unsociable vehicles, whereas cars open up new possibilities.

One day, at an auction in the cattle market of a sleepy Suffolk country town, a 2-seater car was put up for sale; it was knocked down to me at the princely sum of £17 10s. My only asset at the time was a fairly honest-looking face (this, of course, is going back some years), but the auctioneer was a good fellow and gave me a day to settle up. I drove the car back home without incident—my first attempt at car-driving—but I remember that my attempts to change gear were far from clever.

The car was an Albert, made by the Gwynne Engineering Co., of Chiswick, and boasted a radiator not unlike a Rolls-Royce in appearance. The rest of the design was remarkably unlike a Rolls—but the Albert gave me several months of fun, though my family never expected to see my safe return whenever I sallied forth. After a major overhaul necessitated by big-end failures, it was decided to part; it caught fire one night when trying to sell it to a hard-boiled sceptical Scots farmer—the car was saved, but the deal was off.

Eventually the Albert was bought by a local coal-merchant who was a lay-reader at week-ends—never again did he arrive punctually for his church services.

I will draw a veil over my experiences with the next velocipede, an o.h.v. Blackburne-engined Morgan 3-wheeler. I seldom had more than one ratio, being dogged by dog-clutch trouble. It was part-exchanged in Cambridge for an Austin Seven "Swallow" coupé. This was exchanged for a ga-ga Morris Oxford 14-h.p. coupé, but this was damaged by a head-on collision with another car, in thick fog.

I then saw, in Ipswich, and fell in love with, a very rakish H.E. Side-Valve Six, fitted with a low 2-seater fabric body and flared wings, by Martin Walter. This really was a splendid-looking turn-out, low sweeping lines, and colossal brake drums. It was the very last H.E. ever to leave the factory. The engine was a fine piece of work, and the aluminium Whatmough head, copper and brass pipes and fittings, glistened like a power station. Fine workmanship and first-class engineering characterised this H.E. Possibly the unlucky firm put too much into the car, and the output was very limited. The performance was not very terrific, owing chiefly to the rather high weight of the car. Also the vacuum servo brakes were disappointing, but it was a smooth, flexible and quiet car for those days.

Next came a couple of less interesting

cars, an Austin Seven "Cup" 2-seater, which on one occasion roared up Beggars' Roost, complete with passenger and full camping equipment—and a Wolseley Hornet 2-door saloon, with metal-panelled Morris Minor body.

Then I discovered an old "Targa Floria" Ballot 1½-litre twin camshaft job rusting away in a corner of a garage in Colchester. [This would appear to be one of the sports 2-litre cars based on the 1922 Grand Prix racing Ballot.—ED.] I towed it home, threw away the body, which was high and boat-shaped, and, with the aid of a handyman-carpenter, built a 2-seater sporting body with framework of ash, covered 3-ply and fabric, in British racing green.

The large Zeiss headlamps and all plated parts were chromiomed, and the result was quite startling; so was the exhaust note from my primitive built-up manifold and exhaust system. An outside hand-brake and two small aero screens put the finishing touches.

The performance of this grand old car had undoubtedly been pretty good in the days of its pristine glory—but my efforts at body-building had left me with little cash to spare for the engine; I had not reckoned with sundry items such as a new crown wheel pinion and differential parts made for me at a cost of £30 by the E.N.V. Engineering Co.

Still, it was fairly fast, though very noisy, and my wife (in those days the "girl friend") showed some fortitude as my passenger, since there was little or no protection from the weather and most of my Ballot motoring was done during the very worst of weather. Flames would belch through the floorboards, but we never actually had to abandon the car *en route*, though we were always ready to do so.

Jack Bartlett, of Notting Hill Gate, described the Ballot as "a most depressing motor-car," but he took it in part-exchange for a 2-litre Lagonda tourer, a really excellent car. But I hankered after the low-chassis model, and soon changed the first Lagonda for the more modern type, which was a genuine "Double-Twelve" job, and had finished intact in one of these events. The engine was detuned, but the 24-gallon fuel tank still remained. Its maximum was an honest 80, but when, after many months of most enjoyable motoring, I eventually passed the car on to a local sporting parson, the new owner removed one (if not two) of the cylinder-head gaskets, and to his great glee, managed to touch 90 m.p.h.

I next had an old Riley "Redwing" 4-seater sports with a polished aluminium body. This car, I was told, had originally belonged to the late Sir Henry Birkin. I entered it for some trials in the Chilterns, organised, I believe, by the Vintage Sports Car Club, but did not do very well, failing on the worst hills.

Then I bought an o.h. camshaft Salmson, which I named "The Snag." Several modifications were carried out, including a new body and instrument panel and an outside exhaust system. This car had a 4-speed gearbox, unusual for this model, I believe. Back-axle

F/O. B. C. Wood recalls the cars he owned before the war, and describes how he has motored since.

trouble persuaded me to part. I then acquired a really fine specimen of "30/98" Vauxhall, which, though it had done over 200,000 miles of motoring, mostly on the Continent, was still in fine fettle. Laystalls fitted liners and new pistons, and 90 was its top speed. I have tender memories of this amazing car with its very high back-axle ratio and its ability to pack in really phenomenal averages, in spite of its poor braking system.

But I found it expensive to run, so sold it to the Hon. Ruth Cockayne, who had a decided penchant for these fine old cars. I believe she installed the engine from my car into another "30/98" chassis and used it on a tour of Russia.

Next came a car of extremes—with an engine a third of the Vauxhall's rated h.p.—a P-type M.G. Midget, queer to handle after the Vauxhall and felt like a toy, but it was economical, fast, and reliable. But I find I quickly tire of small buzz-boxes, and found my real motor-car again at Bartletts, a 1½-litre blown Alfa-Romeo. Smooth and fast, it handled beautifully, top speed 94 m.p.h. I had some fine runs on this grand machine before economics intervened, when I again went over to small stuff—this time an older J2 M.G. Midget.

I soon disposed of the J2, as finances improved a little, and became the proud owner of S. C. H. Davis's "Ulster" Aston-Martin. Once again I joyed in super road-holding, cornering and braking; but matrimony intervened, and the car was sold to a young enthusiast, who luckily moved from the district soon afterwards, as I could not bear to see him driving and tinkering with *my* car.

After the furniture was all paid for, my fancy lightly turned to thoughts of speed. I went to town one fine day and returned with a supercharged M.G. Midget 2-seater. My wife thought me crazy, but condescended to come with me to Donington (1937), our first trip, and only marred by an unlucky incident with mobile police in a 2½-litre S.S. in some built-up area.

After my wife burnt her arm on the outside exhaust pipe, I promised to buy her something should could drive. We went to Earl's Court and chose a D.K.W. Cabriolet. Much has been written about this fine little German car, so I will only add that I heartily wish I had it now, a real austerity job—no frills, but very economical, dead reliable, exceptionally accessible, and fully up to its work. Would that some British manufacturer, after this war, would build something similar, that the non-technical owner-driver can maintain himself in his limited spare time.

Then we had an old Darracq saloon for a short time, next acquiring a 1937 Aston-Martin long-chassis 4-seater, a grand machine, albeit this one had a noisy axle.

And now the war was well under way, so in order to economise the Aston was sold (for £125!), and in its place a Fiat "500" graced (or disgraced!) the garage.

*Continued at foot of previous page*

## A YEAR WITH AN "1,100" FIAT "BALILLA"

I PURCHASED my "1,100" Fiat for economy reasons some nine months ago, since it seemed that my 1,750-c.c. Alfa-Romeo was using an unnecessarily large amount of fuel for war-time conditions. I am one of those fortunate people whose duties in connection with aero engines still enable me to put in some 20,000 miles a year by road, and since this great blessing has been granted me, I considered that the least I could do was to economise in fuel.

I had no previous experience of this type of Fiat, but had driven some short journeys in a Lancia "Aprilia" belonging to a friend and was fully converted to a desire for a car light in weight, having good independent front suspension, and having reasonable road-holding, steering and safety qualities.

My first short drive in the "1,100" model Fiat showed me that this car had all these qualities in a satisfactory degree, and whereas it could not be compared to the Lancia "Aprilia," I considered that it was better value for money, for whereas my 1938 Fiat cost £120, I could not get a decent "Aprilia" for twice that sum.

The first impressions I got of the Fiat were its good acceleration, good seating position and the excellent field of vision. On the 130-mile drive home the car's ability to get round corners, the light steering and the good braking also became evident.

During 15,000 miles' motoring the fuel consumption has averaged, so far as I can judge, 38 m.p.g., although no effort has been made to tune the carburetter. The cruising speed has usually been around 50 m.p.h., not that I regard this as the "maximum cruising condition," but this speed has not usually been exceeded for tyre economy reasons. On occasions long journeys have been made at cruising speeds of 60-65 m.p.h., and the engine has showed no signs whatever of distress.

The maximum speed is, I suppose, not more than 70 m.p.h., although the speedometer runs round to 80 m.p.h. at the least provocation. Oil consumption on my engine is not so good, since the car had done 30,000 miles before I bought it. I reckon that I put in about a pint every 100 miles at the present time.

Troubles, so far, have been few. At one period I got pronounced vibration at fairly high road speeds, and examination of the rubber discs on the transmission shaft showed that they were badly worn, allowing the shaft to run "out." I fitted a shaft modified by having Hardy Spicer needle roller universal joints, which cured the vibration but has made the clutch very harsh when moving off from rest, so I shall revert to the rubber discs, having obtained new units from Hanover Motors. This rubber disc type of universal is one of the poorest details of the car's design and always gives trouble. The discs need renewing every 12-15,000 miles, but replacements are not expensive.

Wear in the front suspension and steering joints and bushes is fairly pronounced at present, but this is not too bad after 45,000 miles. In a recent letter to your paper Mr. Ian Metcalfe raised this point of i.f.s. wear against the Fiat, pointing out that such wear did not

Last November Harold Biggs told of experiences with his "500" Fiat. Here B. FitzPatrick tells of a year's hard motoring with the "500's" big brother.—Ed.

occur on the vintage Bentley, but I would mention that since the Bentley front suspension remains solid under all road conditions, there is nothing to cause it to wear out; the Fiat suspension does its job, but some better means of protecting the bushes from road grit would be an improvement.

Tyres are 15 in. by 5.00 in., and I thought that I should have difficulty in getting replacements because of the unusual size, but this did not prove to be the case and I got a set of five brand new, pre-war Goodyears, which pleased me immensely.

Accessibility of the engine is not too good, but removal of the radiator is quite easy for any major overhaul job, and the engine is light and easily lifted should removal prove necessary. The gearbox ratios are not all that could be desired, bottom being too low to be of much use, and third does not appear to be sufficiently close to top.

The engine layout is normal, being an orthodox 4-cylinder push-rod job, save for the aluminium cylinder head with inserted valve seats, which is truly admirable, and cuts out all pinking even on Pool. The bore/stroke ratio of the engine is good, being 68 by 75 mm., but this, of course, puts up the Treasury rating to 12 h.p. by our ridiculous R.A.C. formula. Surely it is time that this stupid method of taxing cars was abolished.

A good feature of the construction, for maintenance purposes, is the use of anchor nuts at all points where the usual nut and bolt would be inaccessible to a spanner, but the layout that makes it necessary to remove the rear shock-absorbers for "topping up" is very poor. An anti-roll bar is fixed across the rear shock-absorbers and seems to do its job.

The pillarless saloon body is good for loading up bulky packages (I have had a number of complete car engines alongside the driver's seat when the passenger's seat has been removed), but gives rise to rattles. The body lines generally are good, with reasonable streamlining, and the rapidly-sloping bonnet and deep windscreen enable one to see clearly where one is going, and are especially appreciated in the blackout or in fog.

The finish of the bodywork generally is poor, but the great thing is that it is light in weight; there are no great ash formers and baulks of timber that kill acceleration and braking on the usual saloon. The dashboard is of pressed steel and poor in quality, and the same can be said of the rest of the interior fittings, but I am afraid that bodies fitted up like the lounge of a gin palace do not appeal to me. The function of a body is to protect the occupants from the weather, and this purpose should be served by the minimum weight of material possible. The Fiat is by no means ideal in this respect, for the doors are heavy and the cheap cost price (£198) prohibits the use of light alloys, but it is better than most

in "all-up" weight considerations. The chassis frame is lightened throughout by large holes through the central web of the side and cruciform members.

The low first cost must be considered in relation to the poor quality of the internal fittings. Whilst on the subject of bodywork I would point out that I really prefer an open body, although I do like decent side screens for really rotten weather, when one has to cover some 300 miles on a business journey in the depth of winter.

Another instance of the cheap fittings is to be found in the "tin" sump, but, again, it is light. A beautifully cast aluminium sump may look better on a stationary engine that is not required to accelerate along a road, but it is heavier than "tin" and breaks up just as easily if one hits a rock. Electron would, of course, suit all conditions, if you can afford this material. As an engineer I appreciate the desire that many people show for a mass of costly and intricate machined fittings on their motor-cars, but, since the first purpose of the vehicle is to move along a road and not to be a sort of museum of engineering, I think that the first and only consideration should always be how to save weight; let us hope that plastics will help towards this after the war.

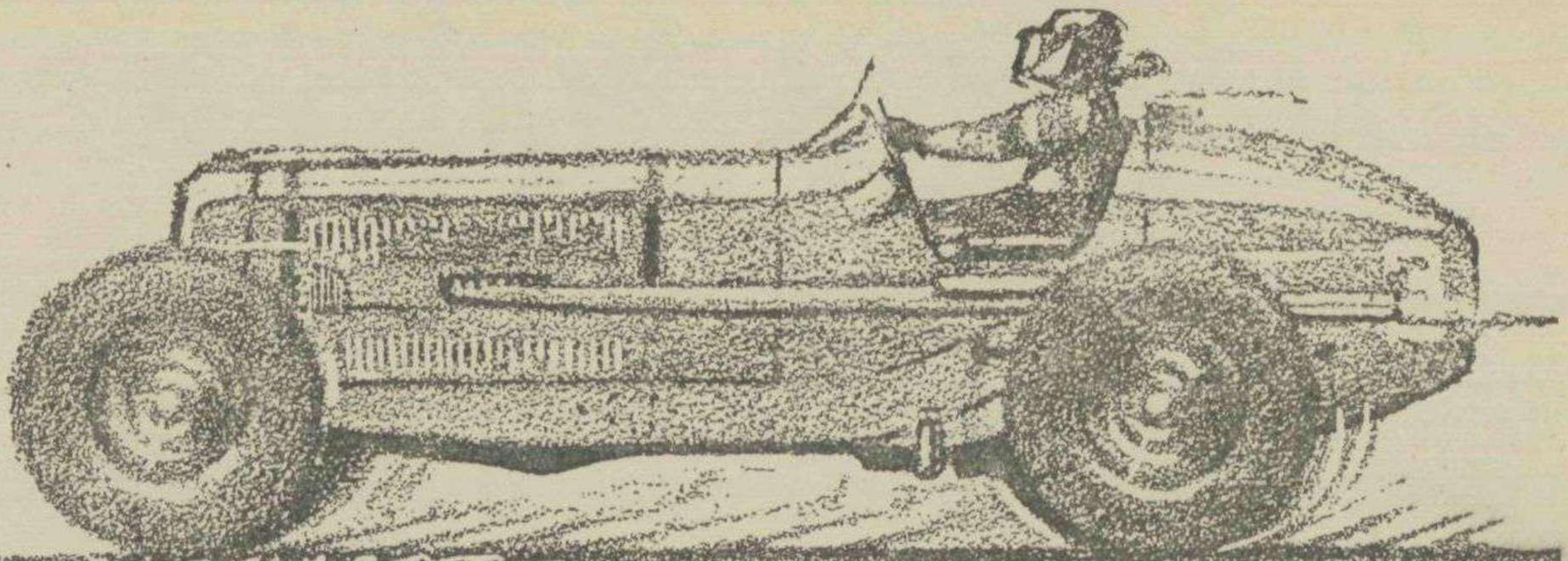
My own car is sadly in need of a new engine at present, but this I hope to rectify soon, having acquired a complete spare chassis and another, almost complete, that has done only 7,000 miles, so the best of these engines is being overhauled for installation at an early date.

In summing up I would say that for its size the Fiat is the best car that I have ever owned, the safest, most comfortable, and most economical and, without doubt, the most useful for ordinary A-to-B motoring. It is the first of what I call the modern-type cars that I have owned, my previous cars having included a 1,750-c.c. Alfa, an 11-h.p. and a "14/60" Triumph, a speed model open 2-litre Lagonda, a blown "Ulster" Austin, a blown F.W.D. Alvis, a "12/60" Alvis, a 2-litre O.M., a T.T. M.G. Magnette, an Austin Twelve, and a "Hyper" sports Lea-Francis. So I am not entirely ignorant of the ways of vintage motors.

It must be remembered that the Fiat is not a sports car—it is a small, cheap, family man's saloon, but how incomparably better is it than the Austin Ten and Hillman "Minx" of our usual choice for a motor of this class! But do not consider the Fiat is only a family man's saloon; if one aims to do a bit of "dicing" it can hold its own with most sports cars of its capacity, and will usually leave them well behind in a country with plenty of hills and lots of corners to negotiate.

Finally, do not encourage people to compare the Fiat with the H.R.G., Squire, Aston-Martin, Frazer-Nash or other such 12-h.p. sports cars, because they are of greater capacity and cost a good deal more. Much less should the vintage Bentley or "30/98" Vauxhall be used for comparison. Compare the Fiat with the Austins, Hillmans and Standards, or such like cars of its own type and class, and then you really do begin to see that the Fiat has "got something."





# RUMBLINGS

The Instruction Book Library has shaped very nicely indeed, and books continue to arrive. It is a

**Makers' Dictum**

scheme which will be of greater value, we hope, after the war, but meanwhile odd bits of information are requested, and supplied. Apart from the value of the "gen" in this not inconsiderable assortment of instruction books, some of them contain rare gems of humour or originality, as witness the following:—

(a) "The — will cruise comfortably at 60 m.p.h. and is built to stand the strain equally with a car of 2½ times its rated h.p.—provided you reflect that at this speed its engine develops 4,363 revolutions per minute (on top gear). Consequently, all moving parts need sympathetic attention if the practice is habitual."

(b) "Brooklands track has an exceedingly bad surface, and were it an ordinary 20-ft. wide road, no motorist would dream of driving at full speed over it. We advise our customers not to accelerate the wear of their cars by lapping Brooklands all out."

(c) "The 8-cylinders engine does not 'swing' before stopping. Its sharp stopping does not therefore mean at all that it is 'seized.'"

(d) "Never accost a flame to look into the inferior of the accumulators as the hydrogen and oxygen remaining after the charge would ignits with an explosion."

(e) "For shifting from 3rd to 4th speed, pull frankly lever towards driver. Usually for shifting from 4th to 3rd speed, from 3rd to 2nd, and from 2nd to 1st, one uses to operate frankly the lever as soon as disengaging the clutch."

(f) "... case must be taken never to use full-lock, or anywhere near it, when the car is travelling at any speed ..."

(g) "The acceleration of the car is such that, cruising at 45 it will pass 95 per cent. of the traffic on the road at a material economy of oil, petrol and supervision."

\* \* \*

Punctually, Vol. IV of the Harborough Publishing Co.'s "Aircraft of the Fighting Powers," by H. J. Cooper and O. G. Thetford, edited by

**Annual Event**

D. A. Russell, M.I.Mech.E., is to hand. It contains photographs, 1/72nd scale plans, and descriptive matter relating to some 80 or 90 military aircraft of 1943, the aircraft of 1940-42 being covered in Vols. I-III. The latest volume contains extra photographs of the larger machines, as the plans which require a folder now back on to a photographic spread. Aircraft of Gt. Britain, Canada, U.S.A., U.S.S.R., Japan and Germany are covered, our new types being the Hurricane II D, Typhoon, Spitfire V, Spitfire IX, Mosquito II, Blenheim V, Lancaster II, Halifax II, Horsa, Oxford IV and V, Magister II, Miles M-28, Martinet I, Defiant II T.T., Auster II, and Warferry I. The book is remarkably good value at one guinea, and it is a treat to enjoy such good print, not only in the text, but in the advertising pages, particularly those taken by our American allies. The last page is devoted to photographs of the Avro York, and it is calmly stated that, although details of this aircraft were released too late for full inclusion, this machine will be covered in Vol. V, which will appear on Monday, December 4th, 1944. That is a nice example of unquenchable optimism which one expects, knowing Mr. Russell, but may we temper it with the hope that this volume will include many *commercial* aircraft to supplement the 1944 military types?

.....

*Smith or Brown*

What initial? Where does he live? Repeatedly you will hear these questions, while valuable time is being wasted because Smith or Brown or somebody else has written in asking "Where are my copies?" Nobody of that name appears in the list of subscribers at that address, and the initials cannot be deciphered. After exchange of correspondence it appears that he changed his address two months ago—"Didn't you know?" The overworked staff are not clairvoyant; if they were they would not be working for MOTOR SPORT. Please notify alteration of address, in writing that can be read, **every time** you change it!

# Club News

**WE HEAR . . .**

"Bira" has been seen in the uniform of a Flt./Lieut., A.T.C. Harold Pratley would be glad to help anyone in the Liverpool district with work on sports or racing cars, to "keep his hand in" in his spare moments. His younger brother is a L.A.C. in the R.A.F. out in India, and is believed to have in hand a ½ in. to the foot model of the o.h.v. Austin; he would be glad to hear from Bentley or o.h.v. Austin enthusiasts, and we can forward letters. It seems that Gordon Green's s.v. Aston-Martin, whose fate we recently queried, went to a breaker by an unfortunate mistake, together with a 2-seater 2-litre Lagonda. Norman Green says it is some consolation to know it had an incurably cracked block. Norman Green has in mind the selling of his 3-litre Bentley to a good home. It has the cylinder block used by Kidston at Le Mans, Le Mans-type duralumin valve rockers with rollers, special h.c. pistons, and 6 mm. machined off the base of the block. To replace it Norman has acquired a 1929 2-litre "Speed Model" Lagonda, and he also has the ex-Eason Gibson *monoposto* Zoller-blown Ford Ten. Sam Green's 3-litre Bentley reposes safely on blocks, awaiting the day, and recently started right away on the handle after standing idle for three years. The Greens, of course, are inseparably associated with very good work on behalf of the E.R.A. Club. Their friend, Jack Hawke, is still as keen as ever, too. Flt./Lieut. Gewghegan still runs an old Salmson on leave petrol, and is planning to install a 2-litre A.C. Six engine in a "Boulogne" Frazer-Nash with "Shelsley" front-end. He reports a 1907 single-cylinder De Dion for sale for about £35 in Northampton, and also some 2-litre Bugatti parts, a 1½-litre B.M.W. engine and a 1½-litre 4-cylinder Riley engine and pre-selector gearbox unit. Austin Partridge kindly sends a Rover Ten Special instruction book for the Library, and reports that he has disposed of his ex-Farley 4-seater F.W.D. Alvis to an Admiralty inspector, who has completely rebuilt it and now uses it on official journeys; as the late owner says, "maintaining vintage prestige instead of lying idle." Partridge has taken over Ogle's F.W.D. Alvis 2-seater and is also rebuilding another identical car.

Kenneth Neve recently had bother with his hack Austin and the D.P.O. allowed him to use his 4½-litre Bentley for a month, for 24 miles a day. This Neve describes as being as good as a second holiday!

Douglas Tubbs has decided to concentrate on having his twin o.h.c. 16-valve Bamford and Martin Aston restored to good order. The ex-King of Spain's Bugatti "Royale" has been discovered in U.S.A. and, rescued from a scrap-heap, is

now in storage with a Baby Peugeot to keep it company—which must be a very grand sight indeed. F/O. Mallock has invested in an "Ulster" Austin Seven and is immersed in Austin Specials. Peter Clark has two wheels with 19-in. well-base rims, made specially for a Lancia "Lambda," if anyone is in need of them. Graham Dix has acquired a Brescia Bugatti chassis, complete with spare engine, which he intends to restore to good order. R. Timmis, who broke his 1910 Mercedes tourer in the Presteigne Rally, has the car in safe storage, and is applying for membership of the Veteran C.C. Rivers-Fletcher is now with the Monaco Engineering Co. at Watford. He has recently acquired Douglas Tubbs's s.v. Aston-Martin, in conjunction with Ashworth, and also a T.K. "12/60" Alvis 2-seater.

Commodore Earl Howe, R.N.V.R., used a Fiat 500 on official duties.

**M.M.E.C.**

The Midland Motoring Enthusiasts Club is certainly a go-ahead organisation. Cecil Clutton gave them what he himself describes as an almost interminable speech on "Sports Car Evolution from 1908 to 1938," in November last, and on December 1st they showed the M.G. film, "Five Successful Years of Motoring."

STOP PRESS.—We hear that 35 members and friends saw the M.G. film. The next meeting will be on January 5th at the "Windsor," Birmingham, at 7 p.m.

**COVER PICTURE**

This month's cover picture shows the Delahaye driven by Schell and Dreyfus tackling the final test of the 1937 Monte Carlo Rally. They started from Stavanger, as did the first three placemen, and finished 5th. They arrived looking as fresh as paint, but Schell, whose 9th Monte Carlo it was, told MOTOR

SPORT's representative that it was his hardest ever. The final placings were a close thing, and the winner outright proved to be the Delahaye driven by Le Begue and Quinlin. Actually, Schell made fastest time in the final test, but the car lost marks on the road section.

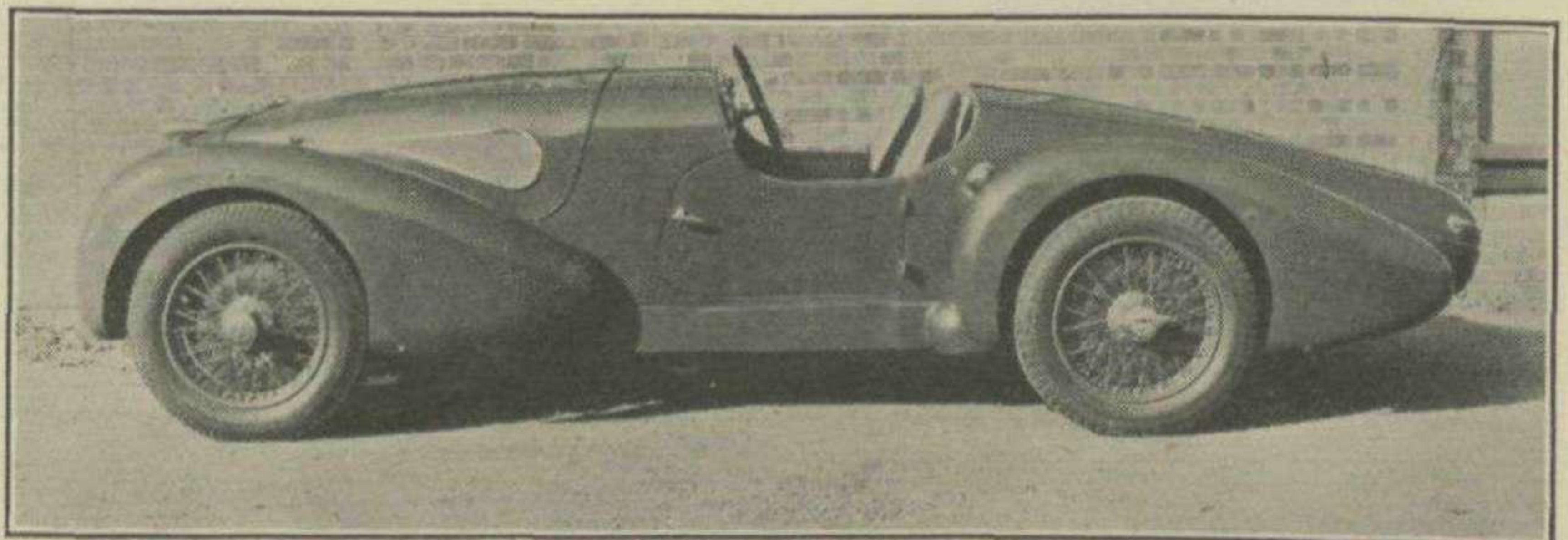
**M.V.D.A.**

The recently formed Motor Vehicle Dismantlers' Association has as its chairman E. H. K. Tye, of York Auto-wreckers. This is pleasing, for Mr. Tye is sympathetic towards collectors of old cars and has assisted several veterans into museums or into good hands.

**OUT OF PRINT**

To avoid unnecessary correspondence, those subscribers desiring back numbers are informed that the following issues are unobtainable:

- 1924: Mar., Dec.; 1925: Feb., April, Aug.; 1926: Aug., Sept., Oct.; 1927: April, June; 1928: Jan., Feb., Mar., April, May, June, July, Sept., Dec.; 1929: Jan., Feb., Mar., April, June, July, Aug., Sept., Oct., Nov.; 1930: Mar., June, July, Aug., Oct., Dec.; 1931: Jan., Mar., July, Nov.; 1932: Jan., Mar., May, July, Aug., Oct.; 1933: Jan., May, June, Aug., Nov.; 1934: Jan.; 1935: Mar., May, Sept., Oct., Dec.; 1936: Jan., April; 1937: April, May; 1938: July, Nov.; 1940: Feb., Sept., Oct.; 1941: Sept.



"Two-Point-Six," whose recently published views in favour of modern British cars have raised such a storm of controversy, sends us this photograph of the 1939 streamlined 2-litre Aston-Martin. A contemporary tested it to do 0-50 m.p.h. in 11.1 secs., and 76 m.p.h. in 3rd, and nearly 98 m.p.h. in top gear. Weight under 23 cwt.

# Letters from Readers

Sir,

I was interested to read the letter from Capt. J. R. A. Green, in your October issue, as I had the pleasure of inspecting the 1½-litre Bugatti in Cairo in 1940. That car, two Alfas, and a Mercedes-Benz 4-seater were the only out-and-out sports cars I saw in Egypt in 1940; the Mercedes was in excellent condition, and for sale at £150 (Egyptian) in Alexandria. I went for a long run in one of the Alfas which belonged to a Greek enthusiast.

Incidentally, the Alfa mentioned by Capt. Green as belonging, he thought, to Capt. Cook, must be my own short-chassis "2.9," which Cecil Clutton gave a brief road test in your January, 1942, issue, and which previously belonged to Robert Arbuthnot. I have run this car on Pool for the last six months with excellent results. I should be happy to show it to any enthusiast in the Lincoln district if you will forward their letters. Lest that remark might be misunderstood, I hasten to state that this car is *not* for sale!

I am, Yours, etc.,

T. ANTHONY D. CROOK,  
(Flt./Lt.).

R.A.F.

\* \* \*

Sir,

I was delighted to read your article entitled "Subject for Debate," together with the contributions of your correspondents, and I feel there are certain points which are always overlooked in these discussions.

By way of introduction, I may say I have been motoring for 21 years, covering some 300,000 miles. It may interest your readers to know what vehicles I have owned and what experience I have had in connection with fast motoring, so I will list my vehicles and experience without comment: Royal Enfield (3), Sunbeam (1), Scott "Flying Squirrel" (1), P. & M. "Panther" (2), Salmson (1), Austin Seven (including blown and unblown Ulsters) (5), 2-litre Lagonda (1), Riley Nine (6), Vauxhall (2 saloon and 1 "30/98" tourer) (3), 1½-litre Alfa, blown (1), 3 and 4½ Bentley (2), Wolseley (2), Talbot "95" (1), S.S.100 (1), Speed Twenty Alvis (1). I have ridden or driven on the Track, in road races, on dirt and grass tracks, and in all forms of trials and rallies. Some 50 awards have been collected, so I may claim some all-round experience.

Since I first commenced reading motoring journals I can remember discussions on Vintage *v.* Moderns, not forgetting all the arguments on average speeds. The feature of these letters that always strikes me is the narrow views expressed by most writers, the majority of whom have had little experience of the subject about which they write so freely. In the case of average speeds I am aware that one is treading on delicate ground and I refrain from commenting other than in a general aspect.

First and foremost it must be appreciated that the public highways are open

to all classes, which may be divided into approximately five categories, viz., pleasure-drivers, travellers, sightseers, commercial and public transport. Considering these facts, it is at once apparent that all drivers must be courteous and considerate for other road users. Immediately, high-speed drivers, in the main, are a thorough nuisance to other people and may involve many others as a result of an error of judgment or carelessness. I would suggest that drivers who enjoy high speed should drive reasonably on the road and adjourn to racecourses for the indulgence of their particular pleasure.

The question of average speed becomes involved with this argument, and it can be seen that high averages are not desirable if consideration be given to other road users. Unfortunately, there is no line of demarcation between the safe and unsafe limit of public travel, and nobody claiming a high average will admit that they have not observed 100 per cent. safety continuously. I admit there is always the perfect few, but I am speaking generally, therefore the admittance of high average includes high speed which in itself is an admittance of breaking road laws.

The question of road use being so subject to abuse, it is reasonable to say that the majority of cars can be driven at high speeds to-day, and for that reason the majority of drivers and cars can be considered "high speed" potentially. Therefore, we are, within broad limits, considering drivers and cars "in bulk." Studying the three groups of pleasure, travel, and touring, it is found that every type of driver and car, not forgetting financial considerations, are covered. Under the title of pleasure we have the £20 vintage expert, the £200 lady driver, £50 clergyman, the £1,000 vintage, and the £1,000 modern, all motoring in different fashion for their own personal pleasure. Again, the motorist who merely uses his car for travel will use a vehicle according to his taste and pocket, whilst the tourist class will do likewise.

Having arrived at the conclusion that all road users will exercise their undoubted prerogative of choosing a vehicle according to personal taste and pocket, let us examine the effect on the question of vintage *v.* moderns.

First and foremost, it becomes apparent that all the arguments put forward in this respect are so much waste of time when each is entitled to personal taste, and it is pointless trying to convert a "vintage" man to a "modern," or *vice versa*. Speaking personally, I appreciate the vintage vehicle with its accessible chassis, long life and racing pedigree, but unless one can run about half a dozen vehicles, no one car can ever fulfil all the requirements likely to be made on it. For general purposes I find a very fast, quiet and unobtrusive-looking saloon is the most convenient under modern conditions.

I now come to my final conclusion that some means should be devised for the continuance of the sports car and the owner-enthusiast of all denominations. The solution lies in the hands of all organisers of races and is comparatively simple. In addition to the classic races, there is a tremendous field of development for the provision of sports-car racing, designed to cater for all those who love the Sport and yet who cannot afford the time and money for out-and-out racing cars. For a varying entry fee all types of sports car, vintage and modern, would have an opportunity of having fun, and there would be the opportunity for all these enthusiasts to demonstrate my pet theory, that actions speak louder than words.

I am, Yours, etc.,

"LEAMINGTON SPA."

[We cannot agree with our correspondent that because high average speed involves high maximum speed it is in itself an admission of law-breaking. A driver brought before the courts for doing 100 m.p.h. on a public road has been dismissed without a stain on his character. A dangerous driving charge must accompany a charge of driving at excessive speed. 40 m.p.h. can be a very good average from a car unable to exceed 60 m.p.h., but with brakes and other factors good enough to give it that average. In connection with the last paragraph of the letter, we imagine small-club sports-car events are in mind, as before the war plenty of sports-car races were run which were definitely amongst the "classics."—Ed.]

\* \* \*

Sir,

I am taking the liberty of writing and thanking you for keeping *MOTOR SPORT* in circulation, in spite of the fact that the Sport as such ceases to exist except on paper; the fact that you have managed to maintain the paper in its original quality in these difficult times, when practically everything is in short supply, reflects great credit on you and your staff.

When I left the U.K. nearly three years ago I took the precaution of arranging with my newsagent to continue to supply *MOTOR SPORT* and *Automobile Engineering* for the duration—these copies are being stored at home pending my return—and it would seem that I will have quite a lot of reading to catch up with!

The principal reason for this letter is that I have received one or two odd copies of *MOTOR SPORT* which my family have managed to secure in addition to those already ordered. These have been read from cover to cover. I was interested in Capt. Moon's comments on cars in Cairo. I can well remember the first time I heard the Alfa he mentions; it belonged to a fellow in the R.B.s who was in the same camp with us. I heard it approaching one night, down the camp

road. I could hardly believe my ears, but there was no mistaking the thin, high scream from the blower, nor that particularly pleasant flat exhaust note.

For some reason or other I never contacted the owner, though the sound of his car in the deserted streets of Cairo, late at night, often took my mind back to more pleasant days. I was surprised that Capt. Moon did not mention the 6-cylinder unblown Alfa saloon in which the C.M.P. used to chase after unfortunate lorry drivers. I had the opportunity of looking over it when in workshops; there was nothing really outstanding about it, since it was rather on the cheap side, Tipo 6C, according to the plate on the bulkhead, but that does not convey much. There was the conventional twin-cam engine with, I think, three Solex carburetters, independent front suspension, and a very American appearance all round.

Among the other cars of interest I came across in Cairo was a vintage 10/15-h.p. Fiat sports model, with Rudge wire wheels, aluminium body, and a generally sports-like appearance, though rather skinny. I did not know that this type was ever produced in a sports version; I would say that the year of manufacture was about 1925!

Then there was a Mercedes (4-cylinder?) with a very abbreviated body and bolster tank, owned by someone in the R.A.O.C.; it sounded quite healthy and still had German registration plates under the "Gippy" ones.

On second thoughts it may well have been a "33/180," which would make it a 6-cylinder. Every time I saw the car I was unable to find the owner, and when I saw them together they were on the move. Whatever type it was, it was

definitely a super-sports or racing type, and not a mock-up of a touring version.

I tried to locate the Bugatti mentioned by Moon, but without much success. It was rumoured to be for sale, but I never ran it to earth. He is quite right about the Fiats; there are literally thousands, no two being of the same type or year. Surely Fiats hold an all-time record for diversity of types? There was quite a nice edition of a Seventh Series Lambda running around, driven by a not unattractive lady.

There were also a couple of 4½-litre Bentleys in town, one of which was owned by Peter Hordern, who mentioned it, and another he had owned in India, in a letter in, I think it was, *The Autocar*. His (Peter's) was the standard long-chassis model with the usual black fabric body. The other had one of those enormous "Le Mans" type rear tanks, presumably a Replica. The tax, by the way, for a 4½-litre is, I am told, approximately £6 per year; makes one think, doesn't it?

While in Alexandria during the middle of 1941 I came across a beautifully preserved Model T Ford; it was at that time in the hands of the Ford workshops there, being completely renovated. It was the standard tourer, with, I think, an iron radiator shell, and with the exception of the wheels, which had come off a later type of Ford, having low-pressure tyres, it was completely standard. The foreman told me that it was owned by a local Egyptian.

There are, or were, in Alexandria, a large number of Ansaldo tourers, some with wire wheels and some with artillery wheels; practically all were used as taxis. There were about equal numbers of AnsalDOS and Fiats used for that purpose, all very vintage. The former had what

looked like a 1½-litre engine with o.h.c. and a single Solex carburetter. It struck me that it was quite a nice, tidy little engine, and would stand a bit of tuning. Though what the innards are like I do not know, as I never found an engine out of the chassis.

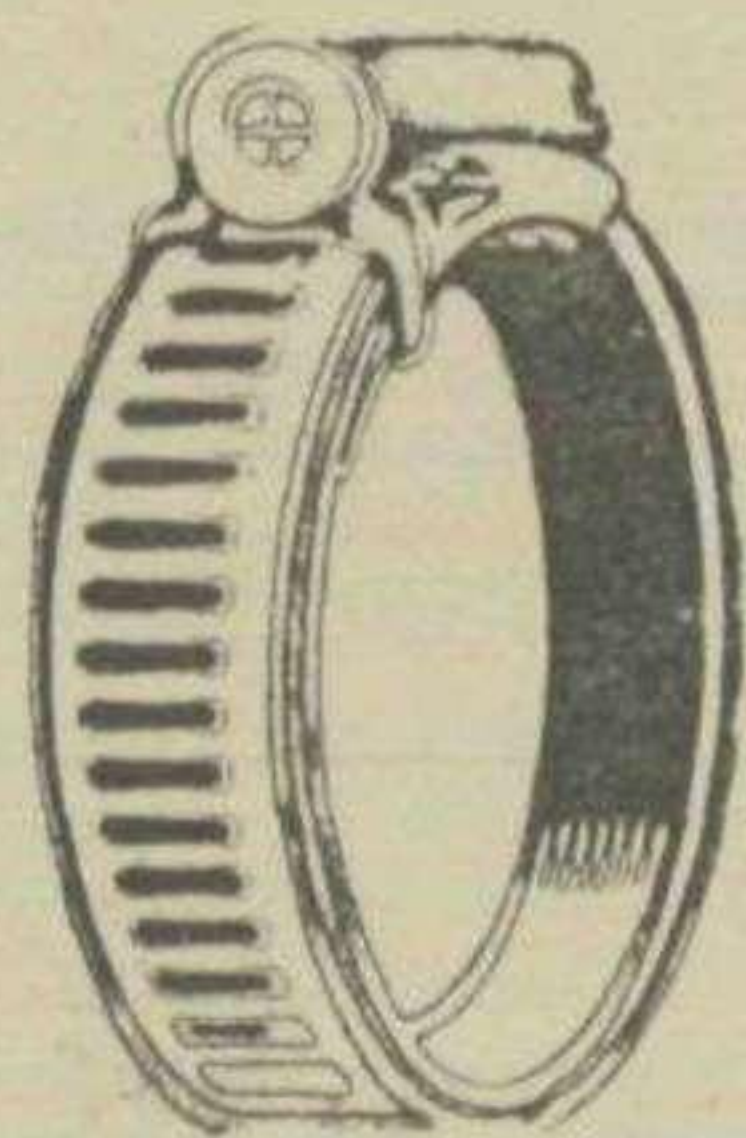
You may or may not remember the very slow 1923 H.E. I used to run, or to be more accurate, creep about in at Vintage S.C.C. speed trials and hill climbs. It is now in store at Salisbury, together with a F.W.D. Alvis with the engine still out, I not having had time to re-assemble it before the war started.

I also have a Type 38 Bugatti in store at the local coachbuilders, where it got left before we went to France. I understand it is being well cared for. I purchased this from a brother officer for £10, during a rather alcoholic party. However, it went quite fast when all the plugs fired in the right order, though the missing third speed robbed it of one of the best parts of a Bugatti. However, in view of what has happened since in France, I consider myself lucky to have a Bugatti at all. Though I must confess, I hanker after a Type 55.

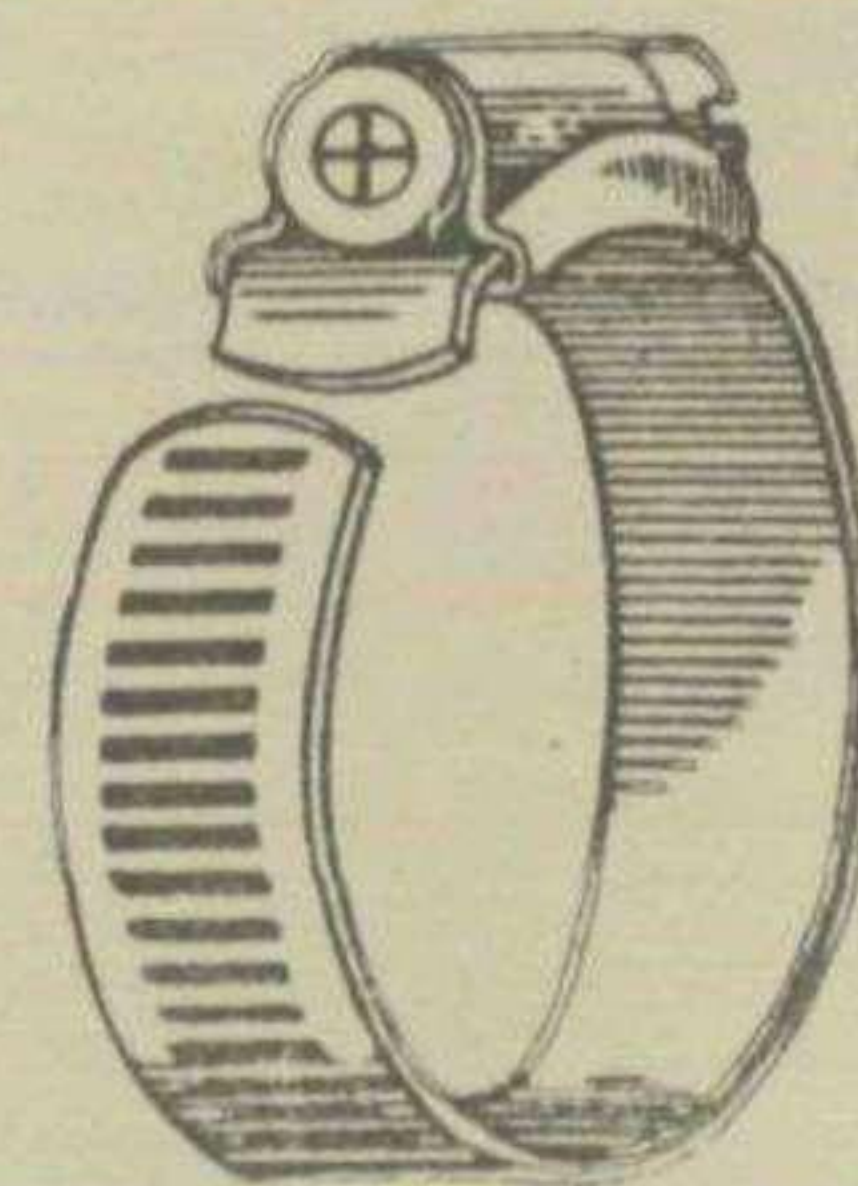
Motoring in Iraq is principally American, and pretty knock-kneed at that; how the front wheels stay on I don't know. Tyres, as you may have heard, are not exactly plentiful, even in this part of the world, and I was told quite recently that an average-sized tyre, say 18 in. by 5.50 in., would cost anything between £100 and £150, that is, if one could get it. This is an absolute fact, and no exaggeration. The result is that there is a most incredible collection of patched-up covers in use. The sewing on of pieces of other covers is most favoured, but I have seen such patches secured by

# JUBILEE WORM-DRIVE CLIPS

THE BEST POSSIBLE TO GET



MAKE SURE YOU HAVE THEM  
FITTED ON YOUR RADIATOR  
JOINTS, LEATHER COVERS,  
ON UNIVERSAL JOINTS, AIR,  
OIL & WATER HOSE JOINTS.



ALL IN ONE PIECE.  
EASY TO FIT.

NO PARTS TO LOSE.  
GUARANTEED NEVER TO LEAK.

A KEEN MOTORIST WRITES: "I cannot understand anyone using any other pattern, as yours are the last word in satisfaction and efficiency."

STOCKED BY ALL GARAGES  
& ACCESSORY DEALERS

MANUFACTURERS  
**L. ROBINSON & Co.,**

2, London Chambers  
GILLINGHAM, KENT.

PLEASE MENTION "MOTOR SPORT" WHEN CORRESPONDING WITH ADVERTISERS

bolts and nuts! And it is quite a common sight to see cars running on the rim of a tyre-less spare wheel, rather than risk damage to the cover after a puncture.

The only vehicle of interest that I have seen here is a Tempo, a name that is new to me, though I suspect it has something to do with Tatra! The car in question, although privately owned, was obviously designed for military use. It has a two-stroke engine mounted at the rear of an all-round independently-sprung chassis, fitted with a very spartan body with no doors (the holes are there, but no doors). The fuel tank is fitted on to the back of the front seat, and I suspect that it has a tubular backbone type of chassis. The spare wheels are mounted amidships on either side of the body and are pivoted to enable them to help the centre of the car over excessive bumps, in much the same way as the spare wheels do on the very efficient German standard chassis.

I am, Yours, etc.,

ALAN SOUTHOON (Capt.).

G.H.Q., M.E.F.

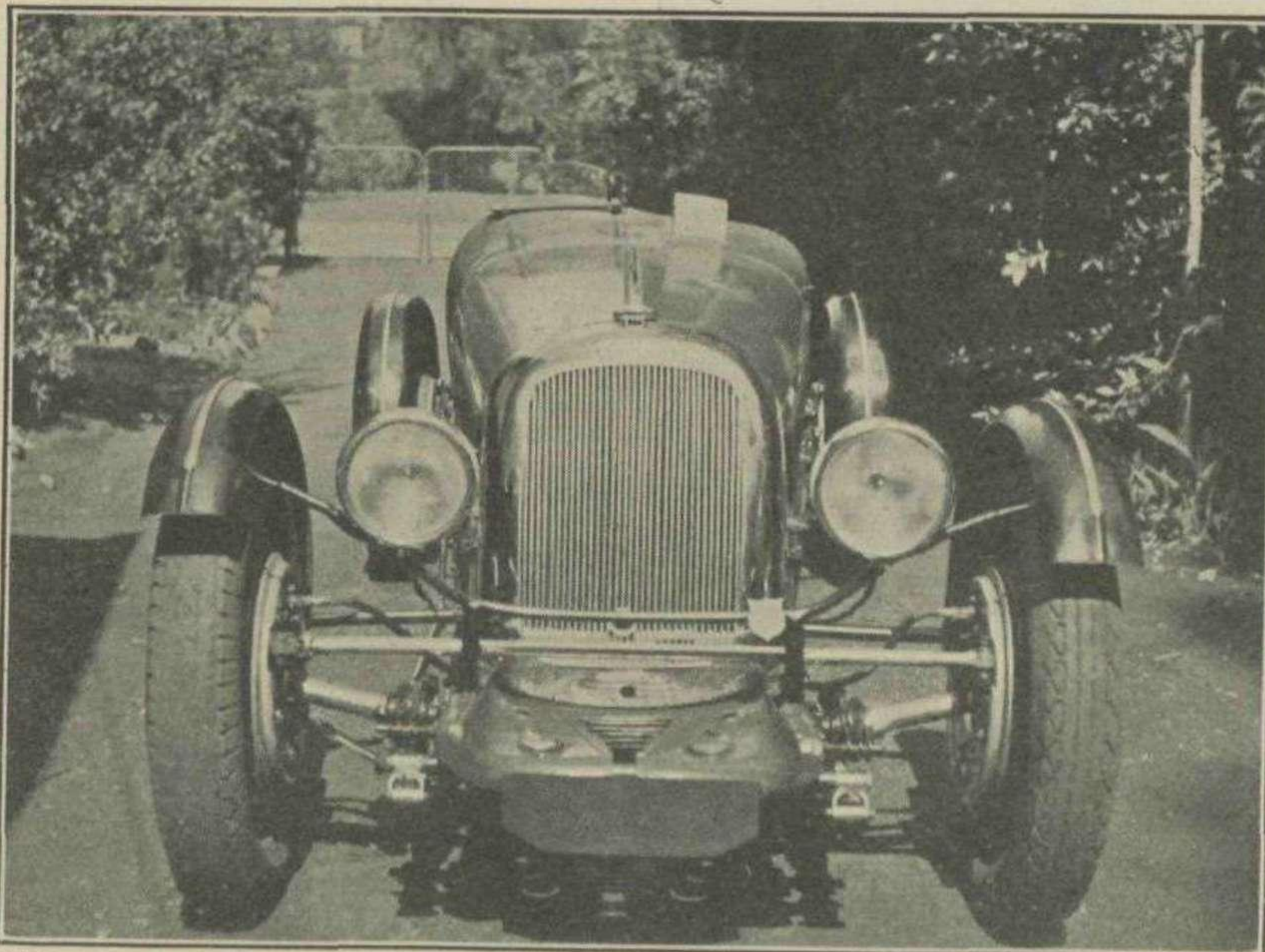
Sir,

The article by Mr. S. H. Statham in your June, 1943, issue has inspired me to write to you anent a car recently purchased by my brother. I have never actually inspected the car at close quarters and must accordingly base my description on my brother's enthusiastic reports and photographs.

Prix, Cape Town, and was replaced with a Graham engine of 3,400 c.c. New members were fitted to take the larger engine, the flywheel housing built up and a Ford gearbox and clutch fitted. This was apparently done to incorporate the transmission system of Ford, which has a big universal at the gearbox and a solid housing running right down to the differential. The Talbot axle housing has been left, but the hubs have been built up to take the Ford axles. (My apologies, if you are shuddering at this apparent vandalism.) The radiator was constructed in Johannesburg, but the chassis, suspension, steering, etc., are all original Talbot.

That the fitting of a blown American engine was justified is shown by the performance. The car was driven very successfully on the Lord Howe circuit by the late Dennis Woodhead, and its lap time was 2 min. 15 sec. (64.83 m.p.h.), as compared with 2 min. 14 sec. (65.31 m.p.h.) by "Mario" in the 3.7-litre Maserati.

In its present form, fitted with road equipment (rather scanty) and reduced compression, it behaves very well on war-time pump fuel, and from descriptions received, the performance is positively wicked. Apparently it can hold its own with just about anything likely to be encountered on South African roads. The engine is reputed to develop 120 b.h.p. at 4,500 r.p.m., and the entire outfit in its present form weighs but 1,740 lb. Maximum speed is over 100



This car, about which Lt/Cpl. Taylor writes in this issue, comprises one of the 1926 straight-eight Talbots, as owned by Lt.-Col. Powys-Lybbe, with Graham engine and Ford transmission. This view shows the Talbot chassis features.

This car was originally Talbot-Darracq, and as such was raced very successfully by one Govoni, at the Lord Howe circuit near Johannesburg. If memory serves me correctly a photograph of a similar car owned by Mr. Powys-Lybbe appeared in your December, 1942, issue. To cut a long story short the original straight-eight engine was irreparably wrecked in the Grosvenor Grand

m.p.h., but could be increased if a higher back-axle ratio could be obtained.

Having long been a supporter of the "large-engined light-weight" theory of inexpensive performance production, I am anxious for this show to end so that I can try this hybrid out.

In conclusion, I might add that all work on the conversion on the car was done by Messrs. McNicol and Whitehead,

# READERS' SALES AND WANTS

To meet the repeated demands for something on the lines of the old Spare Parts Announcements, we have instituted a system of inexpensive advertisements. Each announcement must be limited to **twelve** words, plus the advertiser's sufficient postal address, and the charge will be 1s. 6d. per announcement, payable at time of posting. The system will be governed by the following rules:—

(1) Each announcement to cost 1s. 6d. and be limited to twelve words and the advertiser's address. Box Numbers cannot be used.

(2) The publishers accept no responsibility for loss of advertisements, non-publication, late publication, or incorrect wording, but will endeavour to insert announcements in the next issue, if posted within eight days of the publication of the previous issue.

(3) No advertiser may submit more than **two** announcements per issue and each must apply to a separate article. Only spares for sale, spares or cars wanted, or **really cheap** cars for sale, should be announced. Prices should normally be quoted.

(4) The proprietors of MOTOR SPORT offer this scheme for the mutual benefit of enthusiasts and can take no responsibility of any sort whatsoever. All transactions must be made to the published addresses and no correspondence can be entered into in respect of announcements, transactions or any other matters arising from the scheme.

(5) Announcements should be sent within eight days of the publication of the current issue of MOTOR SPORT, accompanied by stamps or crossed postal orders to the required amount. Cheques or coin cannot be accepted.

## FOR SALE

GRAND PRIX BUGATTI SPARES AND SERVICE

F. O. CLEVELAND HARMER  
Bugatti Specialist  
83, Old Oak Road, Acton, W.3  
Shepherds Bush 5022.

1928 Alvis "14/75" 4-seater, ideal for rebuilding. 100 per cent. chassis. £10, or offer. Salmon, 154, Prince Albert Square, Horley Road, Earlswood, Surrey.

FOR SALE, M.G. M-type Midget, pointed tail, 2-seater, suitable rebuilding, first £15 gets. Smith, Red Cottage, Bakers Lane, Knowle, Birmingham.

## WANTED

BUGATTI, 1½, 2 or 2.3-litre Grand Prix, complete, or parts for same. F. O. Cleveland Harmer, 83, Old Oak Road, Acton, W.3.

WANTED. Magnette K-type, 3/4 seats. Full details, engine number, modifications, condition, price. F. J. Munro, Erneston, Boswall Road, Edinburgh, 5.

WANTED, the following back issues of MOTOR SPORT, in reasonable condition: Feb. and Oct., 1940, July and Nov., 1938, April and August, 1937, Jan., April and Dec., 1936, March, May, Sept. and Dec., 1935, Jan., 1934. F. Wilson, Beresford Hotel, Armagh, N. Ireland.

MARENDAZ, open 4-seater or drophead. Preferably 15/90. Full particulars to D. Trowbridge, 412, Ley Street, Ilford, Essex.

Spares Section,  
**MOTOR SPORT,**  
21, CITY ROAD,  
LONDON, E.C.1

of Johannesburg, from whom it was purchased by us.

Here's hoping that MOTOR SPORT continues to thrive.

I am, Yours, etc.,  
R. D. TAYLOR (L/Cpl.).

M.E.F.

\* \* \*

Sir,

I enclose some pictures of an event which takes place yearly in Alberta, Canada (war-time petrol-rationing notwithstanding!)

It is a race exclusively for Model T

seriously, of course, but the Canadian crowd is both sporting and enthusiastic, and there would be a definite future for the Sport out there.

Best of luck to your excellent publication.

I am, Yours, etc.,  
VAUGHAN L. P. DAVIS (Sgt. Pilot).

R.A.F.

\* \* \*

Sir,

Readers will no doubt remember an article in the May, 1941, issue, entitled "An Idea for the Impecunious," in which

M.G. and Morgan tricycle, brought me a very good "Chummy." Serious efforts were now made to locate an "Ulster," but these being as rare as the odd drop of Scotch, nothing suitable could be found for some long time. Came the day of collection, and accompanied by a soulless individual from the local garage bearing trade plates, the "Ulster" was collected and driven home. A little persuasion enabled me to have a brief drive myself, and how grand it was, the "Ulster" behaving as a thoroughbred should, although an old standard engine (fitted for reasons of war-time economy) reduced performance considerably. However, a hotter engine is almost ready to drop in and then, Mr. Editor, you may add another car to your register of sports cars used on war work. The trio had been achieved. The ideal had been realised.

I am, Yours, etc.,  
West Wickham. A. W. BUTLER.

\* \* \*

Sir,

So Mr. Cecil Clutton does not think me capable of solid reasoning!

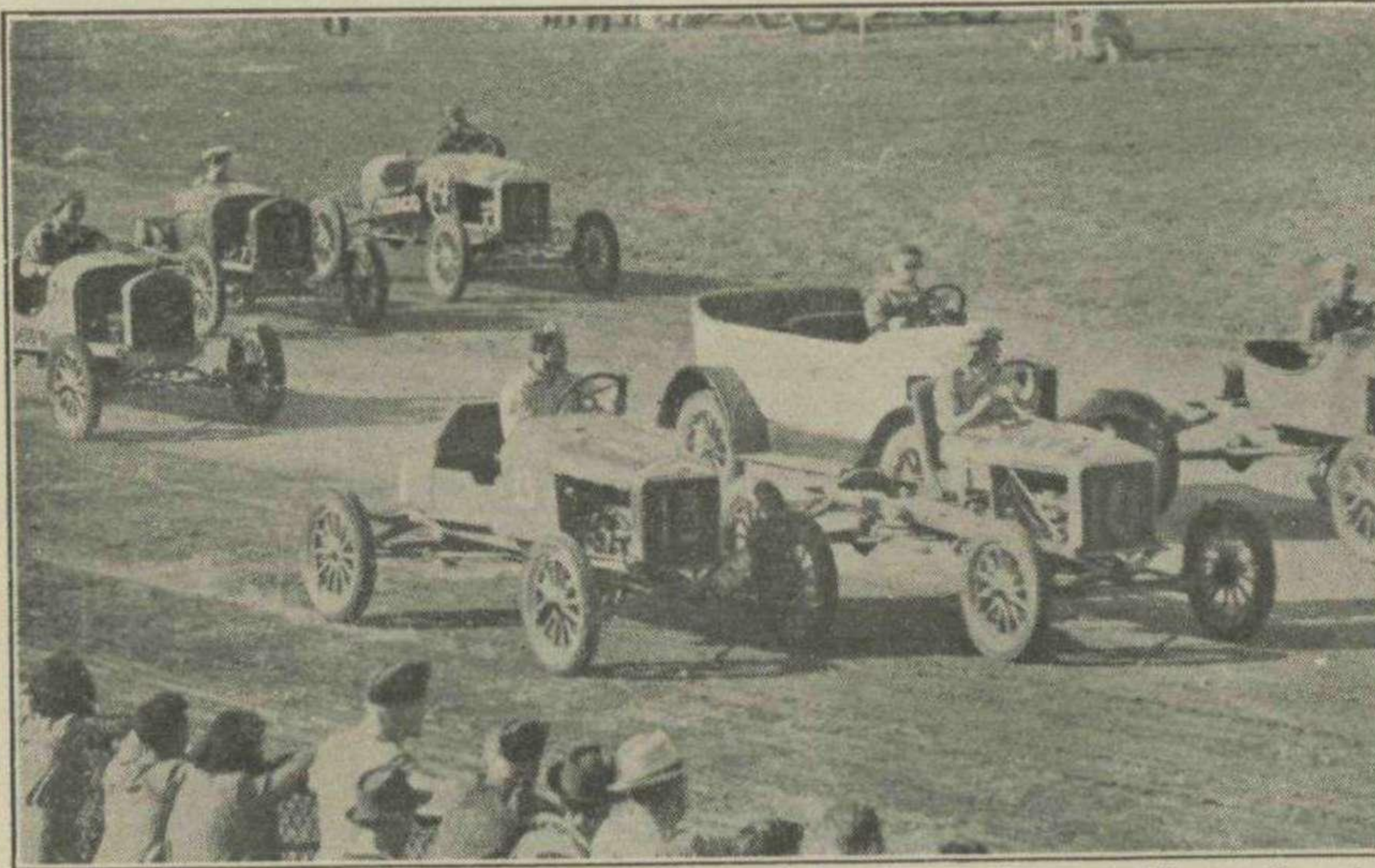
I am sorry, but, naturally, I cannot entirely agree with him, although no doubt my old schoolmasters would. His so-called "refutation" of my article in the October issue is merely a lot of weak sarcasm, sans that solid reasoning of which he is so fond.

I wish to know, too, which of the four cars I mentioned (2.6 M.G., B.M.W. 2½ S.S. "Jaguar," and Riley "Kestrel") has a "negligible" performance, as not one of them does less than 90 miles an hour, and two of them have outstanding acceleration. All of them, Mr. Clutton, are very, very comfortable!

On the other hand, the Editor's comments on my article were sensible, even though I cannot agree with most of them. The M.G. Midget I mentioned was proved to have a maximum speed of 92 m.p.h., the car being Mr. Marshall Thursby-Pelham's tuned, but unblown T-type.

I am, Yours, etc.,  
"TWO-POINT-SIX."

[When, please, was the Thursby-Pelham T-type M.G. proved capable of 92 m.p.h.? We thought the owner claimed it to cruise at 90-95 m.p.h. in standard form and that he never convinced those disbelievers who set the maximum of this car as 75-80 m.p.h.—Ed.]



Model T Fords in a remarkable one-make race over 100 miles, at Alberta, Canada. We are horrified to see, from another photograph, one unstreamlined 2-seater with a faired head-rest—reminiscent of the aircraft engine cowlings in the film, "The First of the Few."

Fords. The distance is 100 miles and is run on a "two-lap" track (unbanked!)

Competitors may tune their machines to any degree they like, but may not use other than "Model T" components.

I dearly wished to compete in last year's event, but since it was run off on a Monday, duty prevented it.

Some competitors drive to the course in their "specials" from outlying towns as much as 100 miles away, minus lamps, wings or silencers—without any interference from the police.

So there's dicing of a kind even in the woolly West! The race isn't taken

it was suggested that a stable of three cars of the same make, but of different types, should be shared by two enthusiasts. The object being to offer two persons something of motoring sport in quite a few of its forms, for the smallest possible expenditure. The trio suggested was three Austin Sevens—an "Ulster" or "Nippy," a "Chummy" fitted with four-speed box and a saloon.

At the time of reading this article I was already in possession of one-third of the suggested trio, namely, an Austin "Ruby" saloon. Some time after that various transactions, involving M-type

BENTLEY



*Ian Metcalfe sends his best wishes for 1944 to his numerous friends and fellow Bentley enthusiasts, many of whom are now pursuing their business in troubled lands.*

DOVERCOURT  
WOOD ROAD  
SHEPPERTON, Middx.

# CLASSIFIED ADVERTISEMENT SECTION

JOHN W. **WHALLEY**  
IN IT!

THE **Ford** AND FORDSON DEALER

**CARS WANTED**

YES—urgently! John W. Whalley will pay **GOOD PRICES** for real good class modern, small-mileage cars

**LONDON ROAD BISHOP'S STORTFORD**  
Phones 181 & 155

**FOR SALE**

**HILLMAN** Spares and Repair Specialists. Re-conditioned engines and chassis components. Large stocks of new and secondhand spares for "Minx" and "Fourteens." Blanchflowers, "The Motor People," Kettering. Phone: 2359.

**GENUINE** short-chassis 1931 Austin Seven saloon. Very poor condition. The only short-chassis with coupled brakes and interchangeable C.W. & P. (See Sept. MOTOR SPORT.) Ideal basis for special. Large crank, £8. Pair R.L.P. wheels, very good tyres, £6. Mallock, 99, Valley Drive, Harrogate.

*Continued in next column*

**R. C. ROWLAND MOTORS**  
of  
**BYFLEET, SURREY**

Telephone 270

Sports and Racing Car Specialists in Peacetime, now fully engaged on work of National Importance, look forward to the day when we can give your requirements our undivided attention. In the meantime, we have a small stock of specially selected cars for sale which may be seen and tried by appointment.

Advertisement Offices :

54, BLOOMSBURY STREET,  
BEDFORD SQUARE, W.C.1

Telephone : MUSEum 0522

**RATES (prepaid) 1/3 per line**  
Minimum 3 lines  
6 Words to line

Copy required by 20th of the month

**FOR SALE—continued**

**C. C. TURPIN, LTD.**, 222, Gt. Portland Street, W.1, have a selection of Austins for sale. Competitive prices. Euston 5677/8.

**PURKISS** offer a very special low-mileage **CORD** saloon which has been most lavishly equipped and improved by its one owner. First registered July, 1937, and unused since 1939; it has been brought up-to-date with the later modifications. Use of the usual adjectives would not do justice to this car, because their too frequent employment has made them negligible, but **IT IS UNBELIEVABLY CLEAN** for its date. Special features include sunshine roof and no-draught ventilation, dual electric petrol pumps, rev-counter, electric clock, trafficators, built-in radio and electric vacuum gear-change. All five tyres nearly new. The *Autocar* says of this machine: "Exceptional average times are possible, for this car has no speed that can be called a cruising rate, and is virtually as happy at a full 80 as at 60 m.p.h." This road test gives a maximum of 93. Price is £450. 18, Carlton Avenue East, Wembley Park, ARNold 1962; and 1, Brentfield Road, Harlesden, WILlesden 3417.

**FOR SALE.** 61-litre Bentley, first registered 1927, rebuilt 1941, with Le Mans-type 2/4-seater body. Very good running order throughout. Available for demonstration. Price £200. Purkiss, 18, Carlton Avenue East, Wembley Park, ARNold 1962; and 1, Brentfield Road, Harlesden, WILlesden 3417.

**FOR SALE.** An opportunity occurs to purchase one of the latest and the fastest Allard Specials. This car has done under 5,000 miles altogether, and has Concours d'Elegance finish. Box No. 128, MOTOR SPORT, 21, City Road, E.C.1.

**"M"-TYPE M.G.** for Sale, 1931. Offers around £18 10s. Can be seen at Mark's Garage, Mullion, Cornwall.

**DISMANTLING** 200 cars, all parts cheap. Albert Motors, Albert Avenue, Albert Square, Clapham, London. Tel. 3256.

*Continued in next column*

**FOR SALE—continued**

**FOR SALE.** Bound vols. of the *Autocar*, 1914-1921. Send for list. Box No. 126, MOTOR SPORT, 21, City Road, E.C.1.

**FOR SALE,** professionally-built Ford V8 single-seater Racing Car. Short wheelbase, L.M.B. front axle, narrow rear track, tuned 4-carb. h/c engine, gearbox, etc., etc. Box No. 127, MOTOR SPORT, 21, City Road, E.C.1.

**WANTED**

**SPORTS CARS.** T. & T. interested in purchase of good sports cars. Thomson & Taylor (Brooklands) Ltd., Portsmouth Road, Cobham, Surrey.

**ALL** types vintage sports cars urgently wanted by T. P. Breen, Ltd., High Road, Whetstone, N.20. Phone: Hillside 2393.

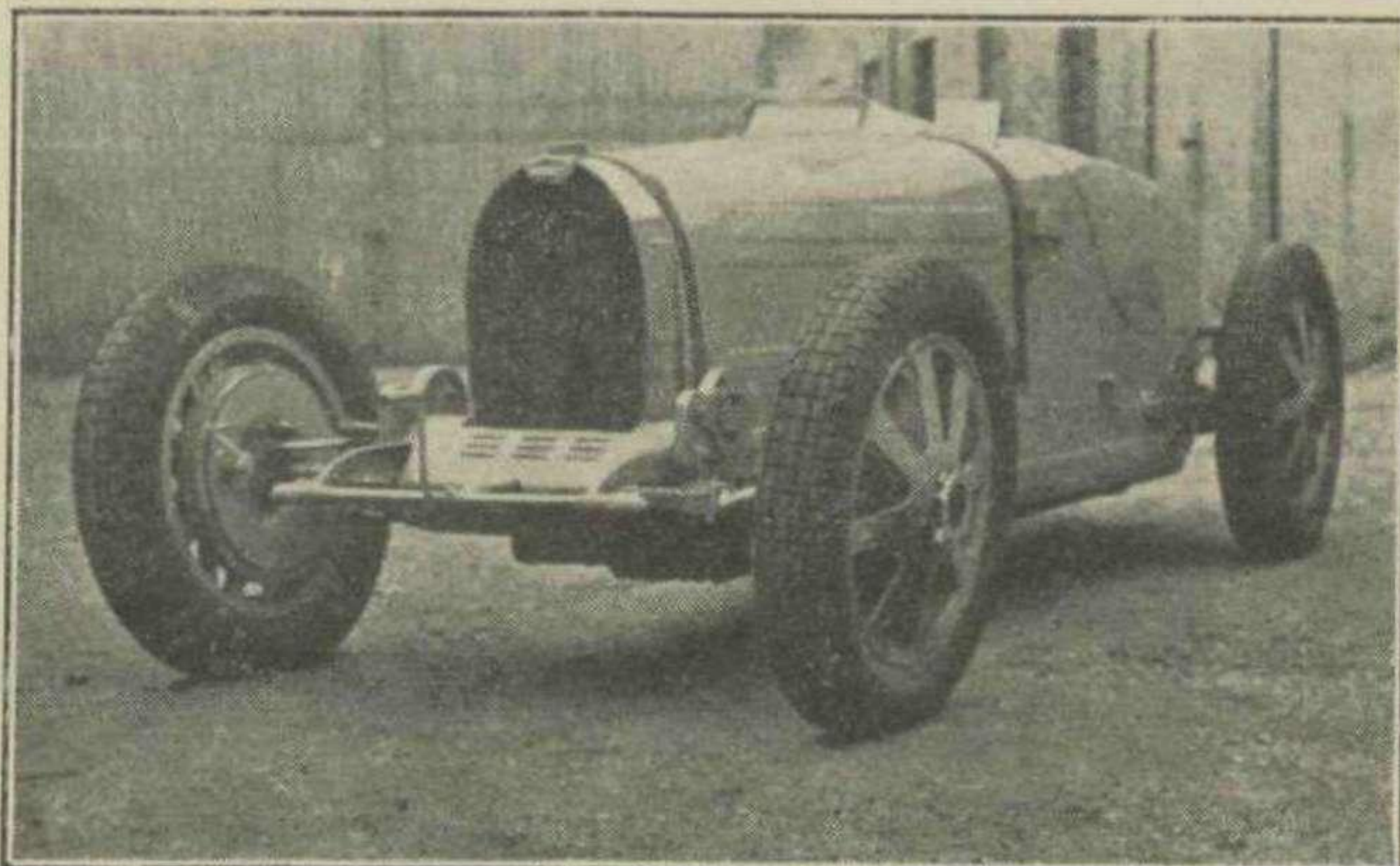
## CHARLES FOLLETT LIMITED

*Will always pay top cash prices for really first-class low-mileage second-hand cars of all types.*



Showroom : 18 BERKELEY STREET, W.1  
Mayfair 6266

Service, Works & Stores : 124 King Street, Hammersmith, W.6. Riverside 1413.



## BUGATTI CLASSICS—No. 3

*Photograph from the Jack Lawrence Collection*

Type 51, 2.3-litre, supercharged, twin-cam Bugatti. The single-cam 2.3-litre Bugatti series was first produced in 1927 and was classified as Type 35B in supercharged form. In 1931 the Type 51 was introduced. Several of these cars came to this country and were raced by the late Richard Shuttleworth, Earl Howe, and the late C. Staniland, etc. The series is credited with a terrific record of successes in G.P. racing and represents perfection in orthodox design.

★ Cars illustrated in this series are not necessarily for sale, but shown for the interest of Bugatti enthusiasts by Jack Lawrence, of 166, Clarendon Road, Holland Park, W.11. Phone: Park 5705

# RECENT MOTOR SPORT ROAD-TESTS

IN the issue of May, 1937, we published an Index of all the road tests conducted by this paper since it was founded, as *The Brooklands Gazette*, in 1924. From this Index we have been publishing extracts, but these did not embrace the tests published during the last six years. In order to make good this omission, we give below a revised selection, including tests published from May, 1937, to the present issue. Read in conjunction with the Index of May, 1937, it provides a reference to all the MOTOR SPORT tests—251 in all. Readers' accounts of their cars and technical descriptions of new models, moreover, are not included in this Index. Many of the issues concerned can still be supplied, at the prices given below. Please quote date of issue when ordering.

Make of Car	Issue	Make of Car	Issue	Make of Car	Issue
A.B.C. 11 h.p. 2-cyl. 2-seater	Feb. 1926	CROSSLEY 20/70 h.p., 4-cyl., s.v. 4-seater	Nov. 1925	M.G. Midget "J1," 850 c.c. 2-seater	Sept. 1932
A.C. 2-litre, short-chassis, 15.7 h.p. 2-seater	July 1936	Crossley Ten, 1,122 c.c. 4-seater	April 1932	M.G. Midget "T" 2-seater	Jan. 1937
A.C. 2-litre, 16/40 h.p. 3-seater	Oct. 1927	Crouch Anzani 12/30 h.p. 2-seater	Aug. 1924	M.G. 14/40 h.p., 4-cyl., super-sports 2-seater	May 1927
A.C. 2-litre, 16/66 h.p. 4-seater	June 1934	DAIMLER 2½-litre 18 h.p. saloon	June 1940	O.M. 6-cyl., 2-litre 4-seater	Oct.-Nov. 1928
A.C. "Ace" 16/80 h.p. 2-seater	July 1937	& Nov. 1941		PEUGEOT "201" 4-cyl., 1,132 c.c. saloon	Sept. 1931
Alfa-Romeo, 1½-litre supercharged 6-cyl. Charles 2-seater (1929)	March 1934	Darracq 12/32 h.p., Weymann saloon	Sept. 1924	RAILTON 8-cyl. Cobham saloon	Sept. 1938
Alfa-Romeo 1½-litre supercharged 8-cyl. "Zagato" 2-seater (1932)	July 1934	Delage 8-cyl., sports saloon	April 1930	Riley Nine 4-seater	June 1931
Alfa-Romeo 2.3-litre supercharged 8-cyl. "Zagato" 2-seater (1933)	Aug. 1936	Delage D8/180 drophead coupé	May 1938	Riley 16 h.p., 4-cyl., "Kestrel" saloon	June 1938
Alfa-Romeo 2900B, Type 8C supercharged 2-seater (1937)	Jan. 1942	Delahaye 3.5-litre "Coupé des Alpes" drophead coupé	Aug. 1936	Rover Ten "Special" 2-seater	Aug. 1939
Alvis 6-cyl., "Silver Eagle" 4-seater coupé (1929)	Aug. 1931	D.K.W. "Special" saloon	Feb. 1938	Rolls Royce Twenty, all-weather (1927)	March 1942
Alvis 3½-litre saloon	Feb. 1936	Dodge 25.3 h.p. "Custom Six" saloon	May 1938	Rolls Royce "Phantom I," supercharged	Nov. 1942
Alvis Speed Twenty 4-seater	June 1932	EXCELSIOR 5½-litre, 6-cyl., super-sports test chassis	Sept. 1927	SINGER Nine 4-seater	March 1933
Ansaldo 2-litre, 4-cyl., o.h.c. 4-seater	Sept. 1924	FIAT "Balilla" saloon	May 1934	Squire 1½-litre, 4-cyl. 2-seater	Aug. 1935
Aston-Martin Mark II, 11.9 h.p. 2-4-seater	Jan. 1935	Fiat "Balilla" 10 h.p. 2-seater	Jan. 1935	Steyr Type XII, 14/35 h.p., Weymann saloon	Aug. 1928
Aston-Martin Ulster 11.9 h.p., T.T. 2-seater	Oct. 1935	Fiat 6 h.p., Type 500 coupé	March 1937	Stutz "Black Hawk," supercharged 4-seater	Jan. 1930
Aston-Martin 11.9 h.p. 2-seater	Jan. 1930	Fiat "Balilla" 1,100-c.c. saloon	March 1938	Stutz 5-litre, 8-cyl. 4-seater	Dec. 1927
Aston-Martin 1½-litre Ulster racing 2-seater	Aug. 1937	Ford Eight "Anglia" saloon	Aug. 1940	Sunbeam 3-litre, 6-cyl. (twin o.h.c.) fabric saloon	Nov. 1927
Aston-Martin 2-litre Speed Model 2-seater	May 1938	Ford V8 "30" Estate car	Oct. 1938	TALBOT "90," Brooklands-bodied 2-4-seater	April 1931
Aston-Martin 1½-litre Mark II, long-chassis 4-seater (1934)	Aug. 1940	GEORGES-IRAT 2-litre f.w.d. 2-seater	May 1940	Talbot "105" sports saloon	April 1934
Aston-Martin 2-litre streamline saloon	June 1942	HILLMAN Fourteen saloon (1939)	June 1941	Talbot 3½-litre saloon	March 1936
Atalanta V12 saloon	March 1939	Hotchkiss 3½-litre "Grand Sports" saloon	July 1939	Talbot Ten "Rally" 4-seater	Oct.-Nov. 1936
Auburn 30 h.p., 8 cyl. supercharged 2-seater	June 1935	H.R.G. 1½-litre, Meadows engined 2-seater	June 1937	Talbot "105" Vanden Plas 4-seater	Nov. 1932
Austin Seven Boyd Carpenter 2-str.	Sept. 1930	H.R.G. 1½-litre Le Mans racing 2-seater	Dec. 1939	Talbot Ten tourer	June 1938
Austin Seven "65" 2-seater	Jan. 1934	INVICTA 4½-litre saloon	Dec. 1929	Terraplane 29 h.p., 8-cyl. 4-seater	July 1935
BENTLEY 4½-litre, 6-cyl., Park Ward saloon	June 1936	Invicta 4½-litre Estate car	June 1941	Triumph 2-litre "Vitesse Six" saloon	April 1935
Bentley 8-litre "Special" 2-seater (1931)	April 1938 & Dec. 1940	LAGONDA 4½-litre 4-seater	May 1936	Triumph 10 h.p. "Gloria Southern Cross" 2-seater	June 1935
Bentley 4½-litre drophead coupé	Aug. 1938	Lagonda 4½-litre 4-seater	Jan. 1934	Triumph 10 h.p. "Gloria" saloon	Jan. 1934
Bentley 4½-litre Mark V saloon	Feb. 1941	Lagonda 4½-litre, 6-cyl. saloon	Sept. 1939	Triumph Nine "Southern Cross" 4-seater	June 1932
Bentley 3-litre "Blue Label" "Special" 2-seater (1928-9)	Feb. 1939	Lanchester Eighteen saloon	Feb. 1938	Triumph Eight "Gnat" 2-seater	Aug. 1931
Bentley 4½-litre "Le Mans" 4-seater (1928)	Jan. 1942	Lancia "Aprilia," Type 238 saloon	June 1938	Triumph Eight, supercharged 2-seater	Dec. 1929
Bugatti 2.3-litre 8-cyl., Type 43, supercharged 4-seater	May 1930	Lea-Francis 1½-litre supercharged T.T. 2-seater (1929)	June 1934	Triumph "Dolomite" 14/60 h.p. saloon	June 1937
Bugatti 3.3-litre 8-cyl., Type 57 saloon	May 1934	Lea-Francis Fourteen saloon	Dec. 1938	VAUXHALL 20/60 h.p. "Hurlingham" 2-seater	Feb. 1930
Bugatti 3.3-litre Type 57 saloon	May 1939	Leyland Eight 2-seater (1927)	Feb. 1938	Vauxhall 17 h.p., 6-cyl., "Cadet" saloon	Sept. 1931
Bugatti 3.3-litre Type 57C supercharged saloon	June 1939	MERCEDES-BENZ 12/40 h.p., supercharged 2-seater	June 1925	Vauxhall Twenty-five saloon	Aug. 1937
Bugatti 3.3-litre Type 57 SC supercharged coupé	Aug. 1942	Mercédès-Benz 33/180 h.p., supercharged 4-seater	Aug. 1927	WINDSOR 4-cyl., 11 h.p., "Special" 2-3-seater	Nov. 1926
Bugatti 5-litre Type 46 saloon (1929)	April 1942	Mercédès-Benz 2.3-litre saloon	April 1938	Wolseley Hornet Swallow 2-seater (1933)	April 1934
		Mercédès-Benz 1.7-litre, Type 170V 2-seater	Feb. 1939	Wolseley Hornet (12.08 h.p.) saloon	Sept. 1930

The following are the charges for supplying any of the above copies—

1924-1926 - 3/- per copy	1931-1934 - 2/- per copy	1939-1942 - 1/- per copy
1927-1930 - 2/6 per copy	1935-1938 - 1/6 per copy	Plus 2d. per copy postage

Send cash with order to:

**MOTOR SPORT, 21, CITY ROAD, LONDON, E.C.1**