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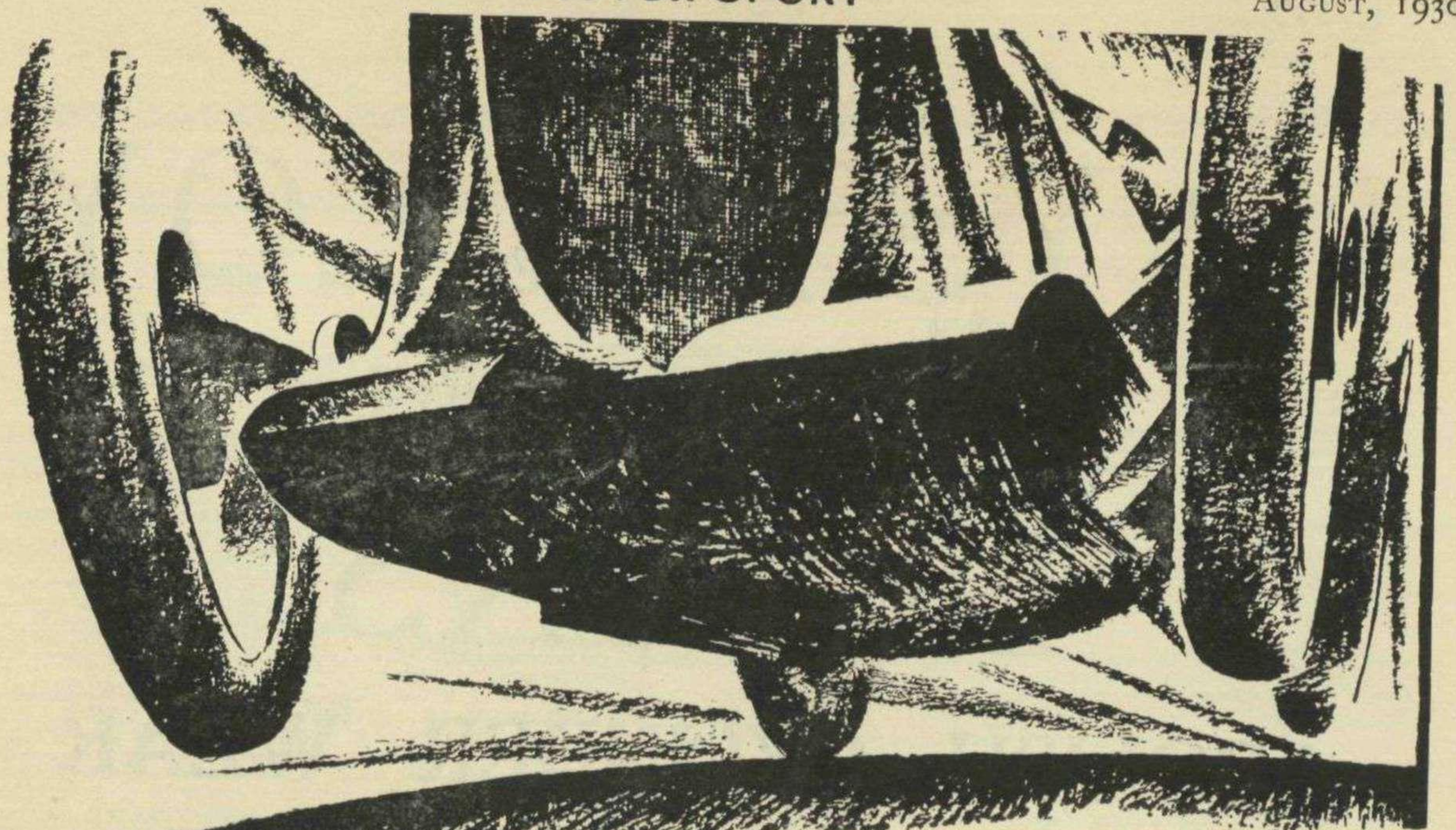
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THE

## IRISH GRAND PRIX

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## The Way of Things

### Phoenix Park.

FOR the second time the Irish Grand Prix races have been run, and it will be generally conceded by those who were fortunate enough to witness the two days' events that they left little to be desired in the way of spectacular driving and interest.

Apart from the fact that, with a representative number of famous Continental drivers, the entries were such as to make the races truly International in character, the course over which the contests were run was admirably chosen. Uncertain weather conditions, naturally provoked misgivings before the races, when it was thought that the rain and wind would detract from the success of the events by limiting speeds. Thanks to the driving ability and spirit of the contestants, however, these forebodings did not materialise. And here we would offer our congratulations to the winners.

Victor Gillow, with his Riley, drove a magnificent, if somewhat hectic race, while Rudolf Caracciola drove as only he himself can. At the same time, we would offer our sympathy to Captain Waite, who, through some extraordinary mistake, was "flagged in" a lap too soon, and thus lost third place. This mis-wielding of

the checkered flag was the only hitch in an otherwise perfect organisation.

### The Schneider Contest.

JUST recently a considerable amount of publicity has been given to the so-called crisis between Italy and France and this country regarding next year's Schneider Trophy Race.

Briefly, the position is that our friends do not agree to the revised rule, made last January, that challengers for the Trophy must deposit a sum of approximately £1,600 for each machine entered, and assert that this deposit should remain at £45. They sent to the Royal Aero Club their official entry of three machines, together with the deposit at the 1929 rate, but this the Royal Aero Club has declined.

The outcome of this matter remains to be seen, but everyone will hope that the responsible officials will see to it that a satisfactory agreement may be brought about, not only because the Schneider Contest is the greatest of all aviation events, but because any difference of opinion in matters of this sort, between nations, is distasteful in the world of sport.

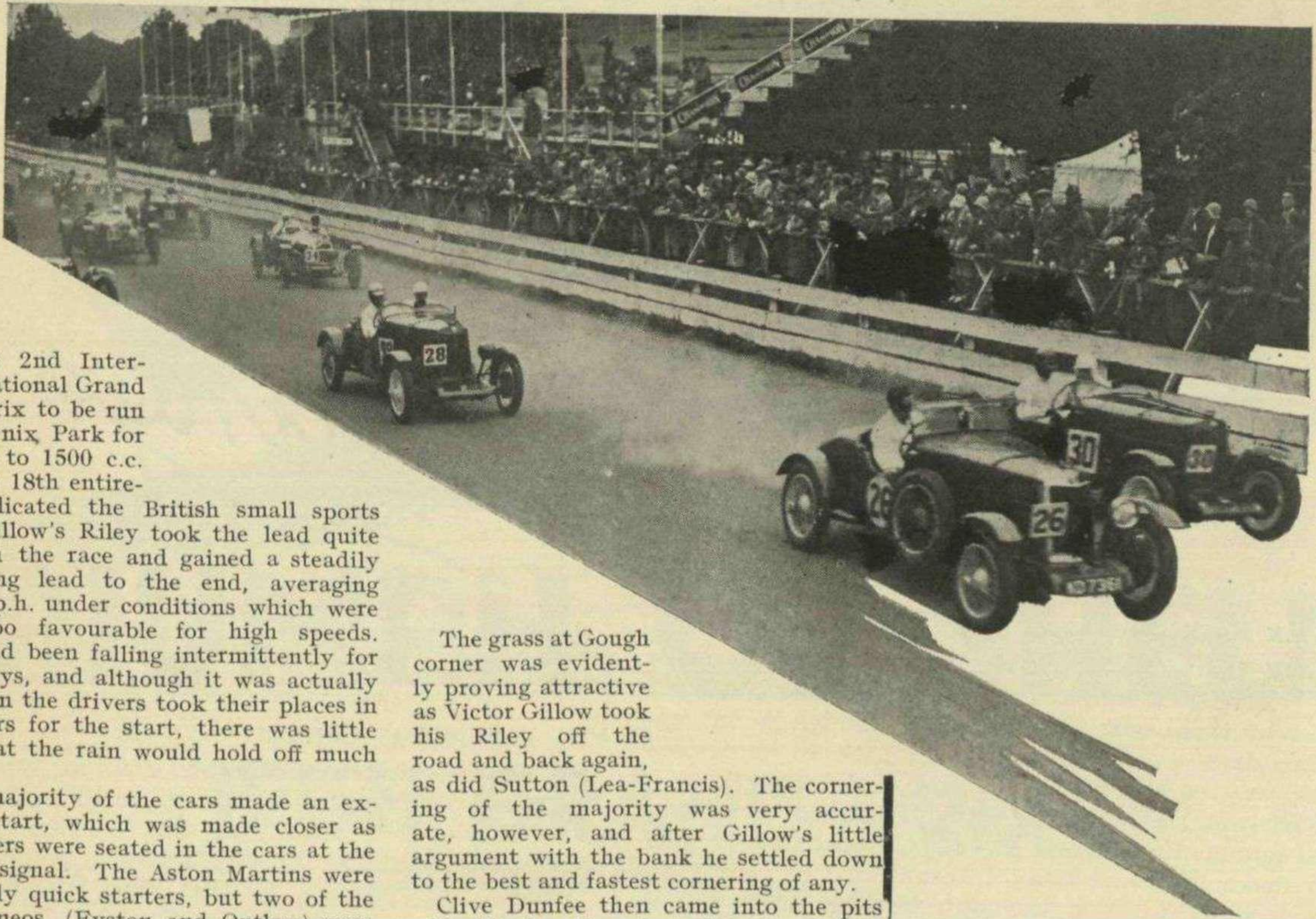
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# THE IRISH INTERNATIONAL GRAND PRIX

*BRITISH VICTORY AT RECORD SPEED*



**T**HE 2nd International Grand Prix to be run in Phoenix Park for cars up to 1500 c.c. on July 18th entirely vindicated the British small sports car. Gillow's Riley took the lead quite early in the race and gained a steadily increasing lead to the end, averaging 72.2 m.p.h. under conditions which were none too favourable for high speeds. Rain had been falling intermittently for some days, and although it was actually dry when the drivers took their places in their cars for the start, there was little hope that the rain would hold off much longer.

The majority of the cars made an excellent start, which was made closer as the drivers were seated in the cars at the starting signal. The Aston Martins were noticeably quick starters, but two of the Alfa-Romeos (Eyston and Outlaw) were slow to start while the Riley driven by Whitcroft, which on previous form was considered a likely winner, was another whose engine was reluctant. J. F. Field's mechanic had to open the bonnet and "do things," before getting off.

The first lap saw three Lea Francis cars in the lead, hotly chased by the Alfa Romeos, and in a few laps a nice little duel had started between Kaye Don's Alfa and Clive Dunfee's Lea-Francis, which was still in the lead.

The shower of rain before the start had evidently had its effect on the course, for there were some wild incidents at the corners early in the race. The Lea-Francis team were very fast at Gough corner, while among those who failed to observe the "Keep off the grass" instructions was Ivanovsky (Alfa-Romeo), last year's winner of both races. He skidded almost completely round in avoiding another car.

Lea Francis cars were running very close together, and sounded extremely healthy. The first pit stop was by H. S. Eaton, Aston-Martin, who stepped out calmly, selected a fresh pair of goggles at his leisure, and then purred quietly off again.

The grass at Gough corner was evidently proving attractive as Victor Gillow took his Riley off the road and back again, as did Sutton (Lea-Francis). The cornering of the majority was very accurate, however, and after Gillow's little argument with the bank he settled down to the best and fastest cornering of any.

Clive Dunfee then came into the pits with his Lea-Francis boiling hard, and work was commenced on the engine.

Half an hour after the start the leadership on handicap was varying between Bertelli's Aston Martin and Gillow's Riley. The Aston Martins in the able hands of Sammy Davis, Bertelli, and Eaton, were running very regularly, and Davis' lap speeds were in the region of 72 m.p.h. The supercharged "1500s" were doing about 75 m.p.h. and Kaye Don's lap speed was 75.2 m.p.h.

Clive Dunfee, after being at the pits for about 10 minutes, gave out that he was suffering from plug trouble. Rather an old story!

Gough corner was providing plenty of excitement, and Kaye Don, coming round in a group of five cars had to take to the path to avoid two cars which skidded in front of him, but proceeded unruffled.

Forty minutes after the start, H. S. Eaton again brought his Aston Martin in to the pits, this time for engine adjustments, but from the calm way everyone was chatting about it they might have merely stopped for refreshment. However, quiet work is far better than excitement on these occasions, and the job was actually done remarkably quickly. J. D. Barnes' Austin was another car

that was in at the pits at this time, but was soon away. At last, after a very long delay, Clive Dunfee got his engine going again, and shot off, sounding quite healthy again.

A great scrap was now in progress between Ivanovsky and Kaye Don, on Alfas, and Higgin and Sutton on Lea-Francis. Gillow was getting his Riley round at an astonishing speed, but seemed rather to be tempting Providence, as his margin of safety (if any) was very small, and several times he used the bank.

Eaton's trouble was apparently fairly deep seated, and he retired, after running for just under an hour.

Sullivan's Lea-Francis was mis-firing badly and stopped on the course for adjustments, and eventually retired.

Poppe's Austin came into the pits with magneto trouble, but got away again after some delay.

The Lea Francis team were putting up a magnificent show, but the very speedy Alfas in the hands of Ivanovsky and Kaye Don were obviously going to be very difficult to catch. Sutton was now in the lead on handicap with Gillow's Riley and the Alfas worrying him constantly. For many laps the Lea-Francis-Alfa-





# THE IRISH INTERNATIONAL GRAND PRIX *(Light Car Section)*

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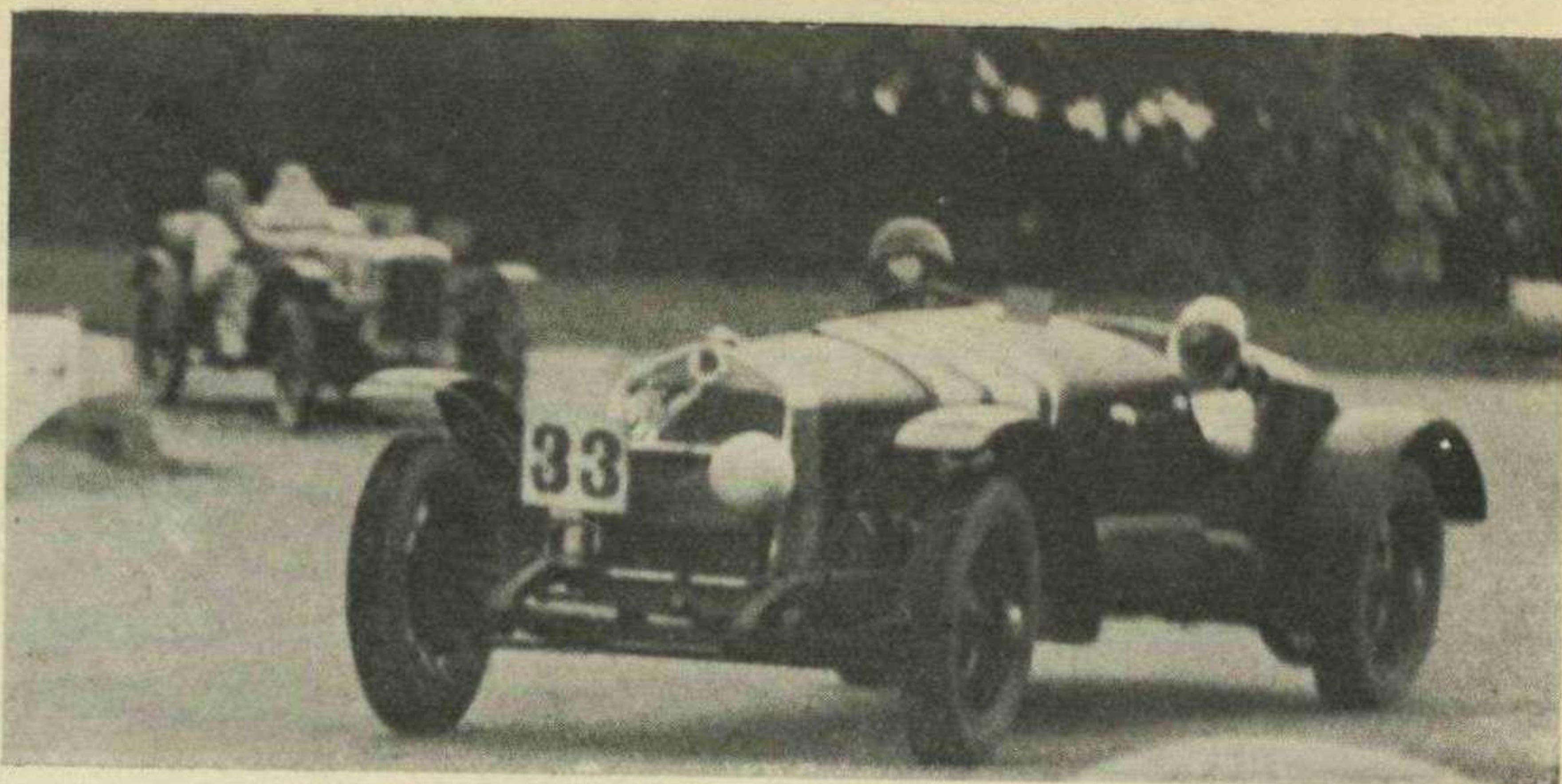


## IRISH GRAND PRIX—continued.

Romeo scrap continued, and the cars were keeping neck and neck on the straight, and cornering very close together. Gillow's Riley was very fast indeed on the corners and he seemed to be getting more accurate as time went on.

This was proving a real race, and the drivers were doing all they knew to save seconds on the corners, and on the very fast bends on the side of the course opposite to the grandstand.

The rain, which had held off fairly well in the earlier part of the race, fell sharply for a while and made the course distinctly tricky. Gardner's Amilcar turned a complete circle at Mountjoy corner, but continued without much delay. A great scrap was now ensuing between Kaye Don and Ivanovsky, the latter leading by a small margin. However Ivanovsky had a short stop and Kaye Don, who was driving a wonderful race, got ahead of him. Just after 5 p.m. that is after 2½ hours' running, Kaye Don went slightly too fast into Mountjoy corner and skidded com-



Boris Ivanovsky leading another competitor round Mountjoy Corner.

Gillow now had a comfortable lead and was driving a real winner's race, not without incident however. His car was

ever, when he overshot Mountjoy corner and came to rest behind the sandbags. He reversed out promptly, and continued as if nothing had happened.

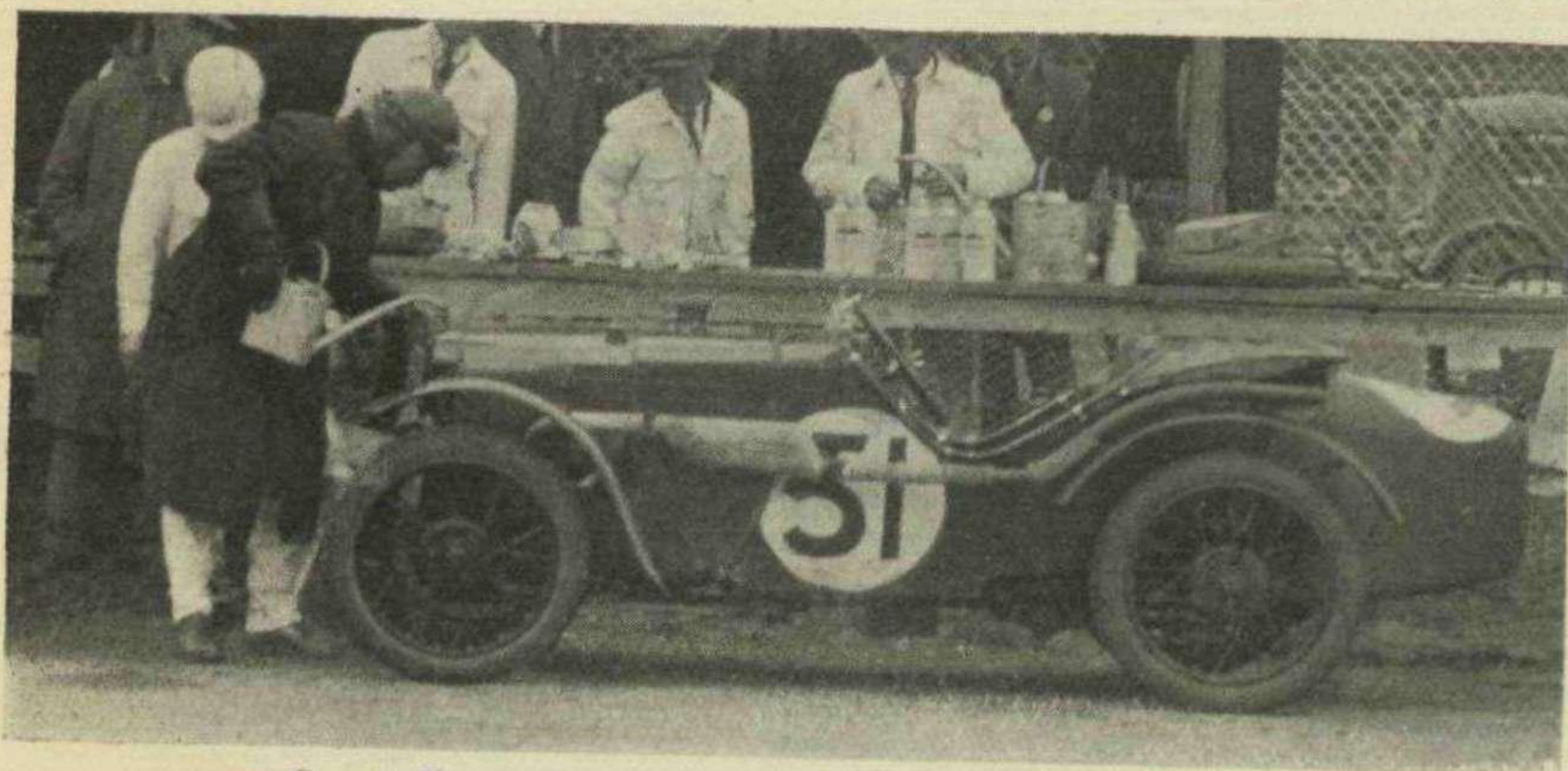
G. E. T. Eyston had been driving his usual steady race, and had firmly established himself among the leaders in front of the other Alfas, but was not seriously threatening the leading Riley which shortly afterwards crossed the line, a popular winner, amidst a storm of cheering.

Capt A. R. C. Waite, hero of many well fought contests, was the next to finish, with a small lead over Eyston, who brought his Alfa-Romeo into third place, after a very fine and steadily driven race.

Gillow's time for the race was 3 hours, 36 minutes 1 second, an average speed of 72.2 m.p.h., thus beating the time taken by Ivanovsky's Alfa-Romeo of last year by 5 minutes, 29 seconds.

A. Frazer-Nash (Austin) was next. The Austins as a whole put up a very fine show and ran very consistently throughout.

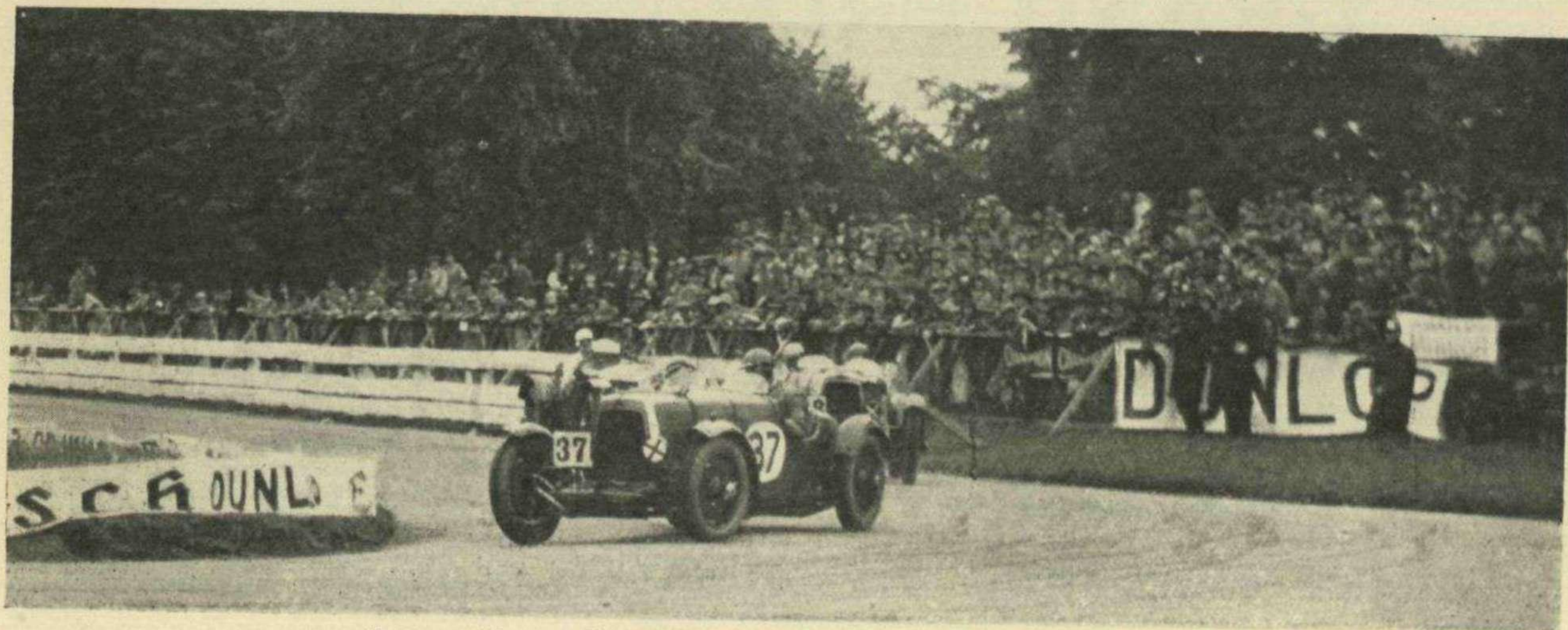
Another make which impressed everyone by their steady running, were the two Aston Martins driven by Bertelli and S. C. H. Davis. As was to be expected



Captain Frazer Nash, at the pits, replenishing his Austin's radiator.

pletely round, just hitting the grass verge. He was back on the road and away again at once, and continued as fast as ever. Poppe was, at this point, compelled to retire with supercharger trouble.

running faultlessly and unofficial timing showed him to be lapping at over 75 m.p.h. truly a wonderful performance for an unsupercharged 1100 c.c. engine. Disaster nearly overtook him before the end, how-



A trio at Mountjoy Corner, with S. C. H. Davis (Aston Martin) in the lead.

[Motor Sport Photographs]



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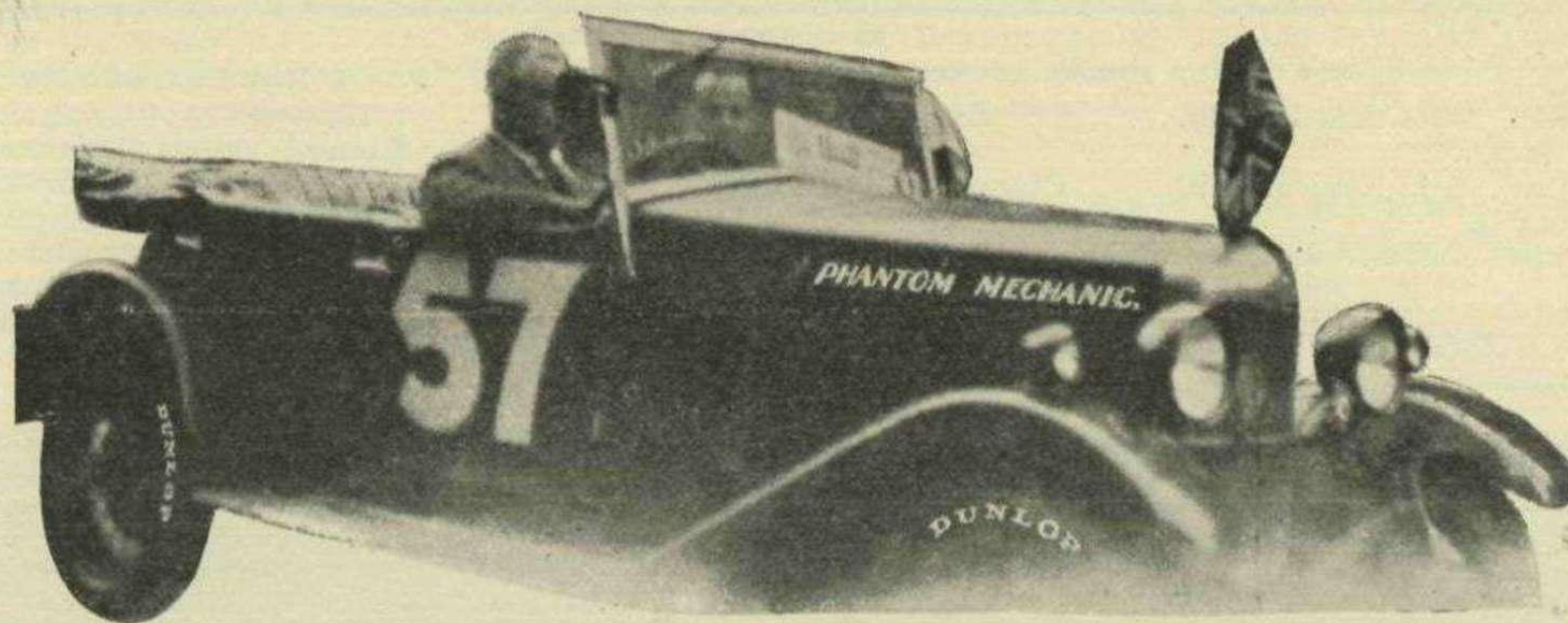
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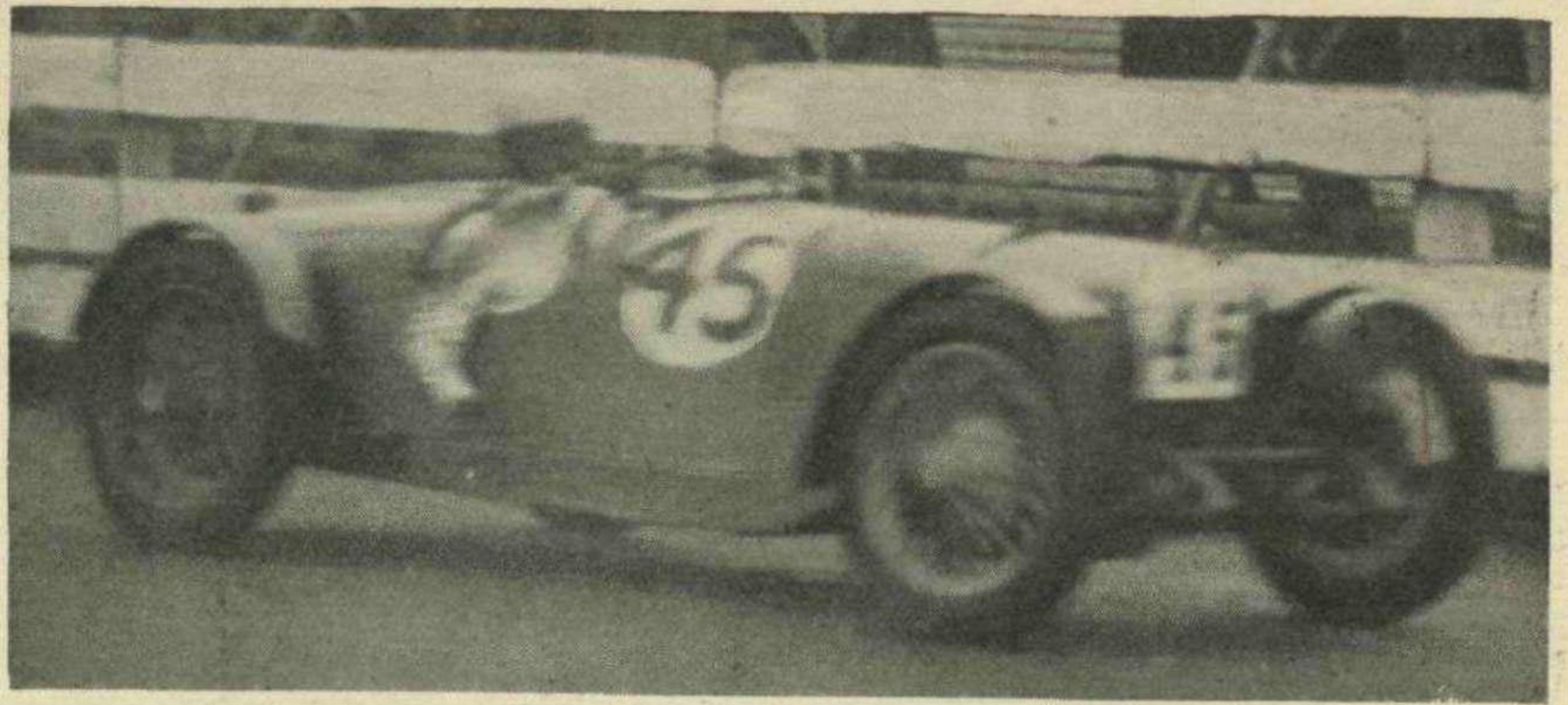


## IRISH GRAND PRIX—continued.

of two such experienced drivers, they gave a fine exhibition of the art of road racing, and their cars ran faultlessly from start to finish. These cars were noticeably steady on the corners, due largely to their low build. The Rileys and Alfas were also outstandingly good. The Austins apparently believed in low tyre pressures, and although this gave them good adhesion, it seemed as if the tyres must be dragged off the rim. The fact that they gave no trouble is a great tribute to the Dunlop wired-on product! Thus closed the first day's racing of the Irish Grand Prix, an excellent preface to the big car event of the next day.

The results were as follow:

- 1.—V. Gillow, Riley. 3h. 36m. 01s. 72.20 m.p.h.
- 2.—G. E. T. Eyston, Alfa-Romeo. 3h. 42m. 05s. 74.83 m.p.h.
- 3.—A. Frazer Nash, Austin. 3h. 44m. 52s. 65.94 m.p.h.
- 4.—Kaye Don, Alfa-Romeo. 3h. 45m. 22s. 73.74 m.p.h.
- 5.—A. C. R. Waite, Austin. 3h. 45m. 45s. 58.89 m.p.h.
- 6.—B. Ivanovsky, Alfa-Romeo. 3h. 47m. 08s. 73.17 m.p.h.
- 7.—S. C. H. Davis, Aston-Martin. 3h. 47m. 48s. 70.71 m.p.h.
- 8.—S. A. Crabtree, Austin. 3h. 48m. 06s. 65.01 m.p.h.
- 9.—A. T. G. Gardner, Amilcar. 3h. 48m. 55s. 70.36 m.p.h.
- 10.—R. M. V. Sutton, Lea-Francis. 3h. 51m. 18s. 71.85 m.p.h.
- 11.—D. Higgin, Lea-Francis. 3h. 53m. 23s. 71.21 m.p.h.
- 12.—A. C. Bertelli, Aston-Martin. 3h. 53m. 33s. 68.97 m.p.h.
- 13.—R. S. Outlaw, Alfa-Romeo. 4h. 0m. 31s. 69.09 m.p.h.
- 14.—J. D. Barnes, Austin. 4h. 08m. 13s. 59.74 m.p.h.
- 15.—J. F. Field, Lea-Francis. 4h. 10m. 14s. 66.40 m.p.h.



Too fast for the others—and our cameraman. Victor Gillow flashing by the grandstand.

- 16.—G. V. B. Cooke, Austin. 4h. 23m. 24s. 56.27 m.p.h.

## CLASS WINNERS.

- F (1,500 c.c.):—G. E. T. Eyston (Alfa-Romeo).  
 G (1,100 c.c.):—V. Gillow (Riley).  
 H (750 c.c.):—A. Frazer Nash (Austin).

## CLASS LEADERS AFTER 10 LAPS.

(Including laps credited in advance.)

- Class F (s):—Cyril Paul (Lea-Francis) and Clive Dunfee (Lea-Francis), each 17 mins. 20 secs.; F: S. C. H. Davis (Aston-Martin), 11 mins. 15 secs.; G (s): A. T. G. Gardner (Amilcar), 11 mins. 16 secs.; G: Victor Gillow (Riley), 3 mins. 59 secs.

## CLASS LEADERS AFTER 20 LAPS.

- Class F (s):—Cyril Paul (Lea-Francis), 50 mins. 59 secs.; F: S. C. H. Davis (Aston-Martin), 47 mins. 9 secs.; G (s): A. T. G. Gardner (Amilcar), 47 mins. 34 secs.; G: Victor Gillow (Riley), 39

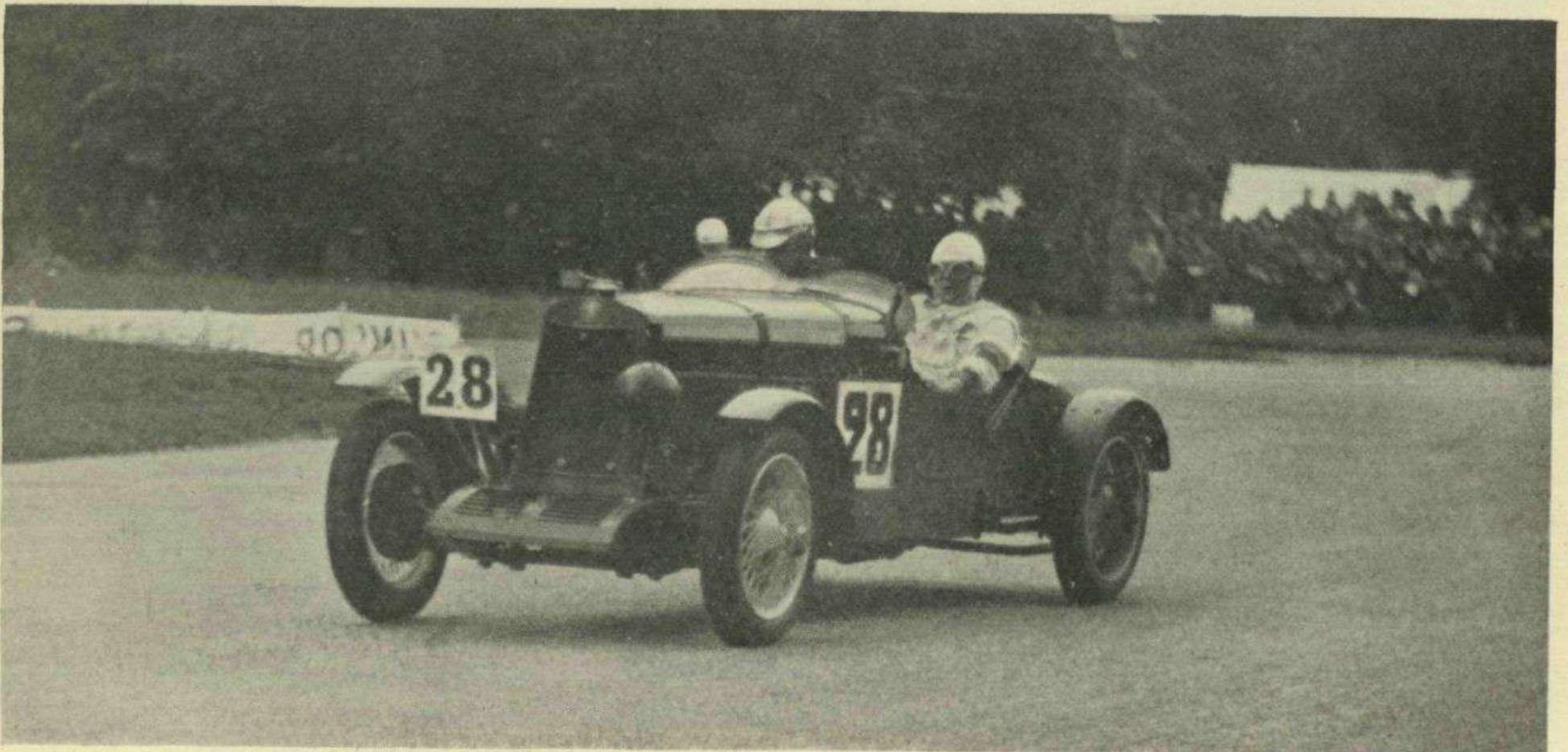
- mins. 12 secs.; H (s): G. Poppe (Austin), 30 mins. 58 secs.; H: A. C. R. Waite (Austin), 9 mins. 26 secs.

## CLASS LEADERS AFTER 30 LAPS.

- Class F (s):—R. M. V. Sutton (Lea-Francis), 1 hr. 24mins. 47 secs.; F: S. C. H. Davis (Aston-Martin), 1 hr. 22 mins. 45 secs.; G (s): A. T. G. Gardner (Amilcar), 1 hr. 22 mins. 56 secs.; G: Victor Gillow (Riley), 1 hr. 14 mins. 36 secs.; H (s): Frazer Nash (Austin), 1 hr. 8 mins. 51 secs.; H: A. C. R. Waite (Austin), 52 mins. 46 secs.

## CLASS LEADERS AFTER 60 LAPS.

- Class F (s): G. E. T. Eyston (Alfa-Romeo), 3 hrs. 9 mins. 14 secs.; F: S. C. H. Davis (Aston-Martin), 3 hrs. 12 mins. 4 secs.; G: Victor Gillow (Riley), 3 hrs. 1 min. 11 secs.; H (s): Frazer Nash (Austin), 3 hrs. 5 mins. 42 secs.; H: A. C. R. Waite (Austin), 3 hrs. 1 min. 55 secs.

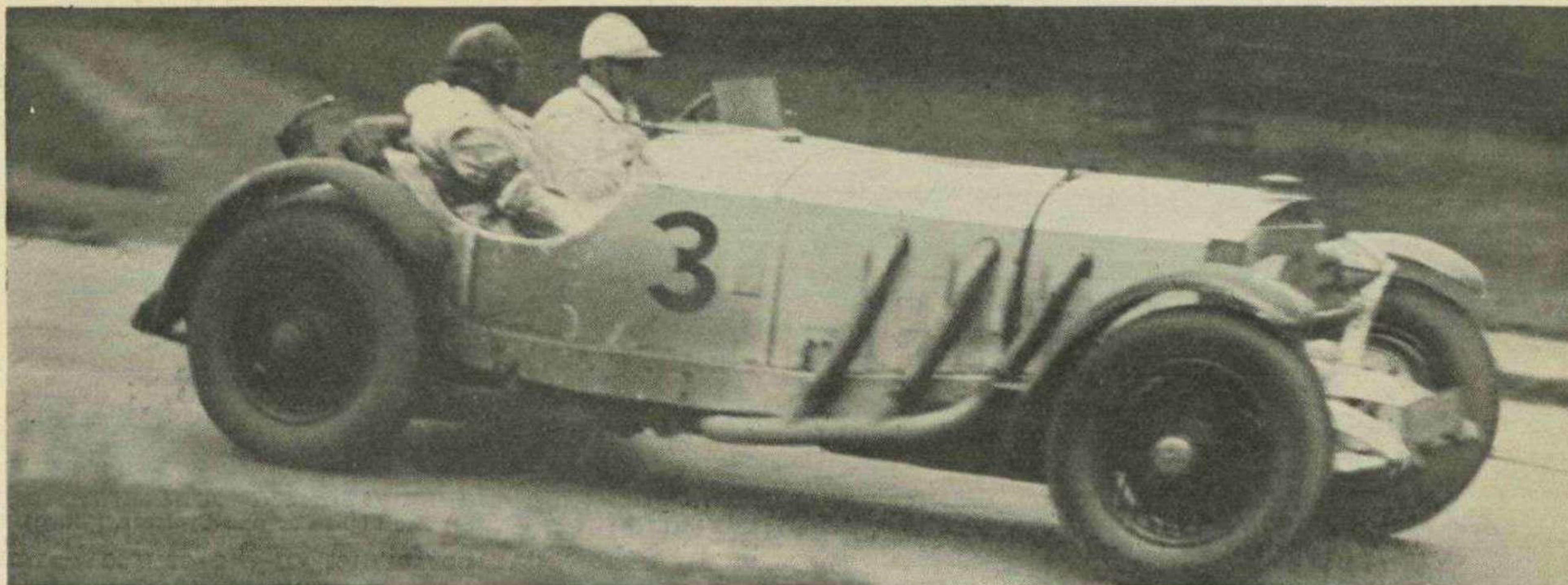


R. M. V. Sutton (Lea-Francis), snapped at Mountjoy Corner. He finished tenth at an average of 71.85 m.p.h. [Motor Sport Photos.]



## IRISH GRAND PRIX.

## THE SECOND DAY'S RACE

*Ends in Decisive Mercedes Victory.**Caracciola, the winner near Mountjoy Corner. He drove a magnificent race.*

THE outstanding feature of the senior race of the Irish Grand Prix was the great Mercedes-Bentley duel, which resulted in a win for Caracciola's Mercedes, by a useful margin, at the wonderful speed of 85.88 m.p.h.

Campari's Alfa-Romeo was second, at 78.00 m.p.h., thus providing a remarkable repetition of the Ulster T.T. of last year when the same drivers on the same makes of car, occupied the first two places. Conditions were variable during the event, owing to short showers which forced the drivers to exercise caution, but the terrific speeds of the leaders, showed that it takes more than rain to slow such men as Caracciola, Birkin, Campbell, and the other famous drivers who came to the line for that event.

Five minutes before the start the drivers took their places in the cars, and at the fall of the flag the whole entry got away perfectly, with the "Mercs" and Bentleys in the van. On the first lap Caracciola came past the stands with nearly 400 yds. lead over Birkin's Bentley. Then came Campbell and Howe on the other Mercedes.

Birkin started with 2 laps to his credit over the Mercedes on handicap, but he did not look like holding it. Caracciola was now fighting an even battle, with a team to back him up should anything happen. His speed through the stands was terrific, and his second lap broke all records for the Phoenix Park course at 90.8 m.p.h.

Harcourt-Wood's Bentley was an early visitor to the pits for a change of plugs, which only lasted him for a few laps, however, when he called again for more. At the same time Jean Chassagne came in. This after only 15 minutes of the race gone!

The team of 2350 c.c. O.M.'s were some of the neatest jobs we have ever seen in a race, and were driven by the famous trio, Fronteras, Minoia, and Ramponi.

A. C. Bertelli, the famous designer and

driver of Aston-Martins, was now in the role of counsellor and guide to the O.M. team, and as a report came through that Fronteras had a buckled back wheel, arrangements were made to receive him. However he roared past with the near side back wheel shaking in a nasty manner.

The next lap however saw him at the pits with grass all over both near side wheels! The subsequent wheel change was one of the neatest and quickest we have ever seen, and the crowd raised a cheer as he got away again.

A sudden shower of rain lasting only a few minutes made conditions very slippery, and Caracciola very nearly came to grief on one of the fast bends on the far side of the course. He went into a terrific skid, and turned several complete circles, but continued as fast as ever. As is his habit, the rain did not appear to worry him in the least.

Harcourt-Wood after only three quarters of an hour's running called at the pits for the fourth time and remained for some minutes before getting the engine running again. However, Birkin was still running, and driving the great race that we have learned to expect of him. However he had not quite all the speed he would like, and it became increasingly evident that Caracciola was not having to go all out to keep the speed scheduled for him, and was only cutting his supercharger in and out as he travelled past the stands at some 120 m.p.h. or more. Mountjoy and Gough corners were both giving some excitement after the rain, Campari's Alfa-Romeo being among those to skid badly at the latter turn.

Birkin was still going magnificently and clinging grimly to his lead on handicap, a few seconds in front of Caracciola. However his team mates were in constant trouble, and one or both of them were at the pits almost all the time. After each getaway however, they sounded healthy enough.

The Talbot team were running beautifully. Very fast, and uncannily silent,

they were again impressing every one with their faultless performance.

At last it seemed that Harcourt-Wood was in for some better luck, and had cured his trouble, as his mechanic signalled "thumbs up" to his pit as he went by, and the driver seemed so pleased about it that he very nearly went off the road by taking Mountjoy corner too fast on his very next lap.

One and a quarter hours after the start Campbell came in to refuel. He used a filling funnel which resembled a small water tower, and actually stood on legs! He also had to adjust the clutch which was slipping, and lost  $7\frac{1}{2}$  minutes. Had this not happened we should in all probability seen a Mercedes 1, 2, 3, victory.

Although the Mercedes-Bentley duel was occupying everyone's attention, a very interesting dog-fight was going on between those great and worthy rivals O.M. and Alfa-Romeo. Remarkably alike, in size and build, and each team containing the pick of Italy's road racing drivers, these men were doing all they knew, and the old rivalry of the Targa Florio and past 1,000 miles races was once more in evidence.

On the far stretch of the course a good impression of this scrap could be gained as the low red cars screamed through the very fast S-bends, sometimes alone, sometimes in pairs or threes, shaving the grass banks by inches. Sometimes a small cloud of earth and stones would show that it had been cut a bit too fine, but the speeds continued as high as ever. The roads were still treacherous after the intermittent rain and the cars were slipping and sliding as the drivers endeavoured to cut seconds off their laps. Birkin was driving beautifully but his Bentley was not quite as rock steady as the Mercedes, which even when it skidded, did so with an absolutely smooth motion that appeared entirely safe.

Caracciola's stop for refuelling was very short, and though a considerable quantity of fuel was spilt no harm was done. Bir-





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*From "The Light Car and Cyclecar," June 13.*

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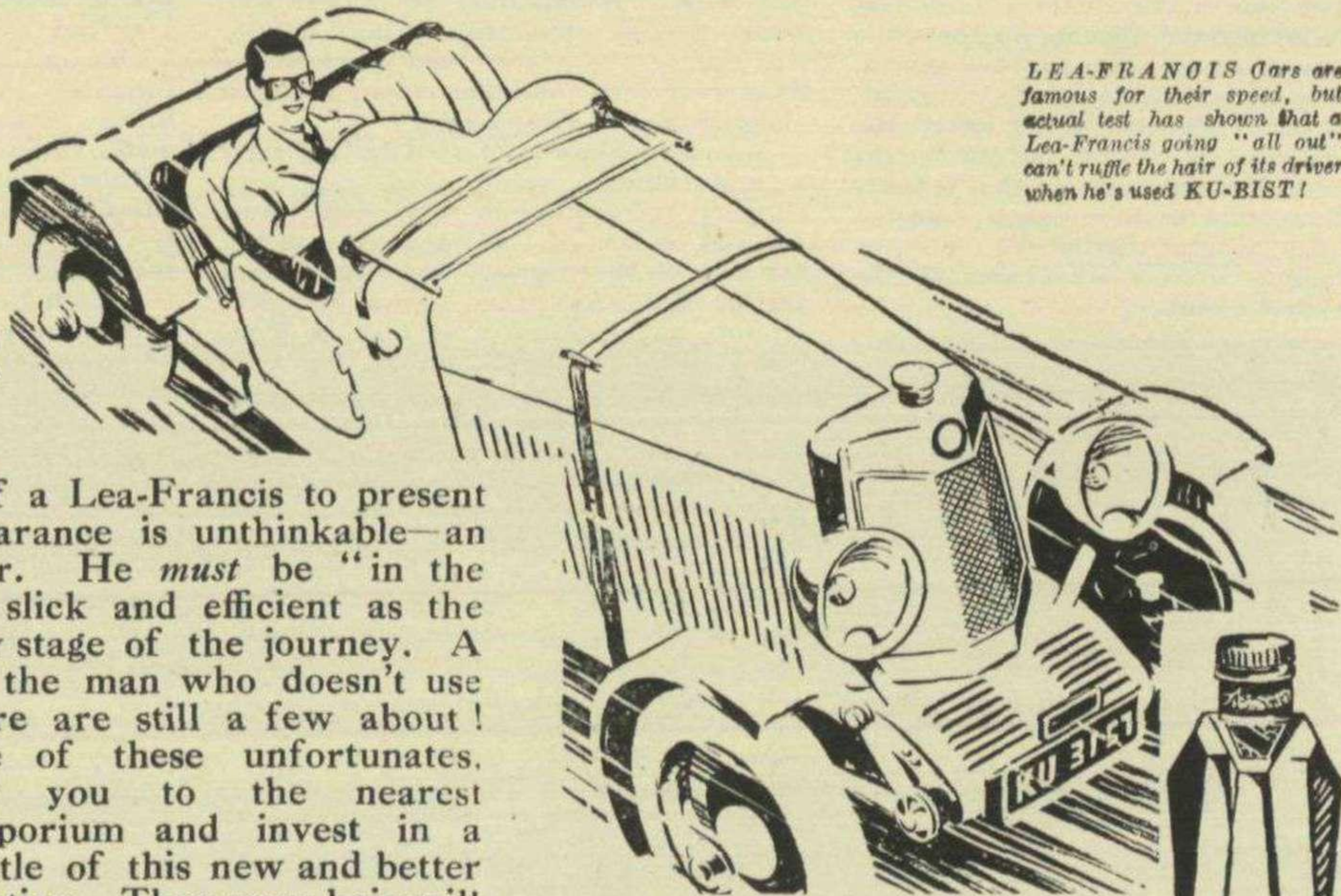
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*IRISH GRAND PRIX—continued.*

kin took the same time (30 secs.) to refuel, and for a moment looked like taking fire, but was promptly extinguished.

One of the things which saved the Mercedes time was the fact that it was not necessary to replenish the oil supply.

Birkin was keeping going finely and his driving was superb. However, the tables were turned with a vengeance now, and "Merces" were taking revenge for Le Mans. Birkin was playing a lone hand and Caracciola's lead was increasing, till near the end he could afford to take things comparatively easily and the intervals between the screams of the blower grew longer. Earl Howe was now in the running for a place and his pit signalled "Go for it!" and go for it he did. Birkin had dropped back and Caracciola came home an easy and popular winner. The second man home was G. Campari (Alfa-Romeo) who had driven throughout like the veteran that he is, and Earl Howe (encouraged by a series of exhortations and comic drawings displayed by his pit) ran into third place after a very fine race.

Birkin, often unfortunate, but ever game, at last got his 4½ litre Bentley

through a no-trouble race, but lacked the speed on the straight to hold the wonderful Mercedes. He has shown, however, that as a driver he must be counted among the world's best, and everyone will wish him luck in his plucky fight to uphold British prestige.

Malcolm Campbell brought the third Mercedes into fifth place, thus fittingly completing this great triumph. Another very fine performance indeed was that of the Talbot team who gained 6th, 7th and 8th places.

Quiet, steady, and fast, they ran from start to finish without any trouble, and with absolute regularity. This is becoming quite a habit of these cars, and shows not only their reliability, but also the great skill and accuracy of their drivers.

To Messrs. Bryan Lewis, H. S. Eaton, and T. E. Ross-Richards, we offer our hearty congratulations on a very fine performance.

The O.M.-Alfa duel had produced heavy casualties. Fronteras overturned at Mountjoy corner and Ivanovsky who had been keeping his Alfa close on the O.M.'s tail only just managed to avoid him. Driver and mechanic were fortunately

unhurt but the steering was damaged and the car was compelled to retire. Minoia had to retire with a blown gasket, leaving Ramponi to bring the other 2,350 c.c. O.M. home, while R. F. Oats, driving his usual steady race finished with the 2-litre car of the same make.

## RESULTS.

1st, No. 3, Mercedes S/c. Caracciola. 3hrs. 28mins. 24secs. 85.88 m.p.h.

2nd, No. 21, Alfa-Romeo S/c. Campari. 3hrs. 36mins. 19secs. 78.00 m.p.h.

3rd, No. 2, Mercedes S/c. The Earl Howe, 3hrs. 39mins. 53secs. 81.33 m.p.h.

4th, No. 8, Bentley S/c. H. R. S. Birkin. 3hrs. 40mins. 29 secs.

5th, No. 1, Mercedes S/c. Malcolm Campbell. 3hrs. 40mins. 47secs.

6th, No. 18, Talbot. B. E. Lewis. 3hrs. 42mins. 32secs.

7th, No. 17, Talbot. H. S. Eaton. 3hrs. 45mins. 50secs.

8th, No. 16, Talbot. T. E. R. Richards. 3hrs. 47mins. 40secs.

9th, No. 10, O.M. S/c. G. Ramponi. 3hrs. 48mins. 14secs.

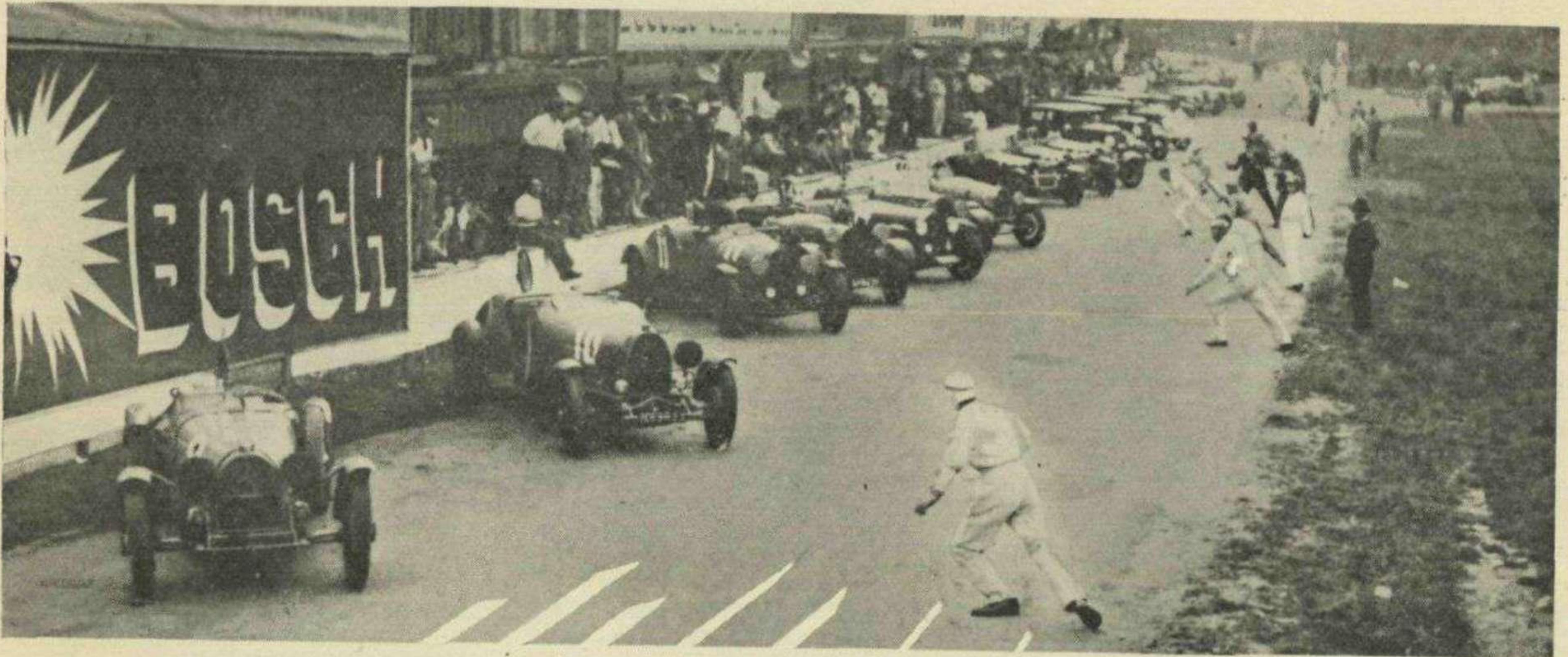


*A tense moment at the Gough Statue Corner, where many high speed skids occurred.*



# THE BELGIAN GRAND PRIX

*Sweeping Victory for Alfa-Romeo*



*Drivers running to their cars at the start.*

**F**OLLOWING close upon the 24-hour race at le Mans, the Belgian Grand Prix, which was run this year on the 5th and 6th July, is an event very similar and yet very different to the Grand Prix d'Endurance.

It is a 24-hour road race for "touring" cars, but instead of there being one prize for the car which covers the greatest distance, and another for that which puts up the best performance under the rather complicated rules for the Rudge-Whitworth Cup, there is in theory no one general winner and the entry is divided into classes according to cylinder capacity, while the rules with regard to replacements are much less strict than in the case of the French event.

The curious part about the entry list was that French cars, which were conspicuous by their absence in their own national race, predominated in this event, and the Belgian and Italian entries gave the affair an international character which was only spoiled by the lack of British cars, which were so numerous at le Mans, and which here were represented by the solitary M.G. Midget. When, in fact, the starters were drawn up on the Circuit of Francorchamps, near Spa, on Sunday, 5th July, they consisted of the following:—

Over 3-litres: Chrysler I. (Stoffel and de Costières), Chrysler II. (de Joncy and Sabipa), Chrysler III. (Renard and Barthélemy), Bugatti VI. (Blin and d'Orimont-André), Delage (Jacques and Ogez), De Soto II. (Hommel and van Hoye). Under 3-litres: Bugatti I. (Chiron and Bouriart), Bugatti II. (Reinaatz and Minsard), Bugatti III. (Orban and Demoulin), Bugatti VIII. (Sigrand and Bouquet), Bugatti IX. (Dreyfus and Schumann), Georges Irat (Cornil and Museaux), De Soto I. (Pesato and Morel), Hotchkiss (Heleartz and Varelle). Under 2-litres: Alfa-Romeo I. (Marinoni and Gherisi), Alfa-

Romeo II. (Canavesi and Zehender), Alfa-Romeo III. (Ivanowski and Cortesi), Imperia I. (Thelusson and Leduire), Imperia II. (Diericks and Lambert), Imperia III. (Fauconnier and Claessens). Under 1,500 c.c.: Bugatti IV. (Evrard and Traseuter), Bugatti VII. (Pierre and Thys), Chenard et Walcker (Breyre and Mues), S.C.A.P. I. (Ménage and Guibert). Under 1,100 c.c.: Aries (Duray and Laly), Tracta I. (Ufa and Moulin), Tracta II. (Gouvion and Vallon), Tracta III. (Debeuguy and Vasena), Tracta IV. (Ingels and Meyer), B.N.C. I. (Doré and Treucet), B.N.C. II. (Sirégoles and Manuel), Salmson (Vasipol and Billy), Rally (Cuvellier and Vilain), M.G. (Samuelson and Kindell), S.C.A.P. II. (Rémond and Dumaret), Amilcar (Seo and Franz).

The most notable absentees were, of course, Lady Dorothy Paget's team of three supercharged 4½-litre Bentleys, though their withdrawal was known some time before the start of the race. Considerable disappointment was also caused by the non-appearance of the front-wheel-drive Cord, whose performance would have been watched with great interest. In the absence of the Bentleys all the competition was expected to lie between the 2,300 c.c. supercharged Bugattis and the 1,750 c.c. Alfa-Romeos, and this forecast was soon justified. The start was given in the usual manner, the drivers running to their cars, scrambling on board and getting the engines going with the starters. They all got away in a bunch, but Louis Chiron on the Bugatti was the first round again, followed by the three Alfa-Romeos in close formation, then Dreyfus and André on the next two Bugattis and Jacques on the 8-cylinder Delage. This last car was rigorously standard, and went remarkably well.

During the first few laps Chiron was travelling extremely fast, and gradually increasing his lead on his



THE BELGIAN GRAND PRIX—continued.

Italian rivals. Alfa-Romeo II. also, driven by Canavesi, had to make several calls at the pits, as apparently the oil pump was not working satisfactorily. He kept going, however, and in that was luckier than Gouvion on Tracta II. and Vasipol on the Salmson, both of whom were forced to retire early on in the proceedings.

While Chiron was busily scrapping with the Alfas, the team of three Imperias were behaving as if they had hardly realised that this was a race as opposed to a high-speed reliability trial. As a matter of fact, these cars, which had 1,800 c.c. 6-cylinder slide-valve engines and comfortable 4-seater saloon bodies, had been picked at random from the showroom by a representative of the Royal Automobile Club of Belgium, and were sealed and entered in the race without any alteration whatever. They travelled round the course in close company and even stopped together to fill up. All three went through without a single vestige of trouble, and they provided a remarkable demonstration of reliability.

In the meantime Chiron held the lead unchallenged until, after he had covered about 220 miles, he came in to refuel and hand the car over to Bouriart. Thereupon it was discovered that the dynamo driving belt was broken, and this took some time to replace. By the time Bouriart got away, the Bugatti was some way behind both Marinoni and Ivanowski's Alfa-Romeos, but the relief Bugatti driver proceeded to show that he was nearly as fast as the great Chiron, and by the time he handed the car over to his team-mate again he had made up more than five minutes on Marinoni.

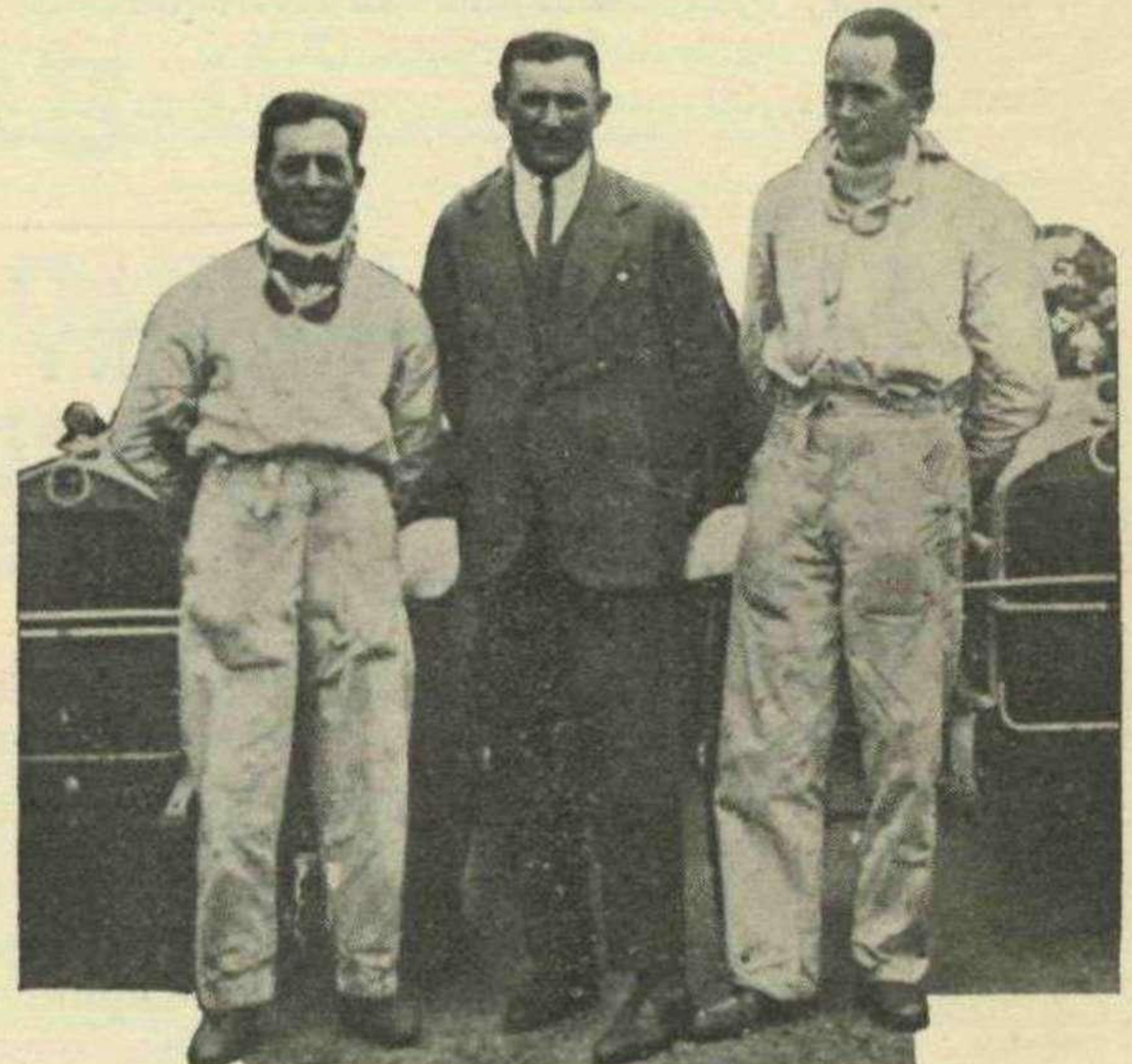
At the end of 6 hours, quarter way through the race, the order of the leaders was as follows:—

- |                                   |     |          |
|-----------------------------------|-----|----------|
| 1. Marinoni-Gherse (Alfa-Romeo)   | ... | 46 laps. |
| 2. Ivanowski-Cortese (Alfa-Romeo) | ... | 46 "     |
| 3. Chiron-Bouriart (Bugatti)      | ... | 45 "     |
| 4. Canavesi-Zehender (Alfa-Romeo) | ... | 42 "     |
| 5. Dreyfus-Schumann (Bugatti)     | ... | 40 "     |
| 6. Blin-d'Orimont André (Bugatti) | ... | 40 "     |
| 7. de Joncy-Sabipa (Chrysler)     | ... | 39 "     |

Among the smaller cars Pierre and Thys on a Bugatti headed the 1,500 c.c. class, followed by the Chenard et Walcker, while in the 1,100 c.c. division Doré and Trennet on the B.N.C. were first, followed by Duray and Laly on the little Aries. This latter car had been entered on the initiative of its drivers, and is the identical machine which started its racing career in 1926.

When Chiron got away for the second time he was determined to cut down the Alfa-Romeo lead. But apparently the repairs which had been made to the dynamo belt did not prove altogether satisfactory, for soon after dark the car came into the pits with no lights, and was finally withdrawn. This robbed the race of much of its interest for the Alfa-Romeos now seemed to have things all their own way. As a matter of fact the Bugatti had been entered for the race at the last minute and very hastily prepared, so that Ettore Bugatti himself was distinctly averse to its starting. Chiron, however, was particularly anxious to get to know something of the Spa circuit under racing conditions by way of intensive practice for the European Grand Prix, and the car therefore started, although the chances of nothing going wrong seemed small.

The darkness was responsible for several other casualties, among which was one of the Chryslers driven by Barthélemy, which crashed after turning completely round at the Barnouville corner. The driver was taken to hospital unconscious, but fortunately news soon arrived that he was not in danger. Shortly afterwards the Georges Irat ran off the road and hit a tree, and although the driver was fortunately unhurt, the car was placed *hors de combat*.



Marinoni and Gherse (in overalls), the victors of the Belgian Grand Prix.

When dawn came the Alfa-Romeos were still well in the lead, and at half-time, twelve hours after the start of the race, the order of the first few cars was as follows:

- |                                   |     |          |
|-----------------------------------|-----|----------|
| 1. Marinoni-Gherse (Alfa-Romeo)   | ... | 90 laps. |
| 2. Ivanowski-Cortese (Alfa-Romeo) | ... | 90 "     |
| 3. Canavesi-Zehender (Alfa-Romeo) | ... | 87 "     |
| 4. Dreyfus-Schumann (Bugatti)     | ... | 81 "     |
| 5. Blin-d'Orimont André (Bugatti) | ... | 77 "     |
| 6. de Joncy-Sabipa (Chrysler)     | ... | 76 "     |

The Alfas were going marvellously and seemed to have the race well in hand. In the early morning, however, Gherse arrived at his pit, and leaping out of the car caught his foot on the side of the body and fell. He landed on the knee-cap which he broke during a fall in the motor-cycle T.T. the other day, and which, hardly healed, gave out again. He was unable to drive any further, and this left Marinoni to carry on by himself, which he did quite cheerfully until in the final stages of the race he was relieved from time to time by various other members of the team who were off duty from their own cars.

In spite of this handicap, however, there was no catching the flying red Alfas. Soon after mid-day de Joncy and Sabipa's Chrysler which had been going very well at the head of its class retired with a broken oil-pipe, and shortly afterwards trouble which delayed the 5-litre Bugatti driven by Blin and d'Orimont André for some time at its pit, let the remaining Chrysler, driven by Stoffel and de Costier, into the lead.

(contd. overleaf.)



## THE BELGIAN GRAND PRIX—continued.

The final order of the finishers was as follows:—

1, Marinoni and Gherzi (Alfa-Romeo), 1,632 miles;	10, Evrard and Trasentier (Bugatti), 1,264 miles (winner of 1,500 c.c. class, speed 52.7 m.p.h.);
2, Ivanowski and Cortese (Alfa-Romeo), 1,623 miles;	11, Duray and Laly (Ariès), 1,241½ miles;
3, Canavesi and Zehender (Alfa-Romeo), 1,504 miles;	12, Breyre and Mues (Chenard-Walcker), 1,236 miles;
4, Dreyfus and Schumann (Bugatti), 1,455¼ miles (winner of 3-litre class, speed 60.6 m.p.h.);	13, Debeugny and Vasena (Tracta), 1,168 miles;
5, Stoffel and de Costier (Chrysler), 1,406¼ miles (winner of over 3-litre class, speed 58.6 m.p.h.);	14, Sirejols and Manuel (B.N.C.), 1,158½ miles;
6, Jacques and Ogez (Delage), 1,387 miles;	15, Samuelson and Kindell (M.G.), 1,146 miles;
7, Hellaerts and Vaselle (Hotchkiss), 1,321¾ miles;	16, Pesato and Morel (de Soto), 1,140½ miles;
8, Hommal and van Howe (de Soto), 1,293¾ miles;	17, Thelusson and Ledure (Imperia), 1,076½ miles;
9, Doré and Trennet (B.N.C.), 1,284¾ miles (winner of 1,100 c.c. class, speed 53.5 m.p.h.);	18, Dierick and Lambert (Imperia), 1,076½ miles;
	19, Fauconnier and Claessens (Imperia), 1,076½ miles;
	20, Cuvelier and Vilaise (Rally), 1,033 miles;
	21, Rémond and Dumoret (S.C.A.P.), 890½ miles.

## SLOVENSKY CLUB RALLY

*Sole British Entrant secures Premier Award*

OF a total of 80 entries for the Slovensky Motor Club's International Auto Rally, 70 started, 7 of the competitors being foreigners. The sole English representative was Mr. A. Dexter, who was accompanied by Mr. J. A. Orr Ewing in a Riley "9."

They were successful in securing the premier award in Class "G" (under 1½-litres) covering a distance of 2,962 kilometres with the rather remarkable average speed of 44.9 kilometres per hour.

Mr. Dexter's car, which was named the "Phantom Mechanic," started from Glasgow on July 1st and their journey from the start was full of incidents. Driving throughout the night they encountered heavy thunderstorms and narrowly missed a collision with a 6-wheel lorry and trailer which had overturned. Having reached London in the afternoon of the same day, they proceeded to Dover. Crossing the Channel they found the road from Calais to Boulogne closed for repairs and it was necessary for them to make a big detour, but in spite of this they arrived in Paris at 11 p.m. Early next morning they left the French capital and after traversing appalling stretches of high roads they reached the Routes Nationales where they made splendid progress, covering 60 km. in the hour for several hours on end.

Nancy was reached at mid-day, and Strasbourg, 282½ miles from Paris at 3.30 p.m. The German frontier was crossed at Kehl. Later they came to the narrow winding

roads through the Black Forest and here owing to poor marking of the route, they lost themselves for a considerable time, but after some difficulty they reached Froudenstat and made their way to Ulm via Tubingen and Routlingen.

At one village where they pulled up to enquire their way they received an overwhelming greeting, but again, through a misunderstanding they found themselves off their scheduled route and ran into what eventually degenerated into a cart track among the fields. Ulm was reached at mid-night.

After a brief rest, Mr. Dexter pushed on to Munich which was reached at 7 o'clock in the morning of Friday. From there they went to Salsburg, just over the Austrian frontier and then to Lambach. Here they encountered the dust which is universal in this part of Europe, and both the Riley and its occupants soon became smothered with the fine, white and extremely disagreeable substance.

Previously the English competitors had wired to the British Vice-Consul at Bratislava that they hoped to arrive at 8 p.m., but owing to the numerous delays they arrived some two hours later. The same night they continued over bad tracks, until at last they reached Buda Pest at 3 o'clock the following morning, having covered 92 miles, the major portion of which was over surfaces which were inches deep in dust, and full of potholes. At 8.15 a.m. the Riley checked in at the Hungarian Motor Club at Buda Pest, and after

a most cordial reception the crew started on their long trek again, heading for the frontier.

From there to the finish it was a case of really hard driving over execrable roads which followed the river Vach to Kral Lehota. By easy stages they then climbed to the plateau close to the Tetras mountains. They were now nearing their goal, and starting on their final ascent to Sturbach they climbed 2,570 feet before finally finishing at Tatranska Lomnica.

Mr. Dexter reports that the Riley stood up to the arduous conditions of the long run extremely well, and that at no time was any mechanical trouble met with. The equipment included oversize Dunlop tyres (which, combined with the Sorbo upholstery, made high average speed over such bad surfaces which were encountered, possible without serious discomfort). The car was also fitted with the Safety Brake Regulator, which automatically adjusts the brakes when required. This device proved extremely useful on the run and relieved the driver of the necessity of both checking and taking up any brake adjustment and saved valuable time.

At the Rally, the car aroused a great deal of interest, many being surprised at the power and speed of an engine of such small capacity.

Mr. Dexter informs us that he is continuing from Czecho Slovakia on a large itinerary throughout several other European countries on a business tour.



# R.O.P

## WINS

**IN THE M.C. & A.C. 24 HOUR RELIABILITY TRIAL JULY 11-12, 1930**

**G. B. GOODMAN (498 Norton)  
WINS PREMIER AWARD on  
R.O.P PETROL and OIL**

*B.N. Bowl	-	J. W. Burnett	B.S.A.
Gowch Trophy		J. Humphries	B.S.A.
*Jordeson Trophy		R. G. G. Beesley	Sunbeam Sc.
*Novice Prize	-	A. L. Macdonald	Rudge
*M.C. & A.C. Members			
Prizes (Solo)		L. G. Holdsworth	Ariel
Do. (Sidecar)		R. G. G. Beesley	Sunbeam Sc.
Silver Cups	-	T. Robbins	Excelsior
Do.	-	*N. P. O. Bradley	Sunbeam Sc.
Tankards	-	*T. G. Hutton	Sunbeam
Do.	-	*T. Gibson	Do.
Silver Medals	-	*R. C. Cotterell	Ariel
Do.	-	*J. K. Simcoe	Sunbeam



**ALL ON R.O.P PETROL**

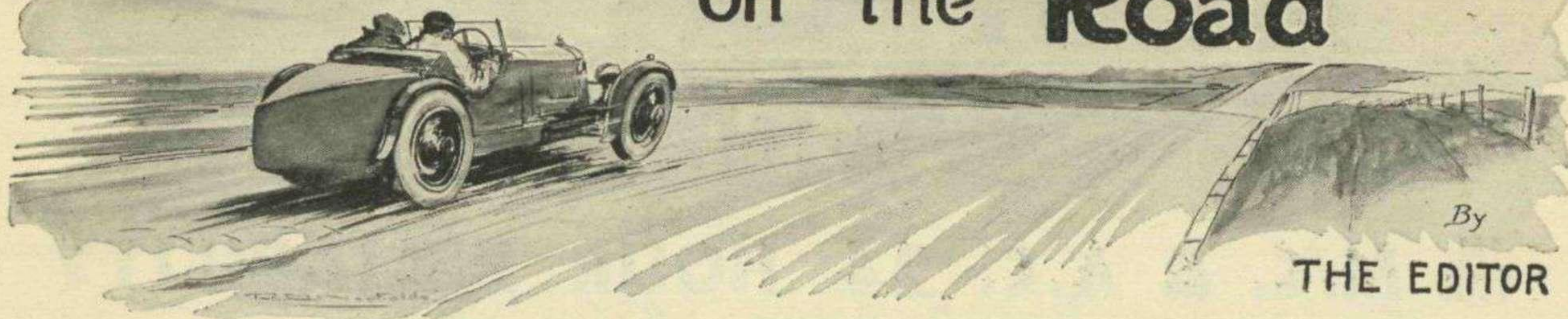
THOSE ASTERISKED \* ALSO ON

**R.O.P OIL**

**RUSSIAN OIL PRODUCTS LTD., MOORGATE HALL, LONDON, E. C. 2.**



# Sporting Cars on the Road



## THE SUPERCHARGED SPORTS LEA-FRANCIS.

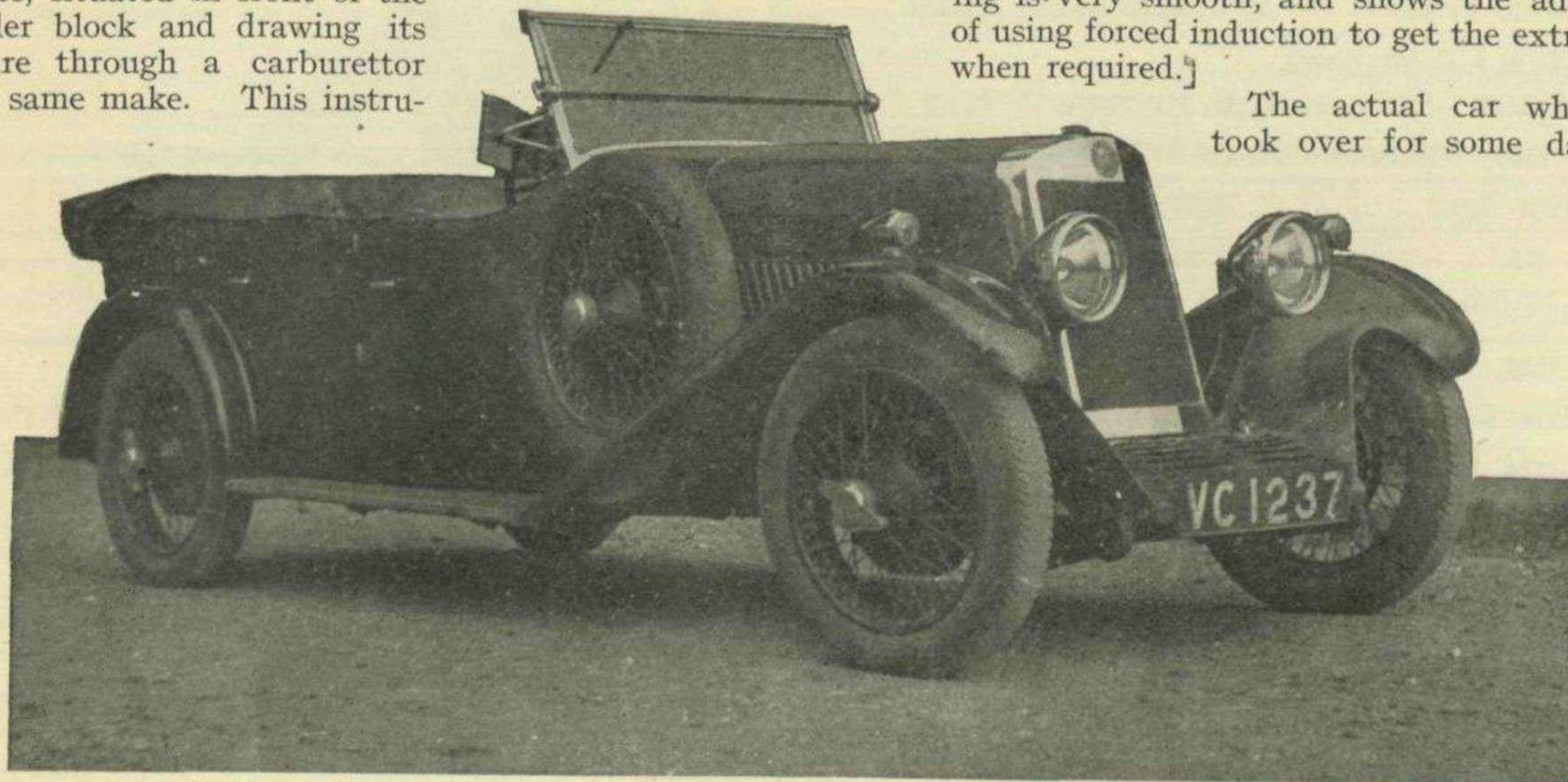
EVER since Kaye Don's victory on a Lea-Francis in the Ulster Tourist Trophy race of 1928, this model has enjoyed a steady run of successes. Owing to the foresight of the manufacturers in marketing the supercharged model as standard as soon as it had showed its mettle, it has proved a very popular car with the amateur who requires something for serious competitions, which at the same time can be used for ordinary work on the road. A measure of this popularity is to be found in the large number of these cars on the roads to-day, which gives ample answer to those over-conservative motorists who still maintain that a supercharged car is not suitable for the private owner.

In the case of the Lea-Francis the supercharger is a Cozette, situated in front of the cylinder block and drawing its mixture through a carburettor of the same make. This instru-

are lubricated by mixing oil with the petrol, and this is a very simple matter as a neat measure is incorporated with the filler cap; one of these filled with Castrol XL. must be put in to every two gallons of fuel. The bearings of the supercharger are lubricated by a mechanical pump, which draws its supply from a neat tank on the front of the dash, and on the same side as the sump filler cap. A two-way tap system is incorporated so that for prolonged "blinding," they may be turned so that oil is supplied to the supercharger by the main pressure system which feeds the engine bearings.

The engine is a perfectly normal 1500 c.c. 4-cylinder O.H.V. job of 69 mm. bore by 100 mm. stroke, and therefore at ordinary touring speeds on a small throttle opening is very smooth, and shows the advantage of using forced induction to get the extra speed when required.]

The actual car which we took over for some days, for



The sloping radiator and louvered cowling between the dumb-irons give the Lea-Francis an imposing appearance.

ment, [as most of our readers will remember, consists of an eccentric with sliding vanes which make contact with the periphery of the casing. These blades

test, was a demonstration model which had [covered many thousands of miles at high speeds, and was therefore expected to show some signs of its past life. How-



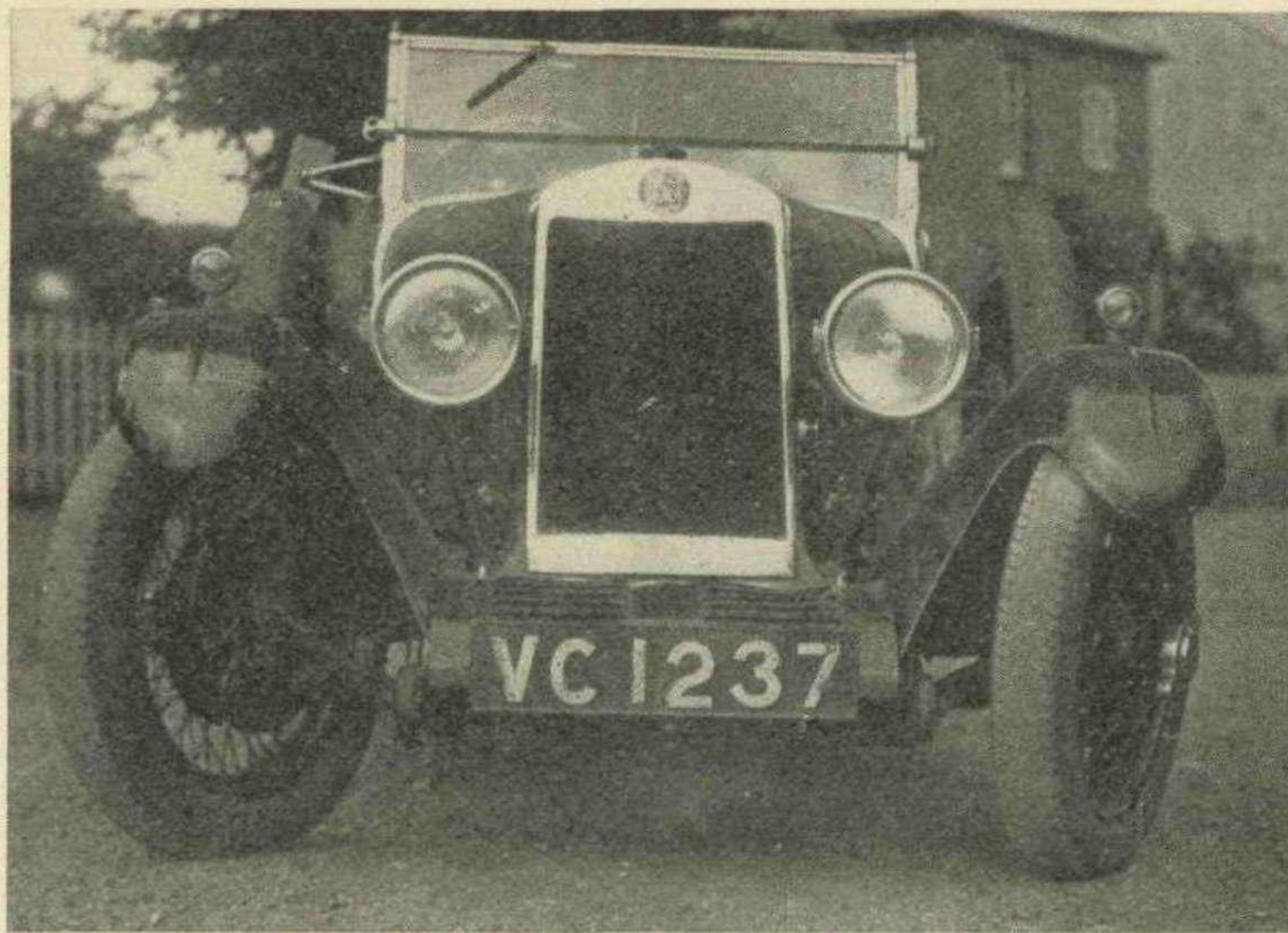
SPORTING CARS ON THE ROAD—continued

ever, it appeared to have stood up remarkably well, and the only sign of a hard time was given by the fact that the petrol and oil consumptions were somewhat higher than would be the case on a newer engine, and merely showed that new piston rings would shortly be required.

The engine and supercharger were mechanically quiet, and at normal speeds we were entirely able to forget the presence of the latter.

When we took over the car it was fitted with some comparatively "soft" plugs, and we soon found that our normal method of progression from place to place, i.e., with the throttle well open, did not agree with them, and produced pre-ignition. This caused us a little bother at first, till we found others of suitable type.

The acceleration was very good, and on second gear 10-30 m.p.h. takes 4 seconds, and 10-40 m.p.h. 6 seconds only. The maximum speed on this gear is 45-50 m.p.h. Third gear, which is naturally in fairly constant use when driving hard, gave us a maximum of 70 m.p.h.



Ample lock is provided on the Lea-Francis Sports.

The maximum speed achieved during our test, with four people aboard was 82 m.p.h., but owing to the business of plugs, just referred to, it was not considered

advisable to keep the throttle too far open too long, and there is little doubt that this speed could be improved on. Even so it is extremely good. The correct plugs for fast work in this engine are K.L.G. 396, which is a road racing type.

The gear change is light, but requires a little practice at getting the revs just right, before perfectly silent changes can be guaranteed, but we became quite at home with this gear box in a few hundred miles, and naturally any owner of one of these cars will be

so used to it, that it will never strike him as presenting any difficulty.

The steering and cornering are good, but it is very important to see that the tyre pressures are correctly adjusted to the load, as the steering is somewhat sensitive to this point. Personally, we should have preferred slightly more caster action, but it is impossible to please everyone in the matter of steering.

As can be seen from the illustrations, the chassis is very low, and stability is excellent, and as we were often in a considerable hurry, this was well tested.

The vacuum servo brakes are very powerful and light to operate, and will bring the car to rest from 40 m.p.h. in 65 ft. Adjustment is by independent wing nuts to each brake, as this firm in common with many others, hold that this is the only way to secure even braking, and also even wear on the linings. The only alternative is a very elaborate system of compensation using differentials, similar to that used on one very large and costly car to-day, but which is too cumbersome to be used on a 1½-litre car.

Altogether the supercharged Lea-Francis is a car for the man who wants something with a performance out of the ordinary which will also be thoroughly suitable for general use, and at £495 it presents excellent value.

INTERNATIONAL 500 MILES RACE.

FULL details of the regulations for the forthcoming International 500-Miles Race have now been issued, and several interesting features are included, particularly the system of handicap which will be employed.

Last year, the cars were handicapped purely on a class basis, the zero speed for each class being the existing record in that class; this year the unit worked on is the speed of the winning car of each class in last year's 500 Miles Race. Thus:—

1929 First in Class	Actual net time over fastest			Handicap	1930 Class	Handicap		
	h.	m.	s.			h.	m.	s.
Holbrook (Austin)	1	39	46	1 8 0	H.	1	39	33
Martin (Riley) ...	1	40	23	1 8 0	G.	1	0	20
Lord Howe (L. Francis) .....	1	2	23	0 55 0	F.	0	27	19
Headlam (Alfa Romeo) ...	0	35	11	0 47 0	E.	0	9	3
Field (Bugatti) ...	1	18	40	0 47 0	D.	0	9	3
Barclay (Bentley)	0	5	19	0 38 0	C.	0	0	0
Davis (Bentley)	Fastest			0 0 0	B.	0	0	0
No Finishers	—			0 0 0	A.	0	0	0

From the table it will be appreciated that each class

Continued at foot of next column.

is penalised on last year's handicap with the exception of the 749 c.c. Austin, which has the advantage of over 31½ minutes on its last year's handicap.

As was the case last year, the British Racing Drivers' Club is giving a bonus of £5 to every entrant whose car starts in the Race and completes one lap within the first ten laps of the Race at the qualifying speed of 80 m.p.h.

After careful consideration, the Committee of the B.R.D.C. decided not to impose any additional handicap upon the supercharged entries, as they were desirous not to take any step which might have the effect of dissuading fast cars from entering.



# EUROPEAN GRAND PRIX

## *Grand Slam for the Bugatti team in the Spa Race*

**I**N accordance with almost universal expectation, the official Bugatti team scored a complete victory in the seventh race for the European Grand Prix, which was run off on the famous Belgian road circuit at Spa on Sunday, 20th July. So sure in fact was Ettore Bugatti himself of the result that he decided the order in which his team should finish beforehand, and gave first place to his great champion, Louis Chiron. Actually however, Chiron suffered from plug trouble, and Bouriart, the second member of the team could only avoid winning by stopping just before the finishing line and letting Chiron catch up. This exhibition annoyed the crowd quite a bit, and we are inclined to agree that this sort of thing represents carrying the team spirit to the point of absurdity. However, even if Bouriart was the moral victor, he officially finished second behind Chiron, with their team-mate, Albert Divo, third. The veteran, Arthur Duray, was fourth on his little Ariès, and behind him came two Imperias with the elder Montier on one of his marvellous Fords, sandwiched in between them.

In accordance with the rules laid down by the A.I.A.C.R., the race was run on a limited fuel consumption basis, the cars being limited to 14 litres of standard fuel supplied by the Belgian Club and consisting of 70% petrol and 30% benzol per 100 kilometres, or rather over 20 m.p.g. The distance of the race was 40 laps of the difficult and sporting Spa circuit, or a total of about 373 miles.

It was rather surprising in view of the complete failure of the Automobile Club de France to collect any entries for its Grand Prix under similar rules, that as many as 15 cars presented themselves at the starting line. Only two teams, however, had been entered by their manufacturers, the Bugattis and the Imperias, the remainder being cars belonging to enthusiastic amateurs. The starters were as follows:—

- Imperia I (Zehender).
- Imperia II (Ledur).
- Imperia III (Michel Doré).
- Ariès (Arthur Duray).
- Ford I (Montier, Senior).
- Ford II (Montier, Junior).
- Bugatti I (Louis Chiron).
- Bugatti II (Bouriart).
- Bugatti III (Albert Divo).
- Georges Irat (Burie).
- Lombard (Gouvion).
- Peugeot (Stoffel).
- Bugatti (Cornet).
- Bugatti (Reinartz).
- Bugatti (Thirion).

The Bugattis were 2-litre machines fitted with superchargers, while the Imperias were of the 1800 c.c. 6-cylinder slide-valve engined type, which performed with such regularity in the recent Belgian 24-hour race. Arthur Duray, who belongs to that very select band of men who drove in the old town-to-town races and who are still driving, was running his famous 4-year-old,

4-cylinder 1100 c.c. Ariès, and the Fords were, of course, the remarkable machines which the Montier family have induced to go so quickly. The Georges Irat and the Lombard were more or less standard sports cars of 2 and 1 litre capacity respectively, while the Peugeot was the special 2½-litre cuff-valve car with which André Boillot so nearly won the French Grand Prix at le Mans last year.

As soon as the start was given, Chiron shot to the front, closely followed by his two team mates, with the rest of the field following as best they could. It was soon obvious, in fact, that the official Bugattis were so definitely the fastest cars on the course that their capture of the first three places could be taken for granted, and the interest centred on who would gain the next few positions. Actually Stoffel on the Peugeot was giving them the best run for their money followed by Reinartz (Bugatti) and Duray, surprisingly fast on his little Ariès. The Imperias were obviously not fast enough to threaten the leaders unless something very unexpected happened.

On the twelfth lap the first incident occurred to make the race exciting: Divo burst a tyre. Stoffel, who was awaiting his opportunity in fourth place, immediately moved up behind Bouriart, and the Bugatti team formation was broken. The rest continued except for Burie, whose Georges Irat after running well in seventh place was forced to retire. This let up Zehender on Imperia I, who thus encouraged, passed Duray and got into sixth place.

Then Chiron began to have trouble with his plugs. He came in and changed them, thus losing a minute and a half of his lead, and a few minutes later he was in again. Bouriart passed him, then Stoffel, and as the cars entered the last lap it looked as if the lone Peugeot was going to gain second place. But a fuel consumption race has many pitfalls, and 10 kilometres from the finish Stoffel ran out of petrol. Bouriart continued and just before the finishing line stopped to wait over a minute to let Chiron catch up.

The final order was as follows:—

1. Louis Chiron (Bugatti), 5h. 8m. 34s. (Average speed 72.4 m.p.h.).
2. Bouriart (Bugatti), 5h. 9m. 34s.
3. Albert Divo (Bugatti), 5h. 13m. 54s.
4. Arthur Duray (Ariès), 5h. 22m. 26s.
5. Zehender (Imperia), 5h. 25m. 19s.
6. Montier, Senior (Ford), 5h. 30m. 30s.
7. Ledur (Imperia), 5h. 41m. 47s.

Of the remaining cars Cornet and Thirion on Bugattis had fallen out on the 14th and 28th lap respectively. The Imperias had obviously been prepared for the race rather hurriedly, and all three suffered from overheating, causing stops for water, while Doré was forced to retire on the 29th lap. They made a good impression, however, and their performance in future races will be watched with interest. The limited fuel rule took its toll, for as well as Stoffel, Montier Junior (Ford), Reinartz (Bugatti) and Gouvion (Lombard) all ran out of petrol just before the end.



# A One-Make Meeting.

## Lagonda's Fete at Brooklands.

**G**IVEN the necessary organisation and support, a race meeting can be seen at its best when all the spectators have a personal interest in the cars which are running, and nowhere is this seen more clearly than at a "one-make" meeting at Brooklands. Such was the case on Saturday, 19th July, when the Lagonda Co. held their "fete."

The weather, at first, was not too promising, but this did not deter Lagonda owners from turning up, and a big crowd assembled.

The programme started before lunch with two events for trade entrants, followed by a convincing demonstration of the supercharged models, which lapped the track at high speed. Then came the Appearance Contest, which was afterwards followed by the Manchester 1-lap Handicap.

The next race was a two-lap Round-the-Mountain event, which was so well supported that it had to be run off in three heats. The cars in the first, included a snappy yellow and red semi-sports 2½-litre and a quick-looking 2-seater driven by Mr. Bowring, who was scratch. No. 41, the limit man, took good advantage of the start he was given, and contrived to keep a lead throughout the run. The ultimate winner, however, was Mr. Barnes, owner of a 2-litre and a notable headgear.

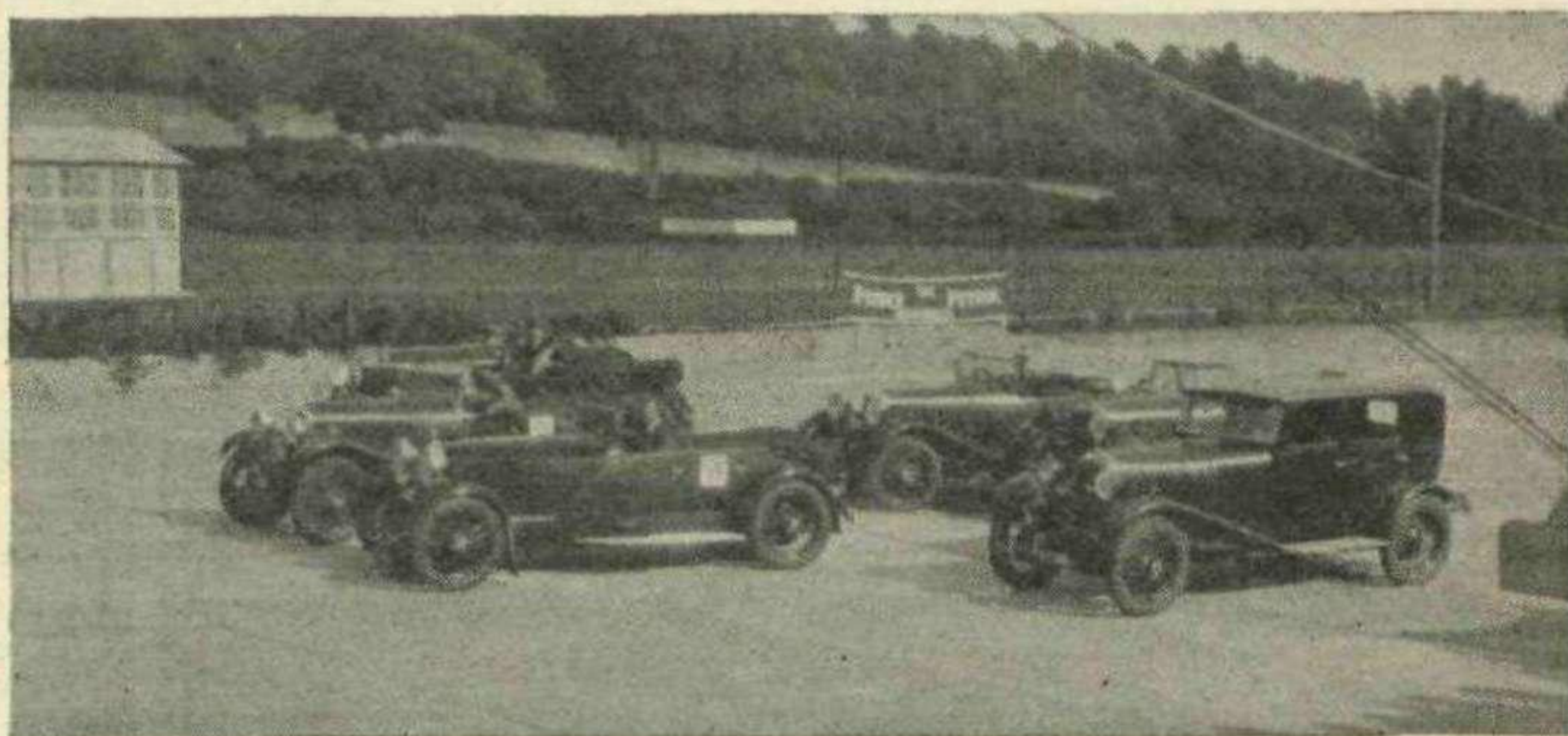
The ladies were now given a chance to show their mettle, and there was quite a good entry in their event—a 1-lap handicap affair. Mrs. Graham proved the winner.

The seventh item on the programme was a one-lap handicap race; this attracted a large number

of competitors, but it was rather marred by some hitch which entailed a long delay before the start of the first heat. However, once the cars were away, things became interesting. Lord de Clifford got home first in a 3-litre Special, in the first heat, while in heat 2 Mr. C. G. Flewitt secured premier place. In the last, a 2-litre Weymann got in first, but did not retain this place in the final, for Mr. Barnes' car once more pro-

speedily, keeping his foot well down, and was able to win his heat. By using the same he won the final.

The meeting finished with a "garaging" race (in which cars had to be backed between hurdles and then out again), and an obstacle race. Prizes were then presented by Mrs. Metcalfe, the wife of the Managing Director of Lagonda, Ltd., and this brought the gathering to a close. Mr. W. J. Barnes won the



*The Start of Bradford 1-lap Handicap.*

duced the goods.

The interest of spectators was being well held throughout the long series of events, and the Hammersmith Round-the-Mountain Handicap produced some exciting incidents at the Fork. In the second lap a three-litre tourer took the corner too fast and spun round, but the other cars were able to avoid it, and the driver was little disturbed, for he engaged his ratio as soon as he came to rest, and lost very little time. No. 3, a green two-seater on a two-litre chassis, was also in some trouble. L. McCardle, in a two-litre saloon, took the corner wide and

Aggregate Cup for the highest number of points.

Altogether the fete was a highly successful, and thoroughly cheerful affair, and the proceedings were greatly enlivened by a broadcast by Mr. Gillie Potter, the comedian. Results were as follow:—Two-lap handicap for trade and sales staff: 1, D. R. Sharman; 2, C. G. Edwards; 3, C. L. G. Wilkinson. Two-lap "Round-the-Mountain" handicap for trade and sales staff:—1, E. Grimaldi; 2, C. L. G. Wilkinson; 3, A. Graham. One-lap handicap:—1, W. T. Barnes; 2, J. A. Lloyd; 3, L. McCardle. Two-lap "Round-the-Mountain" handicap:—1, W. T. Barnes; 2, O. K. Marwick; 3, J. A. F. Dalgety. One-lap handicap for lady drivers:—1, Mrs. J. K. Graham; 2, Mrs. Gemmell; 3, Mrs. J. Cranmer. One-lap handicap:—1, W. T. Barnes; 2, A. D. Evans; 3, C. G. Flewitt. Two-lap "Round-the-Mountain" handicap:—1, L. McCardle; 2, C. G. Flewitt; 3, J. A. F. Dalgety. "Garaging" scratch race:—1, M. Kennerley; 2, E. H. Peak; 3, J. A. F. Dalgety. Obstacle race:—1, Lord de Clifford; 2, R. A. Waters; 3, L. McCardle.



*Competitors in 2-lap Round-the-Mountain Race.*



# Club News

## BERKHAMSTED & D.M.C.C.

The Midnight Social Run is to be held this year on the 16th of this month, starting at midnight from the Hunton Bridge Filling Station (far end of the Watford Bye-pass, Herts).

Any motorist is welcome to join the party, if they will be good enough to inform the Hon. Sec. beforehand.

Breakfast will be taken at Lulworth Cove, and after this several impromptu events, of a competitive nature, will be arranged. The party will return to London on the evening of Sunday, the 17th.

All communications to the Hon. Sec.: Mr. W. E. J. Kentish, "Broxbourne," Essex Road, Watford, Herts.

## ENFIELD AND D. M.C. AND C.C.

A week-end run to Devon is planned for August Bank Holiday week-end, starting at 3 p.m. on the Saturday.

Other August fixtures are the Captain's Run, on the 17th (10.30 a.m.), and a run to Clacton, on the 31st (10.30 a.m.).

## BRITISH TWO-STROKE CLUB.

The second annual Sporting Trial for the Scott Challenge Trophy and the

Shepherd Rose Bowl will take place on August 3rd, starting at 1 p.m., from The Licks, Otley, Yorkshire.

Mr. C. H. Wood, of the Scott Motor Cycle Co., Saltaire, has joined forces with Mr. T. G. Meeten, of Dorking, in the organization and running of this event, and full particulars can be obtained from either of these joint organizers.

The event proved the most popular of the Two-Stroke Club's programme last year, and for 1930 it has been decided to increase the number of observed sections and to decrease the number of close checks, which should have the effect of giving an ultra lightweight, well ridden, just as good an opportunity of winning the premier award as any other type. The marking is both on riding and on time, and a short time section will be used in the event of a tie.

The 1930 route will cover well nigh entirely new ground and will be even more interesting than last year's event, whilst the time section chosen is one in which the baby machine should stand an especially good chance owing to its ease of handling.

A southern party will leave Hatfield on Saturday evening, August 2nd, for the run up to Yorkshire, where special

reserved accommodation is available, the return journey being made on August Monday.

Entries should be sent to Mr. T. G. Meeten, care of Meeten Motors, 41, South Street, Dorking, Surrey.

## KENT M.C.

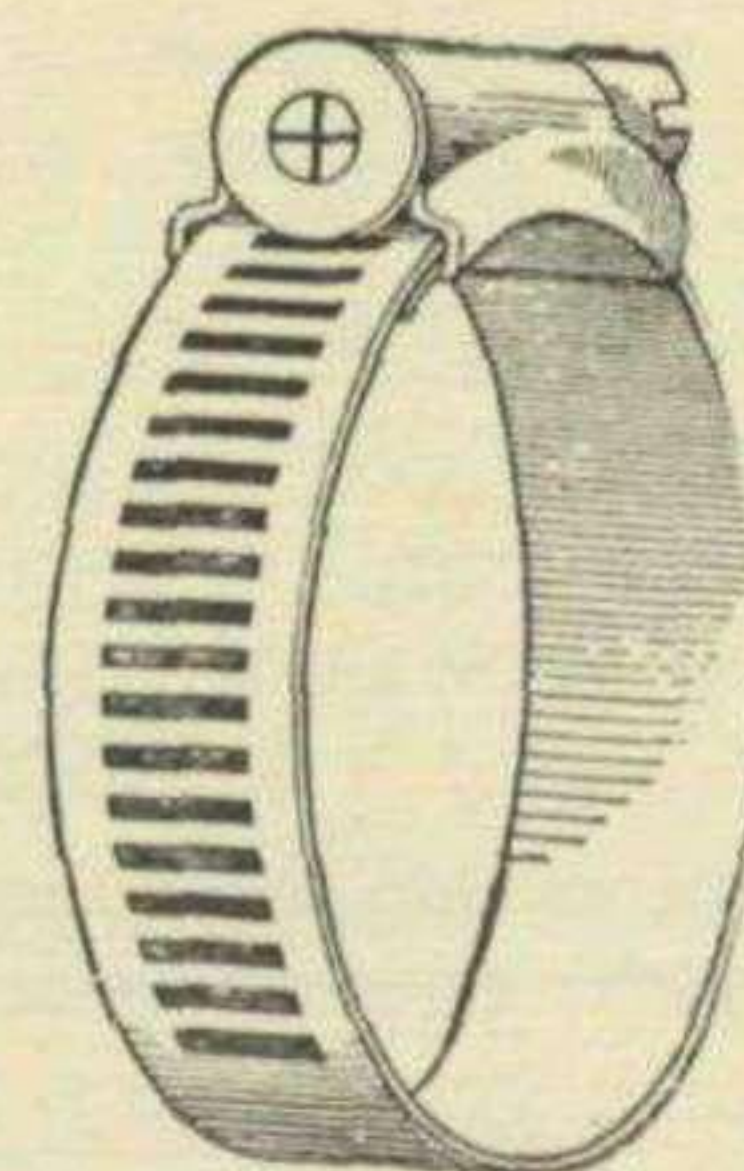
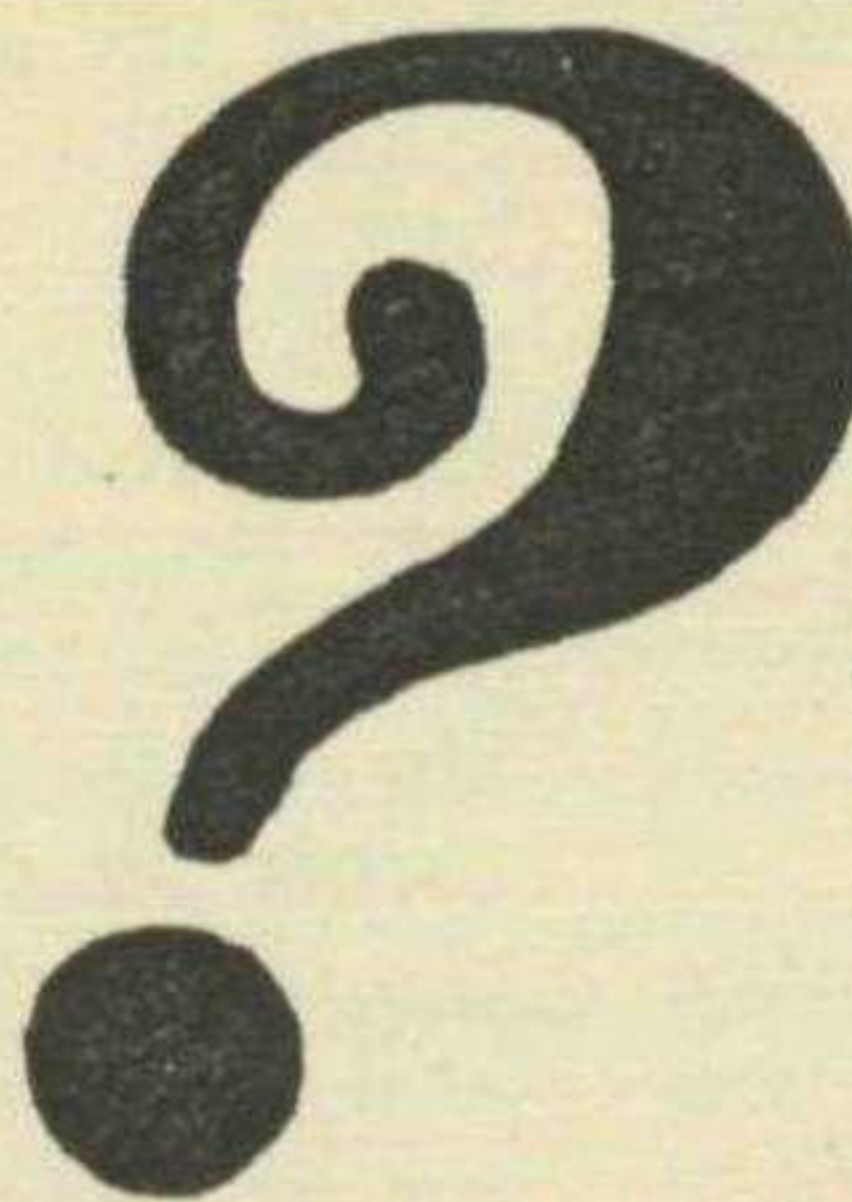
Results of the recent touring trial have now been announced and are as under:— Martin Walter Trophy and Replica, P. R. Guest (New Imperial); Walter Geering Trophy and Replica, F. G. Thompson (Calthorpe); Gold Centre Medal, T. E. Webb (Rudge); Silver Medal, A. A. Webb (Ariel); Bronze Medal, G. Oakley (Velocette); P. and H. Spotlight, F. G. Thompson.

## TOTTENHAM AND D.M.C.C.

We are informed that this club has made application to the A.-C.U. for affiliation and that a few new members are required. At present only social events are catered for, but in the near future, upon reorganization, there will be fixtures to attract the competition rider.

Particulars of the club are obtainable from the hon. secretary, Mr. R. Twiss, 51, Brighton Road, Stoke Newington.

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# THE GRAND PRIX DE LA MARNE

## *Another Tussle for the Bugattisti.*

### RESULT.

1. René Dreyfus (2-litre Bugatti), 2h. 49m. 27 3-5s.  
Average speed 88.5 m.p.h.
2. Lehoux (2-litre Bugatti), 2h. 51m. 30 1-5s.
3. Michel Doré (1500 c.c. Bugatti), 3h. 6m. 14 1-5s.  
(Winner of 1500 c.c. class of 80.5 m.p.h.).
4. Faggioli (2-litre Bugatti).
5. Etancelin (2-litre Bugatti).

IT must be great fun to be the owner of a fast Bugatti in France. You enter it for every one of the provincial Grands Prix and when you get to the start there are all your old rivals ready to do battle. If you think that so-and-so beat you in one race because you had a bit of real bad luck—well, you can always have another scrap with him in the next.

Thus it was that at the start of the sixth Grand Prix de la Marne on 29th June all the usual "Bug." champions were present. Chiron, Dreyfus, Etancelin, Zanelli, Lehoux, Faggioli and Miquel were there with their 2-litre racers, and in the 1500 c.c. class were Max Fourny, Michel Doré, Auber, de Bondelli, Longueville, Velitchkovich, Tédaldi, Gaupillat, Delbos and Brunier, with Casali on a La Perle and Scaron on his Amilcar.

The race was run on a road-circuit near Rheims, and judging by the number of spectators, the organisers could congratulate themselves on a great success. At 2.45 p.m. the signal to start was given, and with a thunderous roar the whole nineteen starters got away at once—a massed start of this number of real racing cars is a fairly rare sight these days. They sorted themselves out on the circuit, and the first to come past at the end of the first lap was the Algerian champion, Lehoux, hotly pursued by Etancelin, Dreyfus, Miquel, Zanelli, Chiron, Doré, Fourny and the rest of the field. Louis Chiron did not seem particularly happy, and at the end of the second lap he came in for what proved to be the first of several pit stops.

This left the field open for a glorious dog-fight between Lehoux and Etancelin, who kept flashing by hardly a length apart. On the fifth lap, the latter bettered an average of 90 m.p.h. and got past Lehoux, but Dreyfus was going like the wind now, and on the seventh lap he passed both of them and took the lead.

On the tenth lap Lehoux did not appear and it was reported that he had broken down at the village of Tillois, and about the same time Gaupillat retired when running fourth in the 1500 c.c. class, and Chiron came in for his sixth stop. Two laps later Dreyfus broke the lap record at over 91 m.p.h., but he was still hotly pursued by Etancelin, until on the next lap (the 13th, and apparently unlucky for him) he skidded on the hot and sticky tar at the Garenne corner, hit a tree and broke his near-side back wheel. In spite of the terrific heat Etancelin at once trotted back to his pit, a matter of 2½ miles, fetched a wheel and returned to his car.

This incident, however, let Zanelli, who had passed Lehoux, up into second place, with Miquel fourth. Velitchkovich retired shortly afterwards with a broken petrol pipe, and he was quickly followed by Auber, who was suffering from a badly burnt leg. Etancelin at last came past the tribunes again, and was cheered lustily, but Brunier turned up on foot having come across the fields after abandoning his car on the other side of the course. The casualties among the smaller cars were also increased by the retirement of Longueville.

Shortly before half distance Zanelli succeeded in passing Lehoux and got into second place, and a few laps later Delbos passed Max Fourny and gained second place in the 1500 c.c. class behind Michel Doré, who had led it throughout. Neither of these two, however, was destined to be lucky, for on the 41st lap, Zanelli stopped at his pit and after some attempts to get going again finally retired; and soon afterwards Delbos ran off the road on the other side of the circuit and his Bugatti was put out of it; the driver fortunately getting off without injury. At about the same time poor Chiron, whose pit stops had been legion, finally withdrew.

Towards the end, Lehoux began to catch up a little on Dreyfus, but the latter's lead was never really in danger, and at half-past five he crossed the finishing line, winner of the Sixth Grand Prix de la Marne. He was promptly embraced by Friedrick, who will be remembered as a Bugatti driver in the post-war Grands Prix, and who had prepared the winner's car for the event. Some two minutes later Lehoux finished, followed by Michel Doré, who had driven a marvellously regular race, and the remaining competitors were then stopped, as the large crowd showed signs of getting out of hand and invading the course. Thus ended a most successful race—and, well, Rheims, the capital of Champagne land is not a bad place in which to celebrate!

### NEXT MONDAY AT BROOKLANDS.

THE August Bank Holiday Meeting at Brooklands is always one of the most popular features of the year's British motor racing, and a more than usually attractive programme has been devised for this year's fixtures on Monday next, the 4th.

In addition to three Short and three Long Handicaps, there are to be two Mountain Races and the Gold Star Race over a 25 miles' course. Entrants for the latter event must have recorded officially timed laps at a speed in excess of 100 m.p.h.

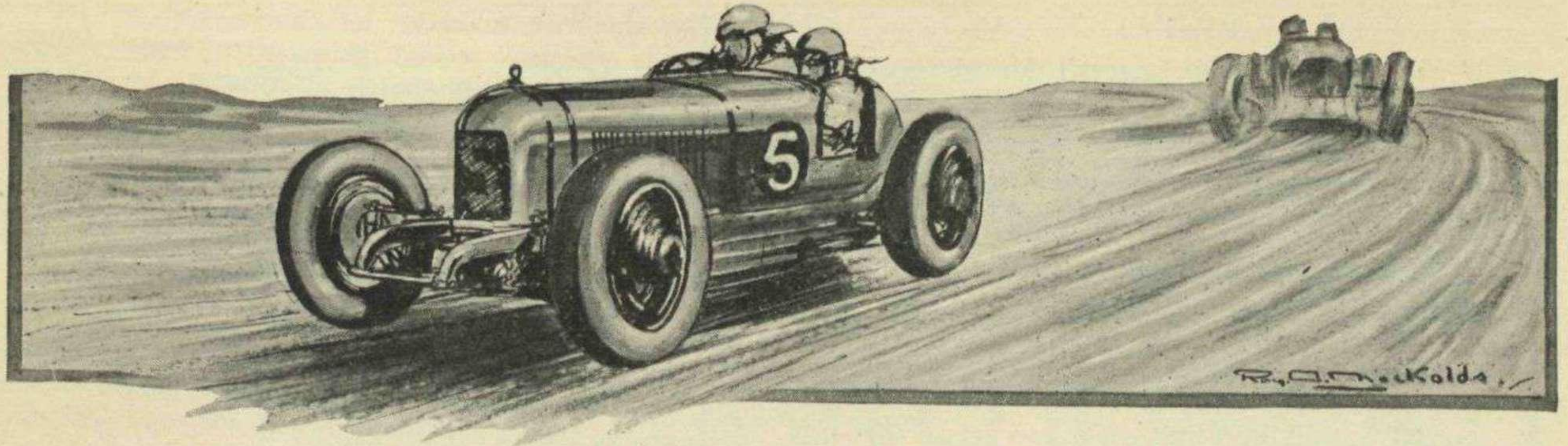
Further to the foregoing events there is to be a novelty in the form of a One Lap Old Crocks' Race over the course used in the J.C.C. Double Twelve Race. At the time of writing, no fewer than 28 entries have been received for this interesting event.

A welcome change has been made in the prices to be charged to the public at this meeting, in that admission to the public enclosure will be 2s. 6d. instead of 5s. as previously, and the charge for garaging cars likewise will be reduced from 5s. to 2s. 6d.



# GREAT RACING MARQUES

## NAPIER



By E. K. H. KARSLAKE.

**O**WING to the fact that road racing in England has never been allowed, and that long-distance races anywhere in the British Isles have been few and far between, it is not surprising that comparatively few English manufacturers have ever seriously gone in for this form of activity.

For a long period we looked to Sunbeam alone to uphold the national prestige; and in the earlier days it was the Napier which was the great English representative in the big races.

In the year 1899 an argument between M. Charron and Mr. Winton as to the respective merits of French and American cars had resulted in Mr. Gordon Bennet presenting a cup to be competed for by cars of all nationalities. The first race which took place in 1900 was won in convincing fashion by Charron on a 24 h.p. Panhard, and indeed the car of his own manufacture which Mr. Winton entered only boasted a single-cylinder engine and tiller-steering. The race, however, had aroused interest in other countries besides France and America, and England determined to be represented in the second race which was run in 1901 from Paris to Bordeaux.

### 50 h.p. in 1901.

The Napier company of Acton in fact set about building a set of four cars for the race, although only three from each country were actually allowed to compete. Of these, however, only one was ready in time, but this car caused a general excitement by reason of its great size and weight. The engine, which was rated at 50 h.p. was one of the biggest which had ever been put into a car, and had four cylinders of 165.1 x 190.5 mms. bore and stroke, (16,257 c.c.), dimensions which look less awkward as 6½ x 7½ inches, and which are interesting in showing that English manufacturers had not then begun to think in millimetres. The car had coil ignition, an all metal clutch and chain drive; unfortunately, however, the rules stipulated that all the items of a car's equipment should be made in its country of origin, and as no English tyres could be found for so heavy a

car, the Napier, although it started, had to be disqualified from the Gordon Bennet race.

Though prevented from appearing officially in this event, however, the first Napier racing car made its début later in the year. The big race of 1901 was run from Paris to Berlin, a distance of 690 miles and for this event the Napier was entered, with S. F. Edge as its driver. Edge started off from Champigny on the outskirts of Paris in fine style and soon overtook many of the French competitors, but before he reached the frontier he was put out of the race with a broken spring.

An entirely new Napier was built for the Gordon Bennet race of 1902, which as a Panhard had won again in 1901, was run by France. The engine now had overhead automatic inlet valves, with side exhaust valves and the cylinders were made of aluminium with liners. The frame was of ash, strengthened by steel plates, and the car had a 3-speed gearbox and propeller-shaft drive.

France was represented that year by a Panhard, a Mors and a C.G.V., built by Charron, Griadot and Voigt, and her only challenger was England with a Wolseley and the Napier, which was again driven by S. F. Edge. As the number of competitors was small it was decided to combine the contest with the Paris-Vienna race, but the Gordon Bennet competitors only had to cover the 385 odd miles from Paris to Innsbruck. By the time Belfort was reached, however, René de Knyff on the Panhard and S. F. Edge were the only Gordon Bennet competitors left in the race: and while descending the Arlberg Pass, de Knyff too had to retire with a broken differential. Edge, however, reached Innsbruck in safety, and thus the cup was won for England and lost to France for the first time since the inception of the race.

As the rules stated that the race should be run by the country which held the cup, England was faced with the problem of organising the event in 1903. Luckily a course was found in Ireland near Carlow, and it was here that the 1903 race was run.

The fact that the cup had not been won by France in 1902 gave additional interest to the race, and challenges were sent to the English club by Germany and



## GREAT RACING MARQUES—continued.

the United States as well of course as France. The English team was this time composed of three Napiers, driven by S. F. Edge, Charles Jarrott and J. W. Stocks; but the triumph of the year before was not to be repeated. The steering on Jarrott's car broke while he was travelling at 60 m.p.h. and the car turned over; while the race was finally won by Jenatzy on a Mercedes after a terrific struggle with de Knyff on the Panhard.

Owing to Jenatzy's win, the race in 1904 was run in Germany; but as there was now keen competition to represent England in the race, the R.A.C. had to hold an eliminating test in the Isle of Man. This took the form of a duration race of eight hours followed by a speed test, and for this five Napiers were entered with S. F. Edge, Clifford Earp, J. R. Hargreaves, Mark Mayhew, and J. W. Stocks as their drivers. In the first part of the event, D. F. Edge secured a place in the team without any doubt; but the race for the last place was so

closely fought out that the committee were not certain whether they should choose Jarrott's Wolseley or Earp's Napier. During the subsequent speed trial, however, the latter crashed, and Edge was therefore left alone to carry the Napier colours in the race in Germany. He was not destined to be smiled upon by fortune however, for after covering three rounds of the Saalberg circuit, he was forced to retire.

The next year a Napier was again a member of the British team for the Gordon Bennet race, which this year as a result of Théry's win with the Richard-Brasier in 1904, was run over the Auvergne circuit in France. The 80 h.p. 6-cylinder Napier of 1905 was in many respects a very advanced car for its date. It was very low built, and the tubes of the radiator which were ungilled, ran down each side of the bonnet and met in a point at the front, and as something of an innovation for a powerful racing car, it had wire wheels. This year the car was driven by Cecil Earp, which was a fitting recompense for his hard luck in the Isle of Man in 1904.

The race was over a distance of 450 miles, four rounds of the circuit near Clermont-Ferrand, and Franceis as the holders of the cup, had received challenges from five countries, England, Germany, Austria, Italy and America. Earp started off in fine style, and finished the first circuit in sixth place. Then, however, his troubles began; first of all the petrol tank, which was of the bolster type set across the car at the back, came adrift and knocked a hole in itself, so that the unfortunate

driver was forced to patch it up and buy some more fuel en route. As a result of this, by half distance he had fallen to thirteenth place. This trouble over, however, his seat came adrift also and he was forced to stop and secure that. In spite of this, by the end of the third round he had climbed to fifth place, and finally finished ninth, having averaged 40.3 m.p.h., 8 m.p.h. slower than the winner.

This was the last of the Gordon Bennet races, and

Napier thereafter decided to give up participating in the continental big events. The 1905 racer, however, put up several records, and covered half a mile at 88.2 m.p.h.

During this year (1905) there was run the first Tourist Trophy race in the Isle of Man, the event being for ordinary touring cars limited to a fuel consumption of 22½ m.p.g., this allowance being supposed to be equivalent to 25 m.p.g. on ordinary main roads. For this event two standard 18 h.p. Napiers were entered, the cars hav-

ing 4-cylinder engines of 90 x 108 mm. bore and stroke (2,607 c.c.), which developed their power at 1200 r.p.m. and had high-tension single coil ignition. Transmission was by a 4-speed gearbox and chain final drive, and the cars were driven in the race by Clifford Earp and F. G. Cundy. Though neither of them were ever in the first flight of the race, both cars completed the course and finished tenth and fifteenth respectively, Clifford Earp calculating things to a nicety, as when he finished his petrol tank was practically bone dry.

When in 1906 the Gordon Bennet Cup race was replaced by the Grand Prix, Napiers decided that they would retire from this form of competition. The next year however they had an opportunity to add to their laurels in an entirely novel manner.

**Edge's Famous Record.**

It was S. F. Edge who had the happy idea that he would prove to the large number of people who were sceptical, that it was possible to travel at 60 m.p.h. for 24 hours in a motor car. Brooklands had lately been completed, and it was there consequently that the attempt was to be made by three Napiers, one of which was driven by Edge himself throughout, while the others were handled by men who took three hour spells at a time. The Napiers used were 6-cylinder machines having a bore and stroke of 127 x 102 mm. (5,170 c.c.), and soon after they started it was apparent that the sceptics were likely to be confounded. As a matter of fact all



An early Napier, one of the team of three which ran in the Gordon Bennet Race of 1903.



*GREAT RACING. MARQUES—continued.*

three cars averaged well over 60 m.p.h. for the full 24 hours, and Edge, driving himself the whole time, actually covered more than 1,581 miles, thus averaging over 65 m.p.h. It was a really wonderful record, and one which was destined to remain unbroken for many years.

During the course of this run S. F. Edge incidentally captured the hour record, having covered 70 miles 130 yards during one of the 24 hours, and Napier thus held another highly coveted record. The same year, however, this record was beaten by Clifford Earp on a Thames car, but in 1908 F. Newton succeeded in recapturing the record for Napier by covering 85 miles 555 yards in the hour, a truly remarkable performance for 22 years ago.

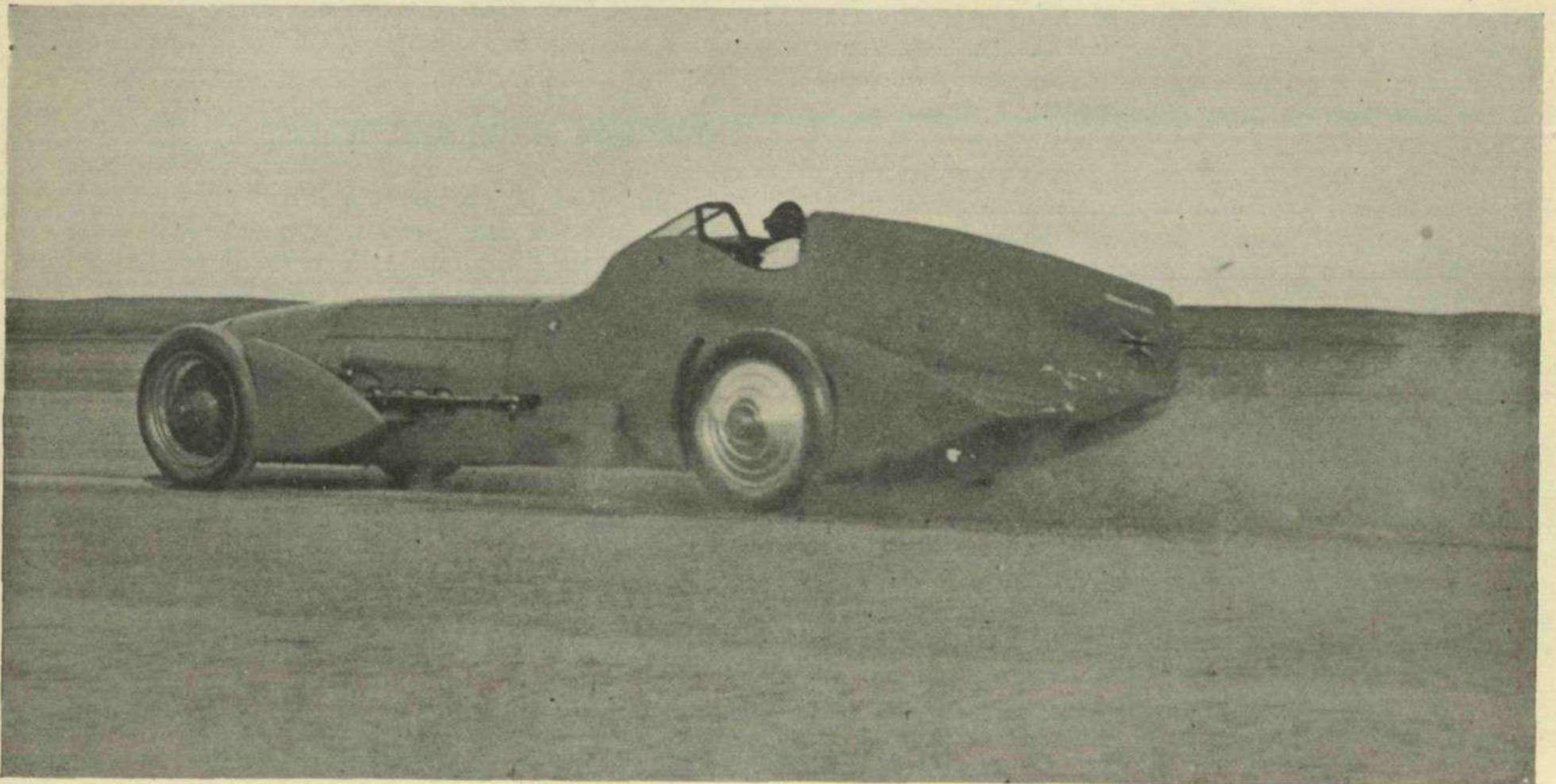
From this date onwards there followed a long period when Napier cars were absent from the great competitions, although various racers of the marque were well-known at Brooklands in pre-war days. During the war Napiers became famous for their aero engines, and a few years after its end the firm gave up the manufacture of motor cars altogether in order to devote their attention to this new field. It seemed in fact that the days of Napier racing cars had gone for ever. But as an aero engine there had been developed the famous Napier "Lion" unit, a broad-arrow 12-cylinder of 23 litres capacity, with a stated horse-power of 450 h.p., and it was one of these engines which Malcolm Campbell decided to use when he was planning a special car for record-breaking in 1926. The machine was finally built, and the Napier engine used was made to develop over 500 h.p. The Napier-Campbell was then taken to Pendine in Carmarthenshire late in 1926, and after several unsuccessful attempts Campbell attained his objective on 4th February, 1927. On that day in fact the Napier-Campbell set up a record for the kilometre at 174.883 and for the mile at 174.223 m.p.h. Thus

to Napier belonged the honour of propelling a car faster than any had travelled before.

The record, however, was wrested from Campbell by the 1,000 h.p. Sunbeam, but nothing daunted the latter decided in 1928 that he would set out for it again. The performance of the Sunbeam at Daytona had shown unmistakably that there was no stretch of sand in England long enough to allow of the terrific speed necessary to break the new record being attained, and early in 1928 the car was shipped to America for a new attempt to be made. For this occasion the car was fitted with an entirely new streamline body of special design and the radiator was no longer in front but divided into two parts, one on each side of the car.

As soon as the Napier-Campbell got to Daytona it proceeded to show that it was terrifically fast, and finally on 20th February, 1928, Campbell succeeded in breaking the world's record for the mile, his mean speed being 206.956 m.p.h.

Campbell's gallant attempts to regain the record at Verneuk Pan in 1929 after it had been lost to the Americans are still fresh in everyone's memory. But there could be few more fitting times than the present to mention the fact that as well as holding the world's air speed record, Napier engines have also helped that great driver whose last record ended so tragically, to travel faster than any other man on land. On his "Golden Arrow" racer powered with two Napier Lion engines Sir Henry Segrave set up the world's land speed record at 231.3 m.p.h., With his first motor boat, "Miss England I.," which was, of course, Napier-engined, he attained a speed at Venice which was within a fraction of a mile per hour of the world's record. Thus has Napier shown the world that in speed in every element, Britain is supreme.



*Campbell's Famous Napier-Engined "Bluebird."*

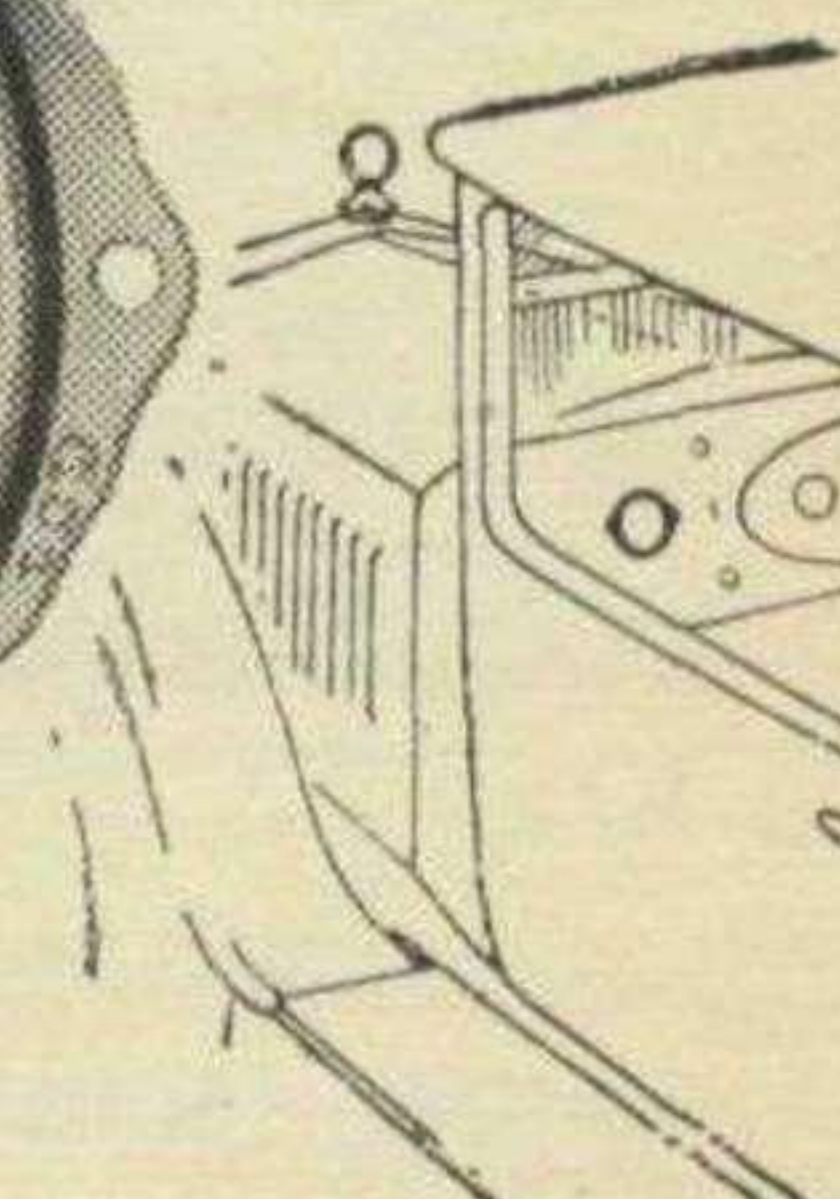
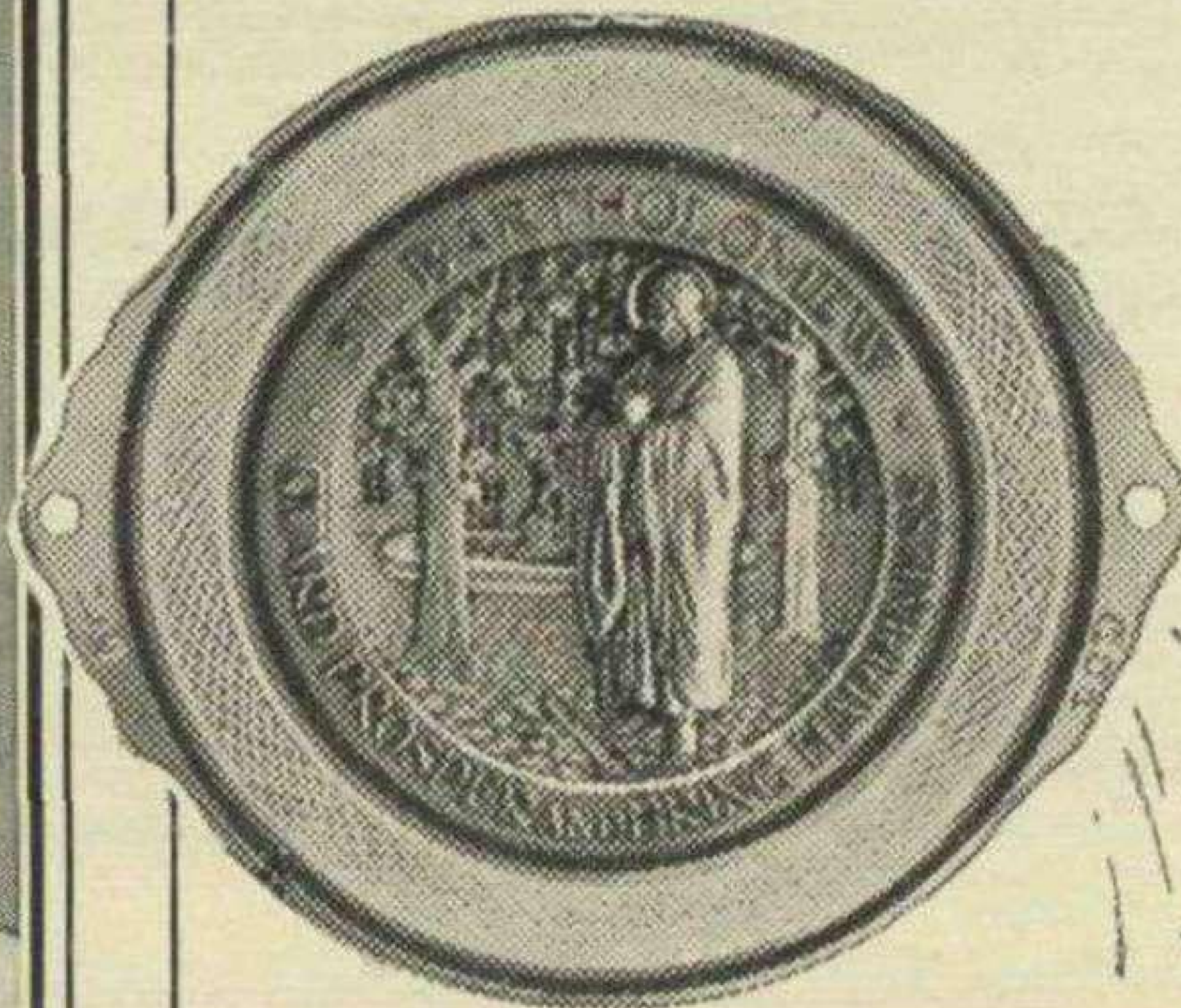
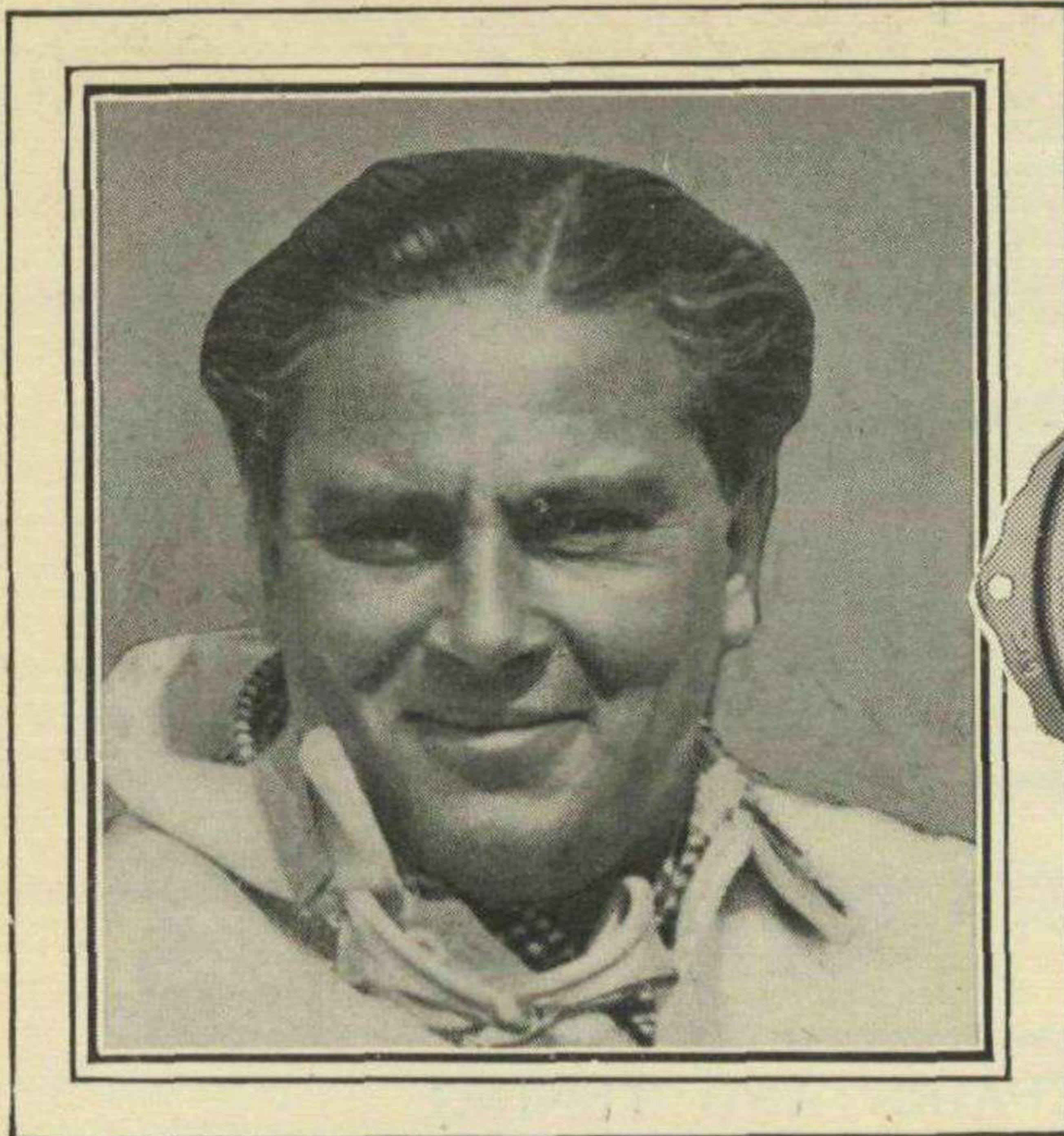


# CAPT! WOLF BARNATO

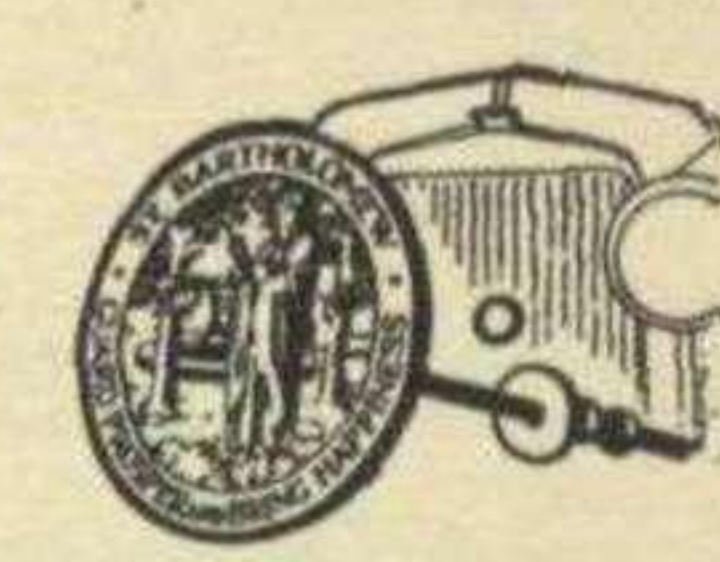
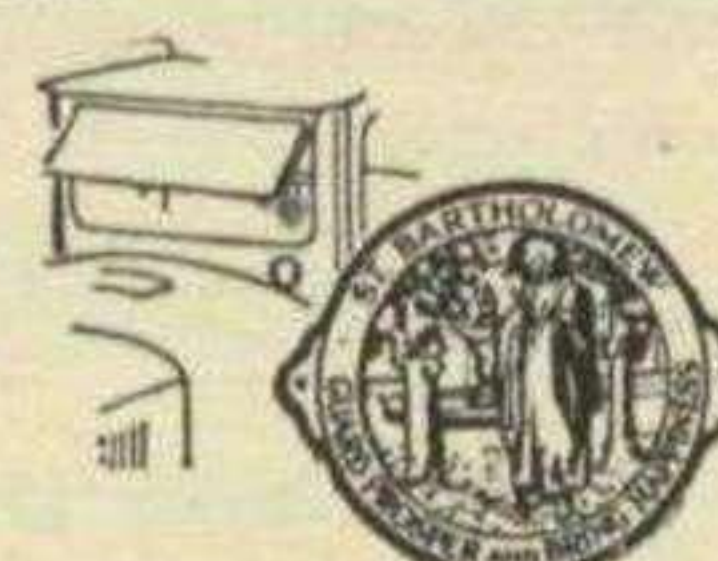
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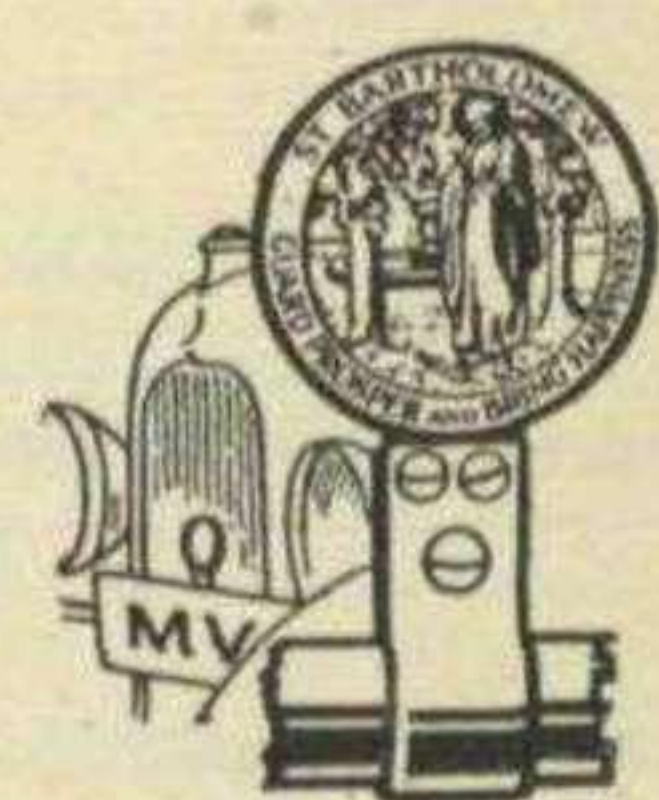
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3rd " 36th " "  
3rd " 38th " "  
2nd " 42nd " "  
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3rd " 35th " "  
3rd " 36th " "  
3rd " 49th 75 " "  
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2 Firsts.  
Fastest Time of Day.

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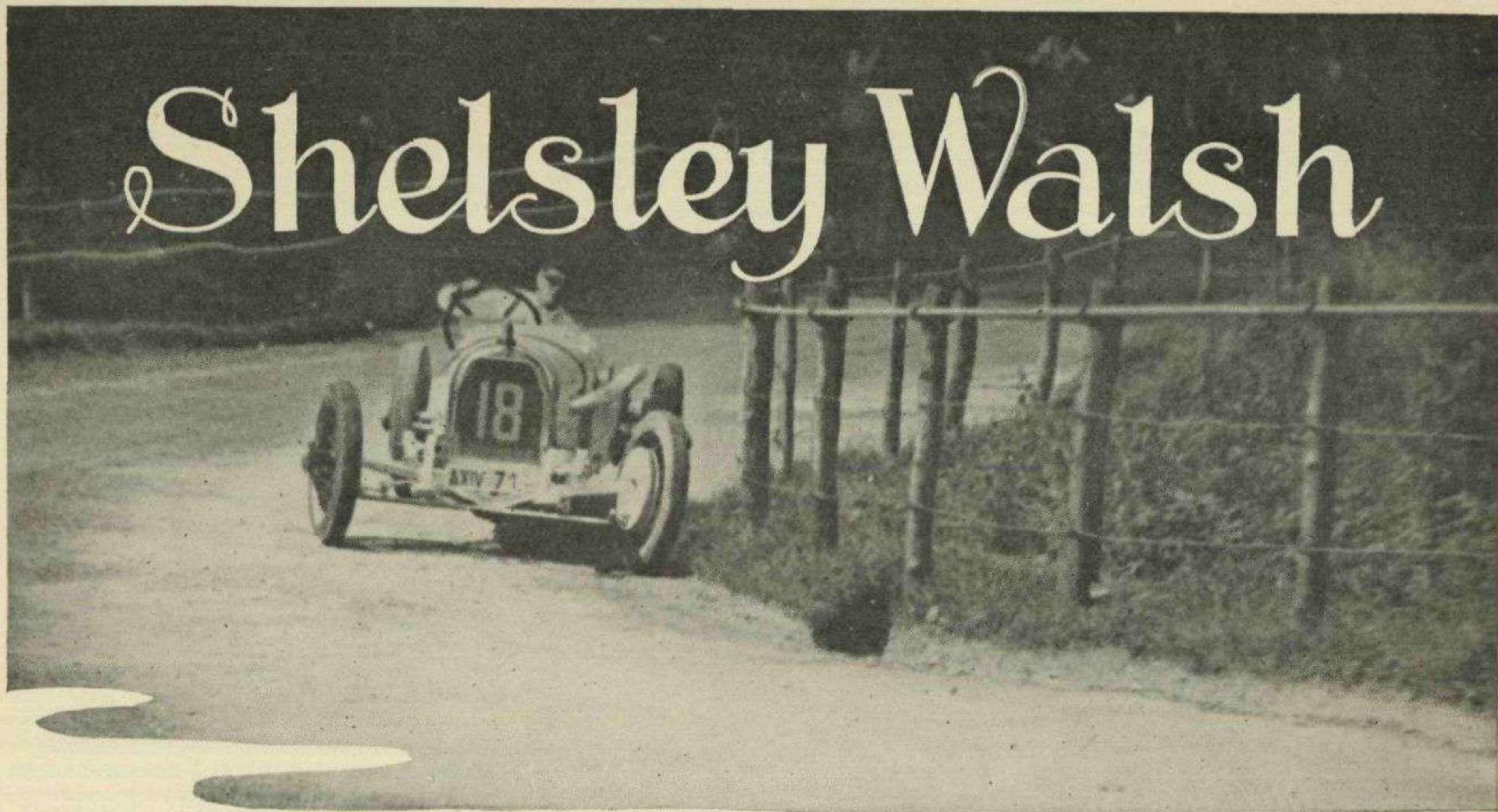
*Assuring you of our services at all times.*

*Yours faithfully,*

Director.



# Shelsley Walsh



*Von Stuck, the Austrian champion negotiating the bend in magnificent style.*

NO more delightful setting for an afternoon's sport could be imagined than the wooded banks of the famous Worcestershire hill where, on July 12th, the clock seemed to be set back several years, to the times when these events were a weekly occurrence in the season. Now only Shelsley Walsh is left, but there we recaptured some of the atmosphere of the days when Kop, Aston Clinton, South Harting, and the rest, were names to conjure with.

Again, our one remaining hill climb has risen to the dignity of being one of the series for the Championship of Europe, and for this year's open event the entry contained many famous names from the Continent, and a good afternoon's sport was promised. Nor were we disappointed. On the contrary, every feature of the event exceeded our expectations, and the Midland Automobile Club, to whose magnificent organisation the success of the event was so largely due are to be heartily congratulated on their efforts.

The weather could not have been more favourable, and it was indeed a gay scene as the thousands of spectators swarmed over the natural grandstands to take their positions for the opening of the proceedings.

Excellent loud speaker arrangements had been made, and right up the hill could be heard the remarkably clear and interesting remarks of the announcer, blending with the intermittent roar of engines on the starting line as the drivers anxiously endeavoured to avoid oiled plugs while awaiting the starting signal.

It was typical of the whole event that sharp at 1.30 p.m. came the announcement that all was now ready, and the ruling was "ladies first."

The Hon. Dorothy Paget, driving a Mercedes, was the first to the starting line, but did not make a very good start, and gave place to Mrs. Hall, who brought her 4½-litre Bentley up in good style, while the Hon. Dorothy Paget climbed later on, but was not very fast. There were some good climbs by the ladies, but far and away the best of them was Mrs. T. H. Wisdom, who handled her neat black Frazer-Nash like a veteran, and shot up the hill in 53½ secs., thus winning the M.A.C. Ladies' Cup.

After the ladies came the "babies," consisting almost entirely of supercharged Austins (and very snappy too). W. E. Harker cornered with nice judgment, and his time was 51.6 secs., which won him the 850 c.c. racing class.

Then followed the 1,100 c.c. and 1,500 c.c. classes, and with them a solution of the problem,—where did all the old racing G.N.'s get to? Here they were in various thinly disguised forms, mostly with their (more or less) original twin-cylinder motors, with chain drive to everything possible and a note like a battery of machine guns. But they went! The fastest was the old Avon J.A.P. which the writer last saw roaring round Brooklands with P. Brewster, of Zenith and Matchless fame, at the wheel. Now, in the hands of R. T. Horton, it proceeded to show that the G.N. designers knew what they were at when it came to making chassis for hill climbs. In the same class came sundry other devices of similar origin, and the first three places in this class fell to them. The Rileys were good and neat, and cleaned up the sports car class. The Avon J.A.P. on its second run improved its tune, but even so it had only

the narrowest margin over the second and third.

If Archie Nash was there, what memories must have been stirred by the sight (and sound) of these ghosts of the past returning to the scenes of their old victories, and what is more, remaining victors to-day.

However, although these were good, what came next was better still. Davenport's "Spider" is the same thing again, only more so. In other words, its two cylinders total 1,500 c.c. in place of the original 1,100 c.c. which this type of vehicle used to have. Most of this model dates back a decade, but to see it climb Shelsley Walsh you might not easily believe it.

Three years in succession, 1926, 1927, and 1928, he broke the record for the hill, and then, last year, it fell to Raymond Mays on the Vauxhall-Villiers. This year he was out for blood, and as he roared up the lower slopes of the hill, it seemed hardly possible that a twin could "rev" so fast. Right close to the S-bend it roared, then cut out and swept round the bend in a perfectly judged slide, and away to the summit. 44½ secs.—a whole second inside Raymond May's record.

There followed a selection of Bugattis, some fast, some very fast, but none could approach the fastest "1500." Second in this class was another resurrected G.N., the Becke special, driven very ably by A. W. van der Becke. This, however, had departed considerably from standard practice, and had a four cylinder supercharged engine, and on his second run he managed the remarkable time of 47½ secs.

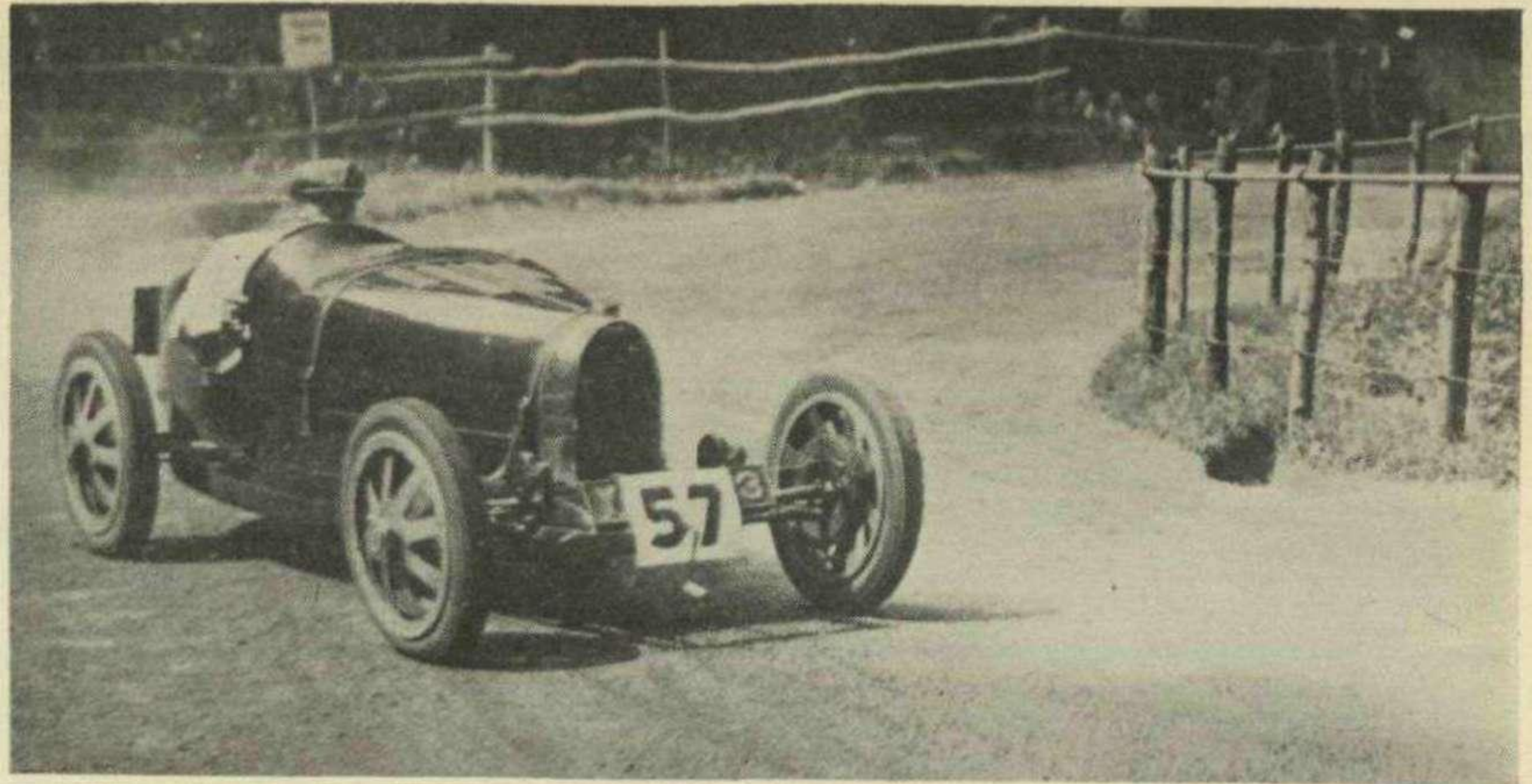
Newsome's Lea-Francis was particularly good, as was also T. H. Wisdom (Frazer-Nash). Phillips (Bugatti) was



wild in the extreme on the bends, and swung from side to side in a sickening manner. However, he got away with it and made a fairly fast climb, but it was noticeable that he was very much more cautious on his second run.

Then came the announcement that Von Stuck, the Austrian champion, was about to leave the starting line. His getaway was terrific, and the speed of the car on the lower slopes of the hill made even the most hardened spectators sit up and take very special notice. The car was remarkably steady, and Von Stuck's cornering on the famous S-bend was a model of neatness. One of the most noticeable things about his performance was the terrific acceleration of the Austro-Daimler between the 2 curves of the S. Whereas, most cars which took the first corner fast only *held* their speed up to the second, Von Stuck simply leapt forward and had to brake hard for the second turn. Everyone expected a good time, but when it was announced that he had taken only 42  $\frac{4}{5}$  secs. for the climb, a burst of cheering greeted the result. Three whole seconds inside Raymond May's record of last year, and two seconds inside Davenport's time accomplished a few minutes earlier!

The next climb of importance was that of the 38-250 h.p. Mercedes driven by the famous Caracciola. It seemed incredible that this little, low, handy car



Winner of the 2-litre class. Spottiswood (Bugatti).

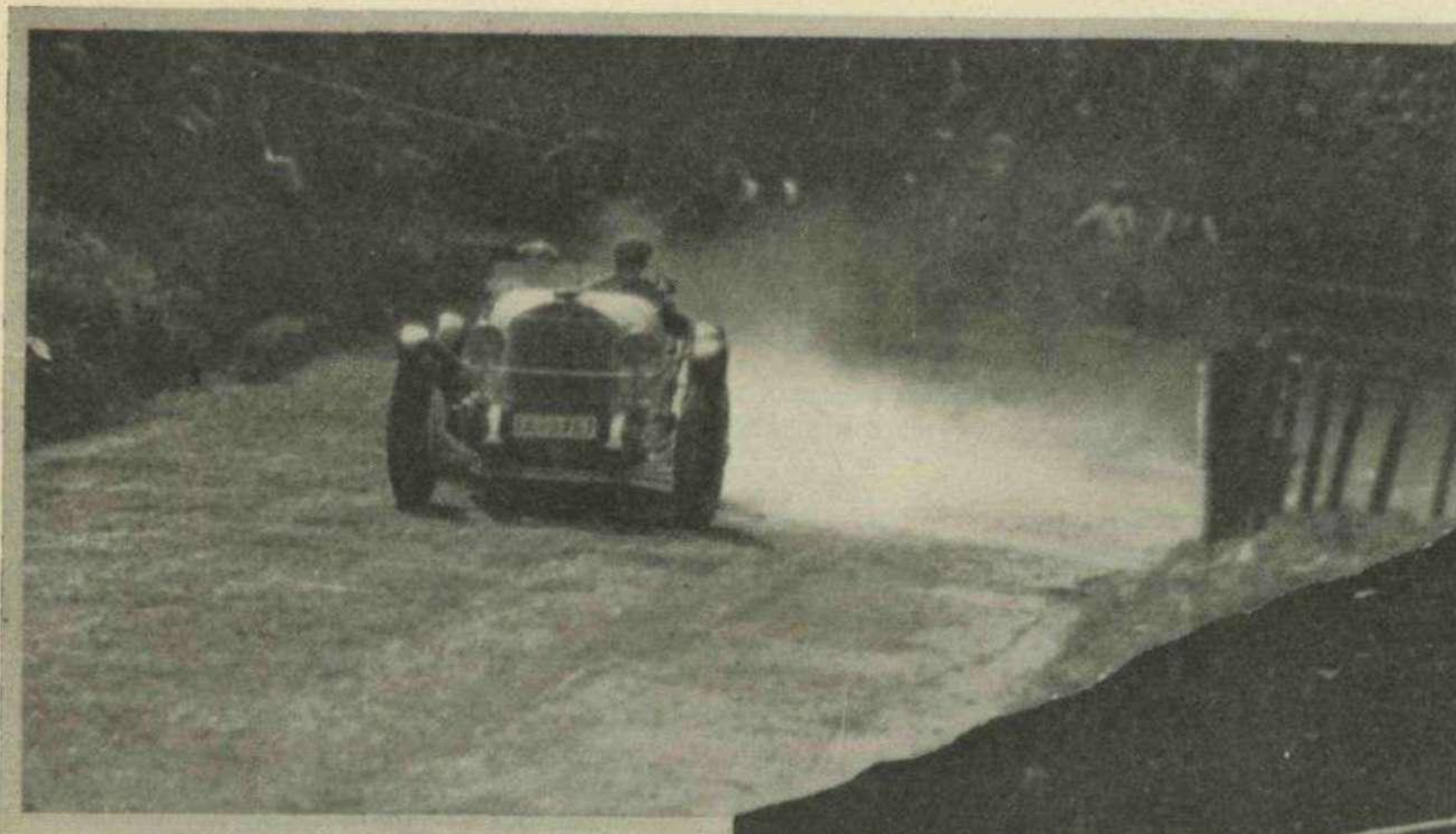
Among such a collection of racers some of the more standard cars were liable to be overlooked, but some of their climbs were very good in a more sober way.

The Invictas showed up well for acceleration, while the M.G. Sixes were particularly impressive, by reason of their steadiness on the corners, and the effortless, unfaltering purr of their engines. Another performer, who by reason of his accurate driving is always faster than he

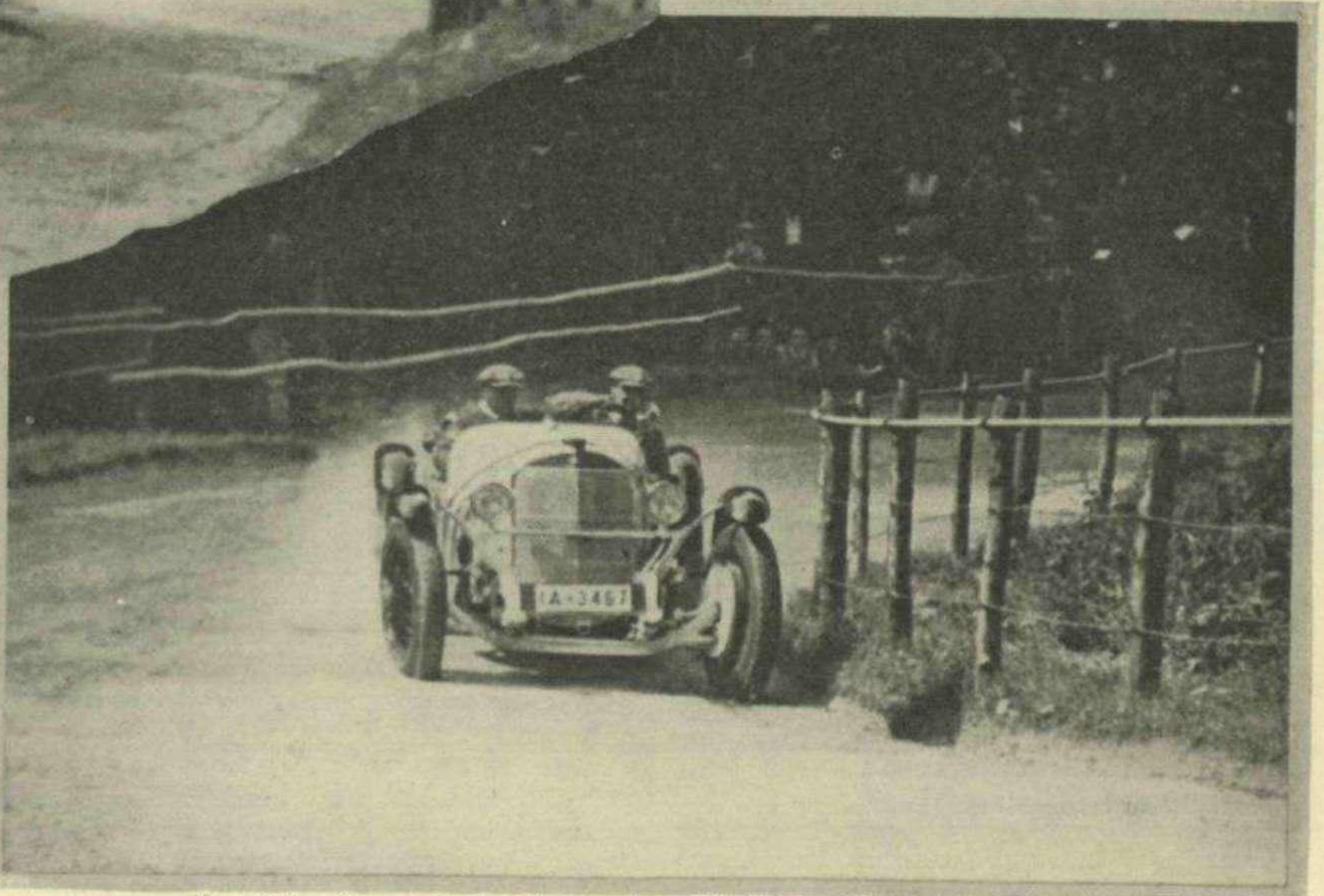
looks, was R. F. Oats on the 2-litre super-charged O.M.

All those who had beaten 60 seconds on their first run, and those 850 c.c. cars which had beaten 65 secs., were then started on their second climbs. As was to be expected, they were out to improve their times, and things began to happen.

Harker, whose Austin had made fastest racing car time in the class with 51  $\frac{3}{5}$  secs. went into the corner too fast, turned round and charged the fence. Although his model looked rather bent, its chief damage consisted of a wrecked back wheel, and at the end of the proceedings was driven down the hill with another wheel, and, from the look of things, a slightly bent axle shaft. Sharp's G.N.A.T. (alias Frazer-Nash G.N., etc.) turned completely round, and went calmly down the hill again. Tinker, apparently satisfied with a neat first climb, took his Alfa-Romeo broadside into the bank with a heavy thud, but continued placidly to the summit. Davenport made another beauti-



could be what is so often referred to as the "giant" Mercedes. What a wonderful feat of engineering it is to house that immense power in such a beautifully compact and well proportioned chassis. The "Merc's" climb, punctuated by a shrill intermittent scream, as the blower was cut in and out for the bends, made a most impressive sight, and as he cut in between and after the corners the wheel-spin on the hard tarmac surface gave an idea of the terrific power available. His time was 46  $\frac{4}{5}$  secs., fastest sports car time of the day, but not up to the times of Von Stuck, and Davenport's wonderful old "Spider," which in spite of its age, and the fact that it is only 1,500 c.c., can still claim a proud place among the fastest hill climb cars in the world.



Two styles of cornering by Carraciola. The famous German driver clocked 46  $\frac{4}{5}$  secs on the climb.



ful climb, but was not quite so fast as before, while Caracciola was also slightly slower, due to skidding wider.

Von Stuck was again very neat and performed the remarkable feat of equalling his previous record. He is now leading in the racing car hill climb championship of Europe, while Caracciola is leading in the sports car class. Spottiswood brought his Bugatti up very fast on his second climb, and after the last bend got off the road, but regained it successfully and won the 2-litre class.

Thus ended one of the finest day's sport ever held in this country, and now everyone will be anxious to come again and see the Amateur Climb at Shelsley on September 13th.

**RESULTS.**

(Subject to confirmation).

850 C.C. RACING CARS.—1, W. E. Harker (Austin S.), 51.6 secs.; 2, B. L. Byrom (Austin S.), 54.4 secs.; 3, G. H. Hartwell (Austin S.), 59.6 secs. SPORTS CARS.—1, H. Beacon (Austin S.), 60.2 secs.; 2, P. H. Moreton (Austin), 66.6 secs.; 3, B. Cooke (Austin S.), 67.6 secs.

1,100 C.C. RACING CARS.—1, R. T. Horton (Avon-J.A.P.), 49.6 secs.; 2, J. F. Parker (Parker Special), 50.4 secs.; 3, E. G. Sharp (G.N.A.T.), 51.4 secs. SPORTS CARS.—1, F. D. H. Burcher (Riley), 59.8 secs.; 2, D. Eveson (Salmson), 60 secs.; and F. G. Sturgess (Riley), 60 secs.

1,500 C.C. RACING CARS.—1, B. H. Davenport (Spider), 44.6 secs.; 2, A. W. van der Becke (Becke Special S.), 47.4 secs.; 3, H. Batlavala (Bugatti S.), 55.8 secs. SPORTS CARS.—1, S. H. Newsome (Lea-Francis S.), 52.4 secs.; 2, T. H. Wisdom (Frazer-Nash S.), 52.6 secs.; 3, J. D. Heath (Bugatti), 52.8 secs.

2 LITRE RACING CARS.—1, A. M. Spottiswood (Bugatti), 47.2 secs.; 2, R. S. Pearce (Bugatti), 51.4 secs.; 3, E. J. Moor (Wasp), 52.4 secs. SPORTS CARS.—1, D. Tinker (Alfa-Romeo), 52.8 secs.; 2, A. J. Mollart (A.C.), 60.4 secs.; 3, Donald Munro (Star), 74 secs.

3-LITRE RACING CARS.—1, David Brown



Above: H. Beacon, winner of the sports 850 c.c. class on the first corner, and (below), J. Allan Arnold (Lea-Francis).

(Vauxhall-Villiers), 47 secs. SPORTS CARS.—1, R. F. Oats (O.M.), 59 secs.; 2, H. G. Scott Jones (Sunbeam), 64.4 secs.; 3, Donald Monro (M.G. Six), 71 secs.

4,500 C.C. RACING CARS.—1, Hans von Stuck (Austro-Daimler), 42.8 secs.; 2,

E. R. Hall (Bentley), 51.8 secs. SPORTS CARS.—1, E. R. Hall (Bentley), 51.8 secs.; 2, K. E. Gormly (Invicta), 52.6 secs.; 3, K. E. Gormly (Invicta), 54 secs.

UNLIMITED C.C. RACING CARS.—1, R. Caracciola (Mercedès-Benz S.), 46.8 secs.; 2, J. Dunfee (Mercedès-Benz S.), 50.4 secs. SPORTS CARS.—1, R. Caracciola (Mercedès-Benz S.), 46.8 secs.; 2, H. F. Clay (Mercedès-Benz S.), 59 secs.

FASTEST TIME OF THE DAY (SHELSEY CUP).—Hans von Stuck (3,500 c.c. Austro-Daimler), 42.8 secs. = 47 m.p.h.

FASTEST TIME BY A LADY (M.A.C. LADIES' CUP).—Mrs. T. H. Wisdom (1,496 c.c. Frazer-Nash), 53 secs. = 38.6 m.p.h.

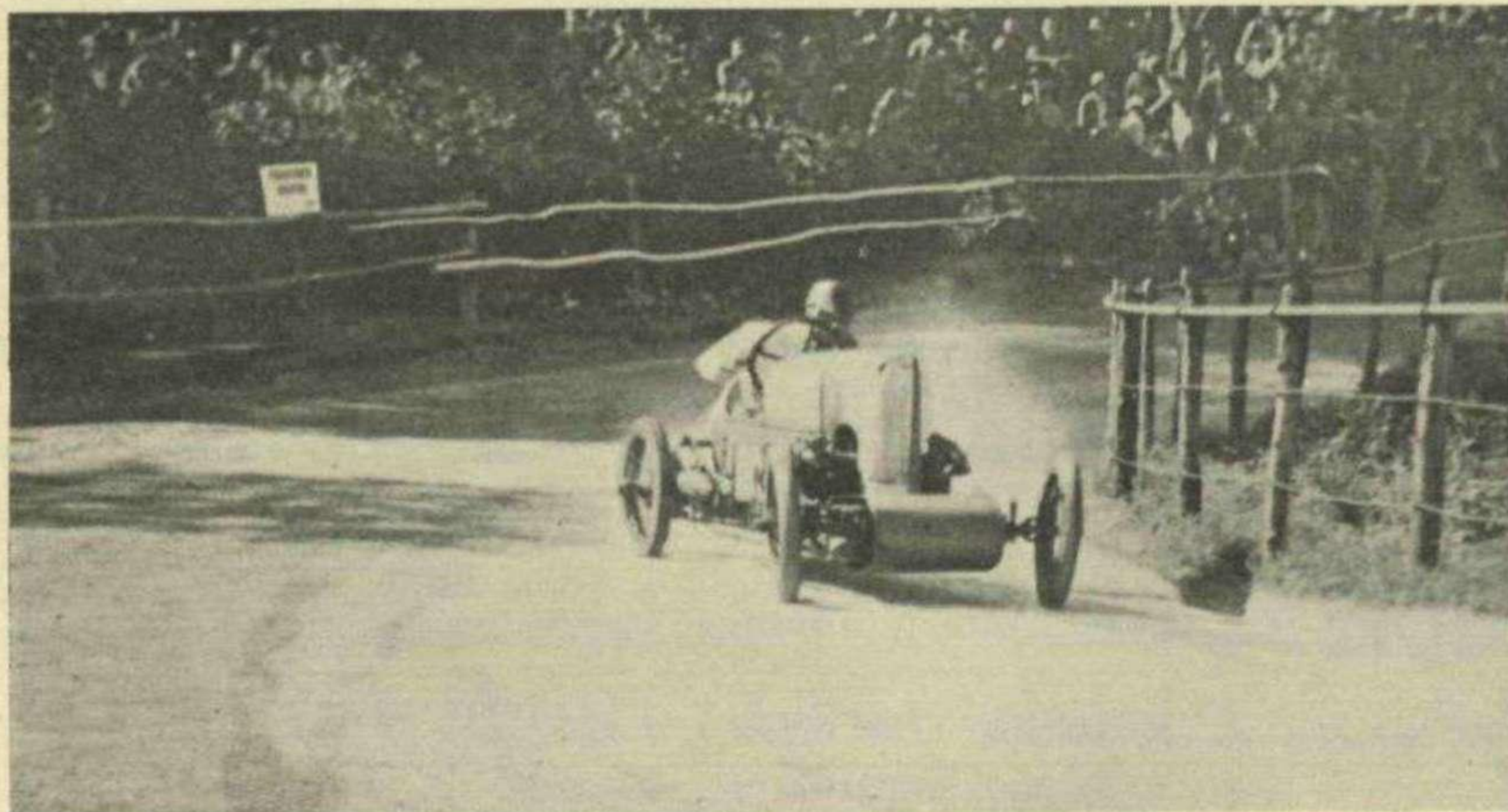
PRESIDENT'S CUP.—E. R. Hall (4,398 c.c. Bentley), 51.8 secs. = 40 m.p.h.

M.A.C. OPEN CUP.—B. H. Davenport (1,493 c.c. Spider), best aggregate on two runs, 89.6 secs.

M.A.C. CUP (FOR FASTEST TWO-CYLINDER CAR).—B. H. Davenport (Spider), 44.6 secs. = 46 m.p.h.

M.A.C. "T.T." CUP.—R. Caracciola (7,069 c.c. Mercedès-Benz), 46.8 secs. = 43.8 m.p.h.

GARVAGH CUP.—E. R. Hall (4,398 c.c. Bentley), 51.8 secs.



A veteran reappears. The old "Spider," with Davenport at the wheel, thrilled the crowd with his cornering.



# THE WASH SPEEDWAY

CONSIDERABLE interest was aroused at the beginning of this year when the project of a track along the north shore of the Wash was announced. The scheme has been carried forward another stage during the past month, for after obtaining the approval of the Board of Trade, the Automobile Racing Association made a survey which shows that the site is entirely suitable. Negotiations have also been completed for the purchase of 8,000 acres of privately owned land and 2,000 belonging to the Crown.

The site of the track is on the Lincolnshire coast some ten miles south of Skegness and runs along a stretch of sand, dry at low tide. A fifteen mile sea wall, fifteen feet high will be built a mile from shore for most of its length, but joining the coast line where it swings out at each end. Parallel to the wall a main road speedway 14 miles long and 600 feet wide will be built, and along the centre of it a trial track 100 feet wide. In cases of reclaimed land such as this, a certain time for settling and consolidation is required, but two years or so after completion it is proposed to treat the track with a material called Carpave, which is claimed to have a non-skid surface, and is not poisonous to fish. (This last matter is of considerable importance to the local fishermen).

Besides the 14 mile "straight," the scheme originally included plans for a "Tourist Trophy" track, 8 miles in length and situated at the centre of the speedway,

together with a motor boat lake over a mile long between the T.T. track and the shore. The latest idea is to have the race track to the south and the aquadrome further north, which will give more room for development. A covered grandstand will be built between the two. The T.T. track is to be laid out with corners reproducing those on classic racing circuits.

An interesting point about the speedway for motor-boats is that it is to contain fresh water. This is an important consideration in the case of racing boats fitted with aero or car engines, for the circulation system of these units is not always suitable for salt water.

An aerodrome is to be built at the north end of the track, also.

The scheme, of course, could not be worked profitably without adequate public support, and so the promoters are fortunate in finding a suitable site almost half way up the East Coast. The great industrial centres of Yorkshire are within a hundred miles, a short distance in these days of modern motor coaches.

Similarly from London and the South, Skegness is easily reached from the Great North Road.

There is not the slightest doubt that an elaborate speedway of this kind, and situated more or less centrally would be immensely popular, and the development and completion of this ambitious scheme will be awaited with eagerness.

## THE CUNEO-COLLE DELLA MADDALENA HILL CLIMB

THIS year's Shelsley Walsh hill-climb, an account of which appears in this number, was the third of a series of hill-climbs counting for the new "Championship of the Mountains," organised by the A.I.A.C.R. The first of the series was the Zbraslav-Jiloviste hill-climb in Czecho-Slovakia, the results of which were published in our July number. The second was held in Italy on 29th June last, and consisted of the Cuneo-Colle della Maddalena hill-climb, which has long been an annual event.

The course is rather a different length to that at Shelsley Walsh, being over 40 miles long, and contains innumerable corners. Fastest time of the day was made by Tazio Nuvolari on a 2-litre Grand Prix Alfa-Romeo, who beat the record for the hill, while Rudolf Caracciola was fastest in the sports car class. The full results were as follows:—

### RACING CARS.

#### OVER 1100 c.c.

1. T. Nuvolari (2-litre Alfa-Romeo), 38m. 27s. (Average 64.85 m.p.h.)
2. L. Fagioli (2½-litre Maserati), 39m. 29 2-5s.
3. L. Arcangeli (1750 c.c. Alfa-Romeo) 40m. 43s.
4. C. Pastore (2½-litre Maserati), 41m. 5s.
5. Sartorio (1500 c.c. Maserati), 42m. 37 2-5s.

#### UNDER 1100 c.c.

1. A. Clerici (Salmson), 48m. 35s. (51.02 m.p.h.).

2. Moradei (Salmson), 48m. 36 4-5s.
3. Plate (Lombard), 53m. 17 3-5s.
4. Ramello (Salmson), 58m. 58s.

### SPORTS CARS.

#### OVER 1500 c.c.

1. R. Caracciola (7-litre Mercédès), 41m. 24 1-5s. (Average 60.54 m.p.h.).
2. Biondetti (2-litre Bugatti), 42m. 30 4-5s.
3. Campari (1750 c.c. Alfa-Romeo), 42m. 44s.
4. Canavesi (1750 c.c. Alfa-Romeo), 42m. 48s.
5. Marinoni (1750 c.c. Alfa-Romeo), 42m. 57s.
6. Dusio (O.M.), 49m. 6 2-5s.

#### UNDER 1500 c.c.

1. E. Siena (Alfa-Romeo), 44m. 43s. (Average 55.77 m.p.h.).
2. Gola (Alfa-Romeo), 45m. 36 3-5s.
3. Klinger (Alfa-Romeo), 46m. 6s.
4. Romano (Bugatti), 46m. 44 1-5s.
5. Brivio (Alfa-Romeo), 48m. 50s.
6. Bruni (Chiribiri), 51m. 54s.

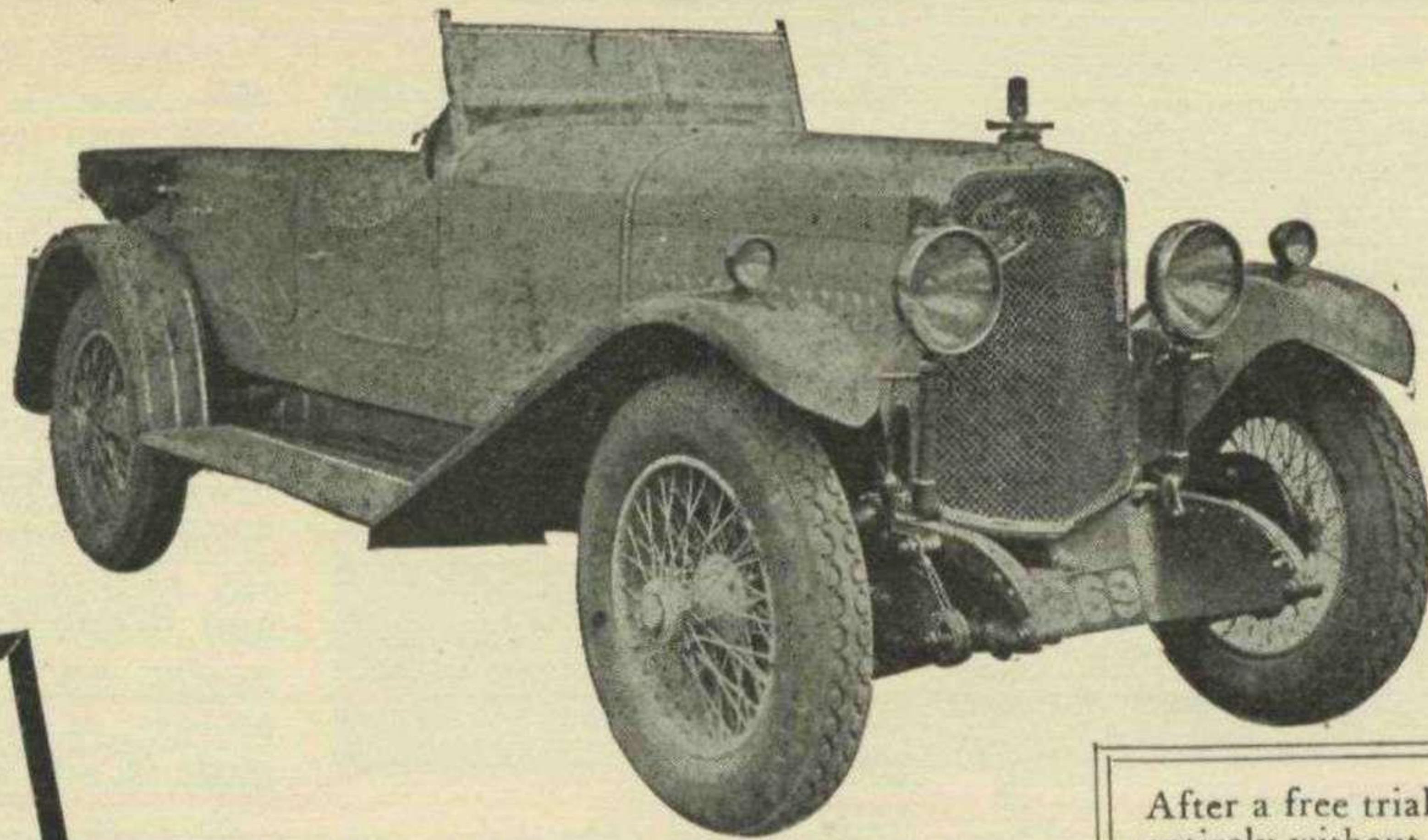
#### UNDER 1100 c.c.

1. Marret (Salmson), 48m. 23 2-5s. (Average 51.54 m.p.h.).
2. Palmieri (Fiat), 53m. 50 3-5s.



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# RUMBLINGS

By "BOANERGES."

## The Bentley Withdrawal.

THIS business of Bentleys officially withdrawing from racing certainly started a storm of argument. Normally fair-minded and reasonable people started to get hot under the collar and say nasty things about all and sundry. Of course it shows one thing, and that is that racing really does matter to the general public, as well as to the smaller number who follow it really closely. It also shows how ready everyone always seems to be to put an incriminating construction on any action. Lots of firms in the past have withdrawn from racing either temporarily, or for good, and no one has seen fit to get unduly excited about it. This case is a bit more important, I know, but merely because Bentleys have done so much to keep this country to the fore in the big events. If they see fit to take a rest there is surely no firm that has better earned it.

A lot of fur was flying too, after the Bentley-Mercédès battle at Le Mans, but again so many people got hold of the wrong end of the stick, and seemed to forget the exact nature of the race. Every entrant in an event of this sort knows exactly what he is up against, and also knows that to win consistently requires careful organisation, and also the entry and careful control of a team. Bentleys knew this, had had a great deal of experience of the job, and proceeded to win the race, which after all is the chief idea in racing! The Mercédès was not an official entry, as no German manufacturer is permitted, by what corresponds to the S.M.M.T. in this country, to support racing this year. Therefore, the sole competition in the big class came from a single car. It was a very sporting effort and the wonderful show that it put up will long be remembered. But to get hot and bothered, and start saying that the firm who went in for the race as a really serious business, worthy of all their resources, were unfair because they won, is merely childish. It started, I suppose, from

a natural sympathy for anyone fighting against heavy odds.

MOTOR SPORT learns from Bentleys that there is no question but that should this country start to lose her lead in this particular class, they will return to the fray in full force, and in the meantime they will be giving every assistance and encouragement to any private entrants. In other words we can look to Birkin and his team of "blower" Bentleys to keep their end up.

## Snug "Sevens"

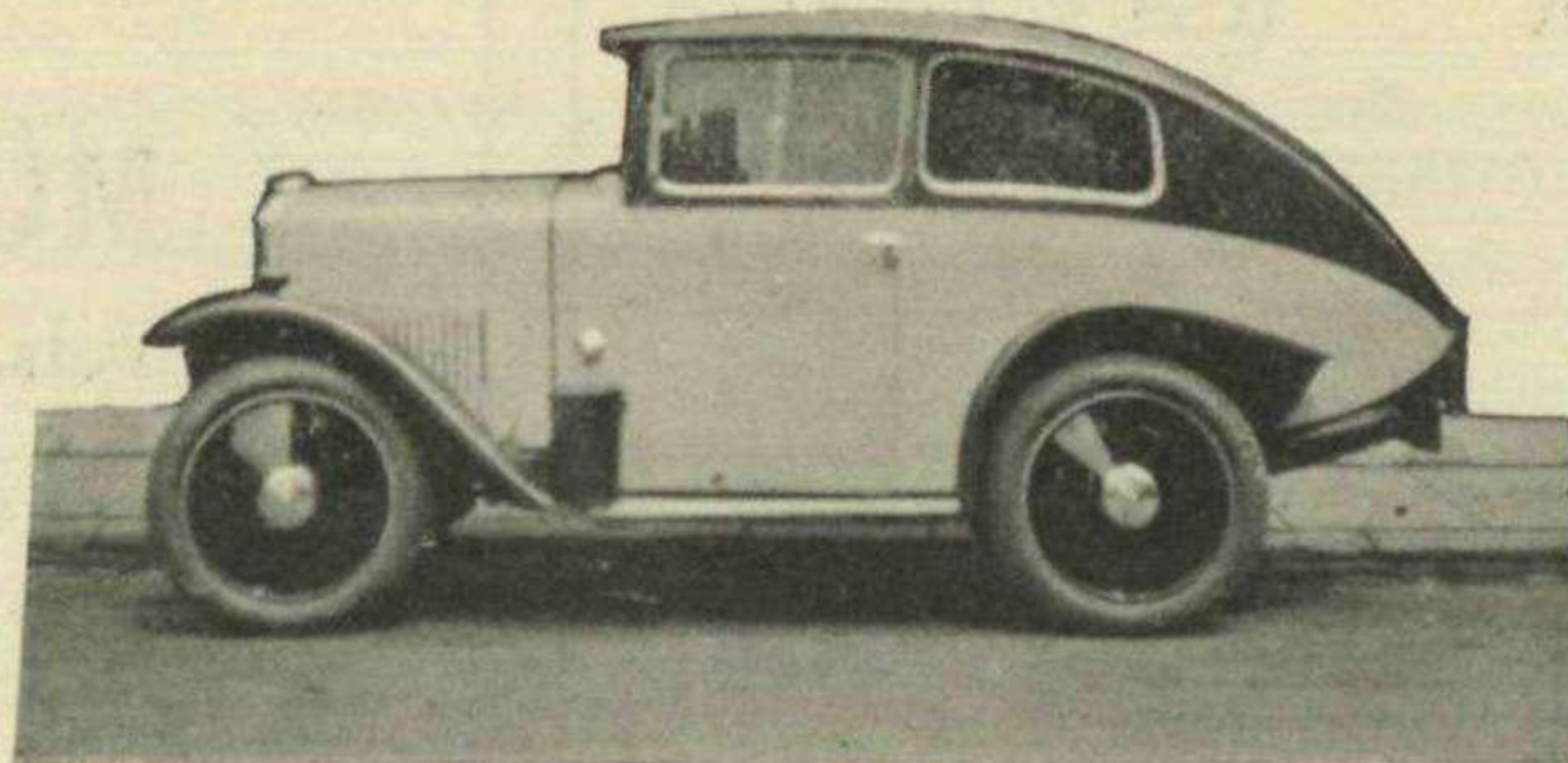
There is no doubt that there are occasions when a really small car is absolutely the only thing, and there are times also when one is very thankful for a saloon. Some time ago I had a chance of appreciating both advantages at once, as I had the loan for a week end of a very snappy little Triumph Seven saloon, from Ratcliffe Brothers of Gt. Portland Street. It so happened that this week end coincided with a local club trial, of the distinctly sporting variety, and I had been roped to take a check and observe several sections, etc., etc. It does seem a pity that in these small trials there are never enough officials

can be used as a substitute for a tank, and seemingly without doing it any harm. Anyway, I had that Triumph sliding about muddy fields, plunging through "winding mossy ways," whose only claim to fame was the fact that they were marked on the map as a right of way, and as we all know that is quite good enough for a trials secretary. But the Triumph did not seem to mind, and if one did get a little too optimistic, and took it too far into a morass, it was a simple matter to push it out again.

Not that one is likely to spend one's days doing this sort of thing, but it does mean that you can go anywhere, and when it comes to hurrying along, 60 m.p.h. in top, and well over 40 m.p.h. in second is distinctly useful, whether it is to get to the next check, or for some more ordinary purpose. And how nice it was to sit in the dry and watch the poor competitors sliding from bank to bank of a sticky colonial section, and occasionally fill in the fateful remarks column of the observer's sheet, and the appropriate figure opposite.

The real open air motorist will scoff at all this talk of getting out of the rain. I know all the arguments and often feel that way myself, but I like to have some choice in the matter. It is great to set out for a long run, well clad to cope with the elements, and not care whether it snows, if you happen to be feeling in the mood for it, but even the most hardened traveller likes a change sometimes.

Of course, there are some of us who haven't the option, like an enthusiast I saw on the road the other day. He was evidently one of the survivors of that noble band who used to (and apparently still do) build their own cycle cars, and probably get far more fun out of the



The smart Triumph Saloon referred to by "Boanerges."

to go round, and the wretched few, who, in a weak moment undertake some job, find themselves having to chase the event all over the country, often at a considerably higher average speed than the trial itself! However I am getting rather off the point; what I was driving at was that it is simply amazing to what extent a modern "Seven"



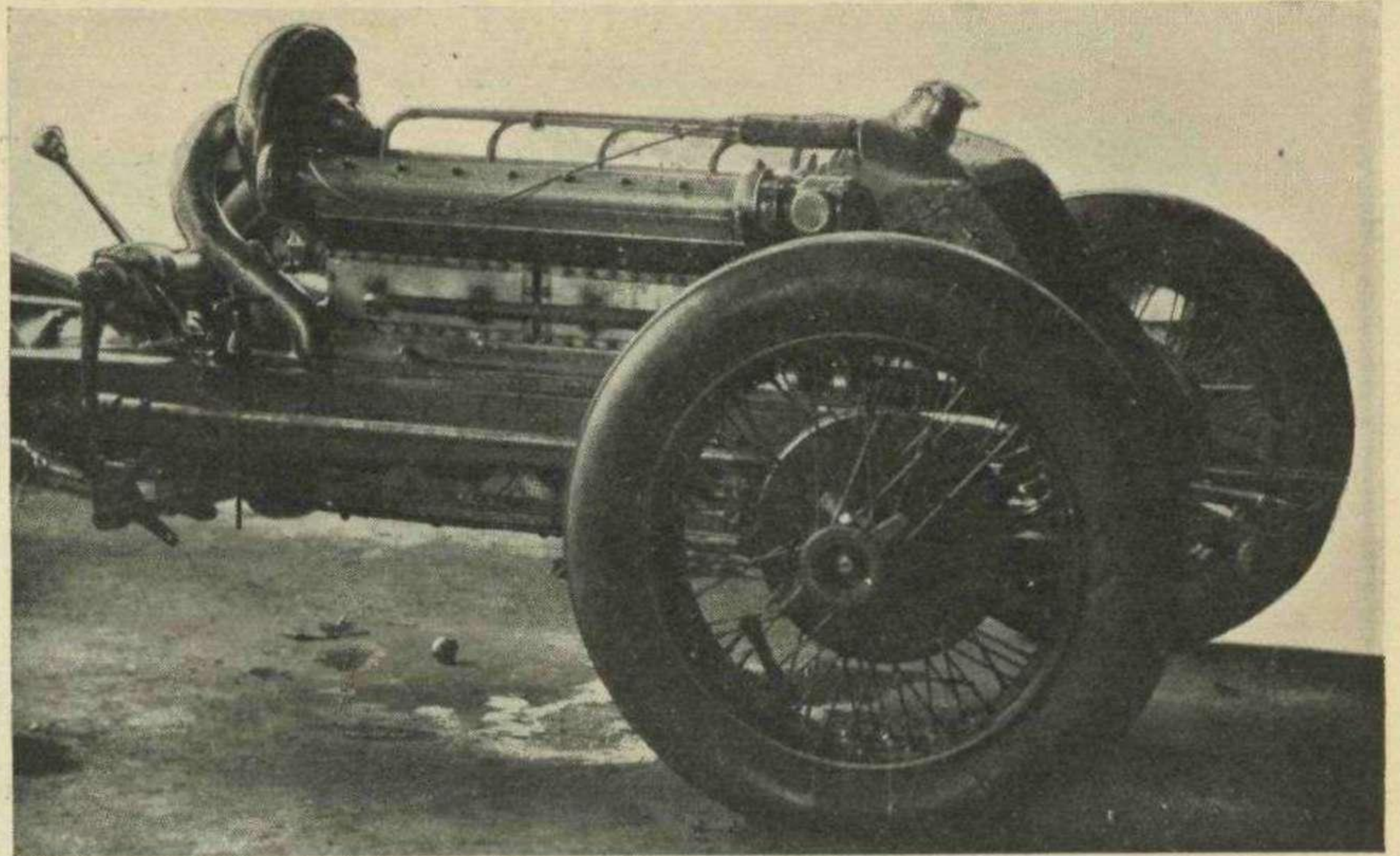
*RUMBLINGS—continued.*

small mileage they contrive to cover than any of your ready made, "as per catalogue," sports car merchants. This particular vehicle was strange indeed, but at the same time had evidently been the subject of much care and thought, and was remarkably well finished, at least what there was of it was. It had the usual body consisting of the seat only, which is the hall mark of your true cyclecarist. The front axle was evidently about 100% Morgan, but then things became a bit different. The engine was one of the twin Villiers, as fitted in the Pullman Francis-Barnett that was, and the final drive was by chain.

The steering was also a bit unconventional, consisting of an absolutely vertical wheel connected by chain to the steering column which was hidden behind the chassis. As I only saw the vehicle in passing on the road, and had not time to turn round and investigate further, I cannot give any very full details, but if the owner should happen to read this, I hope he will let me have some particulars.

**A Specialist's Stable.**

D. M. K. Marendaz, who, as many of our readers will remember, had a nasty accident some time ago with a flywheel coming adrift, is now well on the way to getting fit again, I am glad to say, and we shall probably see him out for some more records soon. I was in his workshops not long ago, having a look round at some of the jobs that were being prepared for various customers



*D. M. K. Marendaz's straight-eight Miller.*

and found that they were so full up that their own special models were getting left out in the cold pending a little more spare time. This is what so often seems to happen when a successful racing man does tuning for other people: when the competition season is on he has a job to get his own vehicles finished off in time. The straight eight Marendaz Special, some of which were just being assembled, have some very interesting features. The cylinder head for instance, has the valves arranged on the inlet-over-exhaust principle, but in place of the usual method they are not directly superimposed, but at opposite sides of the head, thus giving a gas flow right across the head, with improved scavenging. Another machine in

the same establishment which really made my mouth water, was a straight eight supercharged Miller, similar to the one on which Eldridge put up such a wonderful series of records at Monthlery. This was being thoroughly stripped down and rebuilt, and we may hear more of before long. As the engine was partly down, I was able to have a look at the con-rods and pistons, which are very fine pieces of work. The rods are tubular steel, and so wonderfully made and finished that it is really impossible to tell by looking at them how they were turned out. As can be seen from the photograph, the "works" are very compact and business-like, the blower being the highest point of the car.

**B.M.C.R.C. MEETING.**

**G**OOD weather prevailed for the B.M.C.R.C.'s meeting which was held at the track on 12th July. The programme comprised three 25-mile handicap races, a three-lap handicap and a relay race. With the exception of the three-lap event, entries were poor, with the result that the afternoon's sport was not particularly good.

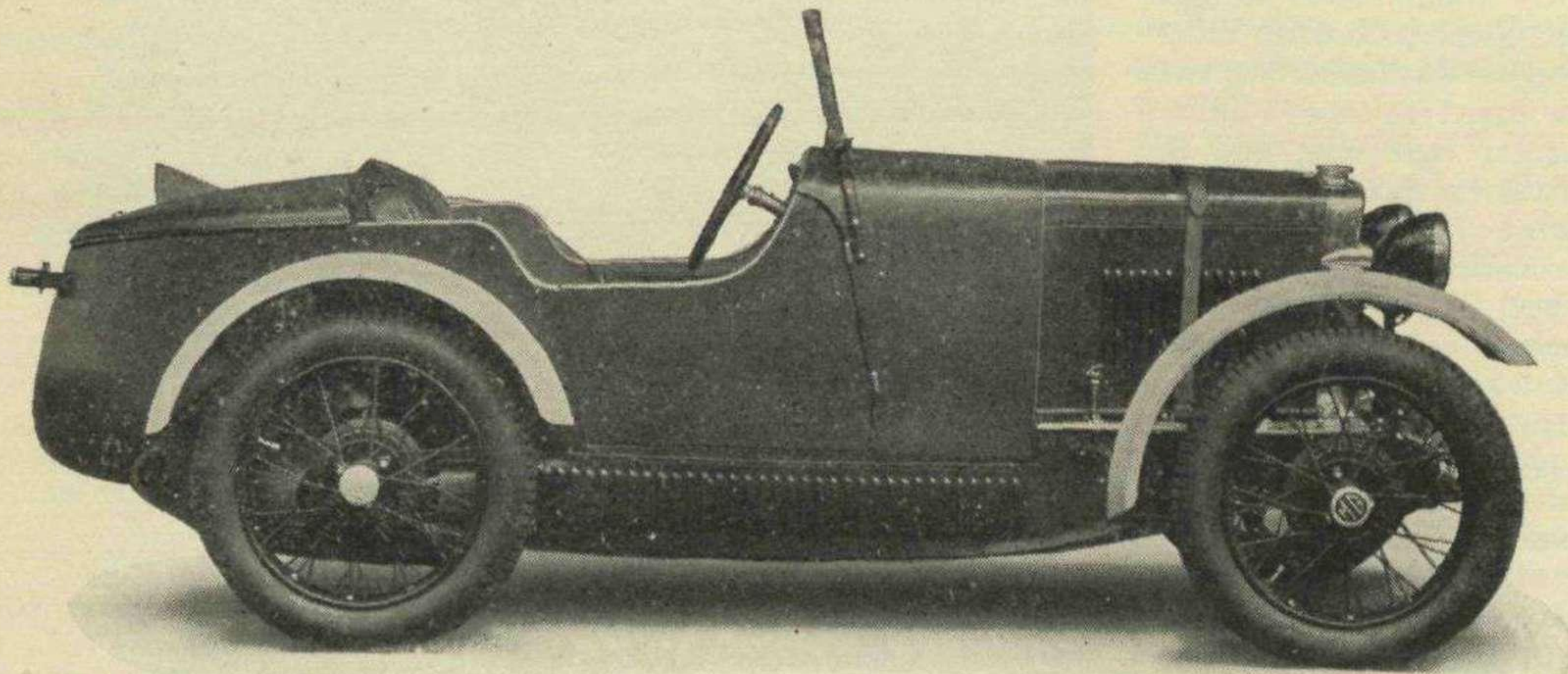
The three-lap race was run off in two heats and a final, the results being:—First heat: (1) C. B. Bickell (348 Chater-Lea), (2) W. Thorne (248 Rex-Acme), (3) J. Duncan (498 Grindlay-Peerless). Bickell's speed was 90.22 m.p.h. Second heat: (1) C. S. Staniland (248 Rex-Acme), (2) L. J. Archer (246 New Imperial), (3) A. R. Quinn (499 Triumph). Staniland's speed was 89.74 m.p.h. Final: (1) A. R. Quinn (Triumph), (2) C. S. Staniland (Rex-Acme), (3) L. J. Archer (New Imperial). Winner's speed 99.01 m.p.h.

The results of the other events were as follow:—25-mile Solo Handicap: (1) R. H. Hopkins (348 Chater-Lea), 3m. 18s.; (2) C. B. Bickell (348 Chater-Lea), 2m. 51s.; (3) W. W. Thorne (248 Rex-Acme-Blackburne), 5m. 24s. Winner's speed, 92.06 m.p.h.; won by 42s.; winner receives the Holiday Cup. 25-mile Non-trade Members' Handicap: (1) A. J. Dussek (588 Norton sc.), 3m. 27s.; (2) H. A. Howell (490 Norton), 45s.; (3) J. Duncan (498 Grindlay-Peerless-J.A.P.), scr. Winner's speed, 79.30 m.p.h.; won by 33s.; winner receives the Wilson Smith Cup. 25-mile Passenger Handicap: (1) V. E. Horsman (599 Triumph sc.), 36s.; (2) H. G. Birch (348 Chater-Lea sc.), 3m. 54s.; (3) A. J. Dussek (588 Norton sc.), 1m. 57s. Winner's speed, 85.87 m.p.h.; won by 7s.; winner receives the Holiday Cup. Relay Race: White team (Bickell, Grosse and Baragwanath).





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Winners of the Team Prize in the J.C.C. Double Twelve Hour Race 1930.

The only British car to compete in this race was

# **The M.G. Midget**

of 847 c.c.

which gained fifth place in the 1100 c.c. class.

This remarkable performance was achieved without the aid of any pit help. The drivers, Capt. F. H. B. Samuelson and F. Kindell, completed the course without any outside aid at all.

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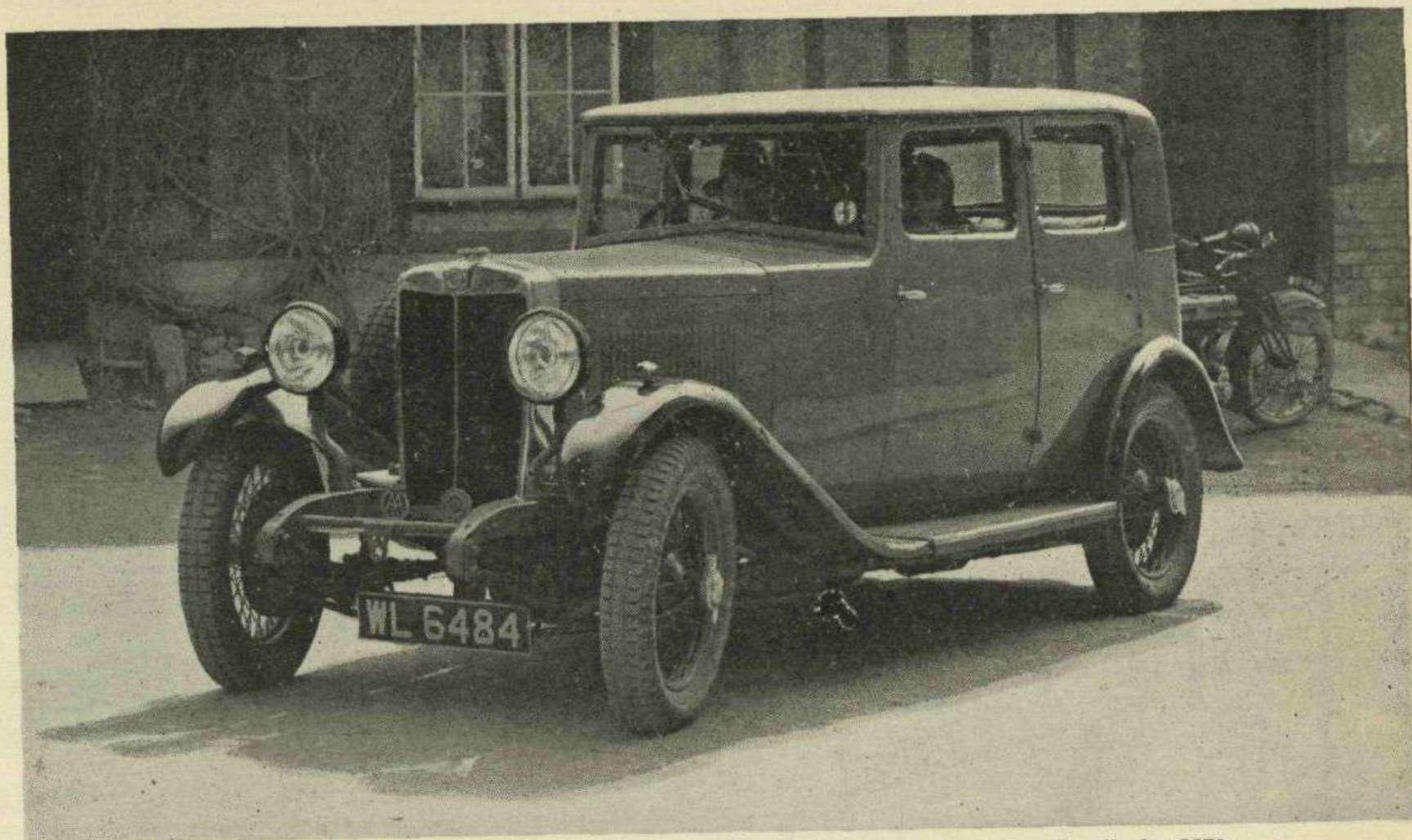
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# THE M.G. SIX (MARK I.).

*A Closed Car of High Performance.*



*This four-door saloon on the Mark I. chassis makes an admirable combination. It sells for £570.*

IDEAS on sporting cars have undergone a good deal of change during the past few years. The days have gone when the owner was content to sacrifice comfort, cleanliness and silence for the sake of speed, and the indifferently-upholstered body with undersized windscreen and scanty wings, which at one time were considered essential in a car which laid claim to high speeds, are no longer in vogue.

The modern sports model, to meet average present day requirements, as well as being capable of fast travel, must also be so equipped as to afford a degree of driving ease comparable with any tourer. It is this combination of comfort and liveliness which is the outstanding characteristic of the M.G. Six Mark I "Sportsman's Salonette."

The particular model which we had for test had already done many thousands of miles as a service car of the M.G. Company and it was not only just standard, but one which had not been specially tuned or tended for special demonstration purposes. This was all to the good of our purpose, as we were able to judge what this popular car in perfectly ordinary production form was capable of doing. On collecting the car from the Pavlova Works at Abingdon, as soon as we got in the driving seat, we found certain little details which call for favourable comment. The accelerator pedal, for instance, which is placed well away from the other foot controls, is operated against a return spring of just the right tension and works through a conveniently small range of movement, whilst the gear lever of the central change is in a position where it falls readily to hand. The brake lever is placed on the right-hand side and is of the quick-release racing type. This is a feature which might well

be included on the most mundane of utility motorcars, for it is a great improvement on the more usual pattern.

From previous experience of low-roofed sports saloons, we were prepared to find the exhaust noise somewhat noticeable, but on the M.G. as soon as the throttle was opened, we found the engine notably unobtrusive. While passing through the country lanes from Abingdon to the main Oxford-London road, it was difficult to realise that our speed had risen to the 50-60 m.p.h. mark, so silky was the running, and on reaching a suitable section of the main road, where we were able to open out, it soon became apparent that it was perfectly easy to "play" the car round the 70 m.p.h. figure without any difficulty at all, and a brief period at full bore brought the speedometer needle round to 75 and finally 80 m.p.h. mark. When one considers that the M.G. has all the attributes of the well-behaved "town carriage," it must be agreed that this maximum speed, without any fuss or any suggestion of over-driving, is definitely good. There are plenty of motors nowadays, of course, with which one is able to obtain these figures, but it would be difficult to find another which makes less business about it, even if one were to choose a car with an engine of, perhaps, double the capacity.

Another point which genuinely impressed the writer was the braking. There is nothing so disconcerting in a car than to find on applying the brakes at high speed that its deceleration is violent and uncontrolled. The M.G. brakes which are of perfectly straight forward lay out, make it possible to slow down rapidly from speeds of 70 m.p.h. to a standstill with noteworthy smoothness; the steering, which is of the Marles type was well in keeping with the rest of the car. As for the



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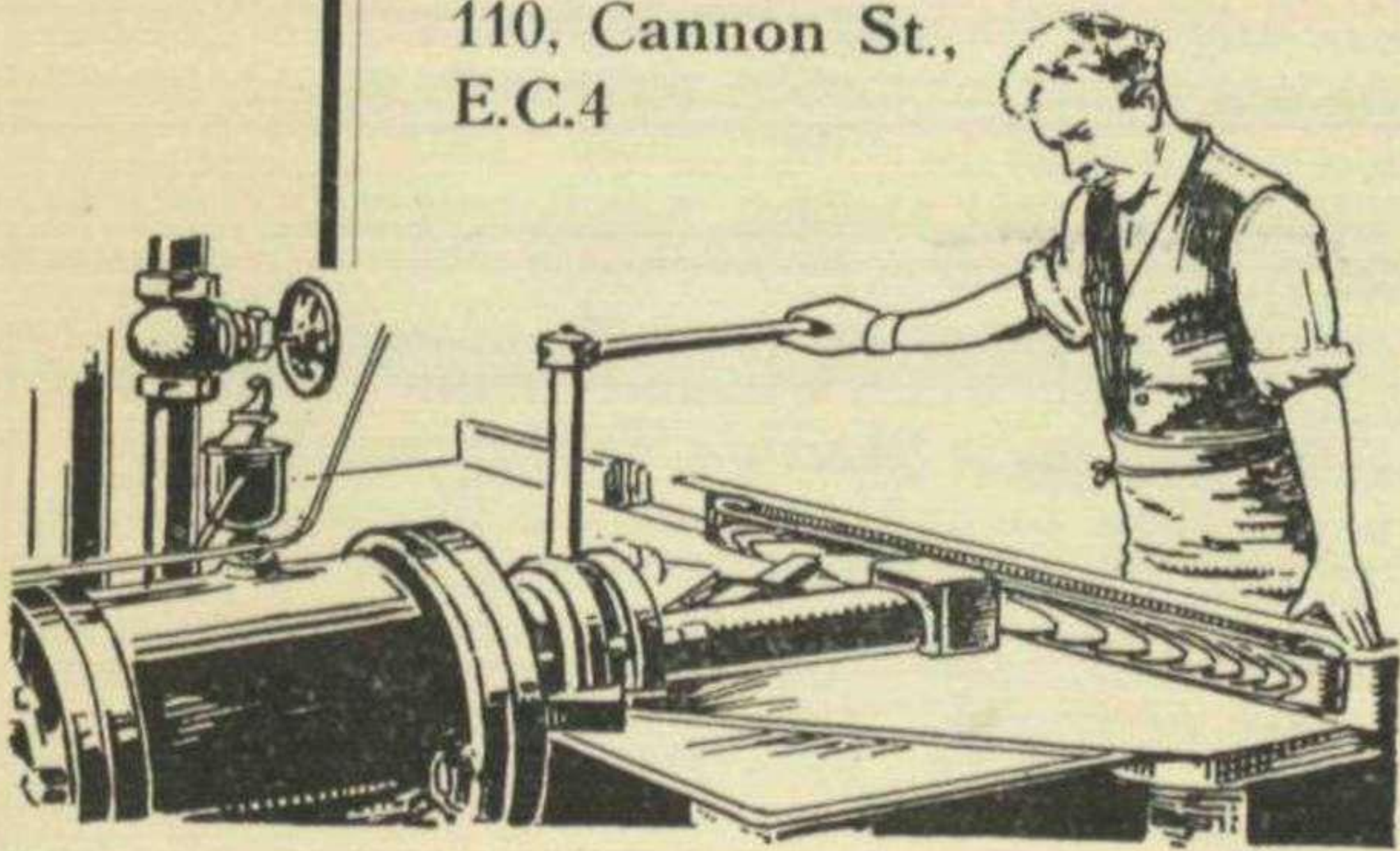
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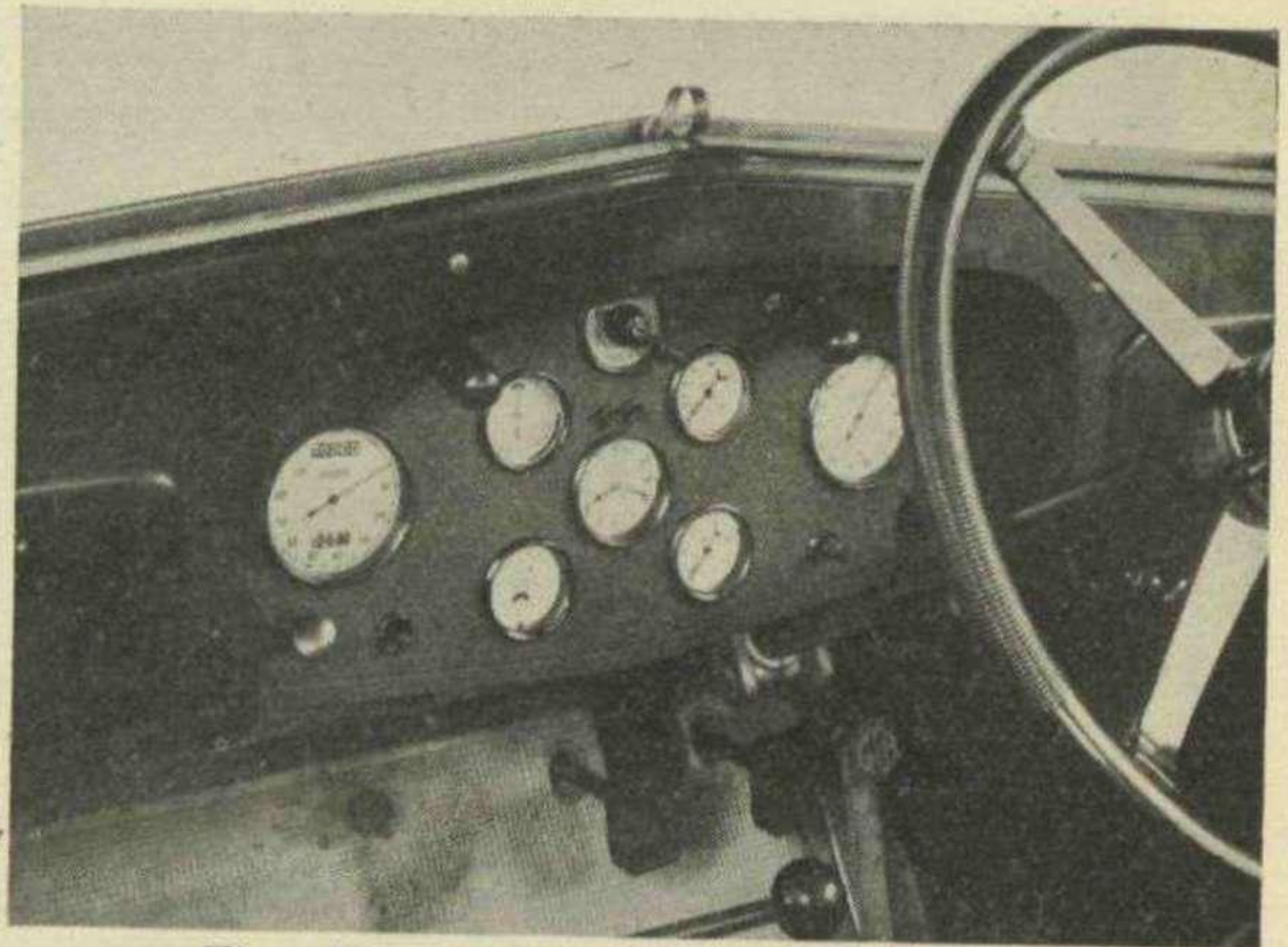
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THE M.G. SIX (MARK I.)—continued.

clutch, this is one of the smoothest that we have ever used.

The springs are long semi-elliptic front and rear with the front ones shackled so that deflections in steering and braking are greatly minimised; a point which is worthy of note is that all the springs are inclined upwards to the front in such a way that the absorption of road shocks is greatly improved. Hartfords are fitted all round.



The well-arranged facia board on the M.G. Six.

As we have already stated, the model under review was by no means new; nevertheless, there was a complete absence of any body rattles or drumming. In a good many cars the instrument board is responsible for irritating "dithers" at certain engine speeds and probably one of the reasons of there being no trouble of this sort with the M.G. is that the dash is built up with the chassis and is thus very rigid. It carries the steering column and reserve petrol tank and also a tank for one gallon of engine oil.

The standard equipment includes a Jaegar speedometer and revolution counter, and besides the usual ammeter, clock, oil pressure gauge, petrol gauge and ignition tell-tale, there is also a radiator thermometer.

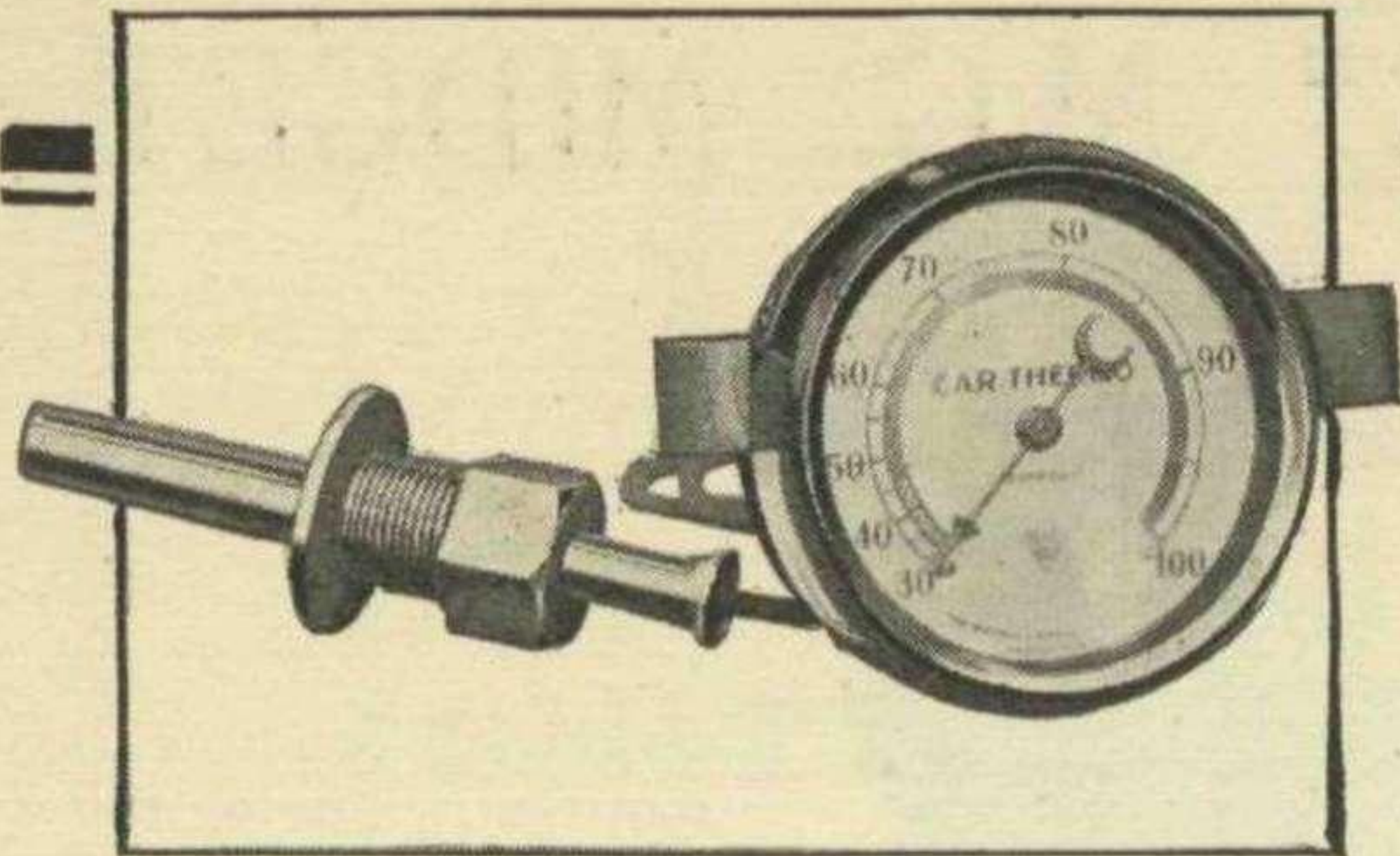
The engine has a Treasury rating of 17.7 h.p. and a capacity of approximately 2½ litres.

The six cylinders are cast *en bloc* with two separate induction pipes feeding groups of three cylinders. The feed to the two S.U. carburettors is by an Autopulse electric pump. The ignition is by coil and battery (Lucas). The crankshaft is carried on four large bearings and is statically and dynamically balanced, and overhead valves are inclined and operated by an overhead camshaft. Lubrication is by spur gear pump bolted to the outside of the engine. This auxiliary, like other parts of the power unit, is readily accessible. The three speed gear box is built up in one with the engine and the ratios are:—top, 4¼-1, second, 6½-1, bottom 13-1. The final drive is by enclosed propeller shaft.

Throughout the M.G. Six, one finds evidence that it has been planned and developed by a designer who is both practical and discriminating, and at the conclusion of our all-too-brief test, we found ourselves in the pleasant and somewhat unusual position of being unable to find anything which we could criticize. And that is all that need be said.

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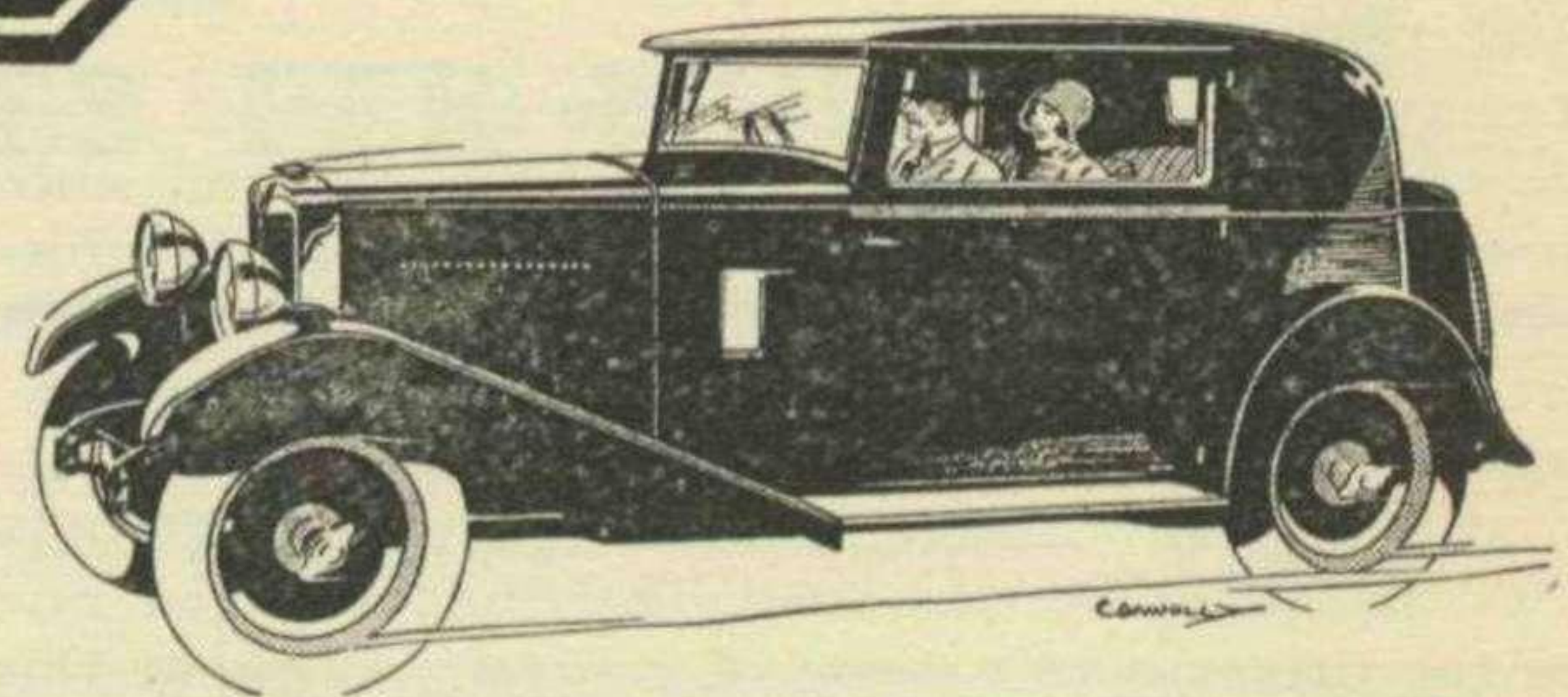
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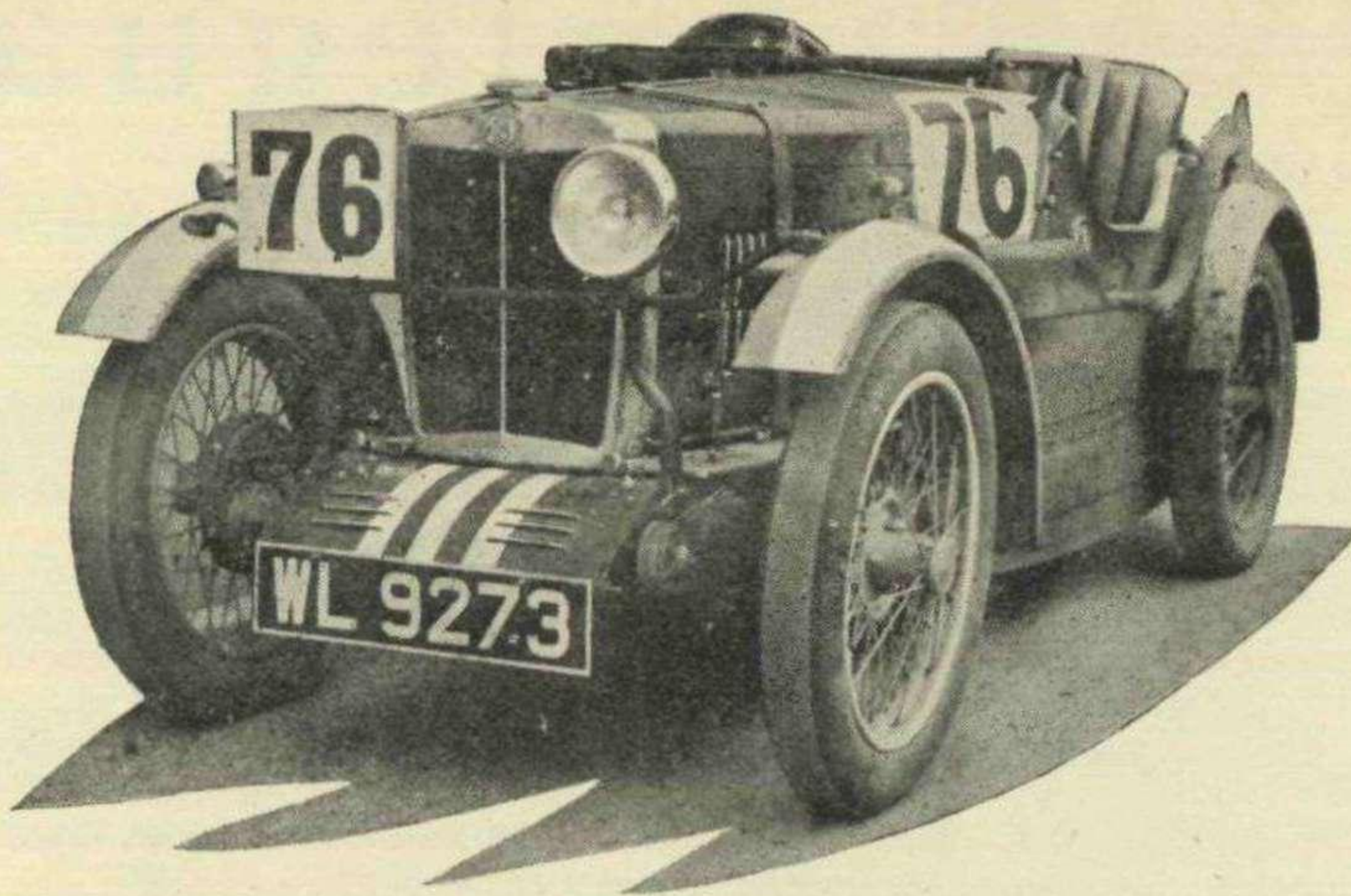
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# THE "DOUBLE-TWELVE" M.G. MIDGET



AMONG the models which have been introduced by makers during the past two seasons, few have achieved a greater degree of success than the M.G. Midget; its popularity has been quite out of the ordinary for it is not mass-produced by any means, yet it is rare indeed to travel far on the roads without meeting one.

Appearance counts for a lot, and doubtless the lines of the Midget are responsible, to quite an appreciable extent, for its quick rise to favour. But it is not a sporting machine in looks only, as has been abundantly demonstrated in reliability trials and races.

Probably the most conspicuous performance the Midget has put up so far was in the "Double-Twelve" Race at Brooklands when three of these little vehicles came through that gruelling contest with flying colours.

The cars which were used, as is to be expected, were not absolutely standard. Nevertheless, they were not freaks, and the M.G. concern have now added to their range, the Midget Sports "Double-Twelve" model, which is identical in every respect to those used in the race of that name.

It may be recalled that we have had one of these models placed at our disposal some time ago, and since then we have had the opportunity of giving the "Double-Twelve" Midget a further test. If we were asked what impressed us most about the car we would say its astonishing road-holding qualities at high speeds, and its general "big-car" feeling. Although it weighs only 10 cwt. it "sits" on the road like a heavyweight, and gives the driver a nice sense of control. Without this quality a small, fast motor can be most unpleasant; with it, the new M.G. is distinctly fascinating. In this high degree of control, besides weight distribution, C of G position and springing, the steering plays a vital part. The Midget's steering gear is of the worm-and-wheel type, and the front axle layout gives a caster action, so that straightening out from locking over is almost automatic. A René Thomas wheel is incorporated and the column is set at just the right rake. The brakes are orthodox, the foot control operating on all four wheels and the hand lever is coupled independently. Their action is decisive without being violent. On the particular car we used, the position of the brake lever was not good, being much too far forward and entailing quite a lot of groping. But this matter, together with the accelerator pedal position (which was also rather

awkward) has now been rectified. The clutch is of the dry-plate type and although it is fitted with extra strong springs its withdrawal is light and easy.

Turning to the "Double-Twelve" engine, it is found that here the main deviation from the standard unit is in the fitting of a

special camshaft, stronger valve springs, a special S.U. carburettor, and special induction and exhaust manifolds. Each engine turned out is very carefully prepared, and before being passed, is freed off and thoroughly run in.

The body fitted has both sides cut away, conforming to International road racing regulations, the general lines being similar to the standard production. There is a special windscreen fitted with Triplex glass, or gauze if necessary, which can be folded flat forward. The upholstery is real leather, whilst the wings and general finish are a pleasing combination of cream and brown.

The model which was loaned us, was the actual car used by Miss Worsley in the "Double-Twelve" and had not been attended to in anyway since that event. The tyres had not been changed, and were the original "five-bar" Palmers, the latest type of cover made by that firm. A Brooklands silencer was fitted which afforded a reasonably silent exhaust under ordinary running conditions, but set up a particularly raucous note on the overrun at high speeds. It was definitely too noisy, and though not unpleasant for the occupants, would certainly sooner or later attract the unwelcome attention of the police. It is only fair to say however, that the makers now recommend and fit a Vortex silencer for road use.

An extra large petrol tank to carry 9 gallons, is fitted in the dash, with quick action filler cap, whilst extra strong road wheels, and a strap to the bonnet, complete the chassis specification. The electrical equipment includes a dynamo specially wound to give an output at high speeds, and the same applies to the coil; the distributor is one made capable of functioning continuously at 6,500 revs, and over.

In addition to the standard speedometer, ammeter, and oil gauge, an oil and water thermometer are fitted, coupled respectively to the sump, and the radiator header tank.

If required an undershield can be fitted, whilst the chassis can also be prepared for long distance racing events by wiring and split pinning all nuts and bolts, and for these two items an additional charge would be made according to requirements.



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**M.G. SPORTS CARS**

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which won **TEAM PRIZE** in the  
**J.C.C. DOUBLE-TWELVE-HOURS RACE**



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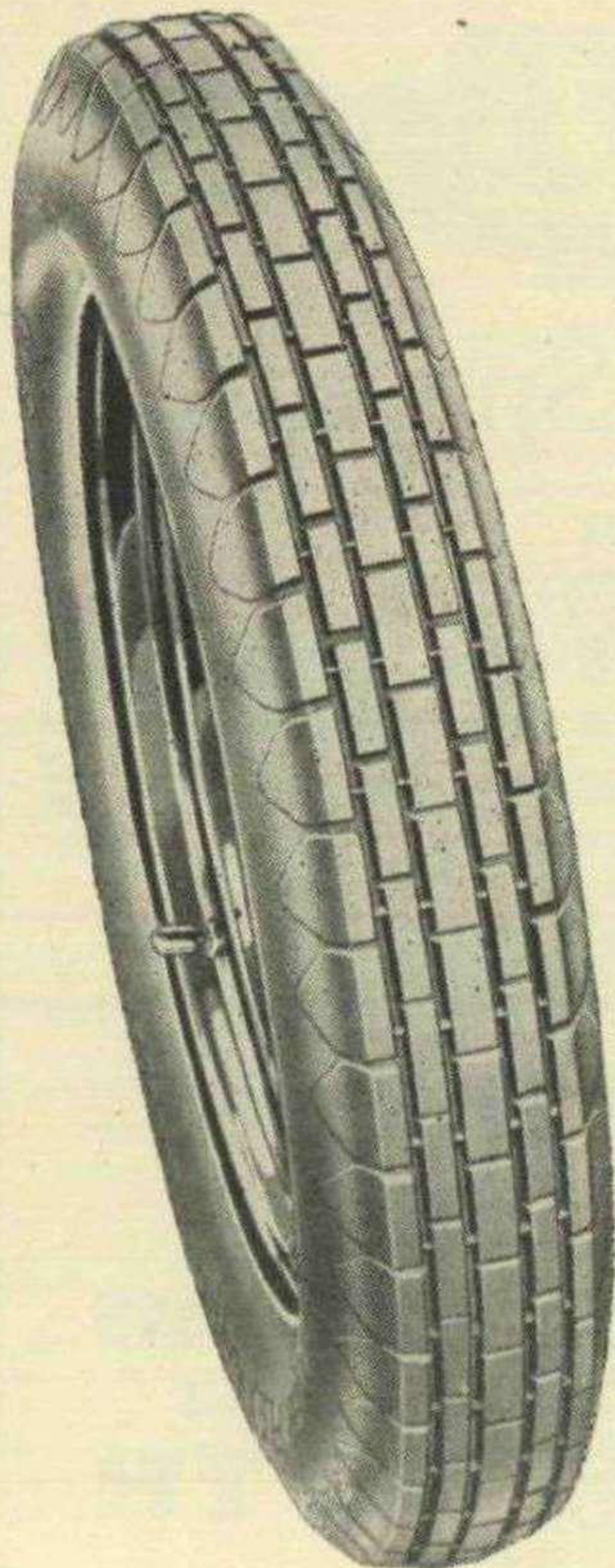
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**1383·86 MILES**  
*at an average speed of*  
**57·72 MILES PER HOUR**

In the Double-Twelve Hour Race at Brooklands, on May 9th and 10th last, an M.G. car entered by Miss Victoria Worsley covered 1383·86 miles at an average speed of 57·72 miles per hour. Miss Worsley had no tyre trouble at all and has said, "I think it was the tyres that enabled us to corner so safely and fast." She was riding on Palmer Tyres fitted with the standard five-bar type of tread—and not special racing treads.

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## “SPORTS MODELS ONLY”

THE history of most pioneer manufacturing concerns, both in England and abroad, is much the same. From small beginnings they have grown to gigantic concerns, from tiny obscure workshops their premises have expanded out of all recognition. All can boast of a reputation and experience extending over many years.

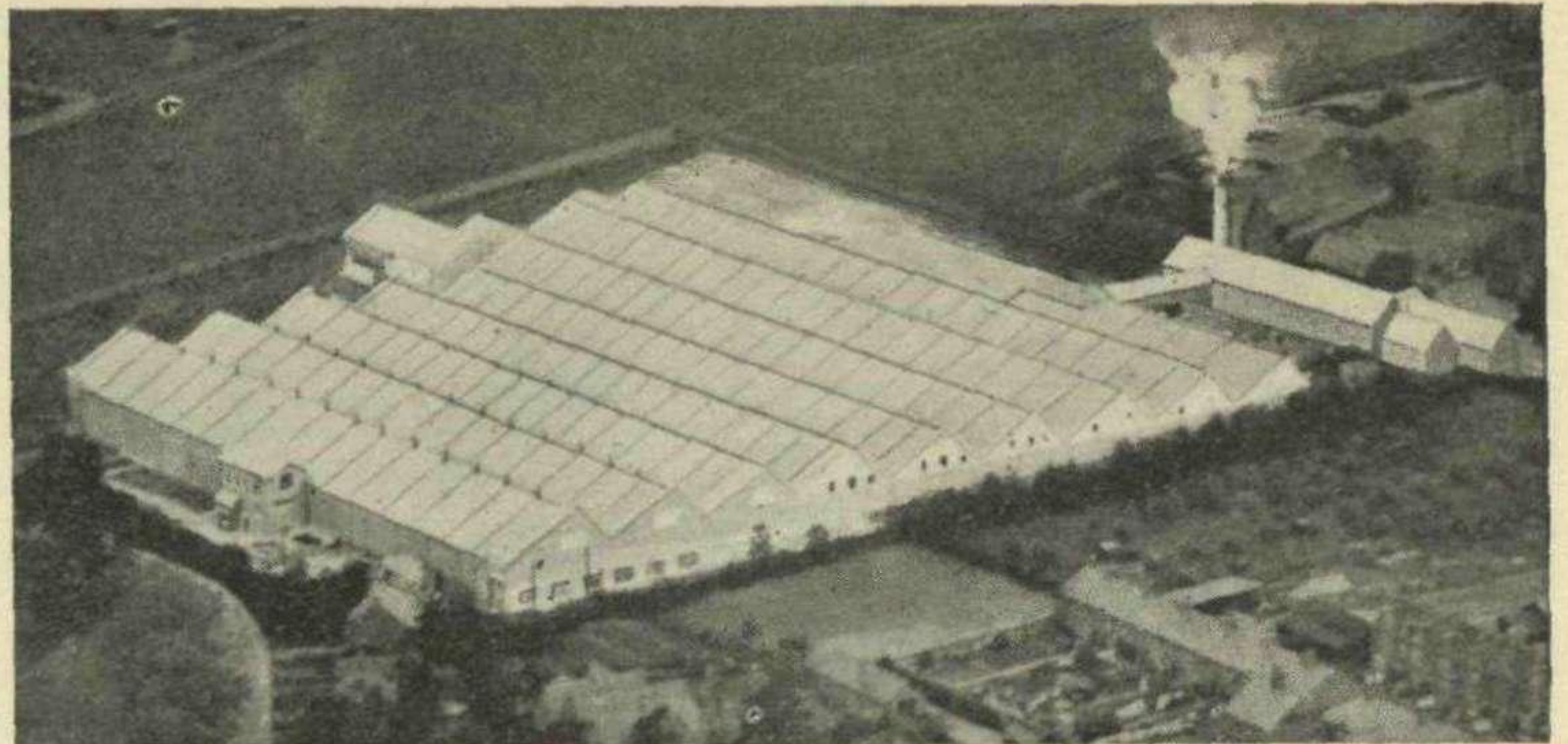
With the M.G. Car Company, it is somewhat different. It is not an old firm. There were no M.G. cars before 1925. Yet it can be truly described as a pioneer concern in that it was one of the first to specialise in the production of sports models only. At a time when other makers were concentrating on the cheap, mass-produced utility vehicle, M.G.'s were using their resources for building a roadworthy, fast car for the sportsman. That was in 1925, and they have been doing it ever since. The first M.G. Sports, many of which are still to be seen on the road, were built, first of all, in a small mews in Oxford. They sold very well and their owners liked them; the demand far exceeded the supply, and so in 1926 a speedy removal was made to larger works in North Oxford.

Here cars were produced in considerably larger numbers, but sales increased to such an extent that a £20,000 factory was built at Edmund Road, Cowley, and production on a still larger scale was started in 1927.

It was thought that this would be the home of the M.G. Sports car for a few years at least, but with the introduction of the now well-known M.G. Midget and M.G. Six models, it soon became apparent that the accommodation was far too limited.



A batch of M.G. Sixes ready for delivery.



An aeroplane view of the Pavlova works.

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# Trials

by

# Night

THE season of night trials is with us again. Perhaps it is not strictly correct to speak of a season, since the "Exeter," the "Gloucester," and one or two others are held in mid-winter. But the majority, and especially those well-organised, well-supported, and thoroughly enjoyable events in the South-Eastern Centre, come during the five months from May to September.

The "night trial germ" is a very virulent little bug. It attacks the owners of cars, three-wheelers, and motor cycles with equal force. The symptoms appear strange to the ordinary motorist. What is the use of losing a night's sleep for the sole purpose of motoring off to Devon or the Peak district in order to assault greasy hills? Nobody knows but the devotees of the practice. Night trials are different to other trials, and they draw a class of followers of their own. The "scramble" enthusiast will not find his beloved frame-breaking country, nor seas of mud in which to get bogged, in a night trial.

What exactly is the appeal of a night trial? Let us try to analyse it.

The greatest support for these events comes from the London district. Here is a clue. What does the jaded Londoner seek for most in his recreation? Novelty, change, unconventionality. Those road-lovers who have been lucky enough to live in the provinces know the joy of having the countryside on their doorstep. A mile or two, and

the Open Road is before them, stretching away for miles in unbroken rurality. Contrast with this the lot of the London motorist. If he is a sportsman, his mind revolts at being hemmed in by pavements and policemen. To escape means twenty or thirty miles of funereal processions or soul-destroying arterial roads; and even then there is no interesting trials country within reasonably easy reach.

The solution to all these problems lies in the night trial. It is the currant in the London motorist's bun. The surprising thing is that so many sporting motorists and motor cyclists eat the bun and leave the currant! The whole essence of a night trial is unconventionality: perhaps that is why conventional folk look so askance at this attempt to bring a little bit of adventure into modern motoring.

But what could be more logical, really, if you object to crowds, than to travel by night; or if you like North Devon, Dartmoor, Dorset, or the Peak district, than to go there? Lack of initiative prevents many people doing these things. A night trial overcomes it for them. It is the only way, in fact, to encompass 400 or 500 miles at a week-end. And what better method is there of blowing away the cobwebs, after a hard week's work? A little too strenuous, says someone? Well, it is impossible to say until it has been sampled. It is tiring, of course, to cover such a mileage in twenty-four hours, but it is worth it. Perhaps there is a moon; moonlight

riding or driving holds a fascination of its own. The summer night is very short; 4 a.m. finds daylight in possession again, and with a start at 10 p.m. or midnight, there is not really a big mileage to be covered during darkness. Dawn is one to the greatest rewards of the night-trialist. Then there is breakfast at 4 or 5 a.m., another novel experience. Walking down the streets of a town such as Cheltenham or Exeter, the dainty fripperies in shop windows contrast strangely with the dirty be-ponchoed figures of competing motor cyclists. One feels smugly superior to the poor wights who slumber all around. How much they are missing.

The rabid enthusiast finds the winter night trials, with their storms, rain, snow, and numbing cold, just as enjoyable, but for newcomers to the Great Game, a summer night trial makes a good start. The hills, generally speaking, are not so numerous or severe as in a one-day trial. The organisers make allowances for the errors which may arise from weariness after the night. Another reason is that in most night trials the course has to be suitable for cars as well as motor cycles.

But what does it matter if an award is won or not; or if one has footed everywhere and parted from the model? It is enough that one has had an experience that is denied to the vast majority of people; that one has been in the company of fellow enthusiasts who understand and appreciate the same things.



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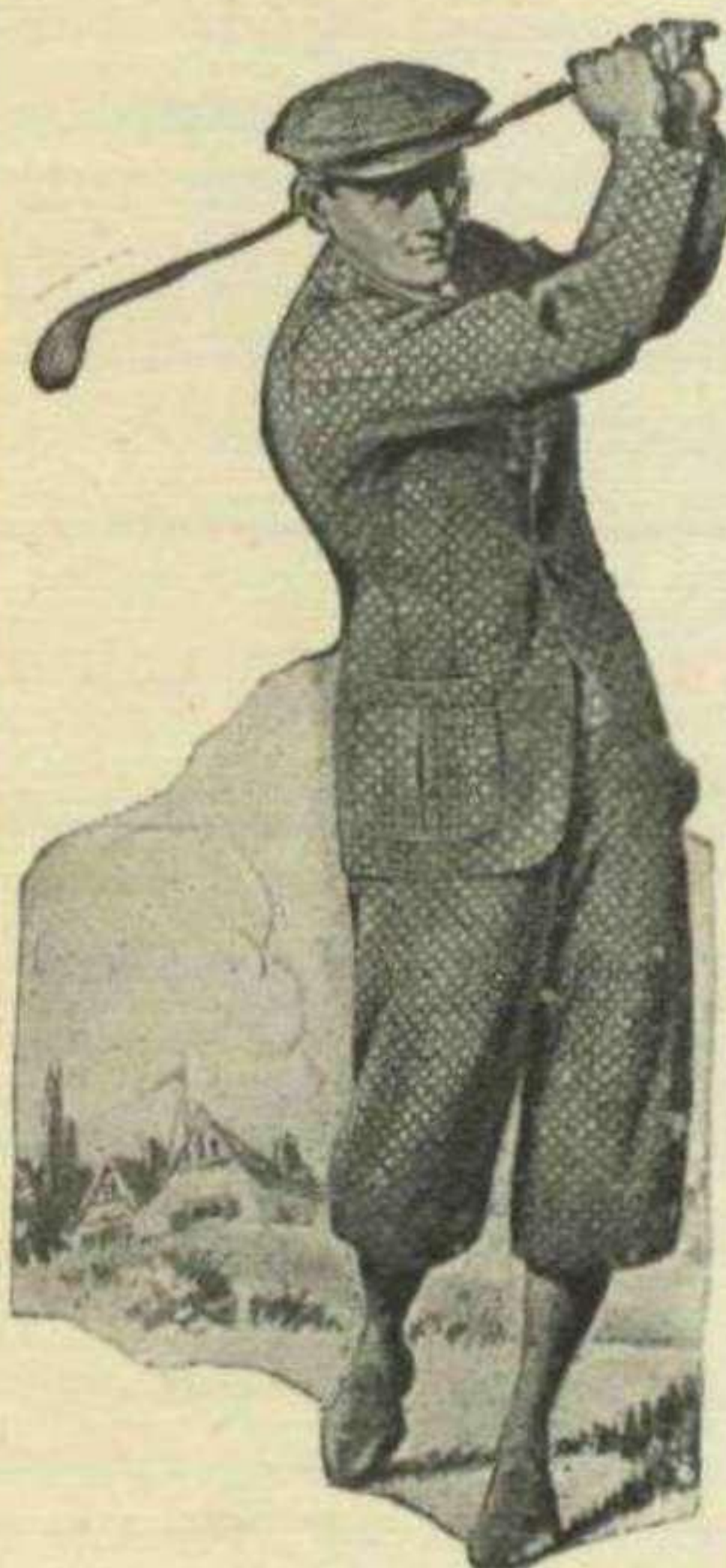
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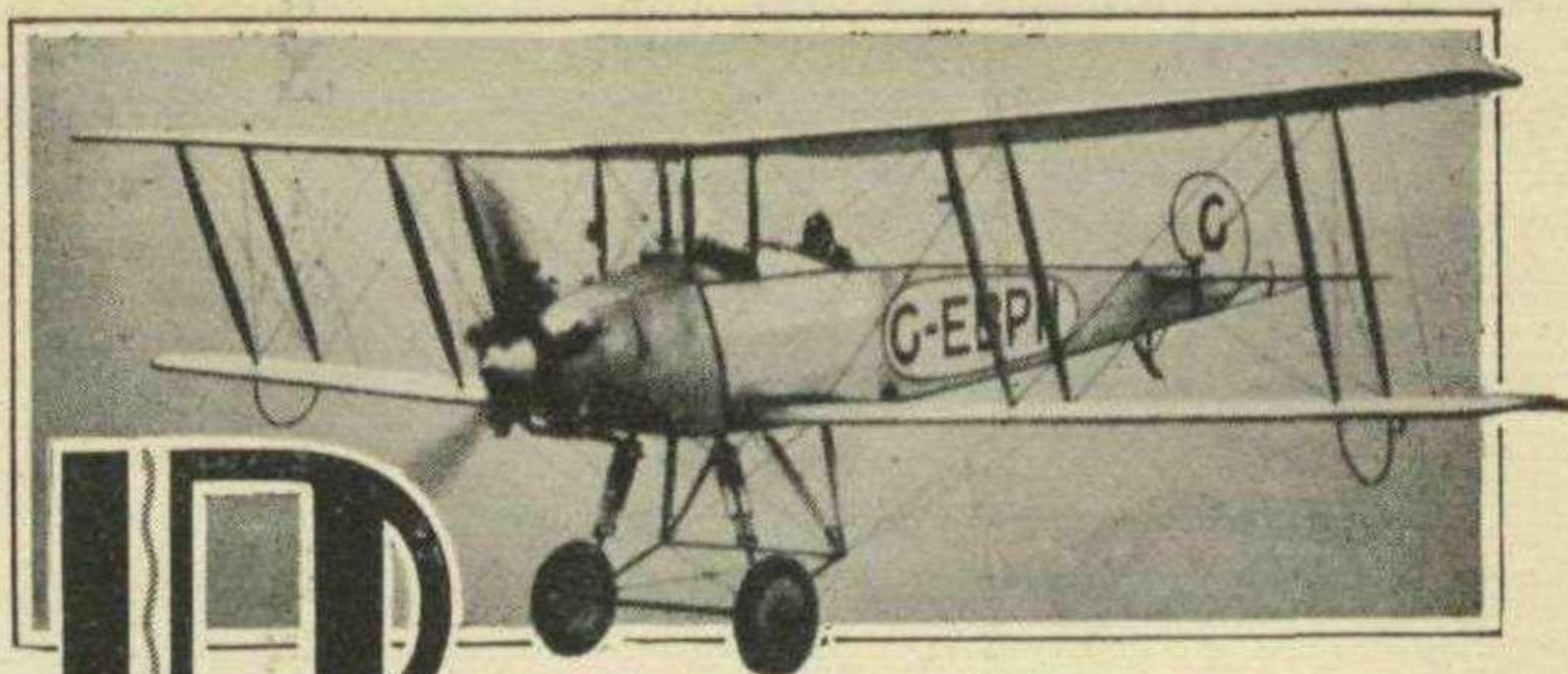
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# AIR



## THE KING'S CUP

88 STARTERS ————— 60 FINISHERS  
 WINNER'S SPEED, 102.7 M.P.H.

**H**ANWORTH aerodrome was the scene of great activity on the morning of the 5th July, when eighty-eight of the 101 machines entered were assembled there for the biggest flying event of the year—the King's Cup Race.

Long before the limit man took off on the 750-mile circuit, officials, competitors, their mechanics, passengers and supporters were up and about in the clear crisp air of a perfect summer early morning. The weather was ideal—with a cloudless blue sky, and the lightest of winds. It was an occasion when the most "unairminded" person might easily have become a convert and conditions were such as to arouse envy for the waiting pilots in the hearts of those who, for one reason or another, were compelled to remain on *terra firma*.

With the approach of zero hour the mingled roar of engines as they were run up increased, slipstreams flattened the grass, the sun glinted on spinning props and everything was set for the day's contest.

Promptly at 7 a.m. W. H. Sutcliffe, in D. M. K. Marendaz's Cirrus-engined "Moth," was sent off on the first leg of the course to Hamble, followed 19 minutes afterwards by G. Vlasto in a sister machine. Then came the little Robinson "Redwing," the latest of light-planes, piloted by J. F. T. Barrett; it took off well, its flat-four A.B.C. "Hornet" motor emitting a particularly crisp and healthy bark. A. G. Mortimer was the next away, snugly ensconced in the diminutive cabin of the "Robin" (A.B.C. "Scorpion").

Then in quicker succession, a series of "Moths," "Avians" and "Bluebirds" were sent on their way, amongst them being G-EBVZ, the "Avian" which Miss Winifred Brown was destined to bring in to premier place. Two "Spartans" followed, one piloted by Lieut-Colonel L. A. Strange (of the Spartan Aircraft Co.), the other by Flying-Officer McKenna.

Things at the starting line had gone off without a hitch up to this point. But when Squadron-Leader L. H. Slatter, flying Lord Trenchard's "Bluebird" IV and Mr. Gillan, in a similar machine, taxied up, they both

mistook Colonel Lindsay Lloyd's signal and commenced their take-offs prematurely. Excited wavings and shouts (which, of course, could not have been heard by the two pilots), ensued and they were recalled. The time was now nine minutes to nine and the 'drome was still crowded with machines waiting to start. Squadron-Leader J. Woodhouse, who will be remembered by many as an old T.T. rider and Brooklands habitué of pre-war days, was the next to leave; he was piloting one of the numerous "Bluebirds." And so the departures continued. At 9.12 a.m. A. B. H. Youell, of Imperial Airways and Flight-Lieut. S. Pope unstuck with a Desoutter ("Hermes") and an Avro V. (three "Genets") respectively, followed later by J. Bennett-Baggs with the new Avro Trainer ("Mongoose"), Gerard Fane in the little Comper, Captain Percival in the Hendy 302 (a low-wing cabin monoplane), the two Hawker "Tomtits," the Martlet, and a whole flock of "Puss Moths."

At eight minutes past ten only four machines remained for the drop of the starter's flag. They were the two Avro Avian monoplanes, (one with a "Genet Major I" engine, the other with a "Cirrus Hermes"), the handsome Segrave "Meteor" and finally the twin-engined Vickers "Vellore." The pilots of these planes respectively were:—F. Tomkins, Captain T. N. Stack, Flight-Lieut. Atcherley, and Flying-Officer Summers. The scratch man gave five minutes to the "Meteor," and then with a terrific roar from his two "Jupiters" he got his big machine in the air, exactly 3 hours and 41 minutes after the limit man.

Col. Lindsay Lloyd and Mr. A. G. Reynolds walked in, the drone of the "Vellore" died away, the whole field was away and Hanworth sat back to await the news from points along the course. Scarcely half-an-hour had gone before the first retirement occurred. It was Atcherley on the "Meteor"; apparently the petrol feed to the starboard engine was faulty, for intermittent running had set in, and Atcherley decided to return. Then a message came through that Mortimer was down at Salisbury with the "Robin."

Time passed and bulletins filtered through from the



## KING'S CUP—continued.

turning points and controls; Sutcliffe with his early "Moth" had reached Bristol, but not without difficulty. Like several of his fellow-competitors, who were overhauling him, he had been harrassed by fog and ground mist near the south coast, and in addition, he had experienced tappet trouble. Barrett, who had been relying on his compass to steer him over the foggy area found himself eventually over Bournemouth and arrived at Bristol very late with his compass doing strange things. Several others had wandered too, but most of them got away in pretty good time, heading for Castle Bromwich, Hooton Park and Manchester. Sutcliffe was still leading, with his gallant Mark I going strong with the throttle wide. He arrived at Manchester at 11.31 a.m., having so far averaged 79.1 m.p.h. This second stopping place was the scene of further retirements, and a number of machines also fell out before reaching it. Barrett's compass was still hopelessly out, and in view of the report of fog and mist between Woodford and Sherburn-in-Elmet, he decided to "pack up." The Avro "Five" landed O.K., but was unable to restart as the impulse starter on the port engine failed. Then it became known that Oliver's "Avian" and Cantrill's "Avian" were both out of it, while F. S. Symondson was reported missing somewhere between Bristol and Barton.

Meanwhile Miss Brown had been going great guns and by the time she had reached Manchester had crept up to third place. Competitors after receiving weather reports, set off again on the section of the course which proved the most difficult. Before Cramlington was reached Vlasto dropped out (he landed at Sherburn) and Sutcliffe, J. W. Chalmers ("Moth"), Flight-Lieut. Addams (Spartan), Capt. de Havilland ("Puss Moth"), Miss D. Guest ("Puss Moth"), Tomkins ("Avian" monoplane), Capt. Maxwell ("Moth") and F. G. Miles ("Martlet") all retired for various causes.

At Cramlington the massed arrival of the luckier ones became too much for the harrassed officials; machines were coming in from all directions, and every pilot was making frantic efforts to re-fuel. In the meantime some error was made in the starting arrangements, and with

about 20 machines due off within a few minutes there was still further confusion. Eventually however, competitors set off again on the 109-miles leg to Hull, the last control. Miss Brown was now well ahead, with Flight-Lieut. Waghorn ("Bluebird") second, and F/O McKenna (Spartan) third; behind these three came the remaining 68, with Mr. A. Butler in his special "Gipsy Moth" flying very fast indeed. But after Hull, there was still 182-miles to do, Miss Brown's "Avian" was still going strong, and her luck was holding. Others were less fortunate, and amongst those who retired for various reasons were:—Col. Sempill ("Bluebird"), Norman Blackburn ("Bluebird"), Lieut.-Col. Strange ("Spartan"), and M. D. Scott ("Moth").

Those at Hanworth, who had been regaled during the hours of waiting by a programme of exhibition flying, were now getting ready for the finish. The minutes passed and then, low down on the skyline, and flying fast, could be seen the outline of a biplane. No one was quite certain who it might be, until at 6.18 p.m. the three-year old "Avian", bearing the number 55, flashed over the finishing line.

Eleven minutes afterwards came Alan Butler who had flown a wonderful race with an average speed of 129.7 m.p.h. No. 3 was Waghorn, who came in two minutes after the second man, and the fourth competitor home was Mrs. Alan Butler who showed her ability as a pilot by averaging 129.6 m.p.h. for the 750 miles.

As the victor, Miss Brown not only won the King's Cup, but also received the Siddeley Trophy (presented by Mr. J. D. Siddeley, for competition among members of light 'plane clubs who are entrants in the Race), and a £50 prize given by Mr. M. H. Volk.

In previous years the winners of the King's Cup Race were:—1922, Captain F. L. Barnard, D.H.4a; 1923, Captain F. T. Courtney (Armstrong-Whitworth); 1924, Sir Alan Cobham (D.H.50); 1926, Captain Hubert Broad ("Moth"); 1927, Mr. W. L. Hope ("Moth"); 1928, Mr. W. L. Hope ("Moth"), and 1929, Flying Officer R. L. R. Atcherley (Gloster "Grebe").



Miss Winifred Brown taxiing her "Avian" in at the finish. She averaged 102.7 m.p.h.

(Motor Sport Photograph).





# SLIPSTREAMS

## Sailplanes and the Ultra-Light Plane.

ONE result of the demonstrations which Kronfeld and Magersuppe have given in various parts of the country during the past two months, has been a certain reawakened interest in the ultra-light 'plane.

People examined and admired the wonderfully clean lines of the "Wien" and the Kegel "Professor." And having done so, some of them, as they turned away, remarked that all these machines needed was a "little engine stuck on somewhere." Such a suggestion is strongly deprecated by glider enthusiasts who are most anxious to keep sailplaning entirely clear of powered flight in any form, while others declare the motorised-glider to be dangerous and unsatisfactory except in the most expert hands.

Nevertheless, it is a fact that one or two machines of the "Wien" calibre are now being planned by amateur constructors, so that it is possible that we may yet see the return of the "pip-squeak" after all. It should be born in mind that the design of motor cycle engines, such as were used in the Lympne competition have improved vastly since 1922, and as lack of power and unreliability were the chief troubles with the early machines, it is reasonable to suppose that a modern edition would make a very much better showing.

## More Foreign Machines.

In spite of the fact that British built machines practically hold the monopoly in the light 'plane movement in this country, the number of foreign aircraft firms which are represented here is increasing.

One of the latest arrivals is the Romeo Ro. 5, made by the aviation section of Alfa-Romeo, the famous automobile concern. The first demonstration model was flown from the works at Naples to Norwich by Mr. W. G. Pudney, late R.A.F., who is the English concessionaire. The "Ro. 5" is a tandem two-seater parasol monoplane, and except for the wing spars and ribs and covering, it is entirely of metal construction. The engine is an 85 h.p. air-cooled radial Fiat, and the machine has a top speed of 105 m.p.h. and cruises at 95 m.p.h. In this country, where it is shortly to be built under licence, it will be fitted with an English power unit. The "Ro. 5" has already distinguished itself by winning the extremely searching competition for the best light aeroplane held by the Italian Government, at Monticello last year.

Another foreign newcomer is the Belgian Bulte, training plane. This machine is a two-bay biplane of orthodox design and is fitted with a 140 h.p. Anzani engine. It is claimed to have a very slow landing speed, a quick take-off, and other qualities which make it admirably suitable for primary instruction or private flying. It is being marketed by Sealandair, Ltd., of 142, Long Acre, London, W.C.2, the price being £675.

## Diesel Developments.

Slowly but surely designers are progressing in the evolution of a satisfactory heavy oil engine for aircraft. On the Continent, in England and in America I.C. engineers have, for several years, been struggling with the many problems which lay in their path, but it seems now as if the Diesel aero motor has reached a stage when it has passed the experimental and reached the practical production form.

One of the great advantages of the type is, of course, the elimination of all risks of fire (gas-oil, which is generally used in Diesels, does not give off inflammable vapours below 90° C). But there are several other features which weigh heavily in its favour. Whereas the carburettor of a petrol engine is extremely sensitive to varying conditions of temperature and altitude, the influence of the latter on the running of a crude-oil power unit is negligible. Again, owing to its working cycle there is a reduction in heat loss from the cylinder walls and the exhaust, and thus the valves are not subjected to such a high temperature as in a petrol engine, and a quieter exhaust note is possible. Finally, there is the highly important commercial consideration of low running costs.

Recently a number of very successful flights have been carried out at Turin with a Fiat biplane fitted with a 180 h.p. six-cylinder crude oil engine. Special interest attaches to the machine, as the power unit was not designed and built throughout as a Diesel, but was one of the well known Fiat A.12 motors, modified to run on heavy fuel. Many of the parts were identical, but the cylinder bores were reduced from 160 m.m. to 140 m.m. in order to lower the internal stresses to the same values as when the engine was in its original form.

## Ground Instruction.

An interesting machine to teach the elements of flying reached this country recently and was demonstrated by Shell-Mex, Ltd., to a number of people in London last month.

The idea is to reproduce, as far as possible, the conditions in a pilot's seat, to teach the feel of the controls and to show how they actually operate and how they cause the craft to execute certain manoeuvres.

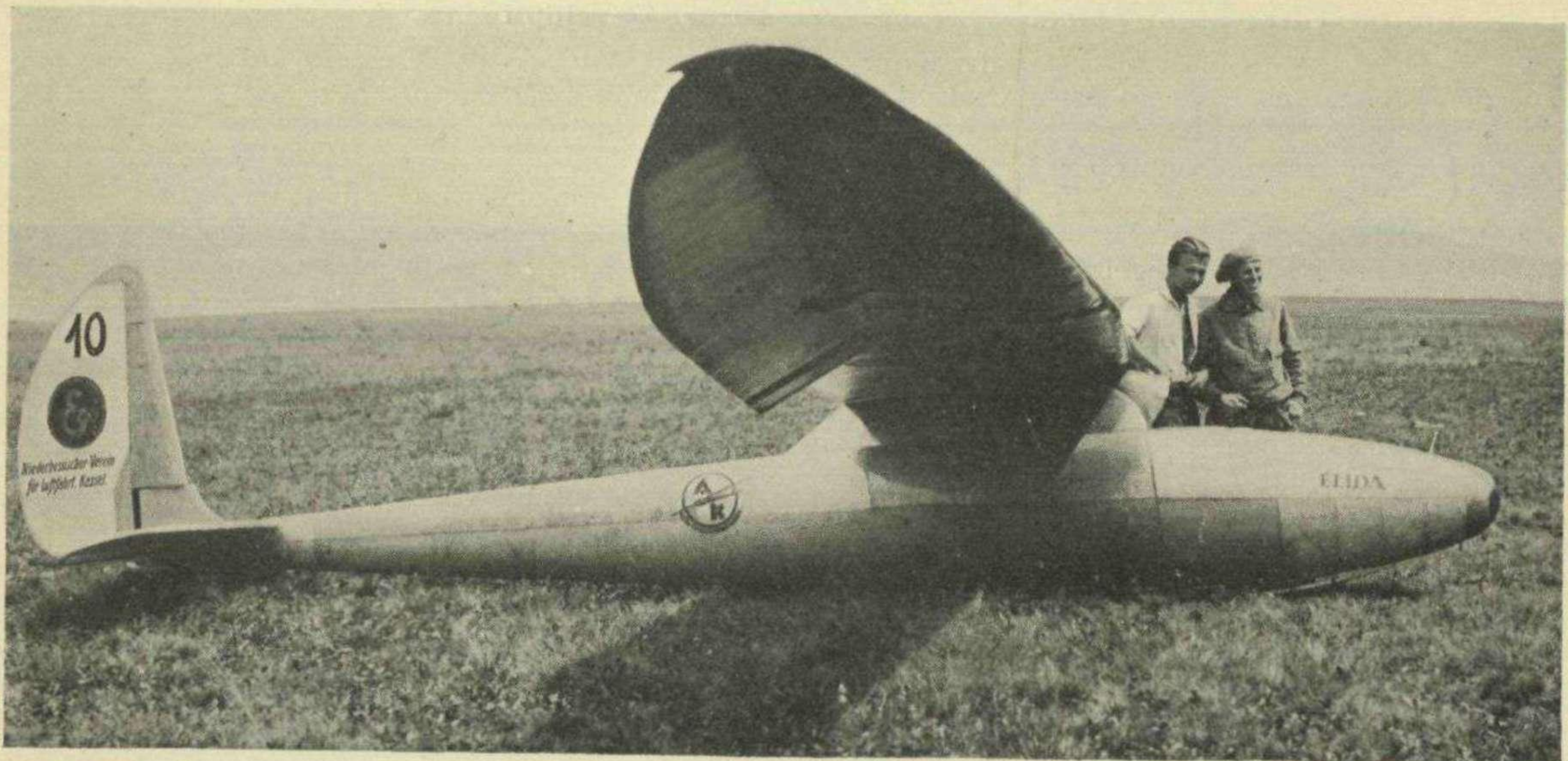
The "pilot," therefore, is provided with a real joystick, a rudder bar and throttle, etc., exactly as in the cockpit of an aeroplane. These are fitted under a table at which he sits. On the table at his eye level is a large glass case with, at the forward end, a motor and propeller to project a wind of up to 70 m.p.h. through it, this being controlled by the opening of the throttle.

In the centre of the case is a captive aeroplane in model form and the rear end of the case is open so that the pilot will feel the wind in his face exactly as in real aircraft.

"RUDDERBAR."



# Gliding Gossip and News



Experts at the game. Herr Magersuppe and Herr Kegel, beside a Kegel sailplane of the "Professor" type.

**A**IDED by the favourable weather conditions, the London Gliding Club has made a great deal of progress during the past month, and besides maintaining a steady series of week-end instructional sessions, the club has been going ahead in regard to membership, the figures of which are now well past the one hundred mark. Prospective members should note that the address of the club is 44a, Dover Street, London, W.1., to which all enquiries should be sent. Amongst other fixtures which the Club has held, one of the most interesting was a lantern lecture held in the Royal Aeronautical Society's Library on Monday, the 7th of July, when Herr Kronfeld addressed a large gathering of L.G.C. members. It is hoped that a number of similar lectures will be arranged for in the near future.

Another interesting development is the purchase of a 2-seater sailplane. This machine is naturally a big attraction, as the lesser-experienced members of the Club are now able to experience soaring (as passengers).

THE British Gliding Association has announced that arrangements have now been made for a party to journey to Germany to witness the Rhön Competition, which is to take place between the 9th and 24th of this month. The inclusive cost of the tour will be about £16, and members of the Association and affiliated clubs who wish to avail themselves of this chance to witness this very interesting event should apply at once to the Association.

ON Tuesday, the 15th of July a special demonstration of gliding was given by the B.G.A. and the London Gliding Club before H.R.H. The Prince of Wales, who flew over to Ivinghoe in an Avro "Avian." He was later joined by H.R.H. Prince George and Lord

Louis Mountbatten. Sir Sefton Brancker, Colonel the Master of Sempill and Mr. Gordon England were also present.

Herr Kronfeld and Mr. Latimer Needham made a number of successful flights over the Beacon and the Royal visitors showed the greatest interest in the proceedings.

ONE of the youngest and most go-ahead clubs is the Scarborough Gliding Club. Although only formed a few weeks ago, it has a large membership and instructional work on the primary type of glider is now being maintained every week-end. Early last month the Club, by arrangement with the B.G.A., held a meeting at which both Herr Kronfeld and Herr Magersuppe gave demonstration flights on the "Wien" and "Professor." The flights were made from Castle Hill, facing the sea and although weather conditions were not too favourable a number of "flips" were made by the two experts. Unfortunately there was some treacherous currents lurking about, and Magersuppe was compelled to put his machine down in the surf, as a result of getting in a violent down draught. Great public interest was taken in the meeting, the crowds numbering several thousands.

THE Sailplane Club of the T.M.A.C., whose address is 404, King's Road, Chelsea, London, S.W., has now secured a suitable site for its operations. This is situated at Smalldole, Sussex, a few miles from Brighton. From an inspection, one would say that it is very nearly ideal for the purpose; it lies some 750 feet above sea-level, is horseshoe-shaped and faces the prevailing winds. The Club has recently taken delivery of an R.F.D. elementary-training glider.

AT a recent meeting of the Nottingham Gliding Club,



*GLIDING GOSSIP—continued.*

it was decided that a reduction should be made in the subscription rates for pilot and associate members, so that the new figures are now £2 2s. and 10s. 6d. respectively. The Club still has room for more members, and anyone interested is requested to write to Mr. L. Burbridge, Honorary Secretary, at the Welbeck Hotel, Nottingham.

YET another Club is in process of formation at the present time. This is to be known as the Middlesex Gliding Club and Mr. D. Ussher who has its organisation in hand, states that one of the principal ideas will be to arrange for gliding facilities for its members in the evenings. Those interested should write to Mr. Ussher,

whose address is:—36, Framfield Road, Highbury, N.5.

SAILPLANING and gliding is now being taken up in South Africa, both the Johannesburg Light Plane Club and the Germiston Club having established sections for motorless planes. These two Clubs are building their own machines, but several R.F.D. gliders have been shipped to the Union recently to the order of private owners.

MR. Russell Taylor informs us that the scheme for the promotion of the "British School of Gliding," upon which he has been engaged for some time, has been postponed indefinitely, and that the subscriptions received in connection with it have therefore been returned.

## The "Tour of Europe."

### *Sixty Starters in International Light Plane Contest.*

COMPETITORS in the big International Light Plane "Tour of Europe," which started on Sunday the 20th July, were faced with atrocious weather conditions when they left the Tempelhof aerodrome, Berlin. Rain and heavy winds prevailed and during the first few days very little improvement was met with.

There was a total of no less than 60 machines at the start, the German entries predominating, while England was represented by the following:—Mr. Alan Butler ("Moth"), Mr. S. A. Thorn (Avro "Avian"), Mr. J. Carberry (Monocoupe), Captain H. S. Broad ("Moth"), Mr. Andrews (Spartan "Arrow"), Miss Winifred Spooner ("Moth") and Lady Bailey ("Moth"). France was represented with fairly large numbers of machines and there were also Polish, Swiss and Spanish competitors.

The course, which totalled 4,680 miles, was as follows:—Berlin, Brunswick, Frankfurt-on-Main, Reims, St. Inglevert, Bristol, Heston, St. Inglevert, Paris (Orly), Poitiers, Pau, Saragossa, Madrid, Seville, Madrid, Alcaniz, Barcelona, Nîmes, Lyon, Lausanne, Berne,

Munich, Vienna, Prague, Breslau, Posen, Warsaw, Konigsberg, Dantzig, Berlin.

The rules of the competition (which is still in progress at the time of writing) stipulated that every contestant must spend each night at one of the obligatory stopping places, but at the same time, he could cover as many stages as he chose in one day. Marks will be given accordingly, and they will also be assigned in respect of comfort, undercarriage design, engine starting, prevention of fire, dual-control layout, parachute equipment, accessibility and other features. The examination of machines, when the allocation of marks for these qualities will be made, will take place during the present week.

The competition has been particularly interesting, as many of the foreign planes were seen for the first time in this country, when they landed at the Bristol and Heston aerodromes. Among these was the Polish R.W.D. (Cirrus "Hermes") cabin monoplane, the low-wing cantilever B.F.W. monoplane (with inverted Argus engine), the very fine-looking Caudron low-wing monoplane, the Belgian St. Hubert parasol machine and the Arados strut-braced high-wing monoplane.



Competitors in the "Tour of Europe" re-fuelling at Orly, near Paris in the early part of the competition.



# THE SPORT AFLOAT



## Outboard Racing Problems

**A**LTHOUGH we would be the last to suggest that outboard motor boat racing has been a "flop" in this country, it does seem that this year, interesting as it has so far been for the real enthusiast, has proved that the sport has not yet shown the wide appeal which was expected.

This state of affairs is certainly not due to the general nature of the sport which, as anyone who has tried it will agree, is full of thrill and interest.

The development of hulls too, is in the nature of research, and of great value. It is rather in matters of detail in the actual events, and the rules under which they are run, that the sport lacks some of the attractions which it should possess. It must be remembered that one of the great values of this form of racing, is its propaganda effect on the spectators and general public.

### The Would-be Competitor.

More, probably, than in any other mechanical sport, the spectator is not only a possible user of an outboard motor, but also a potential competitor in these events. It is therefore of the utmost importance that it should appear attractive to him. At present, there is a sort of "family party" atmosphere about the game, which, though extremely pleasant for the happy band who at present constitute the chief exponents of the art, is liable to exclude the man who would go in for it, but who is deterred from so doing by the points which we are discussing.

There is no doubt that the actual racing lacks many features which should appeal to the interested spectator. By this is not meant the man who knows all the boats and pilots well, and is, therefore, always keen. Though some of the readers of *MOTOR SPORT* who follow this branch may come in this category, the majority will rank merely as intelligent onlookers, who are always on the watch for any new form of competition in which they may indulge.

There is no denying that outboard racing, as at present conducted, is liable to bore them, and give the impression that there is not much thrill to be got out of it. Also,

owing to the constant introduction of new models, it appears that to be successful will be expensive, and as the cheapness of this sport is one of its greatest points, anything which obscures this in the eyes of potential competitors, is something to be avoided.

It is of course obvious that to criticise the efforts of others, who are working hard for the benefit of the sport, although easy, is quite useless unless some suggestions of a constructive nature are put forward. One of the most successful outboard events held this season, was the 100-miles race for utility craft at Poole, and there are many things to be learnt from this.

### Starting Methods.

One of the weak points of most racing is the very uneven start, by the method developed simply from sailing. The method used at Poole, however, was a great improvement. Here all the boats were moored to a large hawser which acted as a starting line, and when the signal was given, engines had to be started up, and a very even start was the result.

This method has several advantages. It secures a start comparable with Brooklands; it makes handicap starts simple, and this immediately gets over the trouble of competing against newer models.

It holds the spectators' attention better than the present method; and, above all, it encourages both manufacturers and tuners to develop easy starting.

The present day utility outboard motor, which is of course numerically by far the largest type, is a very easy starter. Some racing engines however, by the time some enthusiast has tried to get some more speed, and possibly upset the carburation a little, is often obstinate.

The sight of a hunched figure, sitting in the stern of what appears to be an overgrown shoe, playing feverishly with bits of string, what time he drifts helplessly about the water, is not an impressive sight. It is this sort of thing which discourages potential competitors, and which a revision of the starting rules on the lines suggested above would avoid.



# A FOUR-STROKE OUTBOARD ENGINE

## THE 347 c.c. SHARLAND WITH O.H.V.

**I**N outboard engine design the flat-twin two-stroke principle has predominated for many years, to the almost total exclusion of any other type.

More recently, however, certain manufacturers have been departing to some extent from the orthodox in their efforts to gain improvement in performance and efficiency and one of the latest and most interesting engines to be produced is the four-stroke Sharland.

This unit has been evolved not with cheapness or simplicity as the main object, but more as a serious attempt at producing a really high-grade racing engine with qualities and capabilities above the average. That such is the case is clearly indicated throughout the whole engine, and the care with which even the smallest details have been planned, and the high finish of the unit as a whole are points which are at once noticeable.

The capacity of the Sharland is 347 c.c. and it has bore and stroke dimensions of 57 by 68 m.m. Each cylinder head, which is detachable, carries one inlet and one exhaust valve, which are set at 80 degrees. These are operated by tappets, push rods and rockers and a separate camshaft is used for working each valve. The rockers are carried on roller bearings and all the valve gear is enclosed by cast aluminium covers while a special lead carries a supply of oil to the inside of these covers from the crankcase; the valves are closed by double concentric springs. The cylinder barrels are very finely finished and adequately jacketed; they are attached to the crankcase by four studs which are readily accessible. The crankshaft is a one piece forging made of high percentage nickel steel, hardened, ground and carefully balanced. It is carried on both plain and ball bearings of ample size.

The connecting rods are specially heat treated. The big ends run on one piece roller bearings, and the small ends carry floating gudgeon pins. The pistons are of a special aluminium alloy which has been tested to show a tensile strength of 17 tons per square inch at 300 degrees Centigrade. Two rings are fitted to each, the lower one acting as a scraper. Ignition is by a B.T.H. magneto placed in a convenient position on an aluminium platform bolted to the crankcase. Its position in front of the engine and shrouded by the flywheel affords it excellent protection from spray. The flywheel is a steel drop forging and has a grooved plate for taking a starting cord.

The oiling system is on the dry-sump principle, and a "Pilgrim" pump delivers oil direct to the big end bearings via oilways in the crankshaft. From there the lubricant is flung round to other internal parts. The scavenger side of the "Pilgrim" then draws it from the sump and delivers it to a reservoir. This reservoir or tank has

a capacity of one quart and is of aluminium; it is situated on top of the crankcase, and being finned and placed beneath the flywheel, it cools the oil very effectively before it is redelivered to the big ends.

Very careful attention has been given to the matter of carburation on the "Sharland," and in order to avoid those distribution difficulties, which are generally met with in H.O. twin engines where a single carburetter is employed, a separate instrument is bolted direct to each cylinder. Long inducer pipes are fitted to each air intake and the throttle controls are interconnected to a single Bowden lever. Both inlet and exhaust ports are streamlined and polished in the approved manner, giving a good gas-flow.

As has been stated, the engine has been designed primarily for competition purposes and it is, therefore, not surprising to find that it has a compression ratio of  $8\frac{1}{2}$  to 1; with so high a ratio as this, it is, of course, necessary to use a 50-50 petrol-benzol mixture, or a suitable racing spirit. But when desired, the makers supply their unit with a lower compression, when it can be run on straight petrol. The fuel tank holds about two gallons and is secured above the engine by two substantial metal straps.

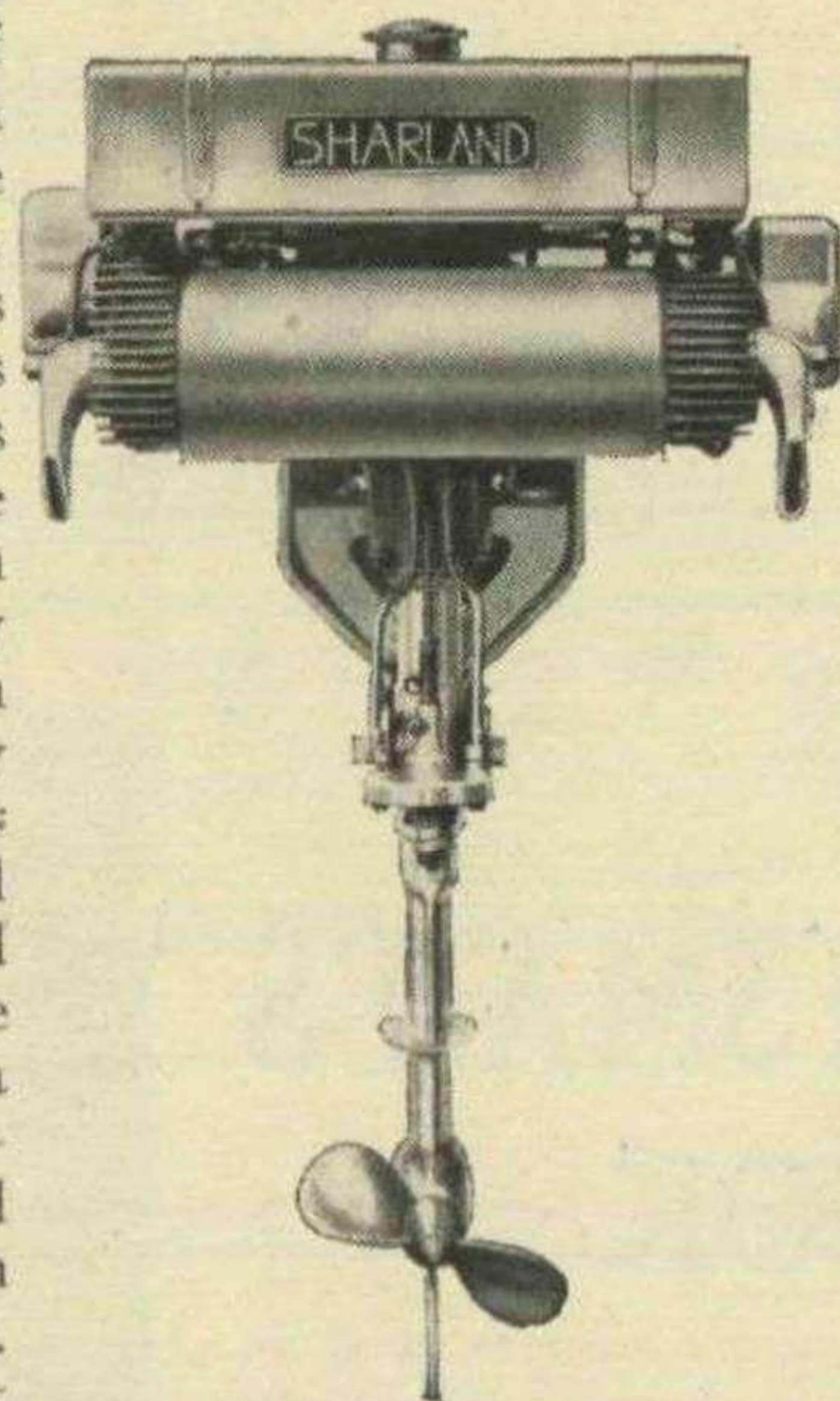
The under-water portion of the unit is a very clean piece of work and in the gearbox and bevel housing a high degree of stream-lining has been achieved with a minimum of excrescences. The casing is made of a special aluminium alloy which is practically corrosion proof. The gear-ratio used is 13-21, and both the propeller shaft and the driving shaft (which are of stainless steel) are supported on ball bearings, two radial and one thrust being employed for each. A skeg is fitted, but the unit can be supplied without this, if desired. Due attention has been given by the designer to absolute watertightness of the gearbox, and a well thought

out arrangement of spring loaded packing glands is fitted around the propeller shaft to provide for this.

The water-circulation pump is placed on a flange on the gearbox housing above the water line. It is of the centrifugal type and is shaft-driven at crankshaft speed. The silencer is cylindrical and water cooled, and has two heavily-finned cast aluminium end plates with fish tails attached.

The finish of the engine is of a high standard, all the aluminium parts (except the oil cooler and silencer ends) being polished; the flywheel, tank, carburetters and all small fittings are chromium plated and the cylinder barrels are painted with cellulose.

It is understood that arrangements are now completed for the "Sharland" to be put into regular production and that its price will be about £75.



The "Sharland" Engine



## The London-to-Cowes Race

### *Six Finishers in B.M.B.C.'s Event.*

**T**HERE were eight starters for the British Motor Boat Club's London-to-Cowes Race which took place on Sunday, 13th July.

The start was from the Erith Yacht Club's ship "Garson," and the finish was opposite the "Enchantress" at Hythe, Southampton.

Weather conditions were far from ideal for the competitors, and off Margate, where fairly heavy seas were running, the craft could be seen to be undergoing a pretty severe test for seaworthiness.

There were two retirements, and the competitors finished as follows:—(1) "Dahinda" (10.25 knots), (2) "Full Cry" (7.5 knots), (3) "Waterbaby" (6.85 knots), (4) "Gamecock III" (7.5 knots), (5) "Nympha II" (20.8 knots) and (6) "Knock" (18 knots). The winner receives the Braemar Challenge Cup, while "Nympha II" wins a cup for fastest time in the race.—B.

#### Record Attempts.

**M**R. PHILIP TURNER will shortly attempt the "B" class mile record with a Sharland 4-stroke engine and a British hull. He will also attack the class "C" mile record on a Dunelt. In preliminary trials he has attained a speed of over

40 m.p.h. The attempt will be made at Medina, I.O.W., over the Admiralty measured mile. This will be the first time that the record has been attacked with a British engine and hull. Up to recently the Americans have predominated in this class. Mr. Philip Turner has every confidence that he will attain a speed of 43 m.p.h. The hull only weighs 37 lbs.

#### ANOTHER BRITISH ENTRANT FOR DETROIT.

**M**R. SCOTT PAINE will leave for America in about a fortnight's time, taking with him his new boat with which he will compete in the International Races at Detroit, which are to be run off at the end of this month.

The new boat is of very promising design and embodies several new ideas. Owing to the fact that there is no suitable English-built engine which would make Mr. Scott Paine's craft eligible for the class in which he has entered—the 5½ litre—an American Scripps has been installed.

The boat will be piloted by Mr. Scott Paine himself.

## THE MOTOR SPORTSMAN'S NOTE BOOK

Bound in polished Crocodile Leather, with pockets and pencil inside, 76 pages of sportsman's matter including Land, Water and Air records, and other information useful to the Sporting Motorist.

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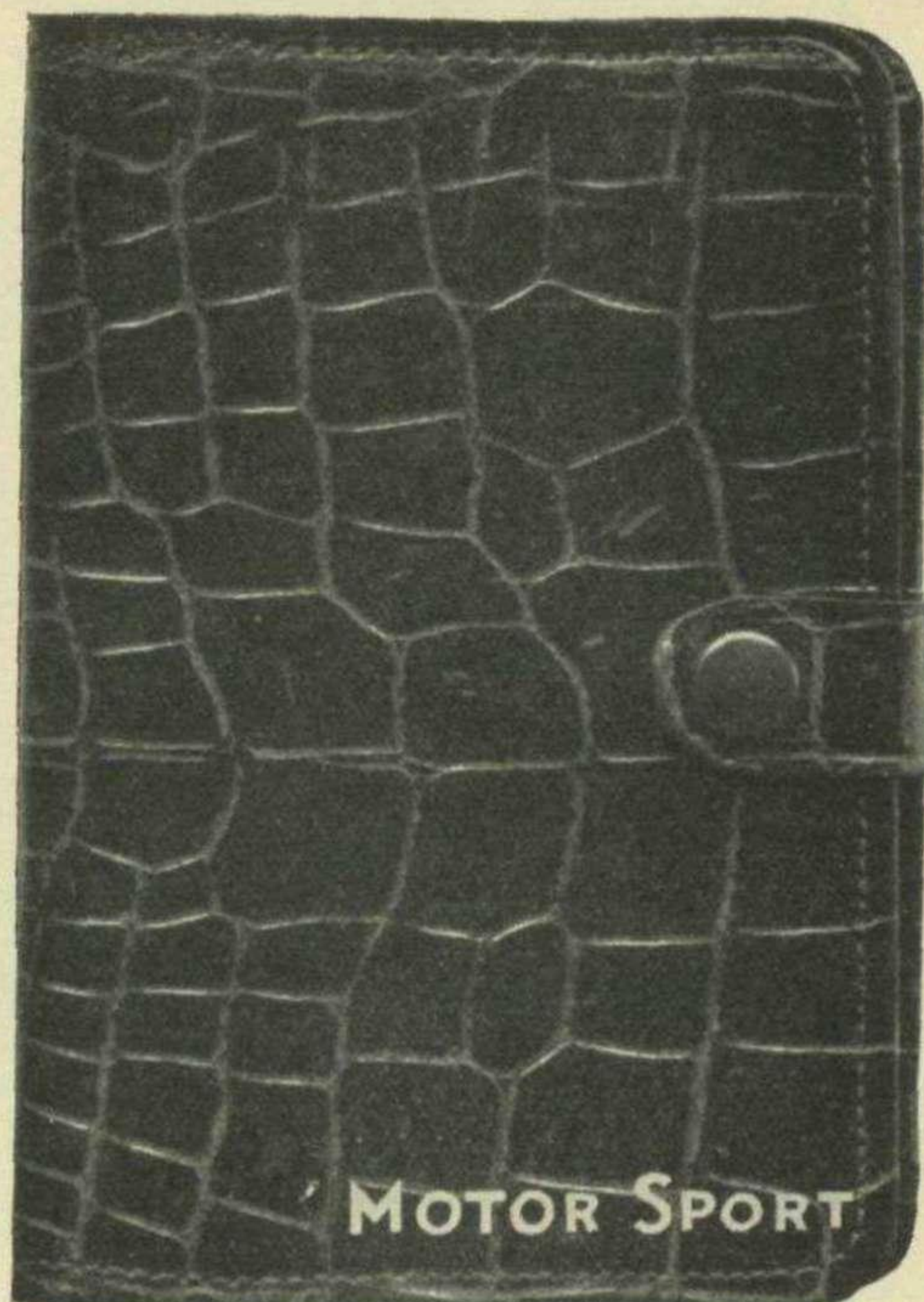
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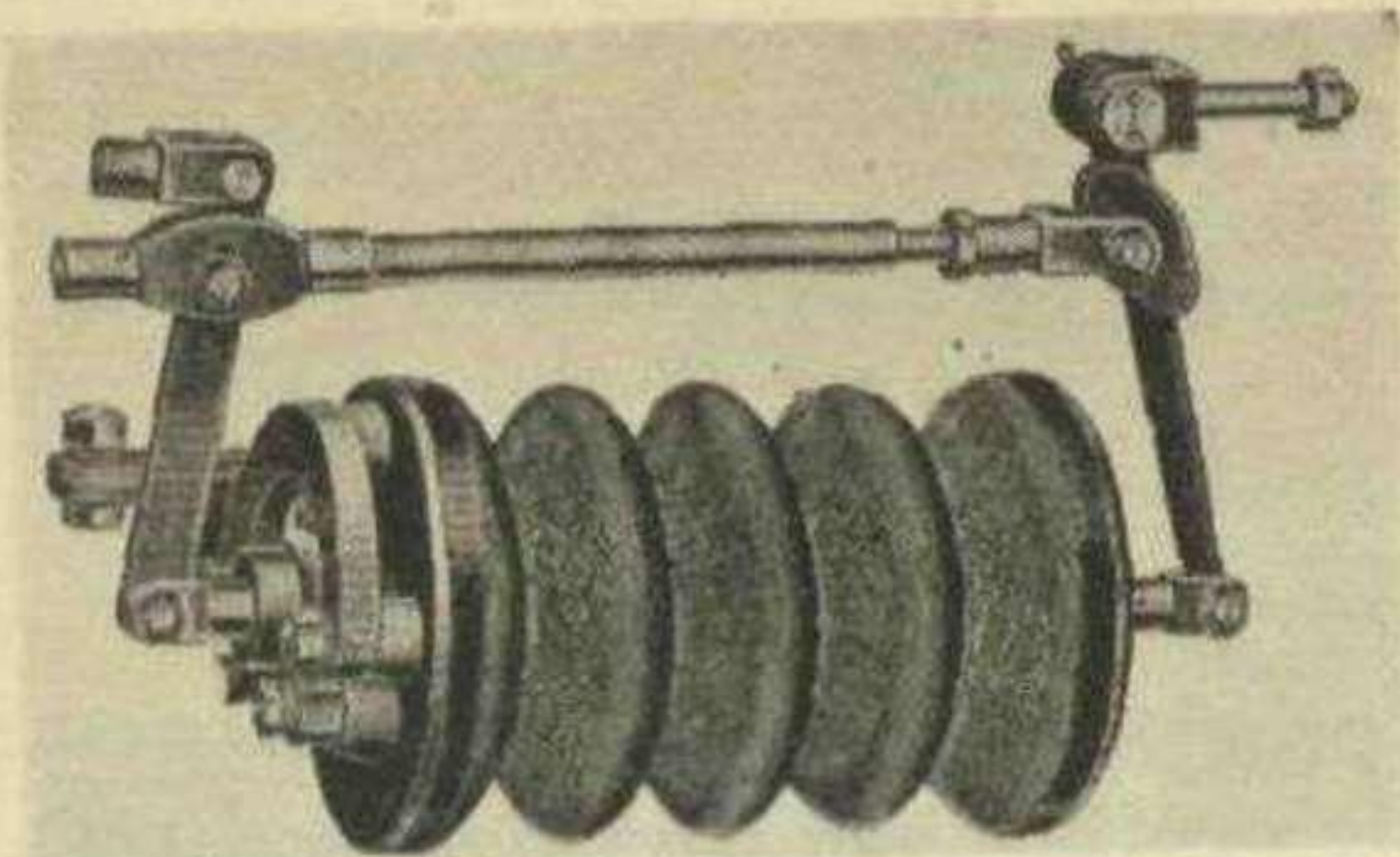
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ACTUAL SIZE



## ITEMS OF INTEREST



Marelli Servo Device.

## Marelli Vacuum Servo

MARELLI MAGNETOS (England), Ltd., are marketing an interesting servo brake mechanism which may be fitted to any car. Power is derived in the usual way from the reduced pressure in the induction pipe, but the suction is made to contract a rubber bellows instead of moving a piston in a cylinder. The bellows, besides needing no lubrication, is said to be unaffected by frost or grit.

The simplest application of the servo is where one end of the bellows is secured to the chassis and a rod conveys the pull from the other end to the existing braking system, which is otherwise unmodified. An alternate and more elaborate scheme is to employ two of the bellows units, one on each side of the chassis. The front and rear brake on each side are connected to the two ends of their respective units, and the suction for each is supplied from a regulating valve placed behind the brake pedal. Depression of the pedal puts the engine suction in communication with the two units through branch pipes, and since the whole system will be under the same degree of vacuum, the braking effort should be equally distributed between the four wheels. The original linkage between pedal and brakes remains unaltered, so that it still comes into action if the servo fails.

## Anti-Glare Glasses.

ONE of the greatest dangers to which anyone is exposed who travels at high speed, whether by air, land or sea, is that of injury to the eyes through the breaking of goggles which one must necessarily wear.

The ophthalmic hospitals of London report a growing total of serious injuries to the eyes through breakage of glass lenses and goggles, and, whilst everyone for some years has been aware that goggles can be made of unsplinterable glass, they are probably not aware that modern developments have enabled these unsplinterable lenses to be supplied in a good goggle at a very reasonable price.

Dollond & Aitchison Ltd. of 28, Old Bond Street, are now selling, in large quantities, a goggle with unsplinterable lenses at 15s.; and since one can now buy a high class instrument at so low a price, it should be a crime for anyone to wear the old form lens or goggle.

These unsplinterable lenses can now be worked with the sight of the wearer at a very small extra cost, and therefore

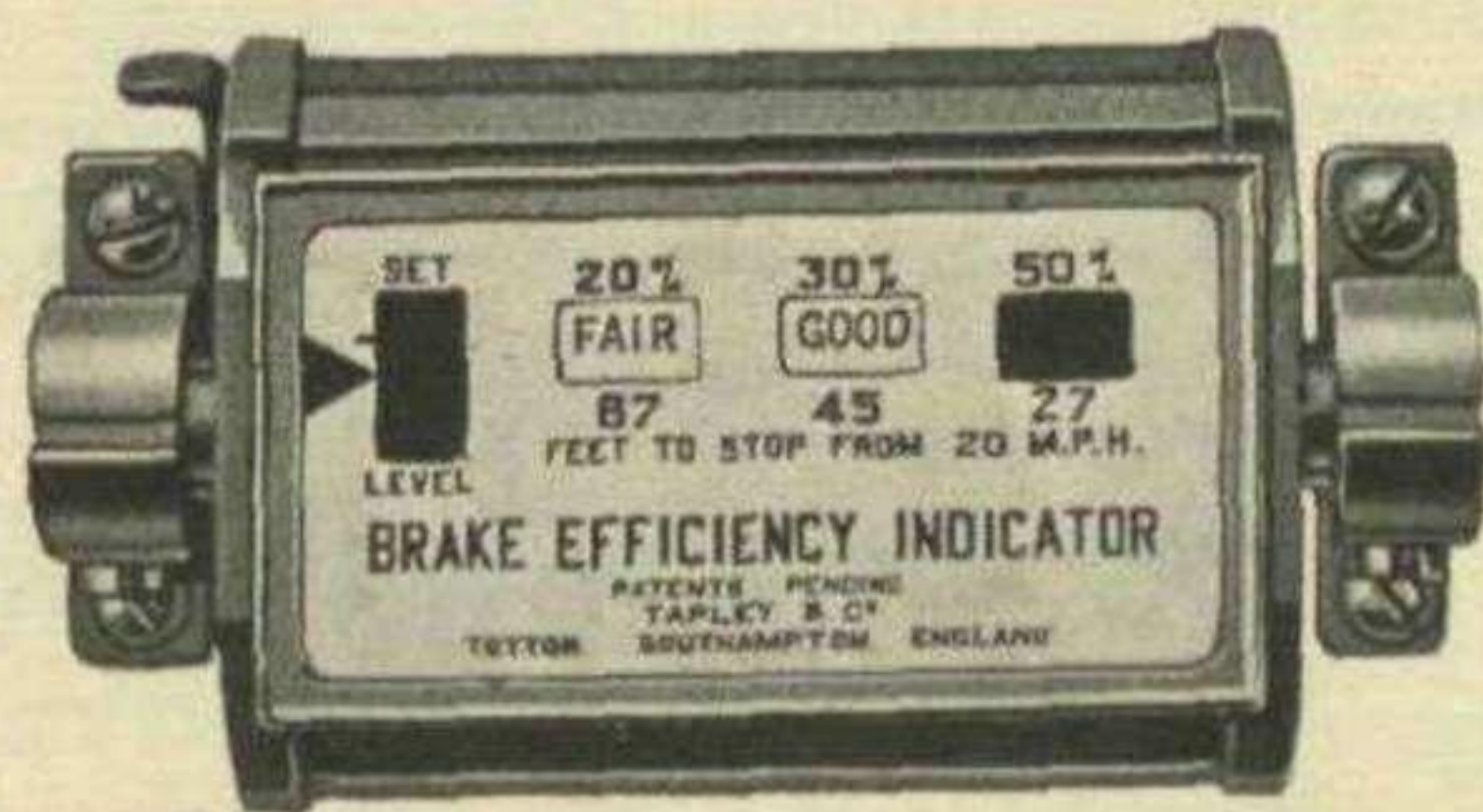
anyone with defective eyesight need no longer wear a goggle over his spectacles, but can get the full advantage of perfect vision and safety in the one goggle.

This firm also handles Crookes glasses, a sample pair of which we have recently tried, and found most effective in combating the glare, both of the sun or headlights. A feature of these glasses is that the lens is of light grey tint, so that colours are not altered to the wearer, as is usual with tinted glasses.

## Checking Brake Efficiency.

TAPLEY & Co., of Totton, Southampton have added a new instrument to their range of useful performance indicators.

This is a little device designed for the purpose of checking the efficiency of the brakes of a car. It comprises a metal casing with a rectangular dial on which are three graduations. The internal mechanism consists of three pivoted inclined tubes, which carry balls and their movement is transmitted to tablets inscribed "Fair," "Good" and "V.G." These tablets appear on the dial according to the rapidity of deceleration of the car, and they denote respectively 20 per cent., 30 per cent., and 50 per cent., braking efficiency, equivalent to a stopping



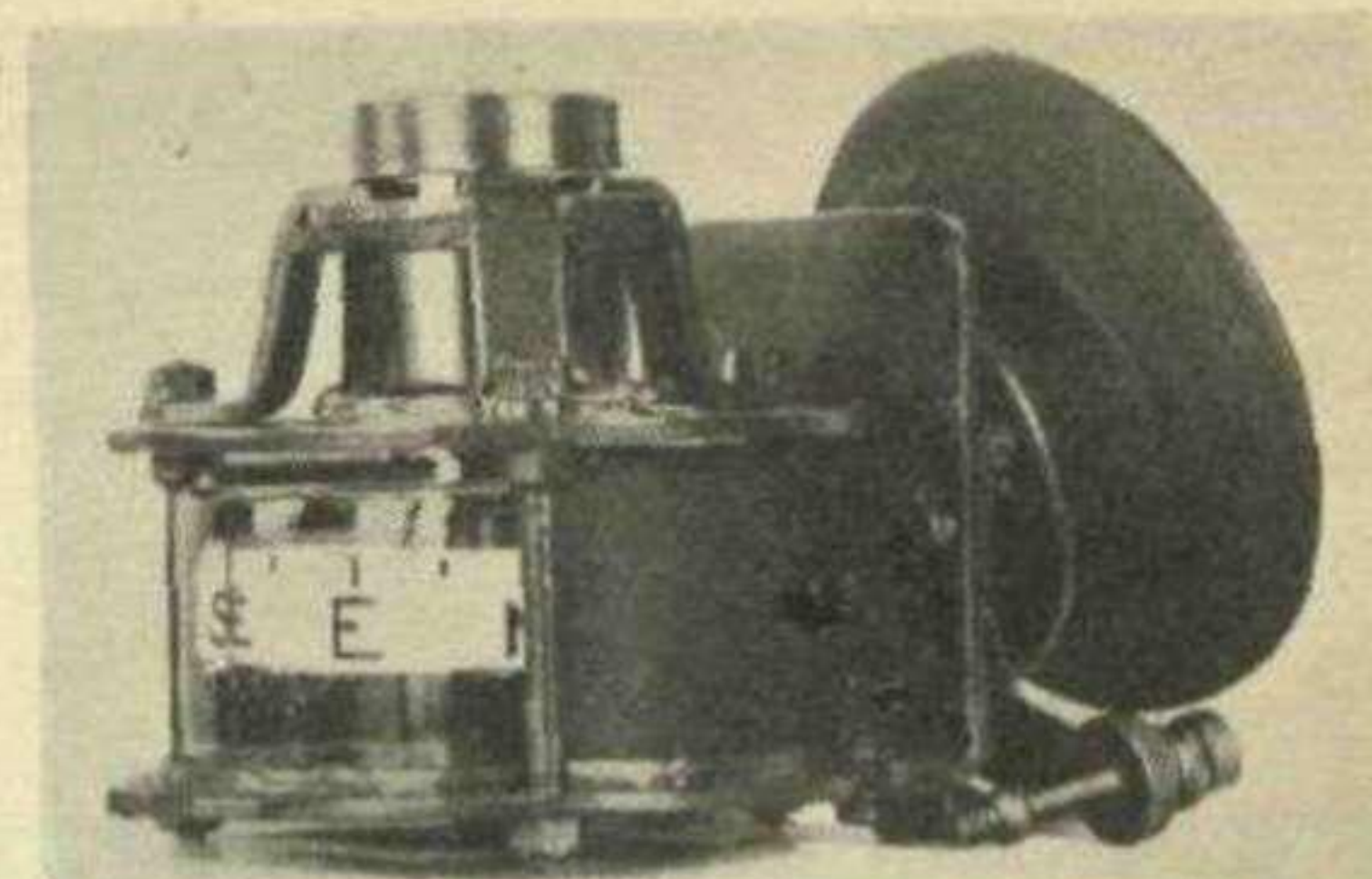
Tapley Brake indicator.

power in feet from 20 m.p.h. of 67, 45 and 27. The indicator is very carefully calibrated and checked in manufacture, and it can be relied upon to show accurately just how good or how bad are the brakes of the car to which it is fitted. Its dimensions are quite small, its width being only 2 $\frac{3}{4}$  ins., and finished in Chromium plate, with matt silver finish dial it is of particularly neat appearance. Its price is 18s. 6d.

## A Compass For Cars.

HENRY HUGHES & SON, Ltd., of Barkingside, Essex, the well known nautical and aircraft instrument manufacturers, have recently introduced a small compass for use on cars.

Of neat, compact design, it is intended for attachment to the windscreen, and a rubber shock-absorbing buffer is incorporated in the mounting. The construction is based on the same principles as those of the "Huson" motor boat and aeroplane compasses, and in practice it functions very well under the arduous conditions imposed by road work. Its price is £3.



Hughes Car Compass.

## For Inner Tubes.

A NEW, patented substance known as "Karbosite," has recently been placed on the market which claims to prevent deflation of tyres when punctured by small sharp objects, such as a nail or sharp stone. This compound is injected under pressure through the tyre valve and owing to its special composition, unlike many other puncture preventatives, it does not adhere to metal or rubber. Karbosite is in the form of a paste and contains inert asbestos fibres which tend to fill up any small holes in the tube. Besides acting as an effective seal for the tube, it is also claimed by the manufacturers that it definitely preserves the rubber, yet at the same time it has no adverse effect on the vulcanisation. The cost of treating the tubes with this substance varies, according to the size of the tyre, but the filling of a 27 x 4.40 in. tube is 7s. The name and address of the makers is Karbosite, 2-4, Harehills Road, Leeds.

## Super Suspension Spring Attachment.

A "MOTOR SPORT" staff car has recently been fitted with a set of Super Suspension spring attachments. This device comprises a number of steel plates which house a series of hardened steel balls, in a similar way to that found in the centre portion of an ordinary thrust race. These plates (four of which are used for each spring in the case of a semi-elliptic suspension system) are fitted between, and at the end of the first and second, and second and third leaves, and their effect is to allow the latter to slide one on the other with a greater freedom of movement. The result is a considerable increase in their periodicity and a more lively action.

Under test, the improvement in the riding comfort was most marked, while the steering appeared to be lighter than previously. The manufacturers, Super Suspension Ltd., of 20-26 Lonsdale Road, London, N.W.6, state that their attachment also tends to eliminate wheel bounce, and reduces the risk of skidding, and our experience after making various adjustments to the shock absorbers, indicates that these claims are by no means unjustified.

It is of interest to note that a free trial may be had of Super Suspension over a period of 14 days.

The cost of the attachment (a set of 16 races) is:— small cars £1:5:0; light cars £3:3:0; medium cars £4:4:0; and heavy cars £5:5:0.



# HERIE and THIERIE

## By "Camshaft"

### De-coking While You Drive.

WHEN one is continually trying out new gadgets, fittings and ideas—generally at the request of their makers or inventors—one is inclined to become a little sceptical over the claims which are always made for them. I must confess I was in this state of mind recently when the Editor commissioned me to carry out a test of the Decarbo Exhalator. This device, as may be gathered from its name, is for the purpose of carbon removal from the engine and the claims made for it are:—It will automatically decarbonise an engine while it is in use, it will cure sticking valves, it will keep plugs and valves clean, and, if used regularly, it will obviate the necessity of decarbonising altogether. The Exhalator consists of a small bell-mouthed cylinder into which is fitted a sleeve which, in turn, holds a cartridge containing a chemical compound. The device is fitted somewhere in front of the car—on the bonnet-board, for instance—so that the air, passing over the inner chamber, causes the compound to vapourise. The vapour then passes along a tube to the carburetter intake, and into the engine.

The car to which I fitted it, is some four years old and has not been de-coked for 9,000 miles, and was, therefore, an excellent subject with which to test the claims of the manufacturers of Decarbo. Before putting it into use the head was removed and the condition of the pistons noted. As may be imagined, the carbon deposit was pretty heavy and caused the engine to pink very easily. Since this examination, I have had the device in action for 600 miles, and although I have not yet removed the head, by the improvement in the motor's running, I am quite prepared to find a definite decrease in the carbon. The engine is far less "woolly" than before and the tendency to knock is much less pronounced, so apparently Decarbo is "doing its stuff." I am to continue the test for another 900 miles, after which the engine will be taken down, and my inspection, I think, will be interesting.

### For "Spiritualists."

Hitherto, motorists have been almost entirely concerned with the question of the design and performance of cars. Now, however, that engines have attained to such a uniformly high standard of efficiency, they are turning their critical minds to the subject of petrol. The sports car owner, in particular, is no longer content to dump any old brand in his tank, and selects his "juice" according to his own requirements.

Opinions differ greatly as to the most desirable qualities in petrol. Some regard rapid acceleration with high maximum speed as the most important quality of all. Others with very high compression engines plump

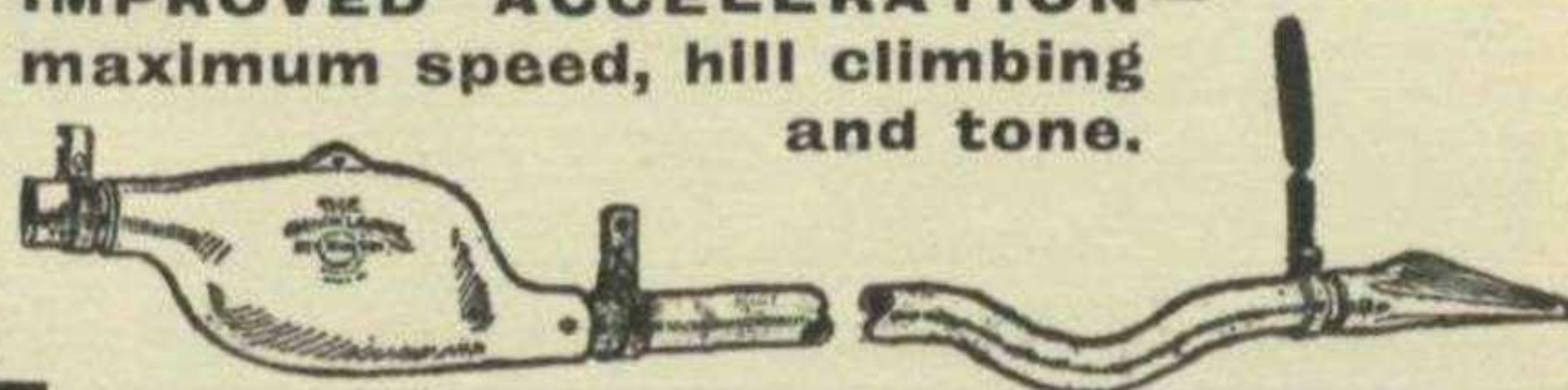
for non-pinking and others with an eye to economy think that mileage per gallon is the chief consideration. There are other qualities, however, which a good petrol should possess, such as volatility to ensure quick starting and elasticity in meeting the demands of the accelerator pedal without choking or fuss. At the same time, the spirit should be such that there will be no risk of its thinning the lubricating oil, otherwise serious damage to the engine may result.

Petrol users have now an opportunity to record their views as to the order of merit in which the different properties of petrol should be placed, for the proprietors of the new "B.P." petrol are offering £2,000 in cash prizes for opinions on this important question. They have undertaken to contribute to the Prince of Wales' Personal Fund, for the charitable work of the British Legion, 3d. for every coupon sent in. Full particulars and free entry coupon may be obtained from any "B.P." petrol dealer.

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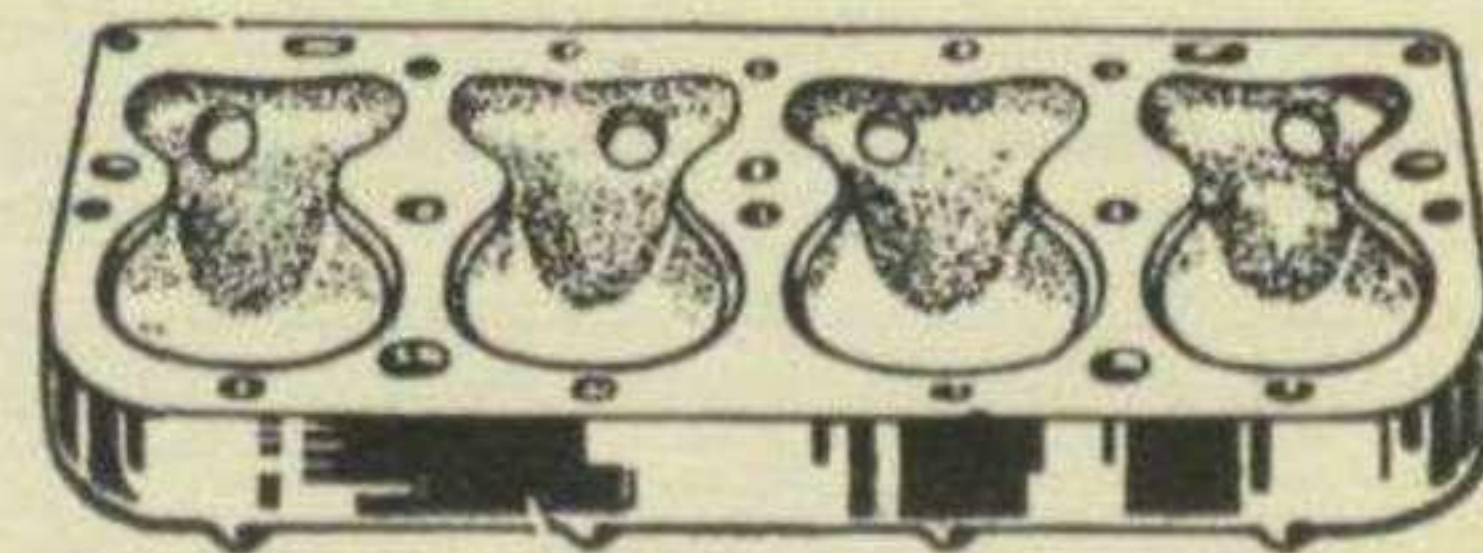


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ALFA ROMEO

IRISH Grand Prix winner, 1929, supercharged 2-litre ALFA-ROMEO 4-seater for sale; has only run this one race and a further mileage of about 5,000; completely overhauled and repainted after race, new supercharger casing and distributor, just decarbonized and brakes relined, £850; no lower offer will be entertained as car is in perfect condition. View by appointment at Adam's Garage, Notting Hill Gate.

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SPEED model short chassis Bentley Vanden Plas Type body, 1925, Bentley seals intact, Triplex windscreen and sidescreeens, 2 spare wheels, 6 excellent tyres, large spotlight, luggage grid, tonneau, all-weather, excellent mechanical condition, Lucas giant headlamps, fastidious owner driver, really magnificent and unusual condition throughout. 6 months mechanical written guarantee. £295. (Terms, exchange). Taylor, 278, Wheeler Street, Birmingham.

"CYRANO DE BERGERAC" for sale, best offer. Enquiries to H. P. Bowler, c/o Symes, Manor Works, Byfleet.

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1 1/2 LITRE T.T. 2-seater supercharged sports, late 1929, 100% condition, 295 guineas, with guarantee. Warwickshire Motors, Ltd., Lea-Francis Agents, 118-122, Gt. Portland Street, W.1. Museum 2963-4.

£375 Latest 1930 1 1/2-litre supercharged LEA-FRANCIS hyper sports low-built 4-door saloon (featherweight), mileage approximately 1,000, cost over £650 with extras. Thorns, 19-21, Gt. Portland Street, W.1. Langham 3966.

£995 MERCEDES-BENZ latest series S type, 36-220 sports super-charged tourer, taxed to end of year, new condition, small mileage, guaranteed speed 112 m.p.h. This car has only been in the hands of an expert and has been most carefully treated, fully guaranteed, cost £2,050 approx. Thorns, 19-21 Gt. Portland St., W.1. Langham 3966.

MERCEDES-BENZ now have to offer for sale their 1929 demonstration cars, which are in perfect condition throughout, and the opportunity should not be missed to inspect and have a demonstration of the following, which makes an exceptional opportunity to secure one of these famous cars:—

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FOR further particulars, etc., write or call. Show-rooms: British Mercedes-Benz, Ltd., Three Kings House, 37, Davies St., Grosvenor Square, W.1.

RILEY

RILEY 9 Brooklands 2-seater. A special car throughout. Cost over £700. £395. Thorns, 19-21, Gt. Portland Street, W.1. Langham 3966.



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(continued).

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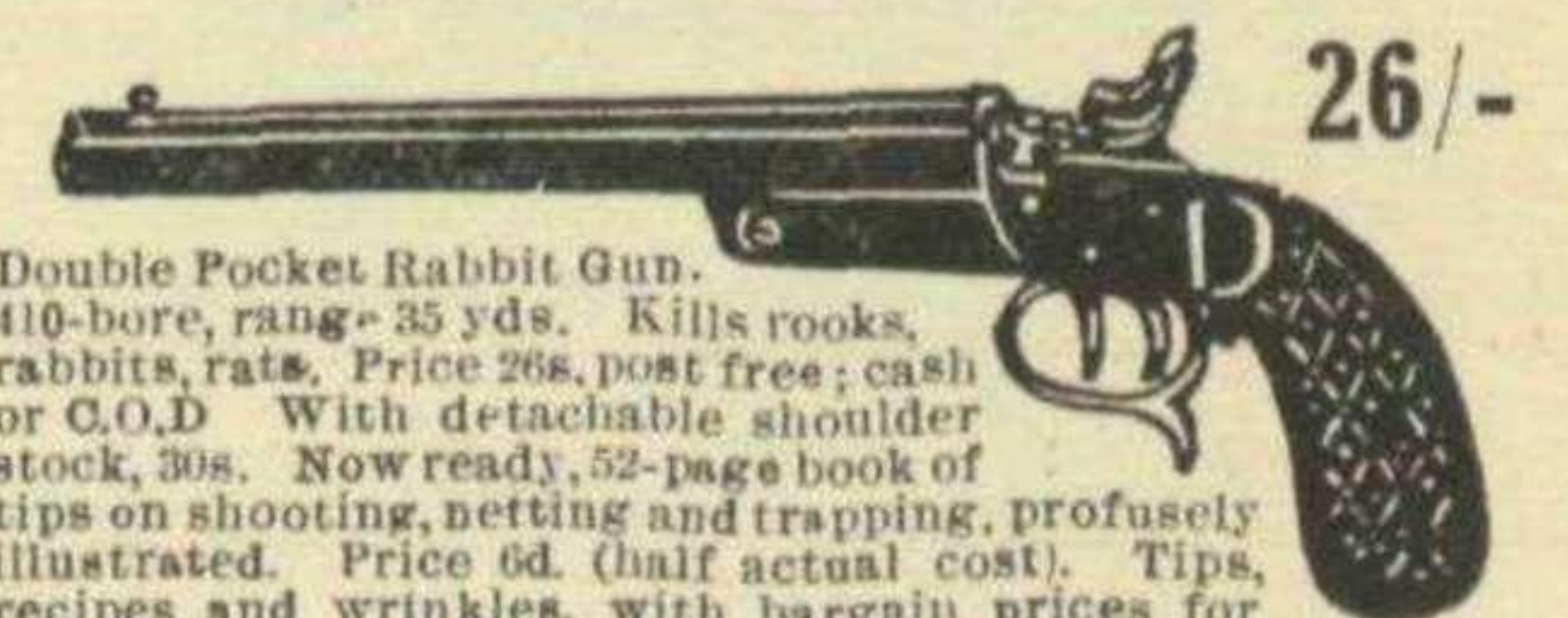
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