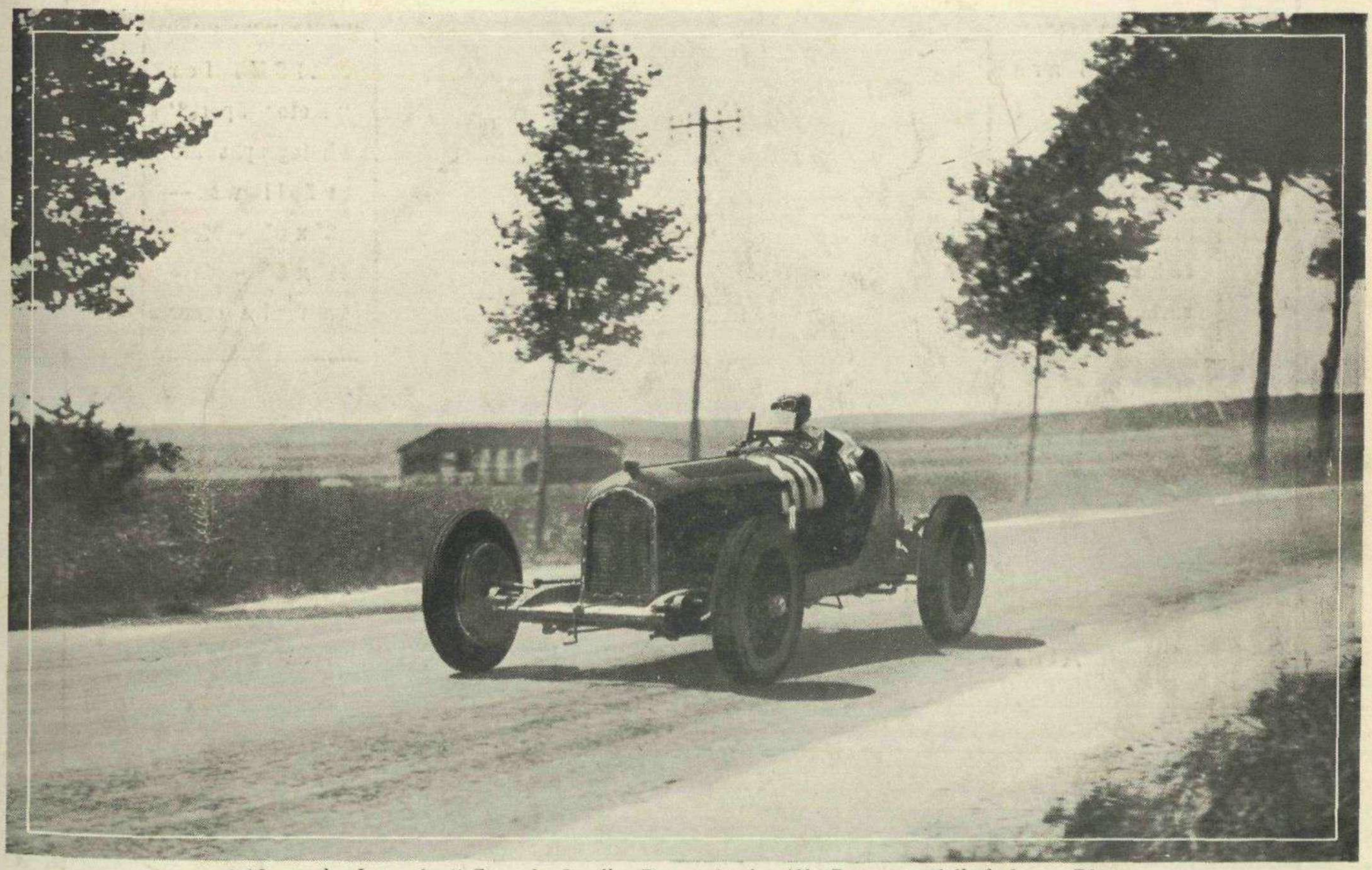
Vol. IX. No. 4 *February, 1933*

MOTOR SPORT

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SIXPENCE MONTHLY



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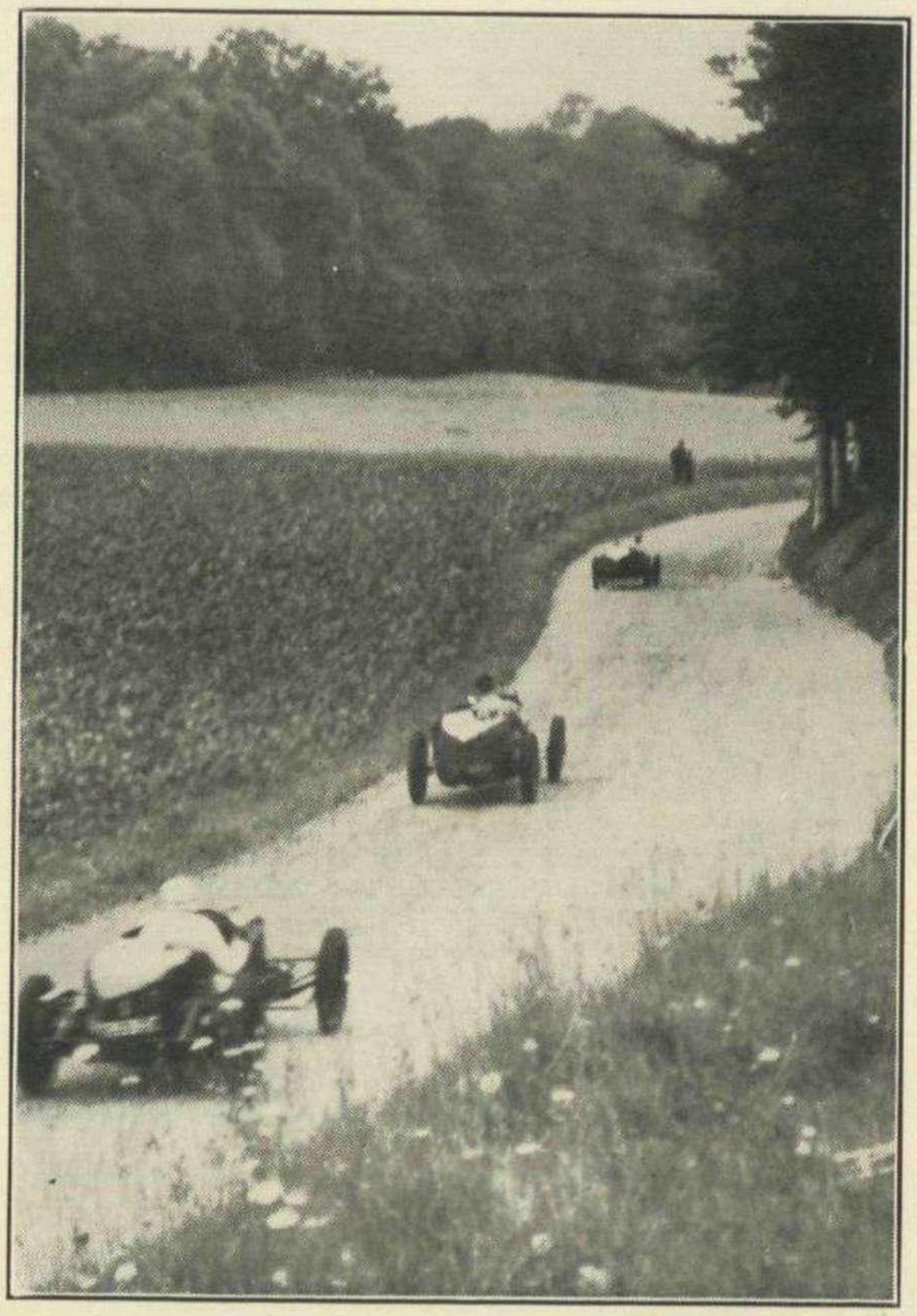


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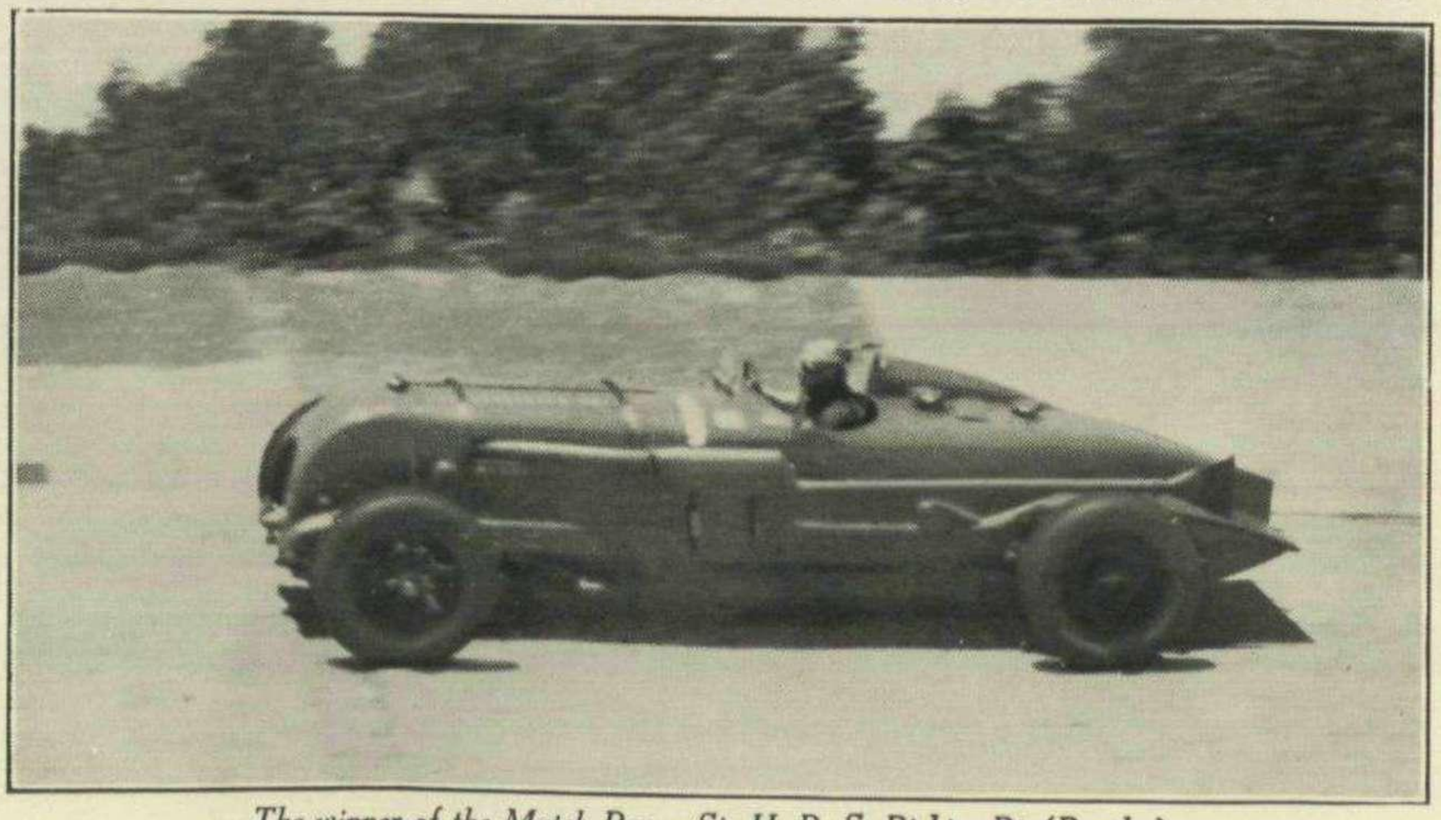
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EDITORIAL. IS ROAD RACING WORTH WHILE?

NEVER has public interest in motor-racing been so widespread in Great Britain as it is to-day. The situation was aptly expressed by "The Times" in their recent description of the proposed road-circuit at Ivinghoe. *"Interest in motor racing has increased in England in recent years, yet the laws of the land have so far never permitted the holding of road races such as have been common on the Continent. Parliamentary permission may perhaps be gained for such a race, but it is well that outside interests should establish a racing course on private ground over the full circuit of which road conditions are maintained."*

There are three such courses in view. First, there comes the proposed Ivinghoe circuit, of which full particulars have now been made public, and a description of which appears in this issue of MOTOR SPORT. Secondly, there is the project for the construction of a course in the grounds of Gopsall Park, in Leicestershire, but so far no plans nor details of the site or the proposed circuit have reached us. Finally, there is the much shorter (but on the other hand already constructed) road-course at Donnington Park, some notes on which appear on another page.

All this enterprise on the part of the promoters of the three schemes mentioned above is worthy of every encouragement by those who profess to have the future of motor-racing at heart. The daily press, from its apathy towards motor-racing a few years ago, has changed to wholehearted assistance of the sport, and is giving very real service in educating the public mind in the furtherance of motor-racing. This has been strikingly illustrated by the enthusiastic reception of the Ivinghoe scheme by the London evening and morning newspapers, and all the provincial dailies.

In view of this, we find the attitude of a certain motoring contemporary, towards these proposed new circuits very difficult to understand. Their chief objection seems to be doubt as to whether motor-racing can be made a financial success. With this we do not agree.

We can only point to the examples of France, Germany and Italy, where the finest drivers earn anything up to £8,000 per annum in prize money, apart from bonuses, where crowds of 100,000 are commonplace, and where there is a road race of some sort practically every week end during the season. Motor racing, judged by these standards, is practically non-existent in England to-day. Is it worth while trying to bring about the Continental popularity of road racing in this country, or are we to shake our heads in gloomy prophesy of ruin to all who try?

Let us make no mistake. In these three projects for the construction of a circuit in England, motor-racing is being put to the test as to whether it is ever to become the national sport it has been for years abroad.

If we, as Englishmen, sincerely desire that our country should be placed at last on a level footing with our motor-racing rivals on the Continent, our attitude towards the promotion of these new road-circuits in England can only be one of fervent encouragement.

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RECORD ENTRY FOR THE MONTE CARLO RALLY

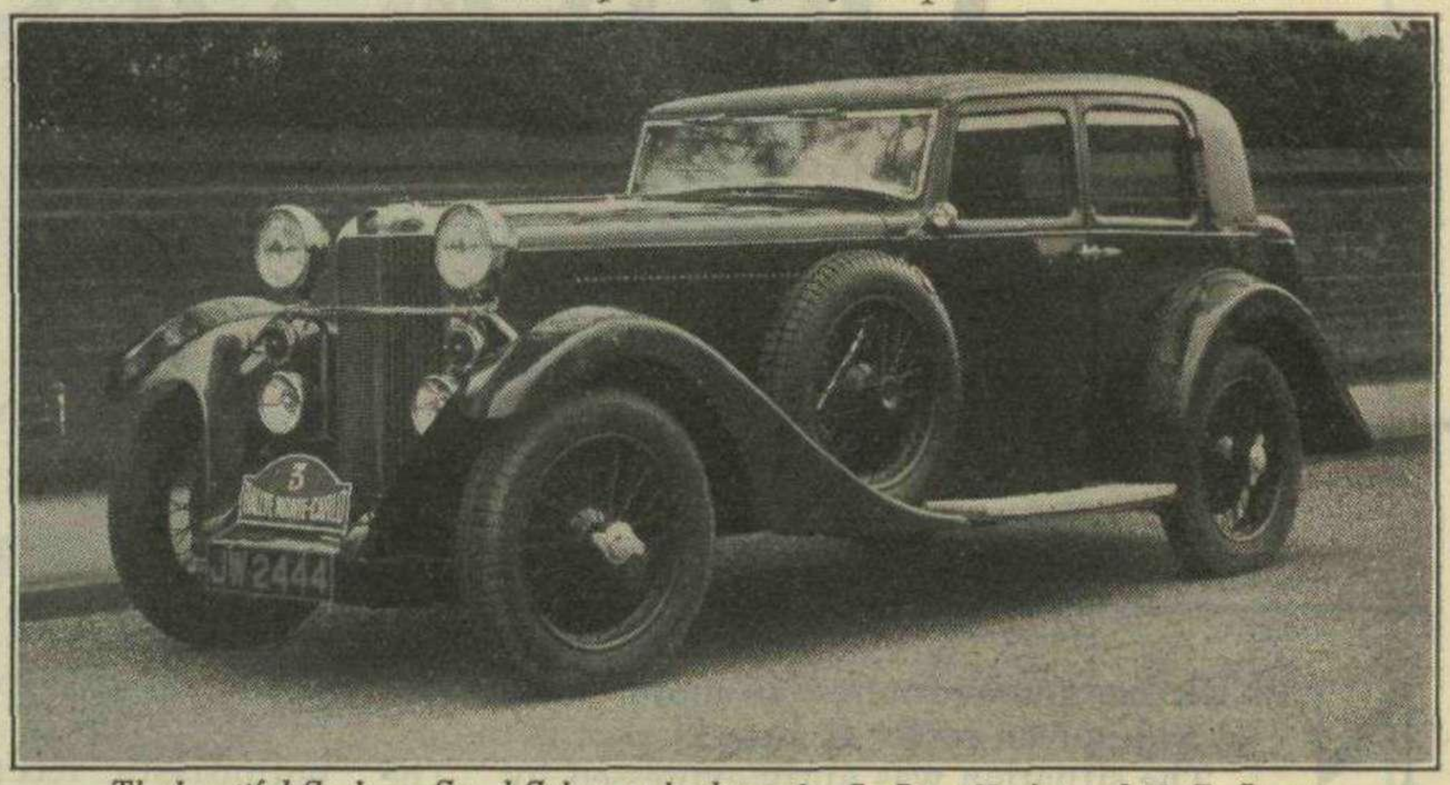
British Cars, with an Entry of 46, Lead the Field ; 129 Cars from 12 different Controls.

MOTORING sport has never been in a more flourishing state than it is at present, and no finer proof of this can be furnished than the record entry for the 12th Monte Carlo Rally, which by the time this article appears in print will have been run and won.

It is encouraging to note that the greatest number of entries should emanate from Great Britain, with 46 cars, France being second with 42, the U.S.A. third with 26, followed by Germany 8, Italy 4, Austria 2 and Czecho-Slovakia 1. All over Europe cars have been travelling by easy stages to their respective starting points, thereby getting a taste of the weather conditions they could expect. And they are bad.

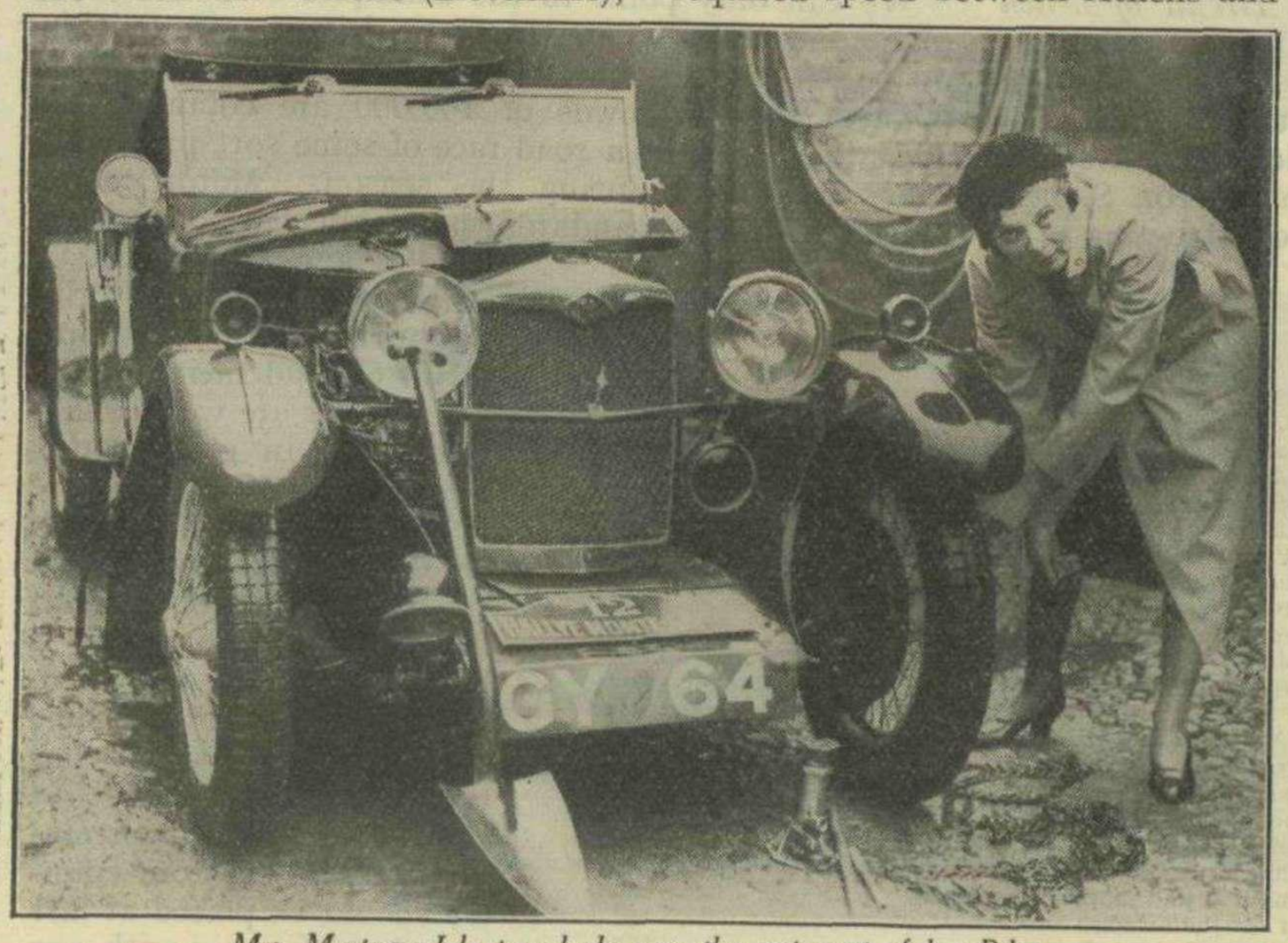
The Tallinn road is very bad beyond Riga, degenerating to a mere cart-track, while there have been heavy falls of snow and the cold is intense. From this point, as reported elsewhere, Donald Healey, with the MOTOR SPORT representative, started in his Invicta, while other well known competitors using this control are M. Vasselle (Hotchkiss), last year's winner ; G. de Lavalette (Peugeot), another previous winner ; Jack Hobbs (Riley) ; Lord de Clifford, on the Gardner-Diesel-Bentley ; and A. W. Huntley-Walker (Riley).

Athens, the furthermost starting point, is particularly inaccessible, and at least one crew, led by E. Fransioli, on a French Talbot, was unable to reach the Grecian capital.



The beautiful Sunbeam Speed Saloon to be driven by C. Penn-Hughes and H. E. Symons.

The road from Nish to Sofia is very bad, being covered with deep snow, but from thence to Salonika the conditions were appalling, and competitors were in great doubt whether they would be able to average the required speed between Athens and Salonika. The most famous competitors from this point were Jacques Bignan (Peugeot) the first driver ever to attempt this route ; Rupert Riley, on an Overseas Riley ; and H. Stoffel, the French racing driver on a V.8 Ford.



Mrs. Montague-Johnston checks over the equipment of her Riley.

A difficult task was set the competitors from Bucarest, for a heavy fall of snow makes the road to Jassy impassable. At the time of going to press this road is so far clear. The second member of the Riley team, V. E. Leverett, on a Gamecock, started from Bucarest, as did H. E. Symons and Penn-Hughes on a very well equipped Sunbeam Speed Model saloon, which has been very specially fitted out for the comfort of its occupants.

On the way to Umea competitors report that the road is covered for many hundreds of miles with deep snow, but so far this is of a constant consistency. Interesting starters were D. E. M. Douglas-Morris (Invicta) ; the third man of the official Riley team, G. F. Dennison ; and Norman Black in an Essex Terraplane.

From Stavanger a ladies' team composed of Mrs. K. Petre and Miss J. Richmond started on a Riley, other English crews being J. Whalley (Ford), T. V. G. Selby (Ford) and F. S. Hutchens on his 'veteran' E. W. Daytona Hornet Special which formed part of the winning team in the L.C.C. Relay Grand Prix and has since seen much trials work.

No fewer than 28 cars were due to start from John o'Groats, all English competitors, with a fairly easy task before them, but the 17 crews who chose Valencia as their control were probably not so lucky, for severe snow storms were encountered en route to the Spanish starting point between San Sebastian and Madrid.

THE COMPLETE LIST OF ENTRIES OF THE MONTE CARLO RALLY.

GREAT BRITAIN 46; FRANCE 42; U.S.A. 26; GERMANY 8; ITALY 4; AUSTRIA 2, & CZECHO-SLOVAKIA One Entry.

ATHENS.

10. J. Bignan (Peugeot).
13. Fran L. Bahr (Adler-Trumpf).
26. R. St. G. Riley (Riley).
42. P. G. Cristea (Dodge).
53. Gas and Trevoux (Hotchkiss).
56. C. Lahaye (Renault).
70. L. de Fabinyi (Citroën).
78. E. Voigt (Adler).
81. H. Stoffel (Ford).
82. G. Duhoux (Dodge).
88. J. H. M. Van den Menlen (Ford).
89. J. Schnell (Ford).
107. E. Frommelt (Mercédès-Benz).
116. A. K. Kurz (Steyr).
117. E. Fransioli (Talbot).
122. T. I. Tattarascu (Chrysler).
128. Mme. O. Preston (Chevrolet).

TALLINN.

1. M. Vasselle (Hotchkiss).
2. G. de Lavalette (Peugeot).
5. Baron T. de Montpellier and M. Schaar (Chrysler).
6. F. Lecot (Rosengart).
14. Mme. J. Mareuse (Peugeot).
15. Mme. Rouault and M. Quinlin (Salmson).
16. L. Braillard (Bugatti).
21. A. C. Lace (Invicta).
29. J. Hobbs (Riley).
30. H. Battu (Citroën).
32. P. Von Guilleaume (Alder-Trumpf).
33. F. Pousse (Amilcar).
34. R. Guyot (Renault).
46. Lord de Clifford (Gardner-Diesel-Bentley).
50. A. N. Huntley-Walker (Riley).
51. H. Schreiber (Tatra).
57. Prince L. Narischkine (Fiat).
60. Miss E. M. Riddell (Alvis).
68. R. Bravard (Amilcar).
92. A. Evrard (Bugatti).
94. Mrs. M. Vaughan and Mrs. Wisdom (Standard).
98. M. Lacroze and W. Belgrave (M.G.).
103. L. Schell and Mme. L. Schell (Talbot).
108. Mlle. J. Jaffe (Wanderer).
109. Ghiorzis and Husson (Chenard-Walcker).
113. J. E. Friis (Hotchkiss).
115. D. M. Healey (Invicta).
119. Cne K. Martinkus (Graham).
120. J. P. Valaitis (Chrysler).
127. M. Chauvierre (Chenard-Walcker).

BUCAREST.

3. H. E. Symons and Penn-Hughes (Sunbeam).
28. V. E. Leverett (Riley).
59. F. de Bremond (Mathis).
62. B. Dusanter and Jourdan (Peugeot).
71. E. S. Prestwich (M.G.).
72. R. Stoclet (Lancia).
85. A. C. Berlesco (Ford).
91. J. M. Thion (Citroën).
102. Cte. J. d'Herbemont (Ford).

UMEA.

8. D. E. M. Douglas-Morris (Invicta).
11. C. de Cortanze (Peugeot).
27. G. F. Dennison (Riley).
40. Mrs. R. Gough (Riley).
58. Mlle. E. Stakelberg (Hupmobile).
76. P. T. Eckersley (Invicta).
87. N. Black (Essex).
104. Blow and Count Van Heinen (Panhard).
130. H. H. Morian (Ford).

STAVANGER.

69. G. Larue and J. Larue (Peugeot)
80. F. S. Hutchens (E. W. Wolseley Hornet).
90. J. W. Whalley (Ford).
95. T. V. G. Selby (Ford).
96. J. G. Smithson (M.G.).
97. Mrs. K. Petre and Miss J. Richmond (Riley).
112. K. Bryde, Junr. (Studebaker).
123. Per W. Schenke (Buick).
125. Per Bergan (Austin).
126. W. Bjorset (Auburn).

RIGA.

43. M. Klinke (N.A.G.).

JOHN O'GROATS.

4. J. Fullerton (Sunbeam).
9. H. T. Van Marken (Chrysler).
12. Mrs. M. Montague Johnstone (Riley).
17. P. E. Cremetti (Riley).
19. G. M. D. Maltby (Riley).
22. P. Runciman (Alvis).
24. F. Longman (Andre).
39. D. C. Love (Lagonda).
41. H. S. Linfield (Essex Terraplane).
44. Mrs. L. Martin and Mrs. Gripper (Hillman).
45. H. Welch (Lagonda).
48. W. T. Townend (Talbot).
49. H. C. Hobson (Austin).
52. L. Martin and F. W. Morgan (Humber).
54. V. A. P. Budge (Standard).
55. W. T. Platt (M.G.).
61. R. H. W. Jaques and Miss Allan (Rolls-Royce).
63. C. A. L. Loughborough (Lanchester).
64. J. B. Bainbridge (Rolls-Royce).
65. T. C. Mann (Lagonda).
73. J. V. Crisp (Alvis).
74. F. M. Lightfoot (Morris).
77. F. S. Barnes (Singer).
79. G. W. J. H. Wright (M.G.).
83. H. J. Aldington (Frazer Nash.)
93. Miss S. P. Richardson (Ford).
111. Miss C. Labouchere (E.W. Wolseley (Hornet).
114. G. E. Scott (Daimler).

VALENCIA.

18. C. Schade (Mercédès-Benz).
20. F. J. A. de Ribeiro-Ferreira (Delage).
23. D. E. Cabral (Bugatti).
35. J. W. G. M. Staal (Bugatti).
36. J. Van Abbe (Rockne).
38. P. Despouys (Renault).
67. P. Marcilhack (Lorraine).
75. Mme. M. Leblanc and Mlle. F. Hustiux (Peugeot).
84. F. Ellena and J. de Buriane (Peugeot).
99. J. Danne (Rally).
100. Jannekeyn (Citroën).
101. Dr. M. Jamot (Peugeot).
105. Dona La Caze (Amilcar).
106. G. J. G. Duchamps (Ballot).
118. A. D. Costa (Citroën).
124. J. Gellweiler (Citroen).
129. C. Hansberger (Mathis).

HARROGATE.

31. E. M. Liddell and H. C. Liddell (Lagonda).

PALERMO.

47. Herbaux and Flipo (Peugeot).
86. Prince K. L. Don Schoenburg-Waldenburg (Lancia).

BERLIN.

25. J. Broere (Nash).
65. C. Graf (Steyr).
110. C. Foth (Cadillac).

AMSTERDAM.

37. P. M. K Povel (Fiat).
121. W. Zweerts de Jong (Auburn)

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"THE AUTOCAR," OCTOBER 14, 1932.

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THE INVICTA GOES NORTH.

BEING SOME NOTES ON THE CONDITIONS MET WITH BY A COMPETITOR EN ROUTE TO TALLINN, AND ON THE EARLY STAGES OF THE JOURNEY TO MONTE CARLO.

By

T. G. MOORE.

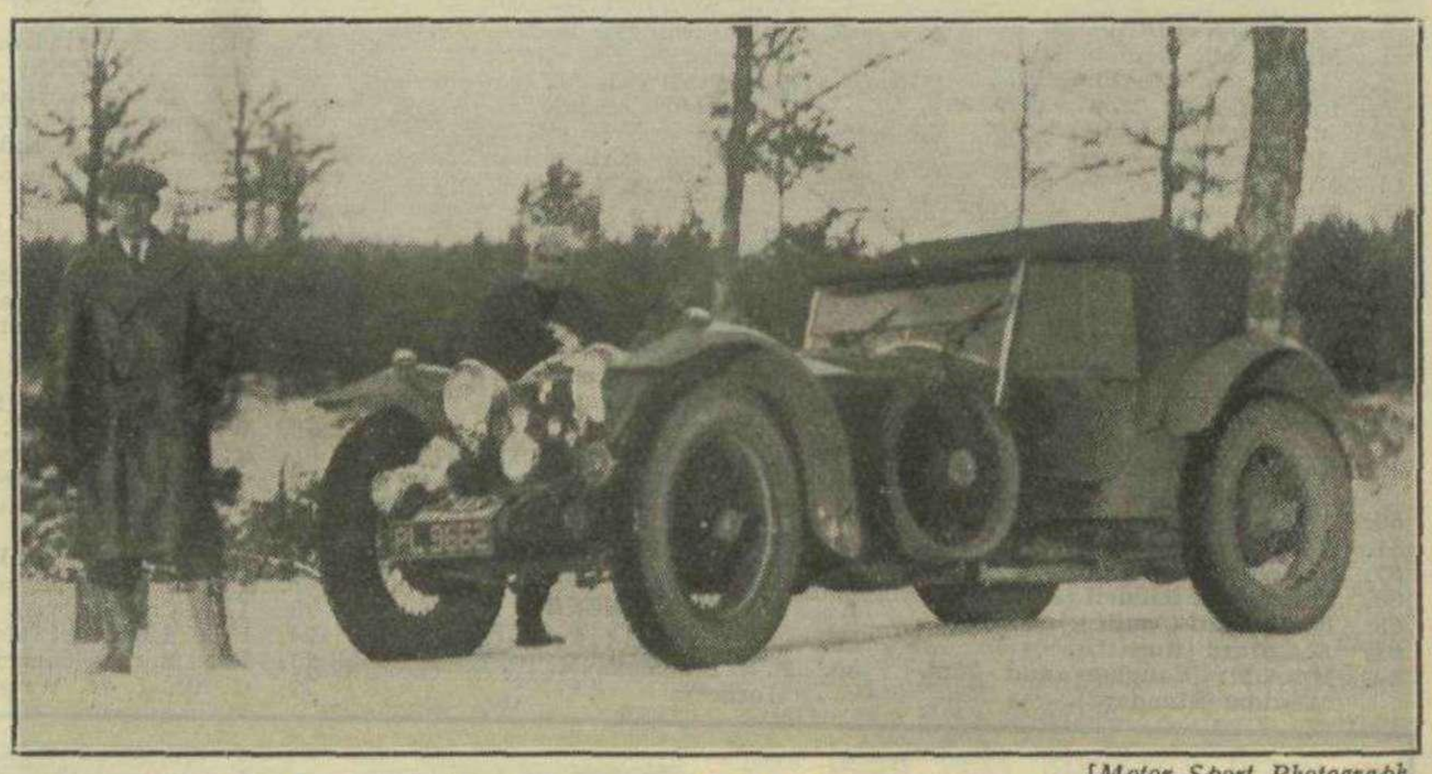
HOWEVER carefully a car is prepared for competition something always crops up at the last minute, and so it happened to Healey with whom the writer was to travel to Tallinn for the Monte Carlo Rally. The clutch, which had had some 50,000 miles of strenuous life, gave signs of trouble so it was decided to change it before leaving England. This caused a day's delay, but the time was welcome as suit cases had to be purchased to fit the luggage box at the rear of the car. Finally, laden with belgas, francs, marks, slotys, litt, lats and kronen, we drove off to Harwich and embarked on the good ship "Bruges" in good time.

The passage was not too smooth, but morning found us in Antwerp, cold and damp, but a good many miles on our way to Tallinn. The Belgian roads had an atrocious pavé surface, which made the back passenger's life unpleasant, and the local petrol was unsuitable for a sports car and caused considerable pinking. By crossing into Holland we soon left behind both these annoyances and drove on over fast well-paved roads to Arnhem. The roads continued dead straight and tree-lined, but speed is not encouraged in Holland, and the writer, who was driving, was pulled up when going through a village at about 30 m.p.h. Fortunately, the brakes worked well, and the policeman was greeted by bland smiles as we did not understand him in the least, and was easily appeased by the word "Englishmen." A disturbing thing about driving in Holland, and in fact all over Central Europe is the number of cyclists who ride whichever way they may be going, sometimes on one side of the road, other times on the other, but on some of the Dutch roads they are provided with tracks of their own and do not sprawl across the road four abreast in the manner favoured by a good many of our "wheelers."

Conditions in Germany.

The German Customs had to have exact details of the money we carried and were rather disturbed by the Heinzian variety of the coins and notes we showed them. However, we were then able to fill up with Esso which contains about 25% Benzol and improved immensely the handling of the car. The time was then four o'clock and we were still about 400 km. from Berlin, so we decided to keep on for a few hours and then stop, as it was plainly impossible to get anywhere near the capital. A belt of fog did not encourage us to go on, so we got no further than Osnabrück, where we stayed at the "Germania," a first class hotel and surprisingly cheap. The Nürburg Ring is not far away, and this hotel might be quite a good stopping place for people going to watch the racing there.

The next morning the air was clear and sunny but the cold was increasing. The tree-lined roads of Germany are safe and well-signposted, but the surface is rough in places and the numerous villages keep down the average speed much more than one would expect. Resolving not to be delayed, as we had been on the previous day, by a prolonged lunch stop, we determined to try our emergency rations of Pascall's chocolaté, barley sugar and Oxo biscuits. All these foods work admirably on a Rally trip as they are concentrated and not too sweet, the barley sugar being particularly good for avoiding indigestion, which one is liable to get through prolonged bumping over rough roads.



[Motor Sport Photograph

T. G. Moore, of "Motor Sport," and F. M. Montgomery, with Healey's Invicta, at a wayside stop in Poland.

Hanover, the first big town we passed through, was very picturesque with its old wooden gabled houses, which contrasted strangely with the modern cars and trams which one saw in its streets. Hanover is of course the home of the Hanomag, a small motor-car with strange coachwork which makes it appear to have a bonnet back and front. Some of the latest ones are quite attractive, and one we saw had a streamlined body rather like an Aero Minx.

After locating the headquarters of the local motor club where the Rally control was to be arranged, the outfit proceeded. The roads around Hanover, as is the case with most big towns on the Continent, are extremely rough, and the writer, who was sitting upright in the back seat, hit his head a resounding crack on one of the hoodsticks, thereby gaining journalistic experience at the expense of a square inch of skin. After that, the back passenger always reclined on his pile of cushions, getting a crabwise view of the country between the shoulders of the two front passengers.

Berlin—and German racing film.

Nearing Berlin the cold increased, and the Thermo-Rad, an exhaust-heated plate in the bottom of one of the back footwells, was brought into use, with very welcome results. After a time, however, remarks began to be made by the front passengers as to the odour from the back man's feet, and this increased as we went along. Turning off the heater showed that this was not to blame, and further investigation showed that the main fuse clip had become loose in its holder, and the "arcing" had burnt away one of the contacts. There was nothing to do for it but to short the two connections behind the dash, which was carried out with legs hanging out into the icy blast.

Berlin is a confusing city to drive in, but a good map solved most of our difficulties. At night we visited the famous Deutschland Café with its rooms, about a dozen or more, decorated in the style of various German provinces, with band, food, waitresses, and everything else in keeping. At a cinema attached we saw a German racing film called "Kampt" in which of course Mercédès figured largely. There were some excellent

Vasselle Wins the Rally.

As announced on page 186 of this issue, the winner of the Monte Carlo Rally was M. Vasselle, driving a Hotchkiss. Owing to the results not being announced until the 28th January we are unable to include a full description of the event in this issue, but in the March number there will appear a fully illustrated review, together with an eye-witness account of the Montes des Mules Hill Climb which takes place after the Rally.

THE INVICTA GOES NORTH—continued.

pictures of the Freiburg Hill Club, Chiron with an F.W.D. Bug. and so forth, but the padding was so tedious to people not knowing the language that we left before the Nürburg Ring scenes were shown. Von Brauchitsch was the hero, and unlike the British film stars who act in racing pictures has had considerable experience at La Turbie and elsewhere.

Courtesy in Berlin.

The Automobile Club von Deutschland, the governing body of German motoring, provide the Berlin control, and we went along there to see if there were any letters or messages. The club gave us a splendid reception, the President, who is the Duke of Mecklinburg, and various other high officials of the club being there to greet us and press photographers shot off quantities of plates outside the Club House. Here we met the first of our fellow competitors, Madame Schell, on a French Talbot. It carried a light home-made closed body which only weighed 2 cwt., and was fitted, as she proudly informed us, with a mattress and a bed in the back, also some special spotlight to deal with the "bruillards formidables" which one encounters round Lyons.

The First Snow.

We had a disturbing moment on starting up the motor in the morning, for no oil pressure appeared on the gauge. However the sump level was found to be very low, and after re-filling and allowing the engine to tick over for some time, the needle returned to its normal reading.

The German Club actually had a pilot car to take us out of the city and we were soon speeding on our way over straight but not too smooth roads. The sun was still with us, but the cold was increasing, and in two hours we reached some snow. It was only local however, and Deutch Krone where Healey had one year been completely snowed up, was totally free from it this year. Owing to the delay in starting and various attentions to the spare wheel, which was stayed by straps across the bonnet owing to its weight, we were behind schedule, and rather than try to make up speed on the rough Polish roads, we were aiming at Königsberg and the direct route North.

Intense Cold in Poland.

Towards evening we were nearing the German frontier and the roads were covered with a few inches of snow. Montgomery, whose experience in former Rallies had taught him how to deal with this, continued with undiminished speed. After a time we crossed the Polish Corridor, a narrow strip of country giving the Poles an outlet to the sea. The roads were very rough and lacking in signposts, and the petrol, which had to be bought, smelt like lamp oil. The cold was intense, but we were somewhat compensated by seeing the moon rise, looking first like an enormous flattened orange as it rose through the mist, changing to silver as we neared the East Prussian frontier. The only redeeming feature of Poland so far as we could see was the peculiar sound of the place-names, which provide almost inexhaustible material for smoking-room limericks. After a short run across the Free State of Danzig, which sells not so good petrol at a reduced rate, we reached Marienburg, and were glad to settle down there for the night.

Next morning it was decided to plug up some of the cracks in the floor boards, which, because they are intended to be easily removed, do not fit very snugly.

The road to Königsburg is good though there was a considerable amount of snow in places. The writer executed a beautiful slow-roll at a wrongly cambered corner, but except for that, all was well. The Auto Club at Königsburg advised us to stay at Tilsit, the East Prussia frontier town, for the night, and we reached that about six o'clock and looked round for a hotel rejoicing in the name of "Gumboil"' or something like that. We did not find it, however, but stayed at another hotel where the local Sunday night "hop" was in progress.

The Land of Sledges.

We were quite sorry to be leaving Germany, where the hotels were good and the people most kind, but on Monday crossed the Mernel over a large bridge and drove into Lithuania. The roads and houses are badly kept as compared with those of their German neighbours, but now that the shock absorbers had been well slacked off and the tyre pressures lowered, the car rode the bumps very well, even in the back. Four cushions resting on a suitcase and a rug made a comfortable couch, and with feet in the footwell the back passenger was actually warmer than those riding in front.

There was now plenty of snow about and we stopped to take a photograph of the car in front of a Lithuanian windmill. Carts had now given way to sledges, and the half-wild horses were much disturbed by our passage and on several occasions bolted over the frozen fields, their drivers gamely hanging on to the reins. Hot drinks were essential at midday, and we stopped in Siauliai for tea. The best feature of this town was the rank of pneumatic-tyred droskis, which looked as though they had been modelled on the motor cars of 1902. Coffee we could not get but had tea and sausage in an extraordinary eating house overlooking the market, not daring to try the bottles of the local fire-water, a form of vodka, which lined the shelves.

The Invicta was not long reaching the Latvian frontier, and the customs official showed us the papers of Lavalette, Schreiber and other competitors. Riga, which is a large town with good buildings on the water-front was reached about 4 p.m. and then Healey's wrist which he burnt before leaving England, required attention. One's most abiding memory of Riga was the cold, about 30 degrees of it, which a sharp north wind drove through one's thickest clothing like a knife. Another peculiar thing was the time the inhabitants feed and dance, nothing happening apparently until 11 or midnight. The stoves in the rooms had not been tended and altogether Riga was rather paralysing. Apart from the weather, however, we were very well treated, especially by the Shell Company, who sent a motor car to escort us out of the city.

The Last Lap.

We were now entering the last lap of our journey, the famous rutted section between Riga and Tallinn, which is quite often blocked with snow and so is even less pleasant than when the ruts are exposed. The year Healey went from Tallinn in his Triumph the roadside was littered with cars that had leapt off the track through pulling abruptly out of the ruts, while an Austin Seven broke all the spokes in its back wheels. After Cesis we were all on the *qui-vive* for the trouble to begin, and soon found some tremendous ones nearly a foot deep. The difficulty about them is that they are frozen hard like concrete, and they wear away the side of the tyres if they get in and one simply has to slow right down in order to pull out of them. Healey once tried keeping his foot down and the car almost left the road, so after that we knew what to do. These ruts soon moderated, however, and apart from this experiment, he kept going at a steady 40 m.p.h. Evidently the Latvian Government has done a good deal of work in the last few years. Soon we reached the Esthonian frontier, which had some resplendently painted barber-pole frontier barriers, and drove on North. Unfortunately the Esthonian customs was in a side turning which we missed, so we had to scout about the country for about two hours until we spotted it. Meanwhile snow was falling and the blasts were becoming more chilling so we decided to stay the night at Pärnu so as to get a good idea of the last and worst section.

A Cosmopolitan Party.

Once again it was not nearly as bad as we expected, and the ruts were partly covered with snow. In one place a drift, which might have caused trouble, had been cleared away, but on the whole the Invicta rode the difficulties without trouble, and neither the special Dunlop wheel straps, nor the chains were called into use. And so we reached Tallinn.

In reaching the town, we found that a good number of competitors had already arrived. At the Hotel Rome we found Vasselle, who took first place in last year's Rally on a Hotchkiss, Lavalette on his Peugeot who was last year the best 1,500 c.c. driver, Schaar on a closed Chrysler, Mme. Mareuse and Mlle. Lamberjack on a Peugeot, Braillard on a 3.3. Bugatti, Schreiber on a Tatra, the Schells with their Talbot, Prince Narischkini on a Ballila Fiat, and Mlle. Jaffé on a Wanderer, truly an all-nation party. Against all that we had only Jack Hobbs, the Riley driver who had shipped his car from England, Lacroze and Belgrave, very sporting drivers of a Magna, and D. M. Healey and his crew. Miss Riddell, who drove a Speed Twenty Alvis, was the only other English competitor who had arrived on the Thursday, but Lord de Clifford reached Tallinn at 2 a.m. the next day.

A number of people had experiences on the way. Mme. Lamberjack who was driving with Mme. Mareuse in a Peugeot, skidded when passing through Poland and cut a telegraph post into two, fortunately without doing anything more

THE INVICTA GOES NORTH—continued.

serious than denting the body. Braillard on a Bugatti shot into a ditch and damaged his undershield, causing Schell, who was following, quickly to put on the special rubber bands which he uses instead of chains. Lord de Clifford reported an uneventful journey, though the fuel which he had to run on in Poland was little better than treacle. The inventor of the Morriscot Petrolift, who was one of the crew was in fear of his life in case his apparatus should fail in the middle of a deserted highway, but so far, without breaking down, it had dealt with something not far removed from vaseline. Fuel consumption worked out at 29 m.p.g.

Gallant Mrs. Vaughan.

On Thursday news of Mrs. Vaughan's car came through. She had stopped somewhere in Lithuania with broken front and rear axles, but spares were being obtained from Kovno. From what one saw of the country, one would hardly expect to get Standard or any other spares there, but it will be a very stout effort on the part of her and her crew if she does manage to get through.

The Magna which is not entirely suitable for negotiating ten inch ruts left the road twice, but was put back again with the aid of a little horse power. It says something for the British small car that it is capable of tackling some of the worst roads of Europe with no more preparation than a decoke and a pair of competition tyres. Apart from some difficulty in starting, not surprising with 35 degrees of frost, the car gave no trouble.

In Tallinn, we heard a story which could be used as a "Thing we would like to know"—

The name of the famous motor firm who were asked to prepare a car for the Rally and suggested putting some old flywheels in the back to make up the necessary ballast.

Language Difficulties.

With competitors of all nationalities in a foreign country, language difficulties are bound to crop up. Healey and his crew were coming back on their tracks and looking for a frontier post. They sighted an M.G. coming towards them. "A" got down from the car and signalled the on-coming car, which stopped. He opened the door, saw a very foreign-looking gentleman with a great fur collar on his coat, concluded that he was a Swiss and addressed him in his most fluent German. "Can't any of you speak English, I thought yours was an English crew," replied the owner of the coat, who was of course Belgrave, wearing his new Polish motor coat.

A similar incident occurred when "B" was mounting guard over a table in the hotel dining room. Down came Jack Hobbs, who had arrived a week ago and sat down. "B" attacked him furiously in French, for no apparent reason, and Hobbs retired abashed before this overpowering foreigner!

Tallinn does not offer a tremendous amount of amusements, but everyone seemed to like it very well. A few people were busy repairing their cars but most of the competitors had plenty of time in hand. The cathedral, which stands on the hill is a fine building in the Russian style with gilded domes, and there are various old buildings and fortifications, for under the Russian imperial régime, Reval, as it was called then was the chief naval port on the Baltic. The streets are covered with snow, and when a wind blows one's ears suffer considerably. Suitably equipped, however, a walk in the morning sun is most enjoyable. The temperature is 35° below freezing, which should mean no more snow before the Rally departures.

There are two good hotels, the Rome and the Golden Lion, the first having good bedrooms and the second the best food. In addition there are various dance places and cafés where one can get Russian food and music. Altogether a pleasant place if one's tastes are simple. The Eesti Motorklubi is very helpful to all competitors, and the language difficulty does not exist so far as any Rally matter is concerned.



[Motor Sport Photograph

Snow in Germany. Donald Healey (left) and F. M. Montgomery stretch their legs en route to Poland.

Prince Naraschkini, who is driving a Fiat, is better known as a racing driver. He won the Spa race in 1932 on a 2,300 Alfa Romeo, and has bought a reserve Monoposto for next year's racing.

Tallinn competitors were rather depressed at first that they had not gone from Athens, where the hard weather should have consolidated the roads. Reports from Roumania say that the country is snowed up, and a copy of "L'Auto" reports difficult going from Athens. Further news from Poland indicates 3 feet of snow, so all the chains and other appliances will probably be well tested.

Mrs. Vaughan and her crew arrived on Friday morning exhausted after their accident in Lithuania, and Lace on the Invicta, who encountered some difficulty with the low chassis of his car on the Riga-Tallinn road arrived at midday.

Our own Invicta car ran perfectly throughout except for the annoyance caused by bad petrol, which caused a good deal of pinking. However, it was never necessary to drop below about 60 m.p.h. for this cause, while the low revs.—2,500—required at this speed made the car very restful to drive. Petrol consumption worked out at about 16 m.p.g.

The Start.

Everyone was anxious to get going, for a period of delay before the start is always dominated by the thought "Shall we get through?" Finally came Friday night, and on Saturday morning, at 4.56 a.m. we were sent away, being given the signal from the Estonia Hotel by a man rather like "Ebby," complete with red and white chequered flag.

Our Invicta was the last but three to start, but we overtook the whole field in turn. The first car we saw stopped at the roadside was Jack Hobbs' Riley, and the driver was examining his chains. There was no snow on the first few miles, and perhaps they had stretched. We did the distance to Pärnu in under three hours (about 2.20 mins.). When we got to the Latvian frontier we came up with the 3.3. Bugatti, and learnt that Lavalette and de Clifford were still ahead. We caught the Peugeot fairly soon, and not long after passed de Clifford.

The awful ruts were filled up with snow to some extent, but they were still icy. Snow was falling on the last part of the journey, but our big tyres held the road well, and we kept going at about 60 m.p.h. in spite of frightful pinking caused by the foul Esthonian petrol. We reached Riga in seven hours, which is considered a good time for Summer conditions.

Other competitors were not all so fortunate. Lace (Invicta) skidded near Pärnu on a frozen rut and ditched

(*continued on page 185*).

THE GREAT PIONEERS

BY

E. K. H. KARSLAKE

ALMOST everyone of the younger generation must have had to suffer at one time or another from the implied reproach of the old timer who complacently remarks, " You've no idea what *motoring* was when *we* started ; tube ignition and tiller steering took some skill in operating, I can tell you. Nowadays cars are so reliable that the romance of motoring is dead." And in the face of these reminiscences our journey to Scotland non-stop on an effete sports car which we bought for a tenner seems a feeble performance. Yet some little consolation may perhaps be derived from the fact that old so-and-so who started motoring in 1900 was really indebted to a whole host of predecessors in automobilism who through trials and tribulations had already done much to perfect the motor car.

To the average person, I suppose, the beginning of motoring dates back only to the Emancipation Day Run of 1896 or perhaps to Paris-Rouen of 1894, and one is inclined to forget those real pioneers, hardy individuals who almost before the dawn of motoring history were undertaking journeys with machines which really would leave the modern motorist aghast and with adventures enough to satisfy the most daring.

Léon Serpollet.

Of such, for instance, was Léon Serpollet. Since his earliest youth Serpollet had had a passion for things mechanical, and at the age of 23 he went to Paris where he acquired a little workshop and set to work on the realisation of his dream of constructing an automobile on which he could journey over the long white roads of France. At that time, for we are speaking of the eighties, steam was the obvious motive force, and Serpollet was soon engaged in the study of the steam-engine. His experiments as everyone knows resulted in the invention of the famous Serpollet boiler, but although he himself constructed two rudimentary steam tricycles, the realisation of his dreams had to await his meeting with M. Armand Peugeot, the head of the famous bicycle factory. In the great industrialist Serpollet found a sympathetic hearer when he expounded to him his schemes for an automobile ; and as a result of these conversations there was built in the Peugeot factory at Audincourt, then under the control of M. Rigoulot, a really practical vehicle which was to be driven by Serpollet's engine.

The machine was a tricycle, with two large wheels at the rear and a small one in front, mounted in a fork terminating in a handle-bar. The seat for two passengers was set across the car just in front of the axle, behind which was the Serpollet water tube boiler, and the two-cylinder vertical engine which drove the axle by a chain. The vertical chimney at the back lent an air of comedy to the little car.

The machine was exhibited at the Tuileries in 1889 and aroused much comment both favourable and hostile, but Serpollet was impatient to undertake a really long run on his new car, and in January, 1890, in spite of the inclemency of the season he decided to set out on no less a journey than that from Paris to Lyons, a distance of 300 miles. In this desperate endeavour he was accompanied by his friend Archdeacon, a man who was always ready for any sufficiently sporting adventure, and who dressed himself for the run in a high stiff collar and a bowler hat.

Paris to Lyons in 1890 !

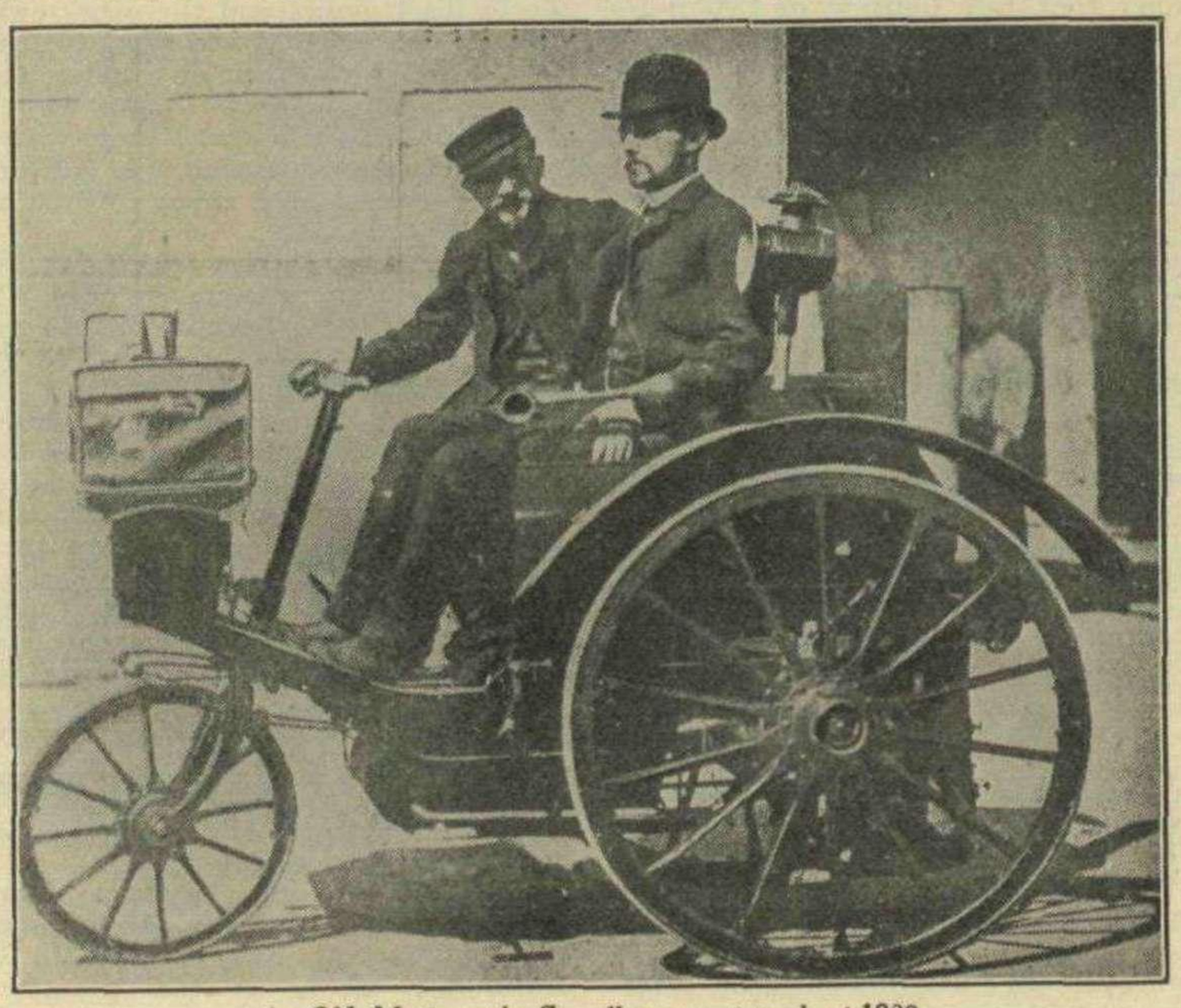
Together therefore they set off from Paris one cold January morning on the road to Lyons. The first day all went well, and at 7.30 in the evening they drove into Sens, having covered the last 40 miles from Melun in less than 4 hours—good going when it is remembered that the boiler was coke fired and that stops to clear the grate were consequently frequent.

The next day, however, the pioneers' adventures began, for just as they were arriving at Briennon, where a crowd of people had collected to see the new " horseless carriage, " Serpollet discovered that the steering had failed. He managed to stop the tricycle in safety, but investigation showed that the front fork had broken. Serpollet, however, was not the man to be stopped by such trifles, and telling Archdeacon to look after the throttle and the brake, he himself lay flat on the floor of the car and steered it by means of shrewdly directed taps on the revolving front wheel. Thus to the general excitement the car threaded its way through the curious crowd in Briennon and finally reached a wheelwright's where a repair was effected, the weight of the car being sensibly increased as the result of his efforts.

Thus with constant incidents and adventures the two hardy travellers continued on their way. One Sunday, about midday, the car was coming down the long hill into St. Florentin, when without warning the single brake suddenly ceased to function. In a moment the tricycle was away down the hill, gathering speed at every yard, and as they hurtled down the gradient Serpollet had horrible visions of arriving in the town at full speed with his machine quite out of control, probably just at the moment when the good people of St. Florentin were pouring out of church. However St. Christopher apparently was watching over the travellers ; the hill ended just where the houses of the town began, and a side street which climbed uphill again gave Serpollet his chance to pull up. Slightly shaken but otherwise none the worse the automobilists dismounted and set about repairing the brake.

A broken axle.

Once more en route all went well for a time, until while bowling along merrily on a good stretch of road near Darcey, not far from Dijon, the horrified motorists suddenly espied one of their back wheels careering along ahead of them on its own. The next moment the car made a lurch to the left, the bottom of the boiler descended on to the road and using it as a pivot the car turned completely round to finish up facing the way it had come. Investigation showed that the driving axle had broken, while the wheel which had gone on by itself for a hundred yards had mounted the bank and finished up in a bush. There was nothing for it but to telegraph to Paris and await the arrival of a new axle by the train.



An Old Master—the Serpollet steam tricycle of 1839.

THE GREAT PIONEERS—continued.

At last, however, after innumerable adventures of which those recited are but a selection, the travellers reached the La Buire works at Lyons, having covered 300 miles in an automobile in mid-winter 1890. Arrived in the town Serpollet took his machine to a weighbridge, where he discovered that by reason of the repairs which had been effected his car had gained 150 kilogrammes en route!

The experience of building Serpollet's tricycle had not been lost on M. Armand Peugeot. The latter at this time was in close touch with M. Levassor of Panhard et Levassor, and the latter firm had lately begun to build in France the petrol engines invented by Herr Gottlieb Daimler of Wurtemburg. One day M. Levassor suggested to M. Peugeot that the latter should build the cars to be equipped with Levassor's engines, and Peugeot was delighted with the idea. Without delay he set about the construction of an automobile, a little quadricycle with wire wheels and a hollow tubular frame in which the cooling water for the engine circulated. The V-twin 2½ h.p. Daimler motor was mounted at the back, and drove through a sliding pinion change speed gear of the type invented by Levassor and a belt forward to a countershaft whence the final drive was by side chains. Ackerman double-pivot steering was used with a two hand grip tiller, and the wheels were equipped with solid rubber tyres.

The Peugeot Quadricycle.

In 1891 was run the first long distance bicycle race, organised by "le Petit Journal" from Paris to Brest, and M. Peugeot decided that his car should undertake no less a task than that of following the race and thus having its performance officially verified. First of all, however, the car had to be got from the Peugeot works at Valentigney in the East of France to Paris, and it was decided that this journey of 290 miles should be made by road.

One fine morning, therefore, M. Rigoulot, chief engineer, and M. Doriot, foreman of the works, set off on their long journey. On the whole the car went well, but they soon discovered that the petrol tank which supplied the burners which heated the platinum ignition tubes had been placed too low, with the result that the burners were starved and their wicks charred. This trouble, however, was not nearly so noticeable in the early morning and in the evening as in the middle of the day, and the ingenious automobilists soon had the happy idea of covering the petrol tank with wet grass which protected it from the rays of the sun and kept it cooler. Thereafter the car went better, but while it was capable of some 12 m.p.h. on the level, anything like a steep hill usually brought it down to the lowest of its four speeds which gave it a maximum of 2½ m.p.h. On these occasions one of the crew invariably walked behind to lend a helping hand if the motor began to fail, but Rigoulot was proudly able to state afterwards that assistance of this kind had not proved necessary on any occasion whatever. At last after sleeping three nights on the road the drivers triumphantly arrived on the fourth day at the Panhard et Levassor works in Paris, having averaged 8½ m.p.h. for the whole of their long journey.

Following a Bicycle Race.

After a short time spent in overhauling the car in the Avenue d'Ivry works, the great day arrived, and at the tail of the long procession of cyclists the little Peugeot set out on its 360 mile journey to Brest. The first day all went well and the automobilists covered the unprecedented distance of 125 miles. The next day they started off again in grand style and hoped to do as well, but after covering rather over 100 miles something broke in the differential Prodigies of ingenuity permitted a repair to be effected with the help of a local blacksmith, and the car not only reached Brest successfully but succeeded in regaining Paris without further breakdowns. All along the road it had aroused the greatest interest and amusing incidents had not failed to result therefrom. A good many of the villages on the route had stationed a man with a trumpet at the entrance to announce to the inhabitants the approach of the racing cyclists or of the Peugeot automobile, and as soon as the trumpet call was heard the people fairly tumbled out of the houses to get a sight of the travellers. In one village in Brittany the approach of the Peugeot was announced just as one gentleman was changing his clothes; but determined not to miss seeing the car this individual appeared in the road with one leg in his trousers and the other out, in spite of the fact that according to Rigoulot, he was not wearing any underclothes. Next door to him was a man who had dashed out of the barber's shop, with the cloth still round his neck, one half of his face shaved and the other covered with soap!

One of the troubles which beset the crew of the Peugeot were the dogs, which were not in the least accustomed to motor cars and sometimes threatened to upset the little machine. However, MM. Rigoulot and Doriot equipped themselves with a long coachman's whip, and found this a most effectual means of keeping off inquisitive members of the canine species.

Not content with regaining Paris, the two adventurers pushed on to Valentigney, where they finally arrived having covered over 1,500 miles at an average speed of nearly 10 m.p.h., with the differential trouble as their only serious breakdown. Not bad going for 1891!

There are many other real pioneers some of whose adventures have been handed down to posterity. M. Lucotte, for instance, one of the first clients of Panhard et Levassor, to whom a car was delivered early in 1893 with a serious warning: "the car is fitted with three speeds, the high gear giving 12 m.p.h., but such high speed demands great attention on the part of the chauffeur and is not always advisable." M. Lucotte, however, travelled many miles in France: once his car was refused admittance to the yard of a hotel as the proprietor considered it dangerous: once its owner was stoned by some carters and had to seek sanctuary in a rectory: while one day MM. Panhard et Levassor received the following letter from him:—

"I am in Burgundy with the car and without oil, as I have lost my supply. Please send me without delay a quart of oil, by post."

The St. Gotthard Pass Surmounted.

Then there was Comte Cognard who in 1895 assayed no less a feat than the passage of the St. Gotthard Pass on his Peugeot quadricycle. On the way up the party met a Swiss soldier on a horse, which promptly took fright and communicated all its terror and a bit more besides to its rider. The latter as soon as he could safely dismount telephoned to the next village that an "amende" (fine) should be prepared for the people who were arriving in an automobile; but the postmaster, who was also the local hotelkeeper was not yet very good at hearing on the telephone and thought the soldier said "chambres" with the result that the motorists found a pleasanter reception awaiting them than they had expected. The inhabitants of Andermatt also were so impressed with the performance that they prepared the following testimonial:

"We, the undersigned, attest that M. le Comte and Mme. la Comtesse de Cognard, with a mechanic, more than 75 kilos. of luggage and a watch-dog were able to cross the St. Gotthard in their Peugeot petrol car without any other assistance than that of the engine of the quadricycle."

Andermatt, 18th August, 1895.

But space would forbid a complete chronicle of the doings of the pioneers, even if all their adventures had been chronicled. Yet I love to think of them sometimes, those lonely travellers, setting forth on the long white roads of France, untouched as yet by the wheels of the automobile. Their contemporaries thought them mad; and yet they were blazing a trail in which a million of their successors were to follow.

CAR RACING AT DONNINGTON PARK

MOTOR cycling enthusiasts in the Midlands are already well acquainted with the 2¼ mile road circuit at Donnington Park. The owner, Mr. J. G. Shields, J.P., arranged the first motor-cycle race meeting there on Whit-Monday, 1931, and for two-wheelers only a few alterations and additions were needed to the existing drives.

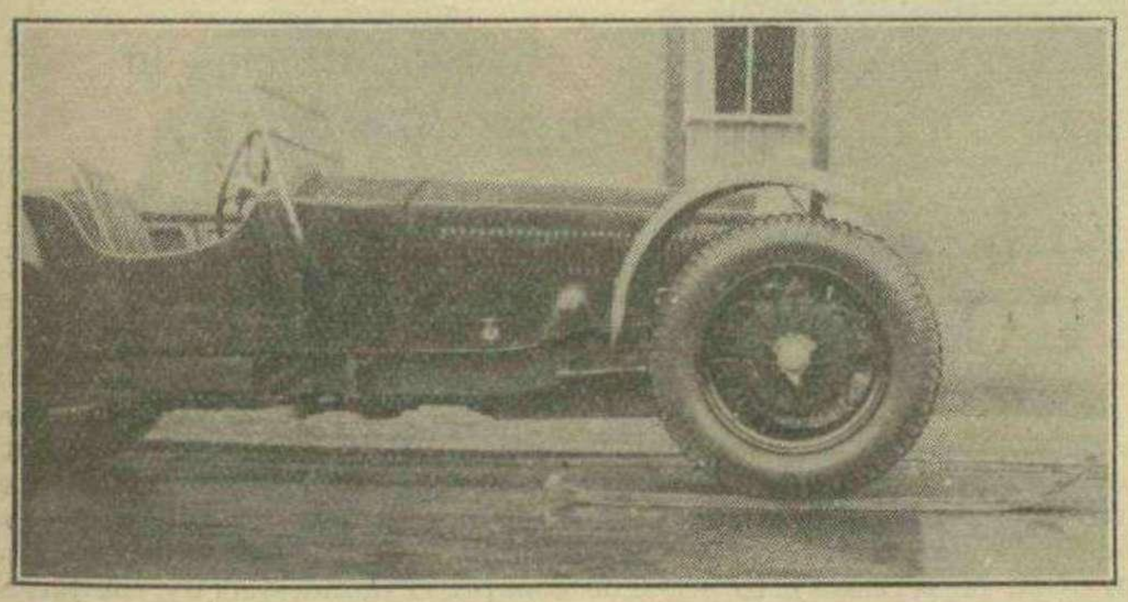
Last year, at the Whitsun Meeting, Mr. Shields discussed the question of car - racing, but decided to wait until the whole of the circuit had been surfaced with tarmac before taking any steps in this direction.

These extensive alterations are now complete, and the Derby and District Motor Club have now at their disposal a 2¼ mile road circuit, treated with tarmac throughout its entire length, at their disposal for car-races.

GROUND CLEARANCE—AND HOW!

DETAILS OF HEALEY'S INVICTA IN MONTE CARLO TRIM

FEW English competitors have had more experience of the Monte Carlo Rally than D. M. Healey, his finest performance of course being that of gaining the premier award in 1931, when he drove his Invicta from Stavanger, and the alterations which he has made for this year's Rally are all of a very practical nature. The same car has travelled over 50,000 miles in all sorts of guises, from the stripped state in which it won its class in the Brighton Speed Trials last autumn to the servo-clutch and slow-running equipment which it carried when competing in the Torquay Rally in March, 1932.



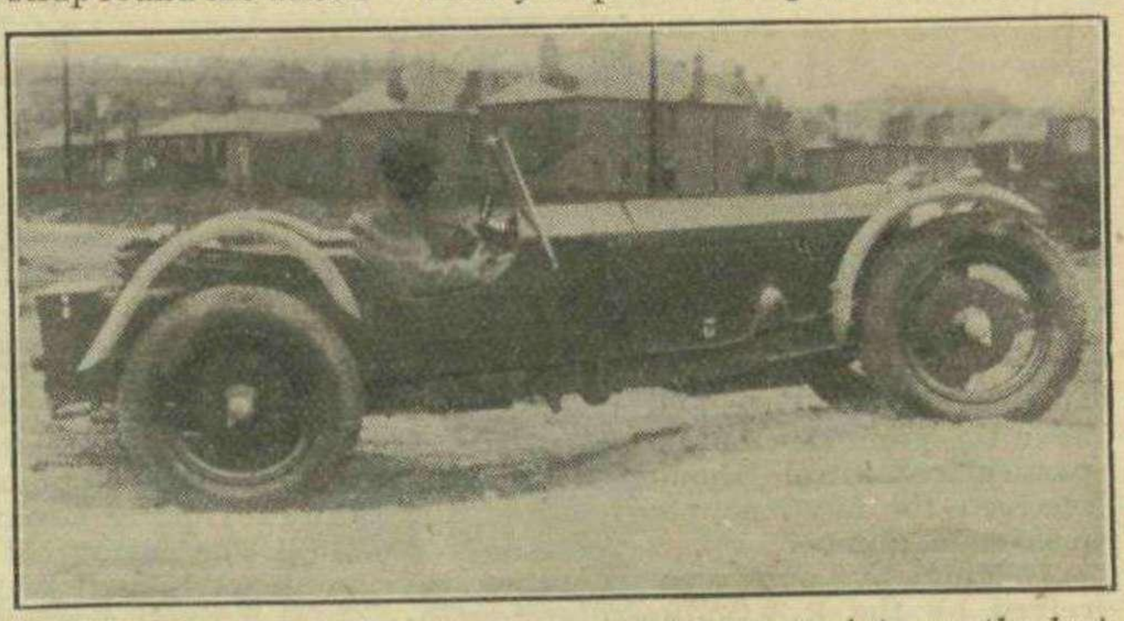
In case of heavy snow steel skids have been prepared for Donald Healey's 4½ litre Invicta.

The car is a standard Invicta production, but the engine has a compression ratio slightly higher than normal and a duralumin valve cover and sump. The mudguards are also of very light construction.

The most noticeable feature of the car as equipped for the "Rallye" this year is the size of the wheels and tyres. 23 inch wheels carry Fort Dunlop tyres of 7½ inch section, the diameter of the tyre being therefore about 38 inches. This is the largest size of private car tyre made, and gives the Invicta a ground clearance of some 18 inches. The photographs were taken at ground level in order to show this, but even from a normal standing position the car looks rather peculiar, the thin mudguards exaggerating the size of the wheels. The track rod is carried behind the front axle, and there is nothing underneath the car which can get caught up when it encounters heavy going. A Burgess silencer is fitted on the off side of the car, and though small seems very effective. Behind this a T pipe allows exhaust gases to pass to the foot-warmer, and the main pipe terminates in a flexible tube and a fish-tail.

To maintain the average speed in the night sections of the run good lamps are essential, for the car may easily be doing 70 m.p.h. in order to make up time. Unexpected corners are especially treacherous, for on Continental roads these are often covered with a sheet of ice. The Rotax lamps which were part of the car's original equipment will probably be used and for dipping purposes one or more of the new Bosch fog lamps with divided mirrors and corrugated lenses. These lamps throw a band of light about a yard deep all round the front of the car, and in fog should be free from the dazzling reflection of stray upward beams.

Inside the car alterations have been made to allow every inch of space to be used. The dashboard has been moved further under the scuttle, a small steering wheel has been fitted, and the gear-lever and its gate have been transferred to the driver's left hand, all these changes being made to make it easy for a heavily clothed driver or passenger to get in or out. A Thermo-Rad exhaust heater is fitted into one of the wells on the back of the car, and the rear passenger should be able to lie more or less at full length along the rear seat. Unfortunately in the Rally the back of the car is liable to get full up with chains and such like articles, so the person who occupies the back seat will probably find a sheet of Sorbo very welcome. The chains incidently are the Dunlop rubber stud pattern, which strap round the wheels at intervals. The hood has been raised at the back by fitting longer hood-sticks, and should allow plenty of air and headroom. Small alterations such as this make all the difference in riding comfort, especially as the hood will probably be left up for the whole of the five-day journey south.



The ample ground clearance of the Invicta is well illustrated in this photograph. Special mudguards had to be provided for the large tyres.

With the floorboards out, the car rather suggests a dope-smuggling outfit, tin trays for spares and small articles being carried underneath, and a pair of particularly fine specimens are carried each side of the propellor shaft under the back seats. Two small twelve-volt batteries in preference to two large six-volt ones are used, so that the car can still be started even though a cell should fail.

Luggage is carried in three minute suit-cases in a box at the rear of the car.

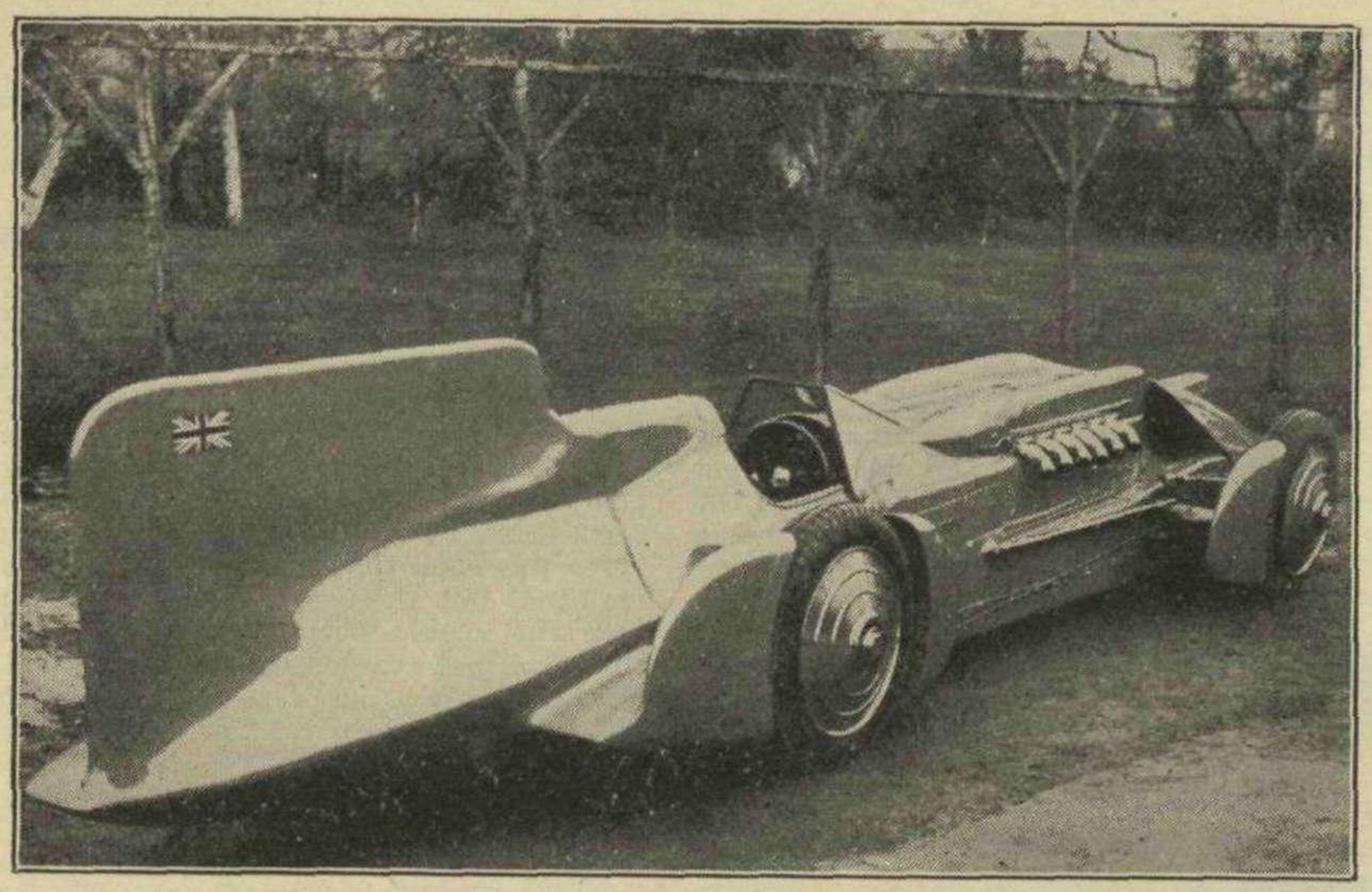
The car's behaviour on rough ground was amazing. It was driven back and forward in all directions on a rubbish dump and nothing short of running the near-side wheels along the top and the off-side ones on level ground could bring the underside of the car in contact with terra firma. The grip of the large section tyres was such that no chains should be required, but these are being carried in case the spaces between the blocks of the tread get clogged on a thawing road. Steel skids are being prepared to fit under the front wheels in case of very heavy snow.

The engine develops so much power that with ordinary tyres the rear wheels spin. Healey wondered at one time whether twin rear wheels, as used on the Terror, would not be useful in the acceleration test, but will probably use the large tyres with which the car is at present fitted. Their mass and the area of the tread will prevent them from spinning, but only accurate timing will reveal whether the extra grip will compensate for the additional weight which has to be got off the mark.

In 1931, it will be remembered, Healey was successful in winning the Rally from Stavanger, in spite of the ice-bound roads and the extremely difficult Tronaasen Pass. This year the regulations have been stiffened up so that the 25 m.p.h. has to be averaged between each check, so that no amount of fast driving on the southern portion of the route will compensate for lost time in the northern sections. In Healey's opinion this puts Stavanger out of court, and he sat up late on the last night on which entries could be accepted wondering whether to go from Athens or Tallinn. The difficulties to be encountered in the Balkans, no bridges, no sign-posts, and no road in case of a thaw setting in, decided him in favour of the latter.

The journey from Tallinn is itself not too simple. The frozen ruts of the Baltic roads play havoc with the tyres, wearing away the side walls, and also causing tremendous strain on the wheels and steering gear when one tries to turn out of them. On a low car the sump and the petrol tank are liable to get carried away, but the unusual ground clearance should

[Continued on page 156



BODY ALTERATIONS TO SUIT THE NEW POWER UNIT.

✠

All Ready for the Record Attempt in February.

BLUE-BIRD COMPLETED.

MESSRS. Gurney Nutting are to be congratulated on their success in building the latest body on Sir Malcolm Campbell's car The Rolls-Royce power unit now fitted is much bigger than the Napier, but the panelling has been carried smoothly round and between the two blocks, which produces an effect not unlike the cowling of the Supermarine Schneider Trophy seaplane in which the engine first appeared. The radiator cowling is no longer independent of the body, but joins it at the top, and then sweeps down following the general line of the body. The engine is enclosed under a separate bonnet, tapering and enclosed at the forward end, so that the air from the radiator escapes between the front end of the bonnet and the radiator casing. The clean sweep of the radiator cowl is broken by a square pipe projecting forward. This is the supercharger intake, and its forward position is necessary to take advantage of the extra pressure built by the forward motion of the car, which amounts to about 2 lbs. at full speed. Sir Malcolm is rather pleased to have the pipe high up, even though it does detract slightly from the car's appearance, since it avoids any chance of sand or water getting drawn into the supercharger.

The smooth and glossy panels are unbroken except for six plated exhaust stubs on each side of the bonnet, and the fore and aft link which controls each front wheel. The rear of the car with its stabilising fin off-set behind the driver's seat, is unchanged from last year.

The cockpit is dominated by the large Smith rev. counter reading up to 3,500 r.p.m. The dial is divided off in the familiar way with sectors of various colours, while round the rim are marked the magic figures "230" "240" and so on up to "300." The dash carries the usual gauges for petrol, oil pressure, water temperature, and supercharger pressure, and an unusual one in the shape of a thermometer giving the back axle temperature.

PARTICULARS OF THE R.A.C. RALLY.

ENTRIES for the R.A.C. Rally now number nearly one hundred, although the actual date on which entries close is not until 13th February next. Intending entrants are reminded that the maximum number which can be accepted as starters from any one of the nine Starting Controls, is one hundred, and that the entries first received will have the preference of starting from any particular Control, should the number received for any one place exceed the maximum number.

Judging by numerous enquiries received by the R.A.C. the following information may be of interest to entrants.

(1) The routes given by the R.A.C. in the regulations and the route card are the shortest distance between the various Controls, but competitors need not necessarily follow these routes. In many cases competitors may find it advisable to take a slightly longer route, as giving better roads and opportunities of maintaining a higher average speed. For members of the R.A.C. these alternative routes are available in the ordinary way through the Club's Touring Department.

(2) The entrant of a car in the Rally need not himself be the driver.

(3) Two drivers must be carried as a minimum. Additional drivers may be nominated at the discretion of the entrant.

(4) Entrants and drivers must be in possession of Open Competition Licences.

(5) Only cars that have completed the Road Section of the Rally are eligible for the Coachwork Competition Ample time will be available between the conclusion of the Eliminating Tests which take place on Friday, March 17th, and the Coachwork Competition on the following day, for cars to be washed and cleaned.

Regulations, Entry Forms and all information regarding the Rally may be obtained from the Secretary, R.A.C., Pall Mall, London, S.W.1.

THE "CONQUEROR" WATCH.

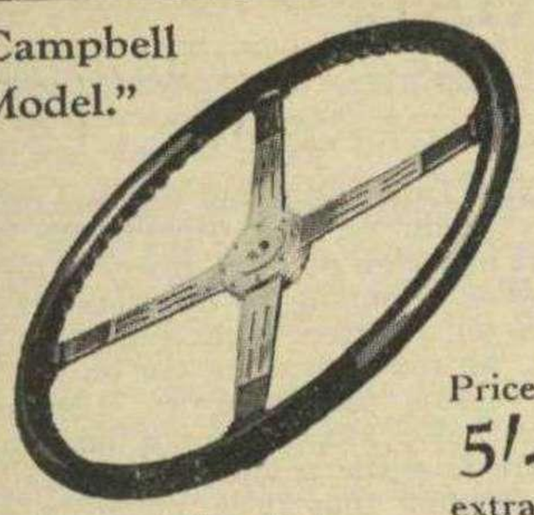
For some time now we have been using an Arnold "Conqueror" watch, marketed by A. Arnold & Co., 122, St. John Street, London, E.C.1. It certainly is comforting to be able to do the most grimy and knuckle-barking jobs on a car without any fear of breaking the glass of one's wrist watch, and in this respect we have tested the "Conqueror" to the full and it has amply fulfilled its name. We soon became accustomed to the small windows in the metal face, and with its 15 jewel lever movement, the Arnold "Conqueror" is good value at 50/-. Incidentally it is guaranteed for three years.

GROUND CLEARANCE—AND HOW! (*Continued from page 155*).

get over this difficulty. In Poland the pot-holes are large enough, if not to bury the proverbial horse in, at any rate for a good sized dog, and here one hopes that the 38 inch tyres will have a cushioning effect.

Three people are travelling in the car, Donald Healey, F. M. Montgomery, who drove an M.G. from John o' Groats in 1931, and a member of MOTOR SPORT staff. They are crossing to Antwerp and going North by car over the Rally route.

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GROVE WORKS, SOUTH WIMBLEDON.
(*Opposite South Wimbledon Station*).
'Phone - - - Liberty 4656

THE LONDON-EXETER TRIAL.

A PASSENGER'S LOG OF THE FAMOUS M.C.C. CLASSIC IN WHICH FOG AND RAIN—AND FINGLE BRIDGE—WERE THE CHIEF OBSTACLES.

WE got up at 3 o'clock, expecting almost any weather. The Exeter has a grim reputation; snow, rain, fog and floods having played their drastic parts in previous years.



The long queue of cars waiting at the foot of Fingle Bridge.

Having fortified the inner man with coffee and sandwiches and the outer with countless sweaters, scarves and coats, we sallied forth to the garage. Our first impression of the night was not encouraging, a damp pall of fog making us wish we were back in bed. Such cowardly thoughts were soon removed, however, when we at last set forth for Virginia Water; the snugly-fitting hood of the Nash kept the dampness out and the gleaming dashlamps gave the cockpit an air of cosiness.

The fog was bad: no thick patches interspersed with clear stretches, but a solid uninterrupted wall. A 24 m.p.h. average under these conditions would be difficult to maintain, but at any rate the main road was straight and fairly easy to follow.

At Virginia Water the usual scene was being enacted: a queue of cars waiting to be started and the rest of the big parking ground scattered with cars and drivers making last minute preparations for their long journey. We signed the time-keeper's sheet, checked our watches from his elaborate chronometer and then heard our number being shouted by a starting marshal. We joined the line, the cars in front of us moved off at minute intervals and at last at 4.30 a.m. we were given the signal to go.

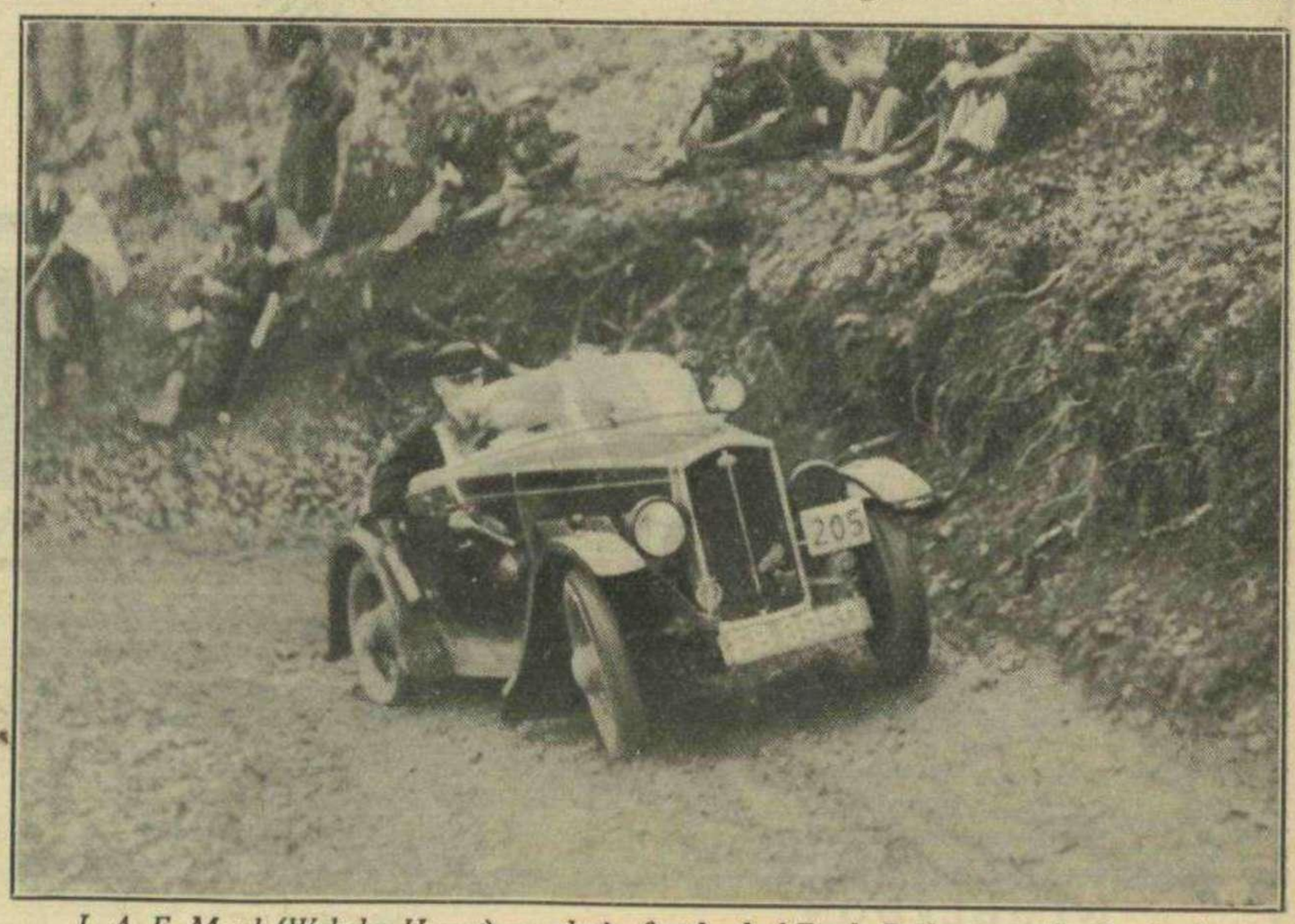
On the main road the fog was not so thick and we managed to keep up a steady 25 m.p.h. Through Sunningdale to Bagshot we crawled and the driver began to wonder whether this sort of thing was going to last all the way to Exeter. Suddenly came respite. Round the corner at the end of the short Bagshot by-pass we emerged from the fog into a clear starlit night. By this time we had caught up the preceding car, the new A.C. sports model driven by Pigé-Leschallas, but with the open road in front of him 'Pigé' decided to make up time and his twinkling rear light soon disappeared from our sight.

On the Basingstoke by-pass, we overtook C. V. Glass who was working on his Singer saloon. As he should have been 50 minutes ahead of us, it looked as though he had already lost his premier award. We had ten minutes to spare outside the Popham Lane check, but we were quickly away again on the Stockbridge road. There had been no more traces of fog and we were beginning to congratulate ourselves on a perfect night run when soon after, we ran into more fog on the high road across the Plain to Lobscombe Corner. We stopped for a moment to inquire how the troops were getting on but deciding that there might be some more fog before we reached the Salisbury check, we pushed on once more. Our fears were justified; but we had a comfortable margin in hand and so arrived in good time.

R.A.C. and A.A. scouts were of the greatest assistance during the night directing the competitors at all doubtful turnings. Between Salisbury and Shaftesbury the night was broken in the east by a strip of light and with the dawn, the sky became cloudy and overcast. As daylight advanced the prospect of fog gave way to the certainty of rain some time during the day.

By this time our early coffee had been long forgotten and we made all speed to the White Cross Garage where two gallant ladies had been up since three dispensing hot coffee and cakes to chilled competitors. The run to Exeter was uneventful except for a heart-stopping moment when a yokel on a bicycle, whom we were just about to pass, suddenly decided to turn off to the right.

At Exeter we had over an hour to wait but at last we entered The Bedford garage, refuelled the car and attacked our breakfast at Deller's Cafe. Little incident seemed to have occurred to competitors en route, although we heard that Hollinghurst's Morgan had retired at Shaftesbury through its back wheel collapsing. Before we were sent off once more we had time to notice and admire E. A. Prince's



J. A. E. Marsh (Wolseley Hornet) rounds the first bend of Fingle Bridge in good style—but he failed higher up.

THE LONDON-EXETER TRIAL—continued.

old pre-war Fiat, and we heard that it had had the misfortune to be two minutes late at the Exeter check.

On our way to Fingle Bridge we scrupulously maintained our schedule but when we arrived at the famous hill we found that our efforts were useless; a queue of cars stretched before us and when we walked forward to the bridge itself we found that no fewer than sixty cars were waiting their turn to climb the hill. Allowing three minutes for each climb we reckoned on having three hours to wait and decided to see how the other competitors were faring on the hill.

The surface of the first hairpin was already badly cut up, each car doing its share of deepening two cavernous ruts and piling the earth therefrom into a central ridge of under-shield scraping dimensions. Apparently failures here were few and far between, although one or two over-enthusiastic people had failed to round the bend. A Bentley had burnt out its clutch and L. B. Henderson (Frazer Nash) had rammed the bank. As we stood there A. Gruzelier came up with a Straight-8 Delage, failed to get round, reversed and got away under his own power. Most of the cars seemed to find little difficulty in the gradient although H. S. Linfield's J.2 Midget died for a moment and came to a standstill with what sounded like petrol starvation. Neat ascents were made by J. V. Hay's old Morris Cowley and Garland's sports two-seater Jowett. Oliver Bertram (Vauxhall 30/98) did well only to chip the bank with his mudguard and changed up and then down again after the corner. Higher up the hill he was baulked but got away cleanly although four up!

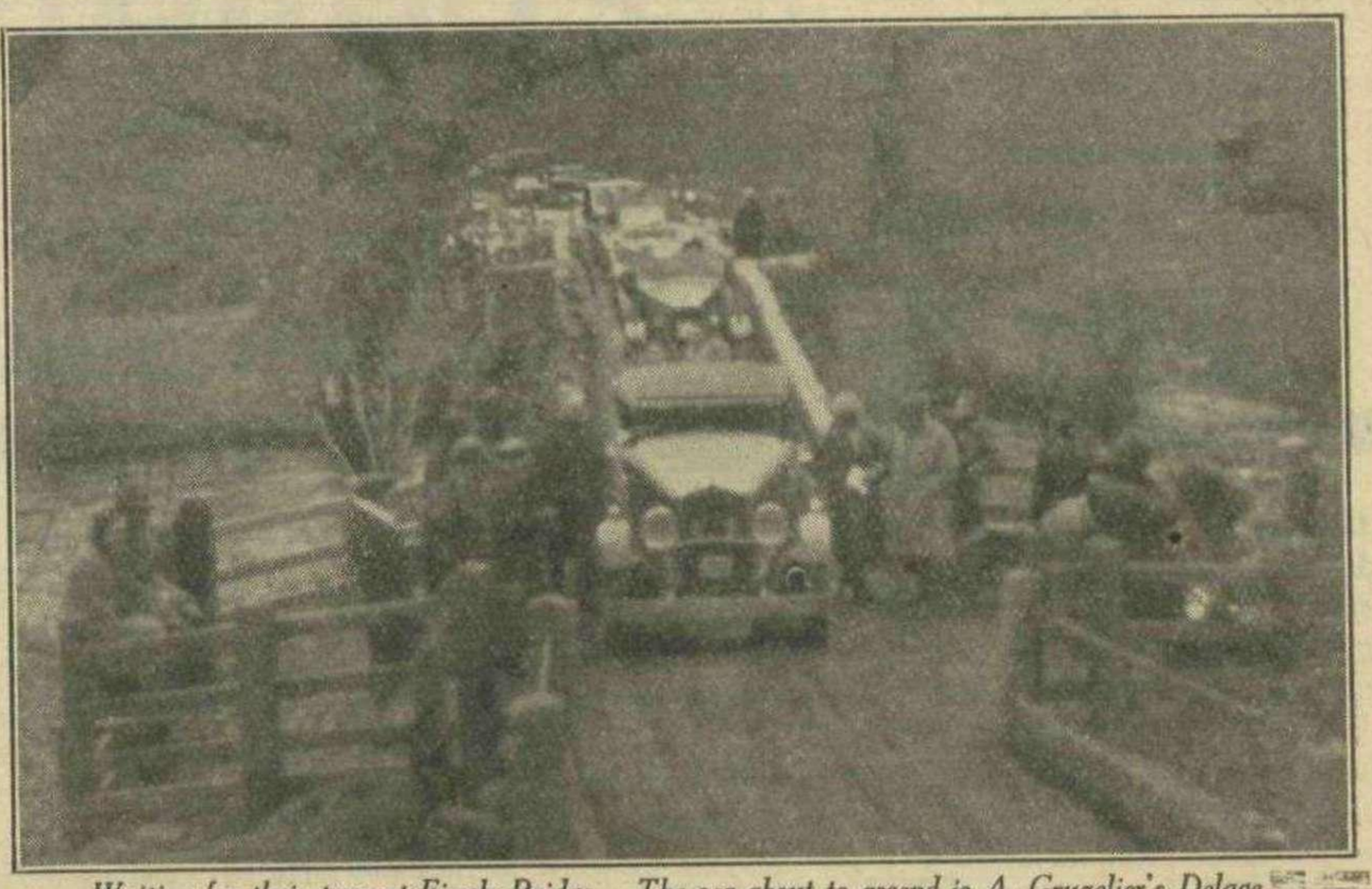
The second bend was also in a bad state, for the surface sloped steeply to the right immediately round the corner with the result that hubcaps were apt to make contact with the bank. Up and up through the trees the road wound past two more corners until the piêce de résistance was reached. Here a large crowd had collected for most of the failures occurred at this point. Car after car came slowly to a standstill to be dealt with by a team of men or horses as the size of the car dictated. One of the best ascents we saw was made by Alan Hess, the secretary of the M.G. Car Club on a J.2 Midget. Wisely keeping his rear wheels spinning he slid round the corners in great style. A climb which put many sports cars to shame was made by E. C. Weiss' Hillman Wizard Saloon with a full complement of passengers.

The rain began to fall so we returned to our steed and gradually moved forward to the foot of the hill. The rain was falling in a deluge and from beneath our hood we gazed with wonder at hardy wights with furled hoods and flattened screens. Then we were off speeding up to the first bend—bump, crash, we were round, past the second, third and fourth until the dreaded stretch came in view, which proved to be our Waterloo.

After such a long wait it was a relief to get going again on the main road. The next hill was Harcombe and a good distance had to be travelled before this was reached. Then occurred an accident which nearly put us out of the trial. Rounding a bend we were faced with a herd of cows; the driver put out his hand, braked and came to a standstill, suddenly there was a wild screech of tyres, a terrific thump in the back of the car and we shot forward among the cows. Our first thought was for the exposed rear tank but a glance at the pressure gauge reassured us; getting out, we discovered the offending vehicle to be a Bentley which had struck us while in a broadside skid. After straightening damaged mud-guards we proceeded, keeping a wary eye astern lest the Bentley should draw too near again.

Harcombe was easy. It was nearly dark when we arrived but we negotiated the hill quite comfortably. At the top we came across a Singer straddled in the ditch but our combined efforts succeeded in bringing it back to the road. The rain fell without cessation and we pitied the officials at checks and on hills. Meerhay, we found terribly rough and in the darkness were unable to choose the smoothest path. Our undershield kept up a merry clatter as we bounded up the hill. The next obstacle was the timed re-start on Black Hill; the scene looked very eerie, the timed stretch being illuminated by the headlamps of marshals' cars. As had been the case at Harcombe and Meerhay failures had been few and far between. The last hill, Ibberton was as easy as the rest although a few of the bigger cars, like Porter-Hargreaves' Alvis came to rest with wheelspin.

At Blandford there came a hitch in the otherwise splendid arrangements for competitors—for unless we were staying in the hotel no meal could be served until 8,30, an hour later. Donning soggy leather coats we went forth to find a café, where our hunger was finally appeased.



Waiting for their turn at Fingle Bridge. The car about to ascend is A. Gruzelier's Delage.



F. B. Robinson (Frazer-Nash) on the lower slopes of Fingle Bridge.

THE LONDON TO EXETER RESULTS

93 Premier Awards, 48 Silver and 27 Bronze Medals.

A.A. SPECIAL (1).

R. H. Massey	*Retired*

A.C. (4).

J. G. Pigé-Leschallas	*Premier*
J. D. Im Thurn (5)	*Silver*
R. J. P. Morley (OTL)	*Silver*
P. L. M. Day (1, 5, 6)	*Bronze*

ALLARD SPECIAL (1).

S. H. Allard	*Retired*

ALTA (3).

G. Taylor (1)	*Silver*
J. R. G. Finch (1, 5)	*Bronze*
G. H. P. Scott	*Retired*

ALVIS (5).

E. N. Adlington (1)	*Silrer*
G. May (1)	*Silver*
J. S. Bass (1)	*Silver*
H. H. Porter-Hargreaves (OTL (E.))	*No Award*
C. J. Hawkes	*Retired*

ASTON-MARTIN (1).

M. H. Scott (1)	*Silver*

AUSTIN SEVEN (9).

A. Massey	*Premier*
A.P. McGowran	*Premier*
N. A. Prince (1, 3)	*Bronze*
C. H. Watstaff (1, 3, 5)	*Bronze*
R. S. Ross (1, 2, 3, 5, 6)	*No Award*
C. R. Miller (1, 3, 4, 6)	*No Award*
M. S. Aldridge	*Retired*
G. E. Good	*Retired*
C. T. Bruton	*Retired*

AUSTIN (Over 747 c.c.) (6).

J. C. Elwes	*Premier*
D. R. Bowyer	*Premier*
C. P. Lambert	*Premier*
W. J. Milton	*Premier*
O. B. Bennett	*Premier*
A. J. M. Hodges	*Retired*

B.P. (1).

M. W. B. May	*Premier*

BENTLEY (4).

R. R. K. Marker (1)	*Silver*
F. E. Elgood (1, 2, 5)	*Bronze*
R. Rose	*Retired*
J. H. Baldwin	*Retired*

BUGATTI (1).

M. E. King	*Retired*

BUICK (1).

H. A. Hardwick-Sewell	*Premier*

CHEVROLET (1).

J. Messenger (1, 3, 6)	*Bronze*

DELAGE (1).

A. Gruzelier (1, 6)	*Bronze*

DORCAS II (1).

G. L. Glegg	*Retired*

ESSEX (5).

F. J. McKenzie	*Premier*
R. Varley	*Premier*
R. A. Brown (1)	*Silver*
A. J. Morris (6)	*Silver*
G. C. Garbett (1)	*Silver*

FIAT (2).

W. H. Whiddington (1, 5)	*Bronze*
W. A. Prince	*Retired*

FORD (8).

K. N. Hutchison	*Premier*
T. H. Wisdom	*Premier*
W. J. Haward	*Premier*
G. M. Denton	*Premier*
J. A. Driskell (1, 3, 5)	*Bronze*
H. B. L. Hillcoat (1, 5)	*Bronze*
J. R. Jordan	*Retired*
C. S. Horne	*Retired*

FORD V8 (6).

M. L. Curtis	*Premier*
G. H. Jackson	*Premier*
J. Harrison	*Premier*
H. Hillcoat	*Premier*
W. A. Ponting	*Premier*
J. A. Wells	*Premier*

FRAZER NASH (20).

H. W. Blaw	*Premier*
D. G. Hopkins	*Premier*
P. Less	*Premier*
K. M. Roberts	*Premier*
N. A. Watkins	*Premier*
D. West	*Premier*
C. L. Clayton	*Premier*
H. J. Aldington	*Premier*
A. L. Marshall	*Premier*
N. A. Berry	*Premier*
A. G. Gripper (1)	*Silver*
F. B. Robinson (1)	*Silver*
L. Butler-Henderson (1)	*Silver*
D. A. Aldington (1)	*Silver*
R. E. Wright (1)	*Silver*
T. G. Moore (1)	*Silver*
H. W. Inderwick (1, 5, 6)	*Bronze*
E. R. M. Walker (1, 2, 3, 5, 6)	*No Award*
Hon. P. Mitchell-Thomson (OTL E))	*No Award*
J. D. Windle	*Retired*

HILLMAN (2).

E. C. Weiss	*Premier*
J. R. T. Niemeyer (1)	*Silver*

HOTCHKISS (1).

A. U. Kipling	*Premier*

HUMBER SNIPE (1).

H. A. Nash	*Retired*

INVICTA (1).

J. J. Boyd-Harvey (1, 5 6)	*Bronze*

JOWETT (2).

A. H. Garland (5)	*Silver*
G. A. Ladwig	*Retired*

LANCIA (1).

R. Bickford (5)	*Silver*

LEA-FRANCIS (3).

H. W. Burman	*Premier*
F. P. Barker (OTL)	*Bronze*
H. J. Vidler	*Retired*

M.G. MIDGET (31).

R. A. Macdermid	*Premier*
A. C. Cookson	*Premier*
A. W. F. Smith	*Premier*
G. E. Taylor	*Premier*
J. L. Toulmin	*Premier*
J. A. Berry (6)	*Silver*
C. G. Fitt (1)	*Silver*
J. Shewell-Cooper (1)	*Silver*
R. Littlewood-Clarke (1)	*Silver*
K. D. Evans (1)	*Silver*
M. T. U. Collier (1)	*Silver*
E. S. Linfield (1)	*Silver*
L. Gardner (1)	*Silver*
D. B. Payne (1)	*Silver*
A. C. Hess (OTL)	*Silver*
F. J. Mattison (1)	*Silver*
P. B. Tanner (1)	*Silver*
P. M. Walters (1)	*Silver*
N. C. Sharp (1, 5)	*Bronze*
H. H. Symonds (1, 3)	*Bronze*
W. J. Hampton (1, 4)	*Bronze*
M. H. Rowell (1, 3)	*Bronze*
A. L. Mason (1, 5, 6)	*Bronze*
R. J. Barnes (1, 3)	*Bronze*
E. C. B. Buckley (1, 3, 5)	*Bronze*
L. L. Schofield (1, 3, 4)	*Bronze*
M. P. Tenbosch (1, 2, 3, 4, 6)	*No Award*
L. O. Prichard (1, 2, 3, 5)	*No Award*
C. J. Fryer (OTL (E))	*No Award*
W. G. Marshall	*Retired*

M.G. MAGNA (14).

L. Maxwell	*Premier*
C. A. H. Cann	*Premier*
W. E. Kendrick	*Premier*
G. R. Brocklebank	*Premier*
G. M. MacGregor	*Premier*
S. W. Cottee	*Premier*
R. J. B. Seaman	*Premier*
A. E. Cleghorn	*Premier*
G. Wood	*Premier*
A. H. Langley	*Premier*
R. M. Mere	*Premier*
F. Sforza (OTL)	*Bronze*
J. R. H. Baker (OTL (E))	*No Award*
W. E. C. Watkinson	*Retired*

M.G. SIX (1).

R. G. Percival	*Retired*

M.S. (1).

S. R. Mitchell (1)	*Silver*

MORRIS MINOR (3).

W. W. Whitnall	*Premier*
J. H. Scholfield (1, 3, 5)	*Bronze*
F. W. J. Bolton	*Retired*

MORRIS (over 847 c.c.) (3).

J. H. Bocock (1)	*Silver*
R. J. Barker (1)	*Silver*
J. V. Hay (OTL)	*No Award*

O.M. (1).

L. Keevil (1)	*Silver*

RALLY (1).

M. H. Morris-Goodall	*Retired*

RILEY (21).

S. H. Roe	*Premier*
W. E. C. Greenleaf	*Premier*
E. A. Dicks	*Premier*
F. Broomfield	*Premier*
G. H. S. Letchworth	*Premier*
R. E. Tongue	*Premier*
H. C. Hunter	*Premier*
E. J. W. Appleton	*Premier*
T. W. Dargue	*Premier*
E. S. Mullins	*Premier*
J. H. Kemsley	*Premier*
L. G. Mussi	*Premier*
Major C. J. S. Montague-Johnstone	*Premier*
A. Thomas (1)	*Silver*
C. V. Wells (1)	*Silver*
K. F. A. Walker (1)	*Silver*
H. J. Ripley (2)	*Silver*
N. G. Stokes (1)	*Silver*
S. V. Colbran (1, 5)	*Bronze*
P. L. Bass	*Retired*
F. M. Hill	*Retired*

ROVER (1).

R. J. T. Hewitt	*Premier*

SALMSON (1).

A. C. Fairtlough	*Retired*

S.S.1 (1).

A. G. D. Clease (1)	*Silver*

SINGER (10).

N. H. Cole	*Premier*
J. A. Kemsley	*Premier*
W. J. B. Richardson	*Premier*
E. F. Ranger	*Premier*
C. W. Hough	*Premier*
N. Roundhill	*Premier*
L. A. Sandford	*Premier*
H. M. Avery	*Premier*
C. H. Lawford	*Premier*
W. R. Writer (5)	*Silver*
C. V. Glass (OTL)	*No Award*

STANDARD (6).

G. H. Strong	*Premier*
G. W. Olive	*Premier*
W. G. Lockhart	*Premier*
J. G. Tice	*Premier*
B. P. W. Twist	*Premier*
J. Torromé	*Retired*

STUDEBAKER (1).

J. P. T. Clarke (5)	*Silver*

TALBOT (4).

Cmdr. R. G. Fowle	*Premier*
E. L. Brynildsen	*Premier*
A. Powys-Lybbe (1)	*Silver*
G. K. Collier (1, 6)	*Bronze*

TROJAN (1).

A. F. Scroggs	*Premier*

TRIUMPH (3).

F. A. Thatcher (1, 5)	*Bronze*
H. J. Ebbutt (1, 3, 5)	*Bronze*
C. J. Turner	*Retired*

VAUXHALL (2).

A. May	*Premier*
O. H. J. Bertram	*Premier*

WOLSELEY HORNET (10).

F. Allott	*Premier*
H. J. Stroud	*Premier*
P. Butler-Henderson	*Premier*
N. E. Bracey	*Premier*
W. A. V. Davis	*Premier*
G. H. C. Goodban	*Premier*
M. A. McEvoy	*Premier*
H. Laird	*Premier*
R. M. Norton (1)	*Silver*
J. A. E. Marsh (1)	*Silver*

KEY TO CAUSES OF FAILURE.

1=Fingle Bridge Hill.
2=Harcombe Hill.
3=Meerhay Hill.
4=Black Hill (non-stop section).
5=Black Hill (stop and restart test).
6=Ibberton Hill.
OTL=Outside Time Limit. E=Early.

The M.G. Records.

AFTER we had gone to press last month with our list of records standing at the end of 1932, G. E. T. Eyston and A. Denly broke several records in Class H, and these were reported in the January issue, but not in the list of records. In order that readers may bring their list up to date we append herewith a revised list of Class H records, which can be cut out and pasted over those shown in the January issue.

INTERNATIONAL CLASS H.—501-750 c.c.

Record.	Speed.	Car and Drivers.	Track.
1 kilometre (s.)	67.21	M.G. (E. R. Hall)	Brooklands
1 ,, (f.)	120.56	M.G. (G. Eyston)	Montlhéry
1 mile (s.)	74.74	M.G. (E. R. Hall)	Brooklands
1 ,, (f.)	120.56	M.G. (G. Eyston)	Montlhéry
5 kilometres (f.)	120.52	M.G. Midget (G. E. T. Eyston)	,,
5 miles (f.)	116.71	,, ,,	,,
10 kilometres (f.)	117.42	,, ,,	,,
10 miles (f.)	114.46	,, ,,	,,
50 kilometres (s.)	98.71	,, ,,	,,
100 ,, (s.)	100.31	,, ,,	,,
200 ,, (s.)	95.52	,, (Eyston and Denly)	,,
500 ,, (s.)	91.77	,, ,,	,,
1,000 ,, (s.)	91.77	,, ,,	,,
2,000 ,, (s.)	69.95	,, (Eyston, Denly and Wisdom)	,,

Record.	Speed.	Car and Drivers.	Track.
50 miles (s.)	99.83	M.G. Midget (G. E. T. Eyston)	Montlhéry
100 ,, (s.)	101.09	,, ,,	,,
200 ,, (s.)	95.02	,, (Eyston and Denly)	,,
500 ,, (s.)	92.50	,, ,,	,,
1,000 ,, (s.)	88.36	,, ,,	,,
mls. yds.			
1 hr. (s.) 101 191	101.11	,, (Eyston)	,,
3 hrs. (s.) 283 1344	94.59	,, (Eyston and Denly)	,,
6 hrs. (s.) 556 1341	92.79	,, ,,	,,
12 hrs. (s.) 1040 131	86.67	,, ,,	,,
24 hrs. (s.) 1694 1126	70.61	,, (Eyston, Denly and Wisdom)	,,

Rumblings



A Chance Encounter.

GOOD fortune is all the more pleasing when it is unexpected. I was having dinner the other night with quite a large party, but during the meal had been placed between two rather unresponsive neighbours. After the ladies had left the room I got talking to a Russian who had been sitting further down the table, and asked him if he knew anything about the motoring conditions on the roads traversed last month in the Monte Carlo Rally. He gave me graphic accounts of the different sorts of nastiness one might meet with, and then quite by accident our conversation turned to motor-racing.

There had been much of it in Russia before the War. My neighbour had taken part in several races, and had even gone to Sicily to take part in the Targa Florio. Pressing him for further particulars I found that he had driven a Mercédès and finished third in the 1911 race which was won by Ceirano on a S.C.A.T. at an average speed of 31.09 m.p.h. Dust and tyres were the great problems in pre-War days.

As a touring car he drove a 90 Mercédès apparently identical except for a sour-seater body with the one tested by MOTOR SPORT in November, and travelled to France to see the 1914 French Grand Prix, in which of course Lautenschlager was the winner.

The Fastest car in Russia.

His most famous car was the 100 h.p. Renault with which Szioz won the first French Grand Prix in 1906, and was the fastest car in Russia until a 200 h.p. Brasier came on the scene. Engine size was the designer's god in those days, and my acquaintance rattled off the cylinder dimensions of the various cars as easily as we would the R.A.C. rating. The figures certainly were remarkable, since the Renault had a four-cylinder engine in which the cylinders measured 150 x 165 mm., giving the substantial capacity of just under 13 litres ! The bonnet was made of wire netting to allow the heat to get away, so that the proud owner got the prestige of his large power-unit even when the car was on the road.

The Good Old Days.

I liked one of the stories about the Renault, which, in common with most of the high-powered cars of the day, used to suffer from clutch slip. To stop this the leather of the cone had been packed up with strips of brass, but this treatment was, if anything, too successful, as it was found that no amount of pressure on the clutch pedal would cause the members to come apart. There was no time to dismantle the car before the speed event for which it was entered, so the back of the car was jacked up so that the wheels were clear of the ground. With second gear engaged, the engine was started and the mechanic took his seat. When the flag dropped a crew of helpers hurled the car off the jacks, the tyres bit into the ground and the Renault leapt off with a smell of rubber and a shower of stones. The other gears were somehow engaged in succession and the car roared over the finishing line in good style. On the same occasion the ignition switch had also given up the ghost at the last minute, but this was easily overcome by having a string to the high-tension lead from the coil, which was pulled away by the mechanic as the car crossed the line.

The unexpected was always happening in racing in the old days, as in fact it still does, and I look forward to hearing some more reminiscences of racing in Russia and elsewhere.

Made to Measure.

We all know the enthusiast who executes "cunning conversions" by installing four cylinder engines in G.N. chassis, uniting an A.C. engine and chassis to an A.B.C. gearbox and back axle, or inverting a Cowley chassis and putting the engine back on what was originally the bottom side of the side members, to mention but a few schemes which have been carried out or suggested. Up to a few months ago, however, I had not heard of any simple way in which the wheelbase of a car could be shortened, the snag being that side members are hard to cut and difficult to rejoin, and bodies not easily altered to suit.

These difficulties do not arise in the old Lancia Lambdas, where chassis and body are one, consisting of a single sheet of pressed steel. The first Lambda I saw converted in this way was one belonging to R. Bickford, who drives it in reliability trials. This car, as far as one could see from the outside, was one of the long wheel-base 13.9 h.p. models—the short wheel-base ones would hardly merit this attention—and the body had been cut through with an acetylene cutter behind and in front of the rear doors, the surplus two feet of metal thrown away, and the back and the front parts of the chassis welded together again. To expert welders this

Another enthusiastic appreciation of Sports "Filtrate"!

Rosecroft,
Mardley Hill,
NEAR WELWYN,
Herts.

12th December, 1932.

Dear Sirs,

"You are quite right—your Oil does 'Keep up the pressure.'

"I drained the sump of my Bugatti and filled up with SPORTS 'FILTRATE,' I warmed up the engine really well, blanked out most of the radiator, and set off for Leicester via Wellingborough and Northampton, and had roughly 150 miles.

"The Oil pressure gauge remained absolutely steady at 5 kilogrammes throughout the journey—and on some stretches the rev. counter was kept at between 3,500 and 4,000. I had become accustomed to the pressure showing only 2 after about a quarter of an hour—so I was most impressed. The engine was noticeably quieter, and this morning, with frost on the ground, starting was really simple."

Yours truly,

(Signed) MARJORIE POLLARD.

Messrs. Edward Joy & Sons Ltd.,
Filtrate Works,
Leeds.

SPORTS "FILTRATE"

(Regd.)

"The Oil which keeps the pressure up."

Headquarters: FILTRATE WORKS, LEEDS.

RUMBLINGS—continued.

is a fairly simple matter, and another Lancia enthusiast told me the other day that it will be done for £10. The only other part required is a new carden shaft. One then has a motor car which with the Lancia's good steering-lock is capable of negotiating with ease hairpins and other obstacles which made trials such difficult affairs for drivers of full-sized cars.

Carried to Extremes.

Our tame jester suggests that this scheme should be carried further and the chassis made so short that the car would approach the dimensions of a "Fronty" Ford—seven foot wheel-base and five foot track—and would then be able to perform on the cinders at the White City. Further that it would be interesting to cut in half the chassis of two front-wheel-drive Alvis and join them up so that one had an engine unit at each end. Neither of these suggestions carries the editorial blessing, but supposing any reader is rash enough to try the second of the two, we suggest that it would be wise to synchronise the two engines by means of a fore-and-aft shaft, also to change over the bevel in one of the power units, otherwise the compound car might be found to suffer from disconcerting changes of wheelbase!

The Alfa-Romeo Retirement.

I am firmly convinced that the sport is bound to suffer whenever a particular make is supreme in race after race. This state of affairs has two inevitable results, both of them unsatisfactory. Either it discourages rival firms from competing, as happened at Le Mans a few years ago when Bentleys were at the height of their form. Or else the firm in question gains the impression that further victories cannot enhance their reputation, and decide to give racing a rest—as seems to have happened with the Alfas.

But we shall see. The new 2.8 litre Bugattis and the 3 litre Maseratis will take a lot of beating by private owners with 2.3 Alfa-Romeos, and I shall be very surprised if the Milanese firm will be able to stand by quietly in the event of a series of Bugatti and Maserati wins.

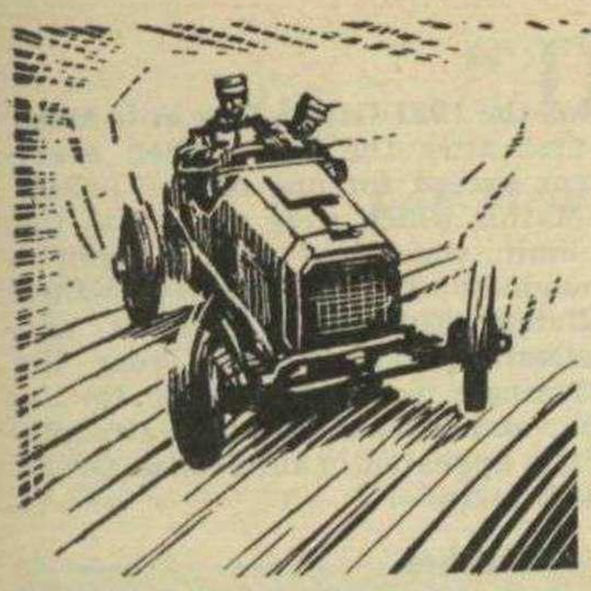
Meanwhile, the wonderful "monoposto" Alfa-Romeos, the finest road-racing cars the world has so far seen, will remain at the factory *sine die*.

Winter Sports.

A friend who is winter-sporting at St. Moritz tells me that for sheer thrills and sensations of speed a solo down the Cresta Run beats anything that a high-speed sports car can provide. Racing motorists have always been attracted by this sport, and I believe "Archie" Nash used to hold the Cresta record at one time. Lt.-Col. J. T. C. Moore-Brabazon was also a famous Cresta Run exponent, and used to do a lot of bob-sleigh work at one time. Rudolf Caracciola has spent this winter at Arösa, in Switzerland, while Louis Chiron has been ski-ing in Austria.

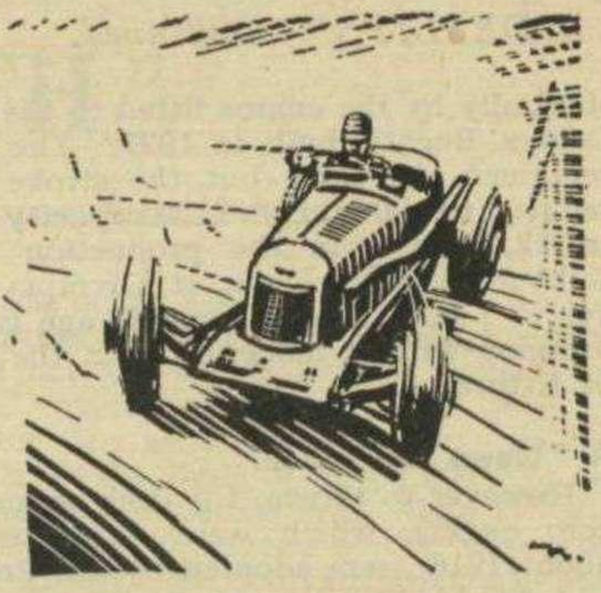
Nuvolari—Stop Press!

Elsewhere in this issue our Continental Correspondent reports that Nuvolari has been offered a large sum to race a new Fiat sports model in the Targa Florio, Monaco G.P. and Coppa Ciano. He now tells me that Nuvolari has joined the racing stable of Ferrari, and that the world's finest driver will be seen at the wheel of a 2.3 biposto Alfa-Romeo throughout the season.



SIDESLIPS

By Baladeur



The fastest Racing Car.

WHATEVER is its final outcome, it is at least encouraging to consider that a certain amount of interest is again being taken in racing rules. The "formule libre" in my opinion has gone on quite long enough, and has been productive of only one really interesting result, namely that it appears that to-day a car with an engine between two and three litres is faster, on the road, than anything else. How many owners of sports cars with engines of 4½ litres or over would admit that their machines were slower on the road than cars with engines half the size or less? Yet Alfa-Romeo and Maserati seem definitely to have found that their straight-eights were faster than their 16 cylinders, and Bugatti has practically given up the 5-litre in favour of the old 2.3 litre size. Certainly the "free-for-all" race has not proved the triumph of the giant engine.

A famous Panhard driver.

Whatever else they do the new racing rules must break up the depressing standardisation which has lately existed in racing cars. All three of the manufacturers who alone during the last year or two have taken racing seriously, have not only used 2-3-litre engines, but straight eights as well. This universality of the straight eight is curious, for as a type it is still not very common among touring cars. The first racing car to be fitted with an engine with eight cylinders in line was, I believe, the 40 h.p. C.G.V. built in 1902 or 1903. The builders of this machine were all famous racing drivers. Charron, the first of them, started his career as a champion cyclist, but by 1897 both he and Girardot were driving 6 h.p. Panhard et Levassors in the great races, and the latter distinguished himself that same year by using the first gilled tube radiator which he had made to his own specification by MM. Grouvelle et Arquembourg and which he hung at the back of his car. Charron was a most successful driver, and after Levassor and Mayade, before René de Knyff, he was the crack of the Panhard team, in days when Panhards won pretty well every race worth mentioning. Marseilles-Nice and Paris-Amsterdam-Paris were his great victories in 1898, Paris-Bordeaux in 1899, and the first Gordon-Bennett Cup Race from Paris to Lyons in 1900. Of course he was not always successful and he had as many adventures as anyone. In Marseilles-Nice-la Turbie of 1897 he took a sharp corner downhill too fast and his car turned a complete somersault, landing on all four wheels again with Charron still clinging to the tiller, although all the other moveables, including the mechanic were emptied out on to the road! On the sixth day of the Tour de France race in 1899 Charron found himself near le Mans with a car which would only travel in reverse; but as at that time he was third in the race he refused to be daunted and drove 25 miles into Alençon backwards, sitting on the bonnet of his car.

"The Eternal Second."

But if Charron was usually successful, Girardot has become almost equally famous as "The Eternal Second." It is true that he won Paris-Ostende and Paris-Boulogne in 1899, but the number of races in which he finished second was really amazing. They included Paris-Amsterdam-Paris in 1898, Nice-Castellane-Nice and the Tour de France in 1899, the Gordon-Bennett Race in 1900, the Grand Prix de Pau and Paris-Berlin in 1901, and the Circuit des Ardennes in 1903. In Paris-Berlin, so says Charles Jarrott, "he was Fournier's terror." But the latter arrived there an hour all but five minutes before Girardot, although as soon as the cars moved off for the formal procession through the Brandenburger Tor, Fournier broke a driving chain and spent such time fitting a new link that Girardot certainly had never missed first place by a smaller margin than on this occasion. Girardot, however, went on racing until 1905, but a bad accident in the French Eliminating Race for the Gordon Bennett cup that year decided him to retire from the game.

Voigt, the third member of the trio, appears on the scene rather later than his companions, but is eternally famous because nobody seems to know if he ought to have an H in his name or not. Incidentally as if to complete the symmetry of the thing, in the first two really important races in which he drove—Paris-Toulouse-Paris of 1900, and Paris-Bordeaux of 1901, he finished third. He also drove in Paris-Berlin and Paris-Madrid, in which incidentally he finished sixth in the heavy car class.

The first Straight-eight.

Up till then all these three had been driving Panhard et Levassors, but in 1902 they set about building cars of their own, and produced the straight-eight engine, which, though you have probably entirely forgotten it, is what we are really talking about. This C.G.V. unit had a bore and stroke of 100 x 130 mm. (8,168 c.c.) with separate steel cylinders fitted with sheet brass water jackets. The valves were at the sides in a T-head, and the plugs were screwed horizontally into the inlet valve chambers. The most interesting point about the engine was that the cranks were set at 45°.

Five years later the problem was attacked again, this time in England by Weigel. For the 1907 Grand Prix at Dieppe this firm constructed an 80 h.p. racer with 8 cylinders in line, the bore and stroke being 120 x 140 mm. (12,867 c.c.). The cylinders were cast in Paris, and the crankshaft had only four throws and five bearings, two connecting rods being attached to each throw. These racers, however were not particularly successful, and the next year the A.C.F. introduced the limited bore rule which practically confined attention to 4-cylinder engines.

The first Bugatti Straight-eight.

The more perspicacious among my readers will hardly be surprised to find that at this point M. Ettore Bugatti comes into the story—he usually does one way or another. We have already seen "Signor Bugatti of Milan" riding upon an Italian-built tricycle in 1899, and we have seen him in 1902 at the bottom of the Semmering Pass on the 24 h.p. Bugatti-De Dietrich, with all the other competitors' suit-cases aboard. The other day I suddenly came upon a mention, in 1905 I think, of the Hermes-Bugatti car. What was this? Perhaps some one of my readers would be so good as to tell me all about it, but in the meantime it has nothing to do with the matter in hand. The fact remains that in 1913 Ettore Bugatti built a straight eight engine, with a bore and stroke of 68 x 100 mm. (Brescia enthusiasts please note) and a capacity of 2,905 c.c. The crankshaft was arranged on the 4-4 principle, that is to say like two 4-cylinder engine crankshafts end to end, with the two sets of cranks at 180° to each other, and the engine had three overhead valves per cylinder operated by an overhead camshaft (Grand Prix Bugattisti please note). When war broke out the Germans invaded Alsace and M. Bugatti was left without a factory, but nothing daunted, he set about designing an aero engine on the same principle as the 3-litre straight-eight, but on a slightly larger scale. This unit in fact had a bore and stroke of 120 x 160 mm. (14,476 c.c.), and before going any further it may be remarked that with the dimensions modified only to 125 x 150 mm. (14,726 c.c.) it was represented sub-

"SIDESLIPS"—continued.

stantially by the engine fitted to the first Golden Bugatti built in 1927. The bore remained the same but the stroke was reduced to 130 mm. and the capacity thus to 12,760 c.c. in the production type Golden Bugatti shown at Olympia this year. I hope that advancing age is not bringing with it moderation on the part of Ettore.

A "blown one gallon."

However to return, the designs for the aero engine, which were completed in about 1916, were adopted by the French and American governments, and engines of this type were built in France in the Bara works at Levallois and in the States by Duesenberg. Now at that time the Bara works were presided over by a Swiss engineer named M. Henry. This M. Henry was already a man of note, for had he not been responsible for those racing Peugeots which carried all before them in the years just before the War? As a builder of high-efficiency racing cars he had in fact succeeded, as the presiding genius, his compatriot, Marc Birkigt, who was responsible for those Hispano-Suiza cars from Barcelona, which in 1910 were the first 4-cylinder cars to win the Coupe des Voiturettes. At any rate by the end of the War, M. Henry had had considerable experience in building Bugatti-designed straight-eight engines, and at this point in his career he joined the firm of Ballot, which for years had built engines, but which now was bent on constructing complete cars. What was more they were even determined to build racing cars, and so eager were they to begin that they entered for the Indianapolis race of 1919. This event was limited to cars with engines up to 300 cubic inches, which, for the benefit of my nicer minded readers, I may say is equal to approximately 4,916.1066 cubic centimetres. When, by the way, did we give up the barbarous habit in England of building engines to inch dimensions? Early racing Napiers of course puzzle one at first by having a bore and stroke of 165.1 x 152.4 mm.—which looks as if the builder had got things a bit wrong. As late as 1908 we had the .4-inch race, and Rolls-Royce carried on the tradition for years. I think it is a pity, however, that for capacity purposes one always stuck to cubic inches as otherwise the owner of a "4½" might proudly state "I have a blown one gallon Bentley, you know," and someone else "I'm running my Midget in the 1½-pint class." I admit that this form of nomenclatures might lead ignorant passengers unduly to favour the bigger classes.

Straight-eight Ballots.

But to return to M. Henry. The War finished in November, 1918, and the Indianapolis race was on 30th May, 1919, so that little time was available for testing any novel design. Yet M. Henry had the courage to start off at the end of January, 1931, to design, build and send to America in the brief space of four months a team of racing cars fitted with straight-eight engines, of which the dimensions were 74 x 140 mm. (4,817 c.c.). Like the Bugatti engine the Ballots had the 4-4 crankshaft arrangement, but M. Henry, after his pre-war Peugeot experience was not content with a single overhead camshaft, and fitted two.

As the matter of fact these Ballots did not win at Indianapolis, and curiously enough first and third places iu the race were taken by 4½-litre 1914 Grand Prix Peugeots, a type which had also won the last Indianapolis race in 1916, and which had also been designed by M. Henry. One of the Ballots, however, finished fourth, driven by Albert Guyot, and it was at least proved that the straight-eight was a workable proposition. By the next year the race was for 3-litre cars, and the engines of the Ballots built for it had a bore and stroke of 65 x 112 mm. (2,973 c.c.). This year also Duesenberg, likewise after his experience of the Bugatti aero engine in the War, built a set of straight-eight engined racers, and in the final result a Ballot was second and a Duesenberg third. The straight-eight was becoming a vogue.

The Vogue.

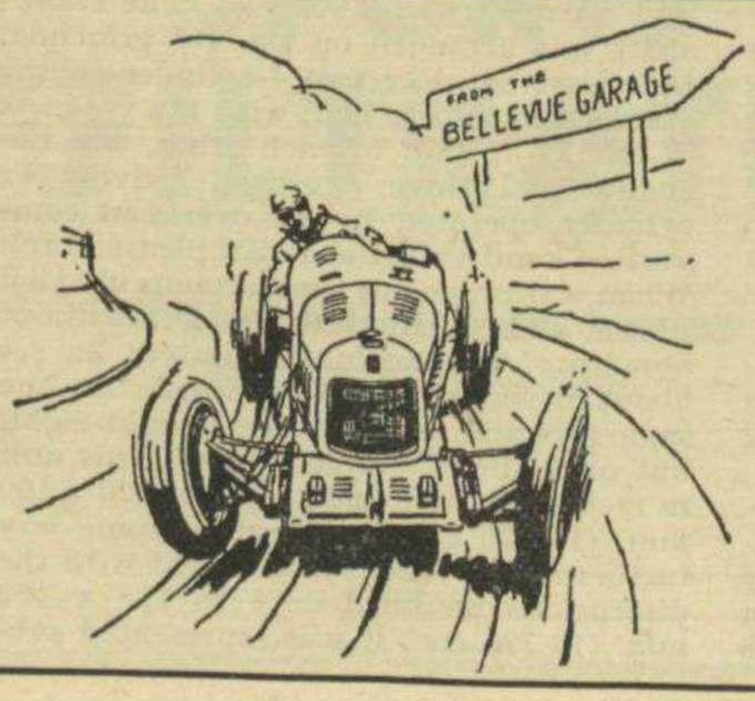
By 1921 it was the rage. The Indianapolis "500" was won by a straight-eight Durant, with a straight-eight Duesenberg second. S.T.D. entered the field and ran straight-eight Sunbeams and Talbot-Darracqs at Indianapolis. The final outcome was the 1921 Grand Prix at le Mans—the first after the War—when every single car except for one of the Ballots and a Mathis which were not up to the 3-litre limit, was fitted with a straight eight engine. The makes represented were Ballot, Duesenberg, Talbot and Talbot-Darracq. That same year the great Torinese firm succumbed to the infection, and a team of 3-litre straight-eight Fiats appeared in the Italian Grand Prix at Brescia.

Firmly established.

Just, however, when it looked as if the straight-eight was the only possible design for a racing engine, the tide seemed to turn. In the 1922 Grand Prix at Strasbourg, Ettore Bugatti, who in reality had been the cause of the whole trouble, appeared himself with a team of 2-litre straight-eight racers, and his example was followed by Rolland-Pilain. But all the makers who had used straight-eights the year before abandoned them, Fiat for a "Six," Sunbeam and Ballot for "Fours." The straight-eight, however, had only recoiled itself in order to jump better. The next year at Tours, in order to make things more exciting Delage appeared with a "Twelve," Sunbeam and Voisin with "Sixes"; but Fiat had gone back to the straight-eight and Bugatti and Rolland-Pilain remained faithful to it, except for one car of the latter team which had a six-cylinder cuff-valve engine, designed by—M. Henry! In 1924 at Lyons the position was as follows: Fiat, Bugatti, Alfa-Romeo and Miller, "straight eights"; Delage, "Twelve"; Sunbeam, "Six" and Schmidt, "Six" (designed by M. Henry!) Montlhéry in 1925 showed no change, except that Fiat, Miller and Schmidt were not there, and in 1926 there was, practically speaking no Grand Prix. Then in 1927 we find Delage, the champion of the "Twelve" since 1923 and Talbot, representing Sunbeam, the exponent of the "Six" since the same date, changing over to the straight-eight. The triumph of the latter was complete—and has been ever since.

And the Straight-ten?

But what about the straight-ten? Oh! you must ask chez Nacional Pescara!

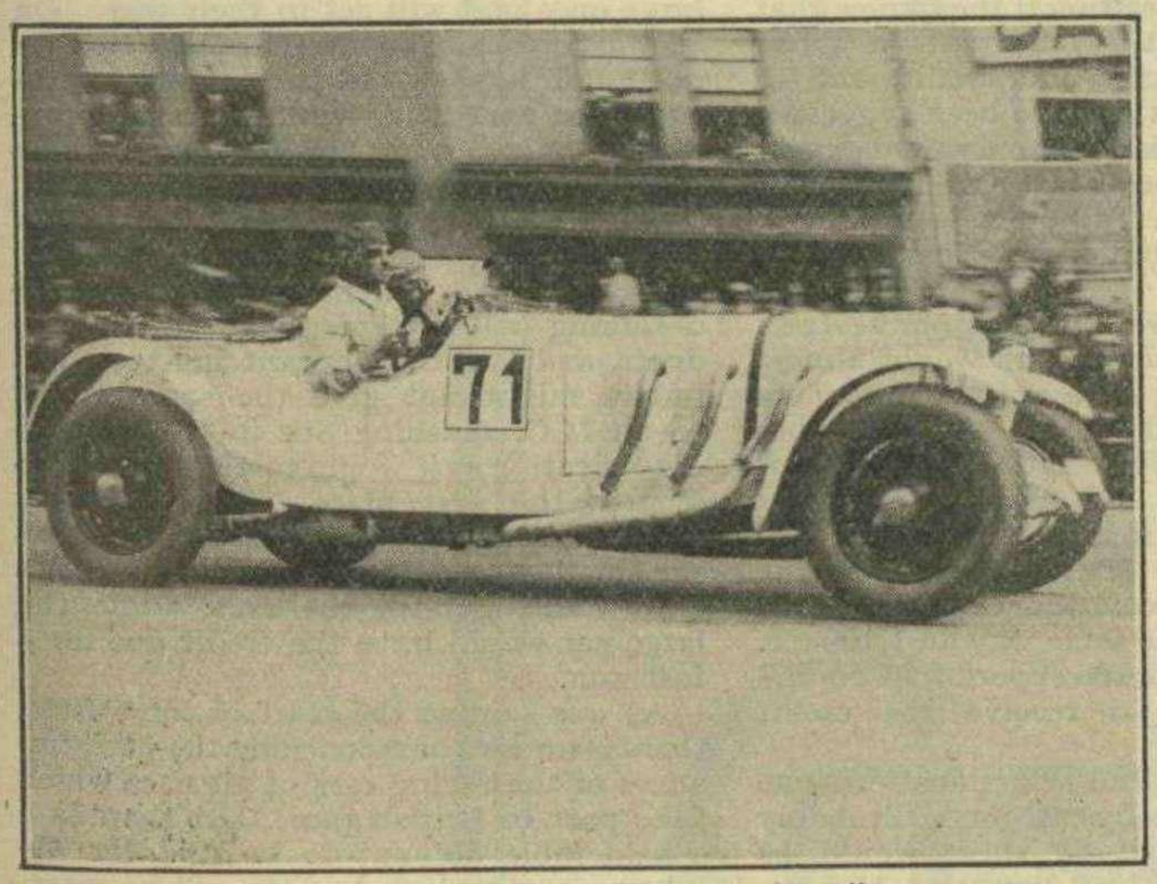


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"DAVID AND GOLIATH"

Can there be a Race Favouring Neither Large Cars nor Small?

THE racing community in Great Britain is both fortunate and unfortunate in having a wide range of fast cars to choose from. Fortunate because the driver not well provided with money can buy an M.G. or a Riley, and be sure of having a reliable car which will put up a fine show irrespective of its capacity, while Talbots or Invictas are available for those whose means allow them to buy big cars. The unfortunate part is that there can be no true comparison between big cars and small ones, and the fact that M.G.'s won at Ulster in 1931 and Rileys in 1932 was simply because these cars beat the handicapper's estimate of their speed on these respective years by the greatest amount. Their average speed, amazing though it was in each case, and which is the measure of their merit, is not the deciding factor. Another trouble about handicap racing is that in the following year a successful class is more or less deprived of the chance of a further win, by having an excessive penalty imposed, while the same applies in the case of a new car rumoured to be very fast; its class is set back in case it should happen to do some good, which is not much encouragement for new enterprise.



"In the large class one might attract a Merc" . . .

On the Continent the popularity of Grand Prix races has tended to produce cars of similar capacity, varying with the rules in force. At one time 2 litres, then 1½'s, the period of the 2.3's, while for the coming year 2.8 litres seems to be the magic figure. A win in a race between cars of similar capacity and specification does establish the superiority of the winner and is much more conclusive than a success achieved in a handicap race, no matter whether the successful car is large or small.

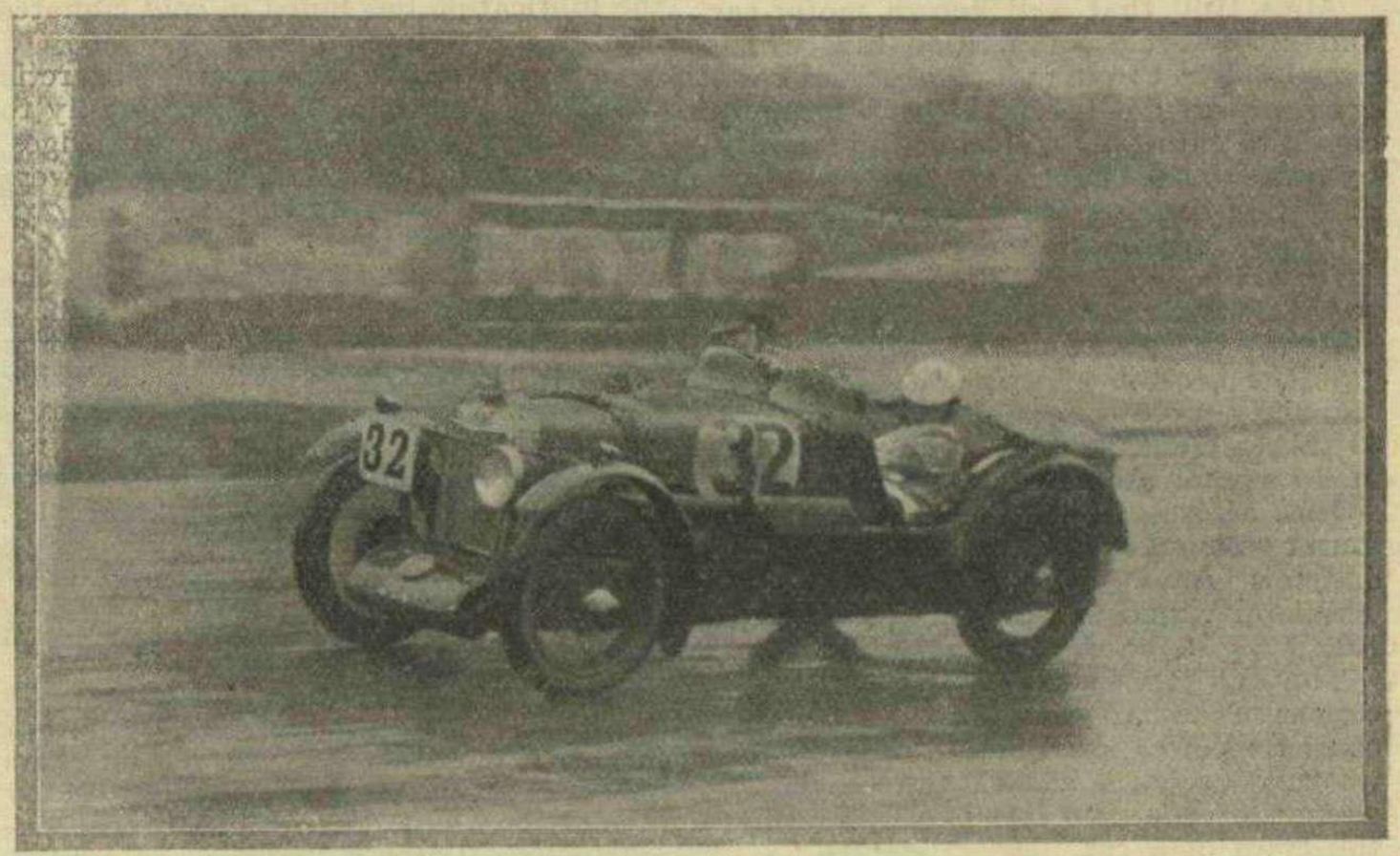
Handicap races are further complicated by having to cater for supercharged and unsupercharged cars. Cars fitted with superchargers are handicapped differently under various circumstances, taking into consideration the nature of the course and the degree of blowing imparted to the engine, but at any rate with modern forced induction methods it may be taken that handicap of 30% of the capacity is no longer sufficient to cover the increase of power which supercharging should impart to an engine.

The Isle of Man races next July are to be run on a scratch basis, one race being for cars up to 1,500 c.c. unsupercharged and 1,100 c.c. supercharged, and the second day's event embraces the larger cars. When one considers it, the Junior race seems almost certain to be won by the Magnettes. Obviously the Magnettes will be faster than the Midgets, and their only possible rivals in their own class would be supercharged Amilcars. Widengren's car is the only one in England which is likely to offer effective opposition, but a single car has very little chance against a well-organised team. The Rileys of course did very well at Ulster, but they cannot be expected to put up the same performance as supercharged cars of same capacity.

What of the 1,500 c.c. cars? With the exception of the 1,500 c.c. Rileys, which have not yet shown a great increase of speed over the four-cylinder jobs, I cannot see serious opposition. 95-100 m.p.h. is the limit of any 1,500 c.c. car in the English racing field, while 110 will probably be the speed of the Magnette, with the additional advantage of a lighter engine and of power low down the speed range, which gives the supercharged car its advantage when getting away from corners.

The Mannin Moar race should be dominated by 2.3 Alfas and Bugattis, though Don's 4.9, if fitted with a four speed gearbox on which the ratios are capable of being shifted, may give them a good run. Talbots or Invictas, likewise such small fry as supercharged 1,500 c.c. Bugattis, Frazer Nashes or the hoped-for Maseratis will be out of the picture.

Raising the class limit to 1,500 c.c. supercharged would not help matters much, as these cars would then take the place of the Magnettes as almost certain winners. The thing to aim for is to run races which will encourage entries from the greatest possible number of manufacturers, and which at the same time will show the relative performances of the various cars undisguised by the confusing effect of handicaps. Nobody expects M.G. Midgets to go as quickly as Monoposto Alfas, but for their size they do put up amazing performances. "Let us start them all together and see how long each car takes to do its 250 miles. Any interested person can then tell the relative performance for capacity and price of the two cars, and form an idea of their absolute merit." Such is the idea of Mr. H. J. Aldington, the Managing Director of Frazer Nash Cars. Besides making the cars, he races them, and so is in a good position to speak both for the Trade and for the competitor.



"Nobody expects M.G. Midgets to go as quickly as Monoposto Alfas, but for their size they do put up amazing performances."

"DAVID AND GOLIATH"—continued.

His idea then is to run two races, one for unsupercharged cars of any capacity and the other for supercharged cars. Let us consider what entries one could expect for the first of these.

Amongst large cars one could expect to get Talbot, Invicta, and Alvis. These latter two cars have not entered officially now for a good time, but in a race where they would have a fair chance of showing their form, I think there would be a good chance of getting them in. It is a great pity the M.G. Mark III which made a successful debut in the 1930 Double Twelve is no longer available to make a fourth.

The 1,500 c.c. class with entries of Aston Martin, Frazer Nash, Riley, and possibly Hornet Specials, not to speak of the earlier Alfas, would provide a good scrap, and if the class were extended to 2 litres, G.P. Bugattis would probably join in the fun. In the next category one would find 1,100 c.c. Rileys, unsupercharged Magnettes, Crossleys and Altas, though the latter two makes do not yet seem to have found the stamina which racing demands. Finally in the ever-popular 750 c.c. class, Austins and M.G.'s would probably have quite an even tussle.

The blown race should command an equally interesting entry. In the large class one might attract a Merc, though the Manx course would require a short wheelbase one, and there are few of these about. Blown Bentleys would take some handling, but the 4.9 Bugatti and the 5 litre Invictas, if they materialise, would be interesting. In the three litre class the most exciting race of all, Bugatti, Maserati, Alfa Romeo, and later on the new Mercédes, also the Bentley when it appears. Maserati, Invicta, Bugatti, Alfa, and Frazer Nash make up a blown 1,500 c.c. class, while the Magnette and the Amilcar and Salmson would be eligible for Class G. M.G. and Austin again in the smallest class—plenty of interest all through.

It may be argued that many of the names in the foregoing lists of names are doubtful as starters, since the firms mentioned do not race. The true facts are, I think, that firms like Alvis, and also private individuals, would be willing to take part in competition if they knew that their achievements would receive a fair amount of publicity and credit, and in scratch races such as have been suggested they would get this. No one would expect a 1,100 Riley to be as fast as a Talbot, for instance, but the Talbot is considerably more expensive, and one expects more for the money.

On a fast course like that of the Irish Grand Prix the larger cars would almost certainly win, but on a twisty course like the Douglas one the result would be more even. Power-weight ratio, brakes, and ease of handling are what count on a racing car, and if these qualities were sacrificed to mere size and speed on the larger cars, their performance would reveal the fact, and in the same way an 1,100 c.c. car which proved its superiority to the "1½ litres" would receive the credit due to it.

Besides a general classification one would need awards by category. Probably the best points to fix these would be (a) over 2 litres, (b) 2 litre and 1½ litre, (c) 1,100 c.c. and under. The cars over 2 litres all seem to have a very similar performance on a twisty circuit, the only 2 litre likely to disturb the (b) class is Count Czaikowski's special double-camshaft one, which one would be glad to welcome in any case. The small classes would probably be cleaned up by Magnettes and Rileys in their respective races, but the development of the 750 c.c. car has reached such an advanced stage that few people would complain.

Like all plans for better and brighter motor-racing, the one proposed seems to have one or two snags. One is that the small cars will be much slower than the large ones and will get in their way. On the fast Promenade stretch, this difficulty need not happen, as there is plenty of room for everyone, while the small cars usually accelerate away from corners quite as smartly as the others.

The other and more serious objection is caused by the fact that manufacturers race to a large extent with the idea of obtaining advertisement for their products, and that the ignorant non-technical public might not give the same credit to an M.G. finishing 8th in the General Classification as it would to a Talbot which secures the first place. This difficulty would be somewhat eased by the fact that the small car would finish high in its class and would publish the fact, while the large car would have the credit due for a fast run.

As was said at the start of the article, there is no way of reconciling the performances of the racing cars of all sizes which take part in British races, but there is a considerable amount to be said for the scheme outlined above. It will be interesting to know what readers think about the scheme, and we are preparing a fire-proof letter-box in case of any too-vitriolic replies. T.G.M.

The Last Up Alms Hill.

Alms Hill, that well known motor-car and motor-cycle competition hill, which rises 1,000 feet from foot to crest and has a gradient of one in three—was formally closed to motor-car traffic on January 3rd by order of the Oxfordshire County Council, owing to the noise which is alleged to have been created by motor-cyclists using it for competition work during week-ends, to the annoyance of local residents.

Before the notice of the closing of the gradient became effective, a number of reliability motor-car trial drivers decided to take advantage of the time limit and make a final ascent.

Just before dusk a Singer Nine sports tourer gave an excellent account of itself, and was probably the last motor-car the wheels of which will ever again use that road.

The hill has a surface on which many cars have come to grief, the middle section consisting of exposed chalk which in wet weather becomes a treacherous bed of slime that offers no sort of wheel-grip to the tyres of a car.

Sub-Zero Weather Test of Oil.

A party of technical experts have travelled via U.S.A. to Regina, Canada, to conduct a series of tests with a number of motor cars in Sub-Zero weather.

It is necessary nowadays for car engines to function equally well in all temperatures, Tropical and Arctic. Usually the lubrication has failed in cold climates as oil is apt to lose its fluidity.

In the Scott Expedition to the Antarctic "Filtrate" oils were used successfully to lubricate the engines of the motor sledges, etc., as even in those far off days they were distinguished for retaining their fluidity at low temperatures.

The motor testing will be made on the famous Regina-Moose Jaw road where the temperature is usually about "forty below." Here the experts are erecting their laboratory with special apparatus, in order to determine the essentials for easy car operation in the middle of winter, however low the thermometer may be.

"The Welding Test"

A new edition for the vest pocket of that useful book "The Welding Test," issued by Barimar, the well known experts in this essential branch of the trade, has just been published, and by reason of its handy size, is certain to be popular. Many illustrations and descriptions of the examples of Barimar Welding are given, from which it will be seen that there are few repair jobs beyond the scope of the process, which not only ensures a satisfactory repair but shows a very distintct saving in cost over new parts. A free copy will be forwarded to any reader by Barimar, Ltd., 18, Lamb's Conduit Street, London, W.C.1.

"Money for Speed."

American car-dirt-track films are popular, but so far no attempt has been made to turn our own motor-cycle dirt-tracks to this use. A new British film company, Hall-Mark Films, Ltd., has broken this spell of inactivity, however, with a production called "Money for Speed," in which many well known dirt-track riders take part, among them being Ginger Lees, Frank Arthur, Jack Ormston, Lionel Van Praag, Con Cantwell and Harry Bray. An additional thrill is provided by Cyclone Danny, the "Wall of Death" rider.

The film, which has just been completed at the Wembly Studios, was expensive to make, for no fewer than 28 motor-cycles were wrecked in its production. In the "Wall of Death" sequence Cyclone Danny had to ride his machine over the top into a net—a particularly hazardous operation.

The leading players are Cyril McLaglen, John Loder, Ida Lupino, Marie Ault and Moore Marriott.

An Australian Relay Race.

A race similar to the L.C.C.'s Relay Grand Prix was held recently at the Maroubra Speedway, Australia, and resulted in a repetition of the Wolseley Hornet Special's win at Brooklands, a team of three carrying off the honours.

FIVE OUT OF THE SIX

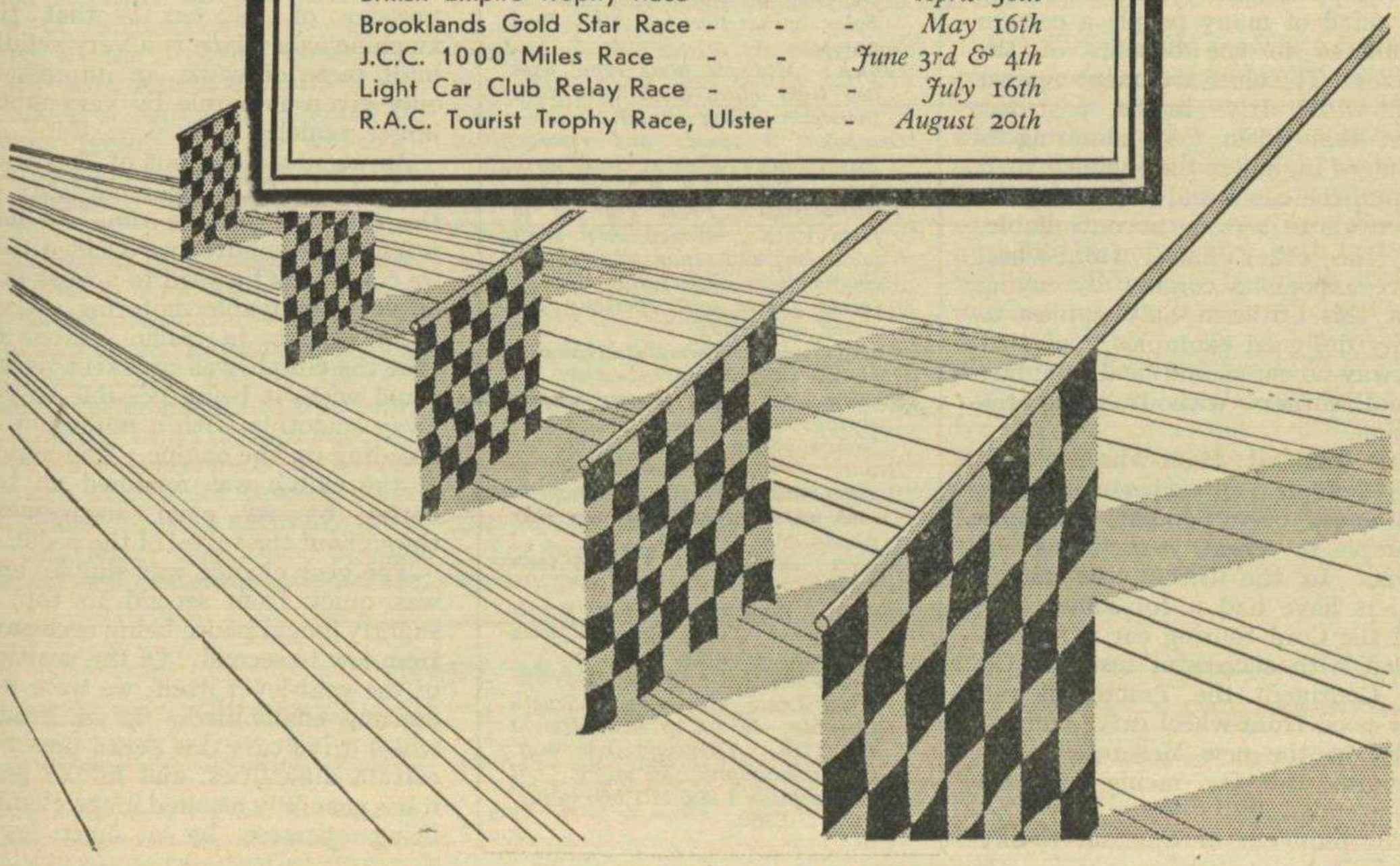
IMPORTANT BRITISH CAR RACES IN 1932 WERE WON ON

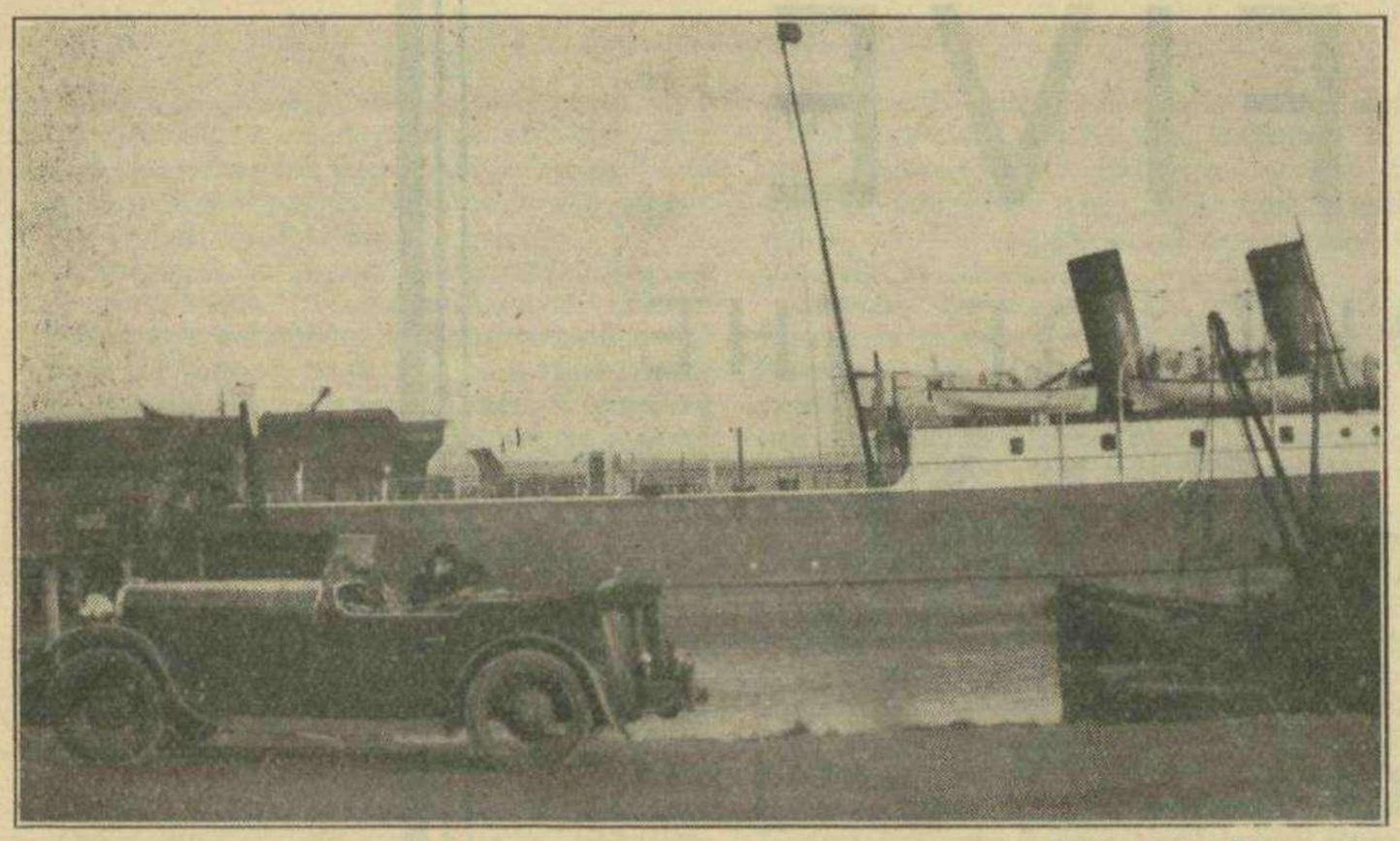
WAKEFIELD

Castrol

MOTOR OIL

British Empire Trophy Race - - -	*April 30th*
Brooklands Gold Star Race - - -	*May 16th*
J.C.C. 1000 Miles Race - -	*June 3rd & 4th*
Light Car Club Relay Race - - -	*July 16th*
R.A.C. Tourist Trophy Race, Ulster -	*August 20th*





[Motor Sport Photograph

A SMOOTH ENGINE, GOOD ROAD-HOLDING, AND EXCELLENT VALUE FOR MONEY.

THE FRONT WHEEL DRIVE B.S.A.

THERE are certain ideas in automobile construction, which although commended in theory by many people, are seldom put into practice. Two examples of these departures from orthodox design are front-wheel drive and independent wheel suspension. The advantages of the latter are accepted without reserve by all those who have driven a car so equipped, but there remains in the mind of many people a certain doubt as to the benefits of the former. The chief argument against front-wheel drive in the past has been that when fast cornering is indulged in, unless the engine is used to pull the car round the curve, the car tends to become uncontrollable. On the other hand, front-wheel drive exponents counter by saying that this criticism only applies to badly designed examples, and that anyway no car should be driven fast round corners without using the engine.

In England front-wheel drive, like independent wheel-springing, has never been popular, the only example in recent years being the Alvis. In the U.S.A. the racing Millers have had it for some time, and the Cord touring car is so propelled with successful results. On the Continent the Tracta showed how good front-wheel drive can be, and now the new Maserati proves that its uses for racing are still being explored.

The only car in England to-day with front wheel drive is the 9 h.p. B.S.A., and we recently had an opportunity of trying for ourselves the performance of this interesting little car on the road. Anyone expecting a totally different "feel" about the car when driven normally would be disappointed, for it is not until fast cornering is indulged in that the advantages of the front-wheel drive of the B.S.A. become apparent. In fact one's first impression of the car is that the machine as a whole is a very solidly built piece of work, an impression only given as a rule by very much larger vehicles.

As we proceeded out of Town we took stock of the characteristics of the car, and by the time we had reached the suburbs we decided that we could look forward to a week-end of very enjoyable motoring. Constant restarts in traffic showed us that the clutch was as sweet as we could wish, it being possible to get away smoothly with a minimum of speeding up the engine. The action of the clutch was rendered all the better by its even engagement throughout the travel of the pedal.

The gear change was simple, and was quick from second to top, a slightly longer pause being necessary from low to second. Of the position of the gear-lever itself, we were not entirely enamoured. In all front-wheel drive cars this detail presents certain difficulties, and in the past it has generally resulted in the change being operated by a short lever

Brief Specification.

Engine: 4 *cyl.* 60 *mm.* x 95 *mm. bore and stroke,* 1,075 *c.c. Rating* 8.9 *h.p. Tax* £9. 2-*bearing crankshaft mounted on ball and roller journal bearings. Detachable head. Cylinder block and crankcase in one casting. Chain driven camshaft. Side-by-side valves. Water cooled. Forced feed lubrication by pump to big-ends through hollow crankshaft, and to tappet gallery. Petrol fed from* 6½ *gallon rear tank to Solex carburettor by A.C. Fuel pump.*

Clutch: Multiple plate type, with two light alloy discs with cork inserts, running in oil.

Gearbox: 3 *speeds and reverse. Silent double helical constant mesh gears. Ratios* 5.2, 9.4 *and* 18.6.

Transmission: From gear-box to front wheels, through short shaft to worm and spur differential. Shafts from differential through fabric joints and specially enclosed universals.

Chassis frame: Normal steel channel section side members, braced.

Suspension: Eight quarter elliptic springs in front, four to each wheel. Semi-elliptics at rear.

Brakes: Front: Drum coupled to differential. Rear: one brake to each wheel. Hand brake on rear wheels only.

Wheels: Wire, with 27 x 4 *inch Dunlop tyres.*

Electrical equipment: Lucas 6 *volt throughout. Coil ignition with automatic advance.*

Dimensions, etc.: Wheelbase 7*ft.* 9*in. Track* 4*ft. Overall length* 12*ft.* 5*in. Width* 4*ft.* 9*in. Height* 4*ft.* 11*in. Turning circle* 40*ft. Fuel consumption* 40 *m.p.g. Oil consumption* 1,000 *to* 1,500 *m.p.g. Price:* £160.

THE FRONT WHEEL DRIVE B.S.A.—continued.

situated on the dash-board. On the B.S.A. a normal lever from the floor is used, but differs from usual practice in being placed between the driver's legs, slightly nearer the left knee than the right. Owing to a low steering column and wheel, the lever cannot be reached comfortably without twisting one's "clutch-leg" sideways, and to avoid this movement one naturally prefers to reach the lever through the spokes of the steering wheel. When cornering, of course, this procedure is impossible, and one has to decide which method is to be adopted in advance. However, this criticism applies chiefly when one is not used to the gear change, although a cranked lever to the left of the driver would be a definite improvement.

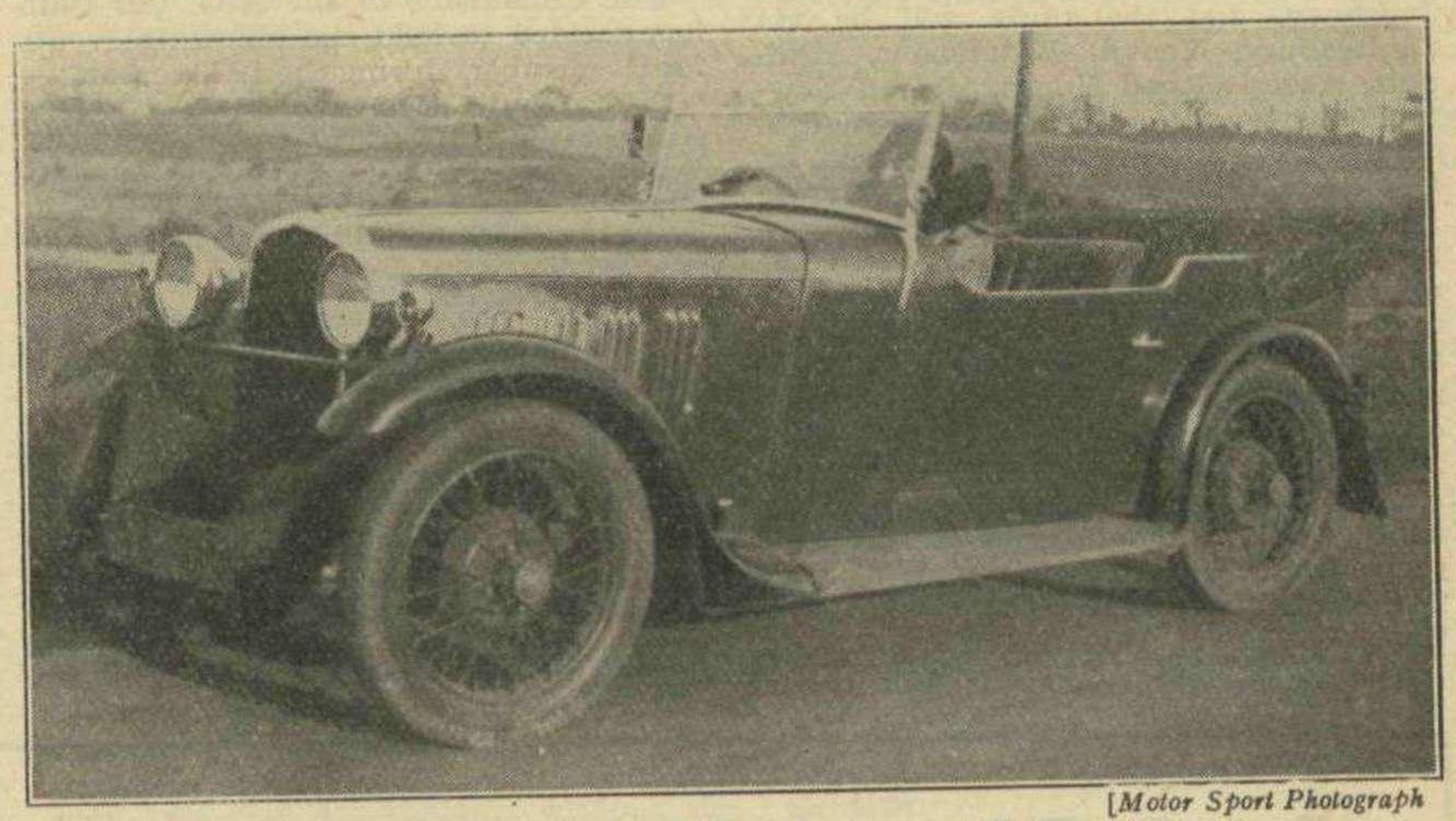
One of the most praiseworthy features of the 9 h.p. B.S.A. is its suspension, the front wheels being indendently sprung by four quarter elliptic springs each, while at the rear normal semi-elliptic springs are used. Going slowly over a wavy surface in towns produced a certain amount of pitching, but once its normal cruising speed was reached the car was absolutely steady, no matter how rough the surface. In conjunction with light, but high geared steering, through which no trace of road-shocks was transmitted to the steering wheel, the car was very restful to control, and demanded a minimum amount of nervous tension from the driver.

Cornering at all times was safe and steady. We purposely encouraged the B.S.A. to reveal any of those tricks on corners sometimes attributed to front wheel drive cars, and took corners fast without the use of the engine. Nothing untoward happened, while driving the car round on the engine resulted in some astonishingly rapid performances on curves which would normally require a certain amount of respect. The high geared steering naturally gives one confidence, and there is just sufficient self centering action when travelling at normal speeds to eliminate the necessity of any "unwinding."

As is only to be expected with such a roomy body, and its feel of solidity, the car takes a fair time to work up to its cruising speed, but once this has been reached it can be maintained indefinitely. On arterial or good main roads 45 m.p.h. is a comfortable gait, at which speed the engine is quite happy. We have seldom known a smoother 4 cylinder power unit. There was not a trace of vibration throughout its entire range, and at 60 m.p.h. the maximum reached during the course of our test, only a subdued hum was audible.

On second gear a maximum of 40 m.p.h. can be attained without fuss, but thereafter the acceleration was not as rapid as might be expected, a state of affairs which could probably be remedied by a little attention to the carburettor. The brakes were smooth and positive in operation, the hand brake being unusual in that the "on" position was forward instead of back, thereby allowing easy entrance and exit by the off-side door.

The body provides a comfortable seating position for both driver and passenger, while two passengers can be accommodated, if desired, in the rear. The driving position is very restful, the wheel being low on the driver's lap, but rather too far away for fast work requiring quick cornering—although this may only be a matter of personal taste. The hood and side curtains fitted snugly, without giving the impression of cramped space sometimes met with on small sports cars, so that the car would be perfectly serviceable as a means of transport to dances or theatres.



[*Motor Sport Photograph*

Clean solid lines distinguish the front wheel drive 9 h.p. B.S.A. Sports model.

At £160 we found the 9 h.p. B.S.A. sports model a thoroughly attractive vehicle. It possesses a performance which, though not spectacular, is accomplished in complete comfort and without fuss, so that on all-day runs on top higher averages could probably be put up than with faster, but less solid cars. It cruises at 45 m.p.h., the tax is only £9, and it does 40 miles to the gallon—what more can one want for £160?

The car was placed at our disposal by Messrs. Stratstone, Ltd., 27, Pall Mall, S.W.1, the London Distributors for all B.S.A., Daimler and Lanchester models, and from whom any further particulars or a trial run can be obtained.

NEXT SEASON AT BROOKLANDS.

The fixture list for the 1933 season at Brooklands Track has now been settled, and comprises the following principle events:

March 11th—B.A.R.C. Opening Meeting.
April 17th.—B.A.R.C. Easter Meeting.
May 6th.—J.C.C. Race.
May 20th.—G.A.P.A.N. Air Meeting. (Guild of Air Pilots and Navigators.)
June 5th.—B.A.R.C. Whitsun Meeting.
July 1st.—B.R.D.C. British Empire Trophy.
August 7th.—B.A.R.C. August Bank Holiday Meeting.
September 16th.—B.R.D.C. 500 Miles Race.
October 14th.—B.A.R.C. Open "Mountain" Meeting.

Club News

THE RILEY M.C.

TWO R.A.C. closed permits have been issued to the Club, the first for the 12 Hours Reliability Trial to be held on February 18th, and the second for the Club's annual 24 Hours Trial on June 23rd and 24th.

Regulations are now to hand of the 12 Hours Trial, and a most interesting course has been arranged. The start will take place at the White Hart Hotel, Salisbury, and the route will be via Shaftesbury, Yeovil, Beaminster, Bridport, Asker's Road House, Maiden Newton, Ibberton, Blandford to Bournemouth. The following hills will be taken in, Capstitch, Chur Lane, Meerhay, Knowle Lane, Black Hill and Ibberton. Probably the worst hill is Knowle Lane, and competitors who enter as novices will not be required to climb this, and will undergo a stop and restart test on Gypsy Lane instead. An unusual test will take place on Black Hill. Competitors will start from a line, accelerate 50 yards, stop, run back 10 yards, stop, restart and accelerate another 50 yards, and come to rest with their front wheels between two lines 2 feet apart. Finally there will be a timed ascent of Ibberton Hill.

The finish will be at the Burlington Hotel, Bournemouth, where a festive evening will be enjoyed.

Any Riley owner who is not yet a member of the Club, and who would like to enter for the Trial should get in touch with the Clerk of the Course, R. C. Porter, of Messrs. Boon & Porter, Ltd., Castlenau, Barnes, S.W.

M.G. CAR CLUB.

The Committee of the M.G. Car Club has decided to hold the following events for its members during the 1933 season :—

MARCH.
Sunday, 26th.—Scrounging Trial.

APRIL.
Saturday, 29th.—Chilterns Trial.

MAY.
Saturday, 6th.—Brooklands Rally in connection with the J.C.C. Race.
Saturday, 20th.—Speed Trials.
Saturday, 27th.—Shelsley Walsh Rally.

JUNE.
Saturday, 24th.—Night Trial.

JULY.
Saturday, 8th.—Gymkhana.
Saturday, 22nd.—Brooklands Rally in connection with the L.C.C. Relay Race.

SEPTEMBER.
Sunday, 10th.—Abingdon - Abingdon Trial.

THE SUTTON COLDFIELD & N. BIRMINGHAM A.C.

An R.A.C. permit has been issued for the Sunbac's annual Colmore trial, which which will be held on February 18th.

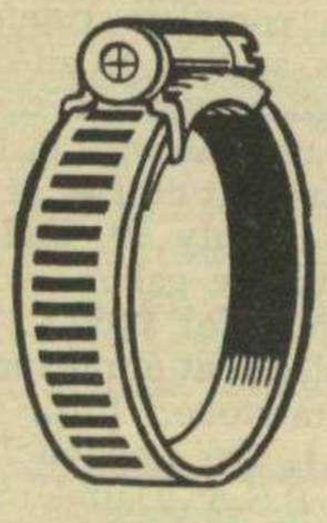
THE MIDLAND A.C.

The Club's Annual Dinner Dance and cup distribution will take place at the Grand Hotel, Birmingham, on Friday, February 10th.

This trial differs from the usual run of events in that a special trophy, the Colmore Cup, is competed for, enabling drivers to show an individual merit. The present holder of the cup is A. Langley on an M.G.

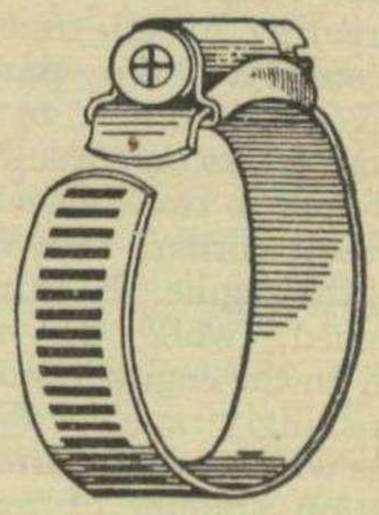
Entries close on Tuesday, 7th February, and anyone wishing to enter should get in touch with the Secretary, at 10, Warwick Chambers, Corporation Street, Birmingham. The trial, in addition to being run for the "Sunbac" members, is open to the following clubs, M.G. Car, Bugatti Owners, Oxford University, Hornet, Cambridge University, and Birmingham University.

Jubilee Worm-Drive Clips



THE BEST POSSIBLE TO GET.

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



ALL IN ONE PIECE. EASY TO FIT.

NO PARTS TO LOSE. GUARANTEED NEVER TO LEAK.

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

STOCKED BY ALL GARAGES & ACCESSORY DEALERS.

MANUFACTURERS :
L. ROBINSON & Co.,
2, London Chambers, GILLINGHAM, KENT.

HERE AND THERE

The Value of a Clean Sump.

UNDOUBTEDLY one of the essential points to be considered if a long life is desired from an engine is that the lubricating oil should be free from any foreign matter. Unfortunately, in the process of running-in, a considerable amount of fine metal is bound to find its way into the sump as the bearings and pistons wear their working surfaces, and if this is not removed it will reduce the life of the engine from the start.

It is very doubtful whether any engine lasts so long as a Rolls-Royce, and it is interesting to know how the Derby firm get over this difficulty. Before the engine is fitted into the chassis, it is run in for five hours, during which period 500 gallons of oil are passed through the engine each hour, so that at the end not a trace of foreign matter is left in the sump.

The cost of economy.

In the article " Roads " by Mr. E. Wingrove Keer which appeared in our January issue, the writer stressed the importance of " tarring " and dressing roads as a means of saving money by holding together road surfaces which would otherwise break up during the winter months.

Another aspect of the danger of the abandonment of this annual dressing was brought up the other day by Mr. R. Harrison, Secretary of the National Federation of Granite and Roadstone Quarry Owners, namely, the risk of skidding. " One of our north country owners," he stated, " reports that in a single night in a small area around his home 40 people were injured and one was killed in a series of skids. Four house-fronts and two bridges were demolished the same night and an ambulance carrying the injured to hospital was ditched."

And yet motorists pay £62,000,000 per annum in special taxation!

A Useful Diary.

Sporting motorists will find a good deal of useful information, as well as room for a log of expenses, in the " My Car " Diary published by Messrs. Sternol, Ltd., the oil people. An interesting feature for competitors in Continental rallies is the French, German and Italian dictionary of car terms. " My Diary " can be obtained at bookstalls for 1/-, or 1/2 post free direct from the publishers, Sternol, Ltd., Royal London House, Finsbury Square, London, E.C.2.

Sorry, Mr. Hess !

In the results of the London-Gloucester Trial which appeared in our January issue, we omitted to include the winner of the Special Silver Cup for the 850 c.c. class, Mr. Alan C. Hess, who drove a J.2 M.G. Midget.

The Cape Town " Metropolitan Big 200."

Normal colonial motoring itself is sometimes so rough as to put British reliability trials in the shade, but when a trial is organised in the Colonies the conditions are difficult to imagine. The recent Metropolitan " Big 200 " organised by Cape Town motorists was no exception to this rule, and the cosmopolitan nature of the cars entered made the event of the greatest interest.

Gold medals were at a premium, for only two cars got through without the loss of marks, a Singer Nine Sports in the light car class, and a Ford in the heavy brigade. The Singer Nine is gaining a good reputation for trials work, and deservedly so, for in this South African trial the second car lost 10½ marks.

Sports Cars in Canada.

The fame of the M.G. cars has spread far and wide, and it is not surprising that a demand for them should have arisen in the Dominions and Colonies. In Canada young Englishmen who have been used to small sports cars at home can never be satisfied with large American roadsters, and they will now be able to purchase an M.G. from a new Canadian firm specially formed to handle the M.G. distribution in Canada alone. The firm is Empire Sports Cars, of Montreal, and although they have only had the agency for a short time they have already placed a substantial order with the M.G. Company.

U.S. Racing Drivers on the Screen.

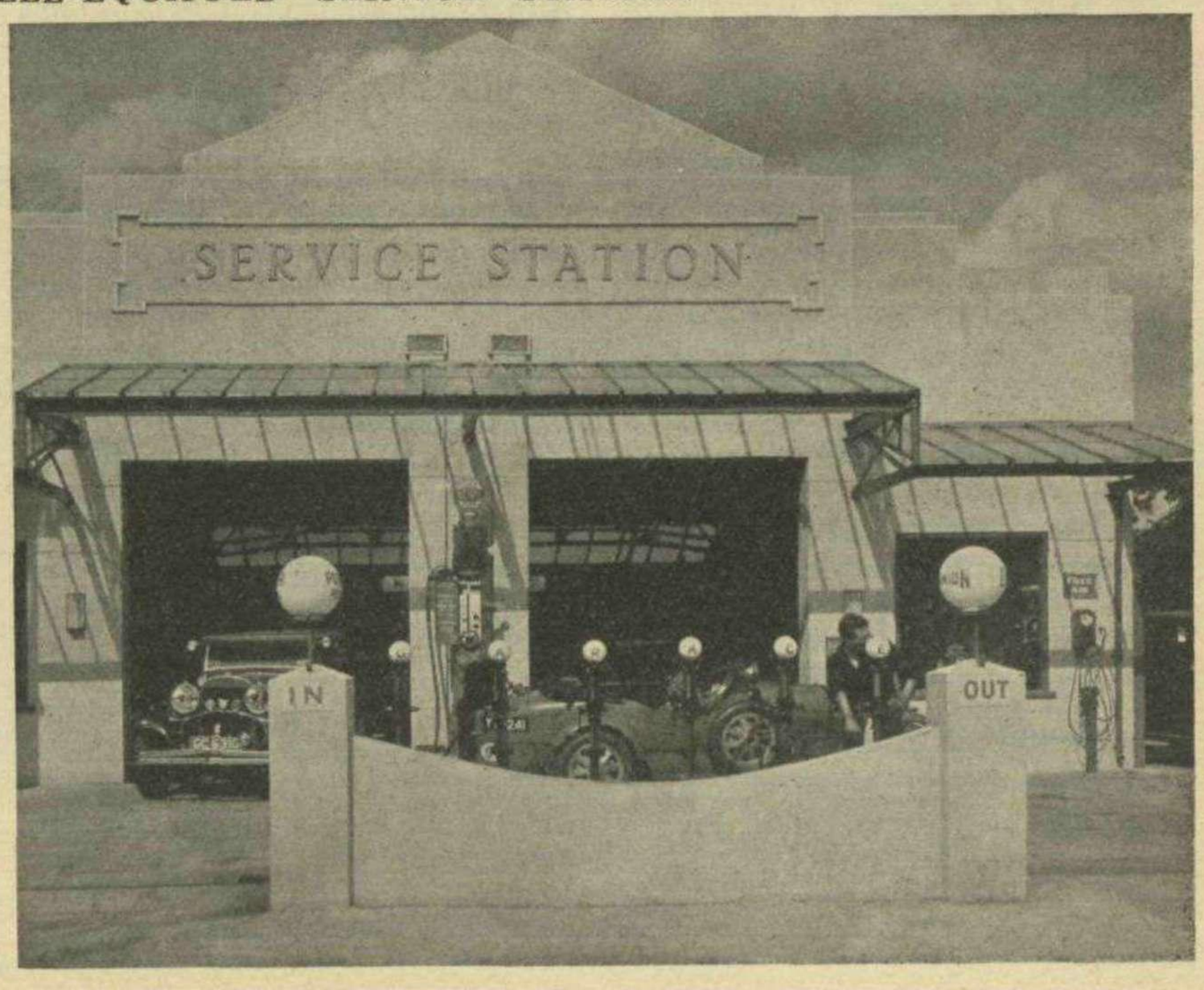
An American reader tells us that an interesting film was omitted from our article " The Car and the Cinema " in our December issue. This was a talkie called " Endless Channels," a propaganda film made by the Perfect Circle Piston Ring Co. of Hagerstown, Ind., U.S.A., which contained some excellent sound shots of the Indianapolis race, and a series of racing stories recounted by eight of the finest U.S. drivers, namely, Peter de Paolo, Louie Schneider, Louis Meyer, Dave Evans, Ralph Hepburn, Tony Gulotta, Russell Snowberger, and Shorty Cantlon.

A WELL-EQUIPPED SERVICE STATION

IT is generally agreed that the average garage or service station is not capable of taking on any high-speed tuning work, nor for that matter is it fair to expect such specialised knowledge. But no qualms need be felt by anyone taking his car to the Bellevue Garage & Service Station at Bellevue Road, Wandsworth Common.

The Works Manager is no less an expert than W. E. Wilkinson, who has had a considerable amount of experience in that most valuable seat of learning, the mechanic's share of the cockpit of a racing car. For years, Wilkinson made his contribution to the success of O.M. and Maserati cars in this country, being mechanic to such well known drivers as G. E. T. Eyston (in the Maserati at Phoenix Park and in the Double Twelve), Ramponi and R. F. Oats.

Now, in charge of a fully equipped workshop, Wilkinson is at the disposal of all sports car owners who want " that little something some others haven't got.' As proof of his skill, we need only quote the performance of the M.G. Midget driven in last year's " 500 " by D. G. Evans (who manages the garage). For three hours the little car lapped steadily at 100 m.p.h.—a wonderful show for a privately owned car without " works " backing.



CONTINENTAL NOTES.

RECORD ENTRY AT SINGLE FEES FOR LE MANS

ENGLAND REPRESENTED BY ALTA, ALVIS, ASTON-MARTIN, AUSTIN, M.G, RILEY AND TALBOT.

In spite of the gradual revival of "Grand Prix" racing having its inevitable effect of a reduction in the number of "sports car" events, the 24 Hour Race at Le Mans continues to draw a large entry. Indeed, this race together with the Italian 1,000 Miles and the R.A.C. Tourist Trophy races, seem likely to form the permanent "sports car" calendar of the future.

For the 1933 event, a record number of entries at lowest fees was received. For this period which closed on December 20th, no fewer than 29 cars were entered, made up of the following:

ELIMINATING RACE FOR THE 11TH BIENNIAL CUP.

1. Alfa Romeo (2,336 c.c.), Lord Howe and Sir H. Birkin.
2. Alfa Romeo (2,336 c.c.), Heldé.
3. Alfa Romeo (2,336 c.c.), Louis Chinetti.
4. Marendaz (1,869 c.c.), D.M.K. Marendaz Ltd.
5. Charley (1,800 c.c.), Societe Française des Automobiles Charley.
6. Alfa Romeo (1,750 c.c.), Mme. O. Siko.
7. Amilcar (1,500 c.c.), Martin and Bodoignet.
8. Aston-Martin (1,500 c.c.), Aston-Martin Motors.
9. Aston-Martin (1,500 c.c.), Aston-Martin Motors.
10. Aston-Martin (1,500 c.c.), Aston-Martin Motors.
11. B.N.C. (1,100 c.c.), Adrien Alin.
12. Riley (1,100 c.c.), Riley (Coventry), Ltd.
13. Riley (1,100 c.c.), Riley (Coventry), Ltd.
14. Alta (1,074 c.c.), J. L. Ford.
15. Tracta (990 c.c.), Automobiles Tracta.
16. Austin (747 c.c.), Metchim.
17. M.G. (746 c.c.), F. S. Barnes.
18. M.G. (746 c.c.), Hon. Mrs. Chetwynd.
19. M.G. (746 c.c.), F. H. B. Samuelson.
20. —— Mme. Mareuse and J. P. Wimille.
21. —— Prince Nicolas of Roumania.
22. —— Rénaldi and Gaillard.
23. —— Roger Labric.
24. Salmson (1,100 c.c.), Vernet and Vallon.
25. Riley (1,100 c.c.), J. Sébilleau.
26. Talbot (2,970 c c), A. W. Fox.
27. —— (5,000 c.c.), G. Bouriat.
28. —— (5,000 c.c.), G. Bouriat.
29. Bugatti (4,900 c.c.), Count Czaikowski.
30. Alvis (2,511 c.c.), J. D. Benjafield and Sir R. Gunter.

Of these entries Nos. 7, 8, 9, 23, 25 and 26 will compete for the final of the 10th Biennial Cup.

In all probability the two 5-litre cars entered by Guy Bouriat will be Bugattis, so that with Czaikowski's 4.9 litre model, a stern French opposition will be provided against the Alfa Romeos.

Of the British cars, the Aston Martins should stand a good chance of carryng off the final of the 10th Biennial Cup, as well as qualifying for the 11th. The team will be Bertelli and Driscoll, Whitcroft and Cuthbert, Morris-Goodall and Mrs. Wisdom, and preparations are going on apace in order that the cars may give the best account of themselves during the race.

The Alta and Marendaz, both being untried designs, will be watched with interest, although the Alta will have the benefit of its short run last year. The "works" Rileys will be dangerous, as will the M.G., and the solitary Talbot and Alvis, while a sporting effort is that of Metchim with an Austin.

The Rileys, Aston Martins and the Talbot will all be helped by the new rule which imposes an increase of 40% on the distance to be covered by blown cars, as against 33% in previous years.

Entries at 30% reduction close on January 31st, but already the field is such as to guarantee a first-class race.

Bugatti Plans.

Bugatti is definitely running a team, composed of Varzi, Williams, Dreyfus and Divo throughout the season. We are informed by no less an authority than M. Ettore Bugatti himself that the cars will be of 2.8 litres engine capacity, but he is unable as yet to divulge any further particulars, although these may be announced any day now.

The entry of two 5-litre unnamed cars for Le Mans by Guy Bouriat is significant. Bouriat is still associated with Bugatti, and it is possible that these cars will be entered for the T.T. as well.

Chiron's 1933 Bugatti.

Frédéric Toselli, the Nicois driver, who last year competed in French races at the wheel of a 1½ litre Bugatti, has sold this and is now the proud owner of the double camshaft 2.3 litre Bugatti raced throughout the season by Louis Chiron.

Louis Trintignant.

Another onetime 1½ litre Bugatti owner, Louis Trintignant, has also forsaken this model for a double-camshaft "2.3." Trintignant is regarded by many French sportsmen as one of the most promising Continental drivers.

Incidentally, he wishes to dispose of his 1½ litre Bugatti, and also a 1½ litre Miller.

Chiron (Alfa Romeo).

For some time after Chiron had severed his connection with Bugatti last autumn, it was commonly thought that he would race a Bugatti privately in 1933. But this is not so, for it is now rumoured fairly widely that the famous Monagesque driver will pilot a 2.3 litre Alfa-Romeo next season, and will actually make his first appearance at the wheel of the Italian car in the Grand Prix of Pau on February 19th.

Meanwhile, Louis Chiron is enjoying the winter sports in Austria.

The Alfa Romeo Bombshell.

It came as a great shock to everyone to hear that the Alfa Romeo concern will not race next season. This bad news was considerably alleviated when another rumour came through that the usual team of "monopostos," with Nuvolari, Caracciola and Borzacchini would be raced by the Alfa racing manager, Aldo Giovanni. But this respite was not to last, for the latest news is that the sleek red monoposto cars will languish in the Alfa works all next season. They will not be raced, they will not be sold, they will not be lent, and it is unlikely that any of the three official drivers will take the trouble to race 2.3 litre models privately.

CONTINENTAL NOTES—continued.

A Mysterious Offer.

No sooner was the news of the Alfa Romeo retirement from racing made known than a rumour was heard that Nuvolari had been offered the sum of 150,000 lires (roughly £2,300) from a large, but unnamed, Italian firm to race a new sports model in the Targa Florio, the Monaco Grand Prix, and the Coppa Ciano.

Each of these three races abounds in corners, and there are practically no long straights. All were won in 1932 by Nuvolari, the fastest being the Monaco G.P. in which he averaged 55 m.p.h. The Montenero circuit, on which the Coppa Ciano is run, is so tortuous that the cars were dispatched at minute intervals.

So far the name of the firm has been withheld, but it is known that the car will be a sports production model, and not a specialised racing car. Its chances of success in these races must be considered favourable, for if it were only required to finish (in any position) it would not be necessary to engage such an invincible, and at the same time expensive driver, as Nuvolari.

What is it? S-s-s-h-h: A Fiat!

Plenty of Maseratis.

When Ruggeri was killed at Montlhéry in December in the 16-cyl. Maserati, everyone condoled with the Italian firm on the second severe loss it had sustained within a year, for the founder of the firm, Alfieri Maserati, died not long ago. The brother of Alfieri, however, Ernesto, has kept the name of Maserati to the fore in the racing world, and for next season the team will be composed of that remarkably brilliant driver Fagioli, supported by Minozzi and Brivio, while Ernesto Maserati will drive himself when time allows.

Then there will be the two new 3-litre cars to be raced as a team by Raymond Sommer and Freddy Zehender, who will take part in all the most important races during the season.

Amilcars for 1933.

For many years now José Scaron has kept the Amilcar flag flying in road races, and has innumerable 1,100 c.c. class wins to his credit. For 1933 he will continue to represent the Amilcar concern, and is preparing two single seater roller-bearing cars which he will enter for most of the big races.

The cars will be brought to Montlhéry shortly for final preparations, and a speed of 125 m.p.h. is confidently expected.

Minerva to Race?

There is a strong rumour on foot that the Belgian firm of Minerva may re-enter the racing field next season. It will be remembered that the *marque's* last appearance was in the Belgian 24-Hours Race a few years ago.

A New Delage Touring Car?

It is rumoured that the Delage concern are shortly to produce a 13.9 h.p. 4 cylinder car, and that the tests of an experimental model have now been completed. If this should transpire, the vogue of the light "six" will have received another severe blow, for many manufacturers are returning to the 4-cylinder unit for cars of medium dimensions. The 12.8 h.p. Delage and the 13.9 D.I.S.S. sports model enjoyed great popularity several years ago. With modern improvements of carburation and engine balance the newcomer should be a worthy descendant of these famous cars.

A New Classification.

With a view to ensuring that the entries of races on the Italian calendar shall be of uniform quality, the Royal Automobile Club of Italy has decided to segregate drivers into three groups, Expert, First Class, and Amateur. In addition, there will be two championships, one for experts and one for amateurs, the former being allowed to compete only in races where the first prize amounts to 30,000 lires or more.

The qualification for an "Expert" is that a driver must since 1928 (a) have won an Italian championship, (b) have won an international prize, or (c) have been placed well in several international races. The following drivers fulfilled these demands:—Battaglia, Biondetti, Borzacchini, Brivio, Cagno, Campari, Clerici, Conelli, D'Ippolito, Fagioli, Gazzabini, Ghersi, Marinoni, Maserati, Minoia, Minozzi, Morandi, Nazzaro, Nuvolari, Pastore, Premoli, Ramponi, Rosa, Scarfiotti, Salamano, Severi, Silvani, Strazza, Tadini, Taruffi, Trossi, Varzi, Zehender.

To be a "First Class" driver merely necessitates the holding of an international licence, while an "Amateur" is one who does not race for money, and who is not connected in any way with a firm.

The races which count towards the two championships are as follow: *Open:* Circuit Bordino, Prix Royal of Rome, Pontedecimo-Giovi Hill Climb, Italian Grand Prix, Susa-Montcenies hill climb, Coppa Ciano, Coppa Acerbo, and the Monza Grand Prix. *Amateur:* 1,000 Miles Race, Circuit of Spezia, Coppa Ascoli, Lassi-Superga hill climb, Coppa Sila, Varese-Campo hill climb, Circuit of the Prince of Piemont, Targa Abruzzi, Coppa Gran Sasso, and the Coupe des Trois Regions.

Death of a Famous Veteran.

Everyone who has followed the sport of motoring since pre-War days will deeply regret the death of one who has been in the forefront of French sportsmen for many years, namely Paul Bablot. His first performance of note was in the Coupe des Voitures Legeres in 1911, which he won on a 3 litre Delage, on the circuit of Boulogne at an average speed of about 56 m.p.h. In 1913 he followed this up with another Delage victory in the A.C. de l'Ouest's race on the Sarthe circuit. After the War Bablot will be chiefly remembered for his magnificent victory in the Georges Boillot Cup race at Boulogne in 1922, when despite heavy rain and a violent storm which caused all his rivals to retire, he finished alone at an average speed of 65 m.p.h. on an Hispano-Suiza.

From then on his activities were confined to organising, and it was largely owing to his efforts that the famous Miramas track, in Provence, was constructed.

The French Grand Prix.

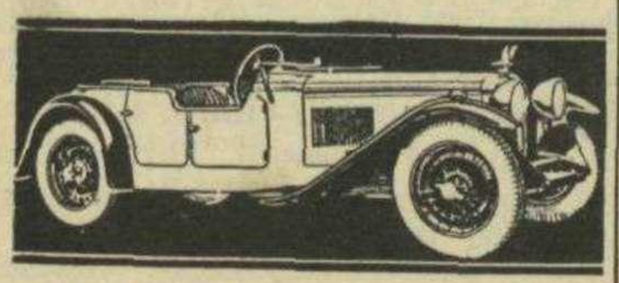
As announced in the January issue of MOTOR SPORT, the French Grand Prix will be run at the Linas-Montlhéry circuit on June 11th, making the fourth time the French classic has been held at the famous Paris autodrome. Incidentally, no other circuit has this figure to its credit, although both Le Mans and Dieppe have seen three races.

The race will be run over a distance of 500 kilometres, or 40 circuits of the autodrome.

Years ahead—

The ALVIS "SPEED TWENTY"

—the World's most modern Sports Car



SPORTS 4-SEATER
£695

Chassis Specification.

Six cylinder 73 m.m. x 100 m.m. Capacity 2511 c.c. 19.82 h.p. Push rod operated O.H. Valves. Pump water circulation. Three S.U. Carburettors. Dual Ignition. Single plate clutch. 4-Speed Gearbox, with "silent third" gear. Ratios 4.55, 6.25, 9.6, 15.7 or 4.77, 6.6, 10, and 16.9 to 1. Fully floating spiral bevel rear axle. ALVIS self-energising four-wheel brakes, 14" ribbed drums. Hartford shock absorbers. One-shot chassis lubrication. 14½ Gal. Rear petrol tank. Mechanical fuel pump. 12 v. electrical equipment, positively driven dynamo, dipping headlights. Speedometer, rev. counter, oil-pressure and radiator heat gauge clock. Single-nut wire wheels with 30 ins. x 5.25 ins. Dunlop tyres. Wheelbase 10 ft. 3 ins. Track 4 ft. 8 ins. Overall length 13 ft. 10½ ins. width 5 ft. 5 ins.

May we send you full details and arrange for a trial run? There is a full range of ALVIS cars from £455. Write:—

ALVIS CAR AND ENGINEERING CO., LTD., COVENTRY.

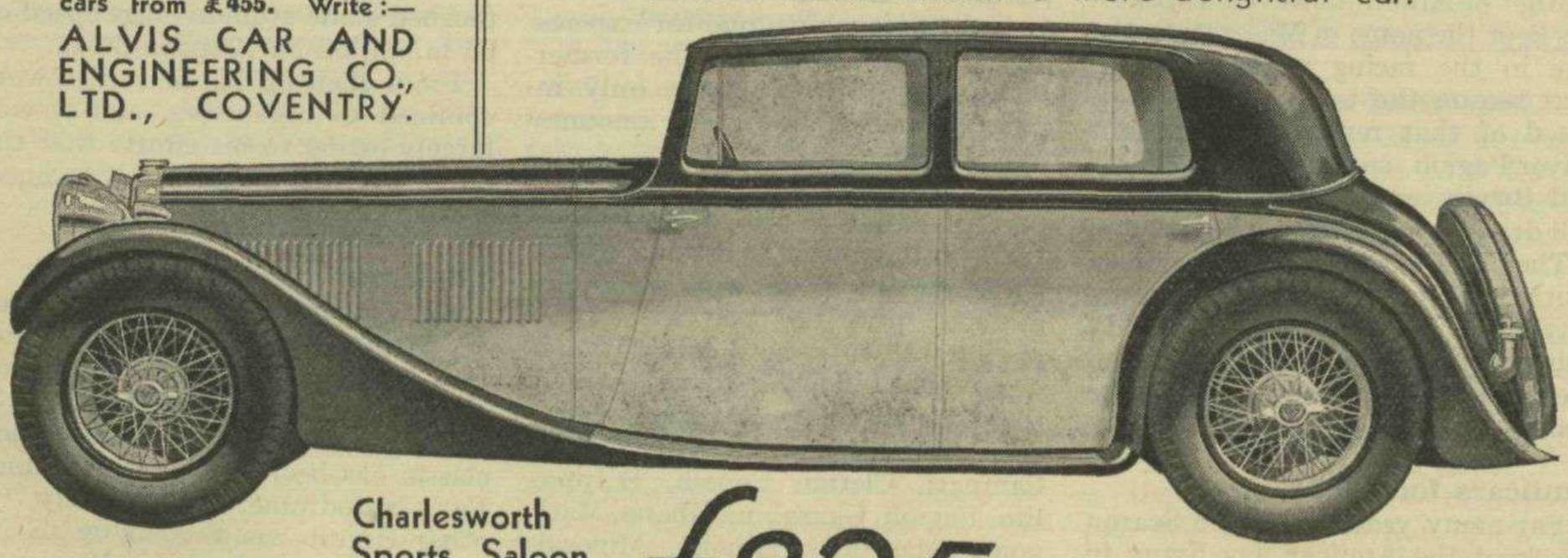
DESIGNED by acknowledged specialists in the production of fast cars, the ALVIS "Speed Twenty" combines a racing car performance with a greater degree of safety and controllability than ever before known.

Vivid acceleration . . . : from a traffic crawl to over 90 miles per hour in less than a minute in top gear . . . from rest to 80 through the gears in 32 3/5 secs. Yet this irresistible surge of power is delivered smoothly and is accompanied by an amazing docility at low speeds, and the wonderful self-servo brakes (an ALVIS Patent) bring the car to rest from 30 m.p.h. in less than twice its own length.

Superb steering . . . perfect road holding . . . comfortable driving position . . . admirably placed controls . . . these are more reasons why

Sir Henry Birkin *wrote:—*

"I have never driven a more delightful car."



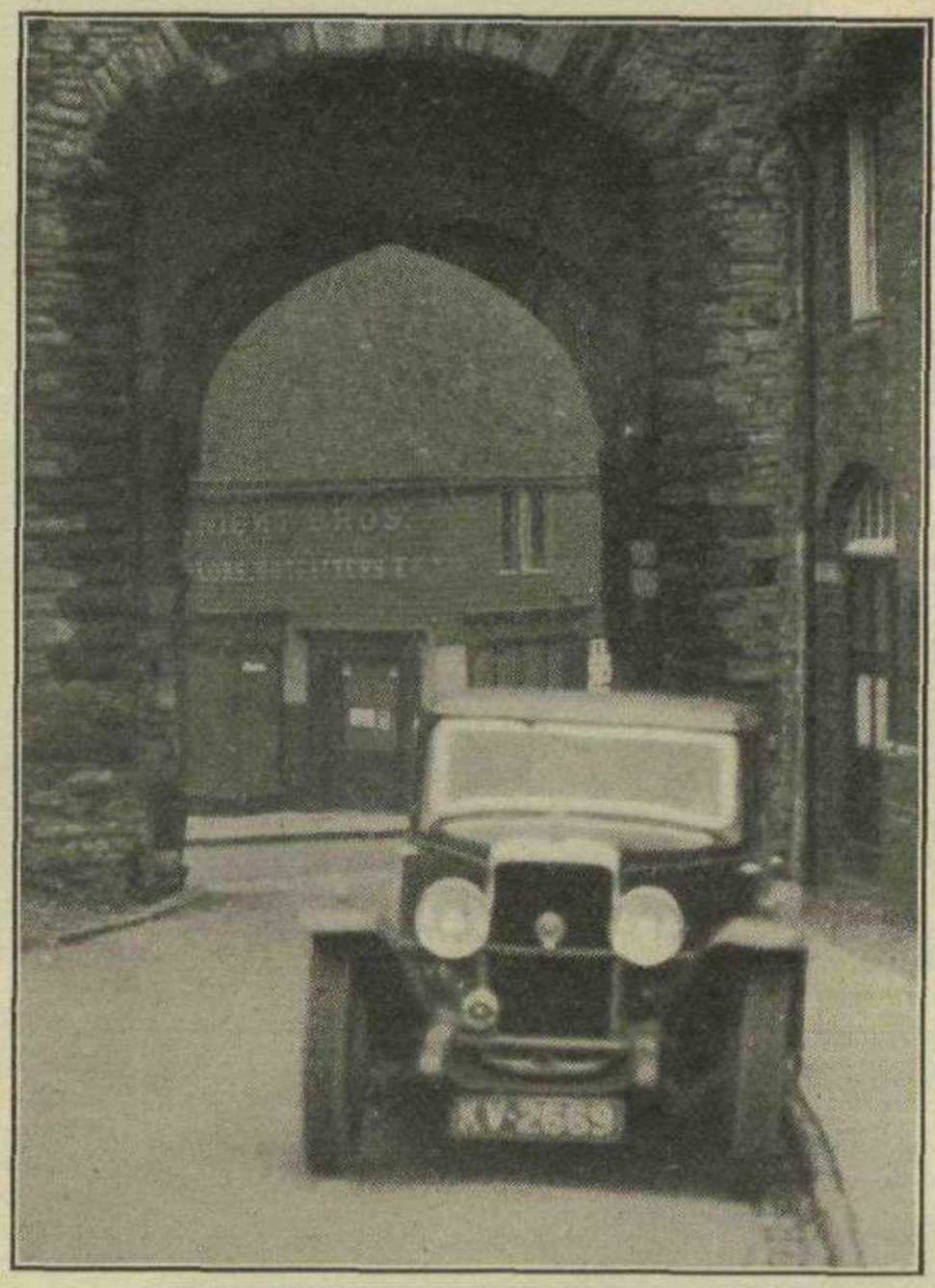
Charlesworth Sports Saloon

£825

A WEEK-END WITH THE ALVIS "FIREFLY"

THE increasing standardisation in the design of modern cars has naturally led to similarity in control, so that in the ranks of cheaper cars there is very little to chose between them in this respect. This state of affairs is largely brought about by mass production methods, and does not apply to those cars which are built, not to a price, but to the designer's ideal.

This train of thought passed through the writer's mind when he first took over an Alvis" Firefly" Sports Saloon for a week-end test recently. His previous mount had been a popular light six, which did its job adequately without revealing a trace of character and without making any demands on its driver—except at high speeds, when concentration was required to remain in a straight line. What a difference in control was needed for the "Firefly," and with what correspondingly greater pleasure! Alvis cars have always been renowned for a rock-like solidity and strength, and this new model is no exception to the rule. Tautness and robust construction are one's first impressions of the car, and one felt unmistakeably that it was descended from the famous old 12/40 model of ten years ago.

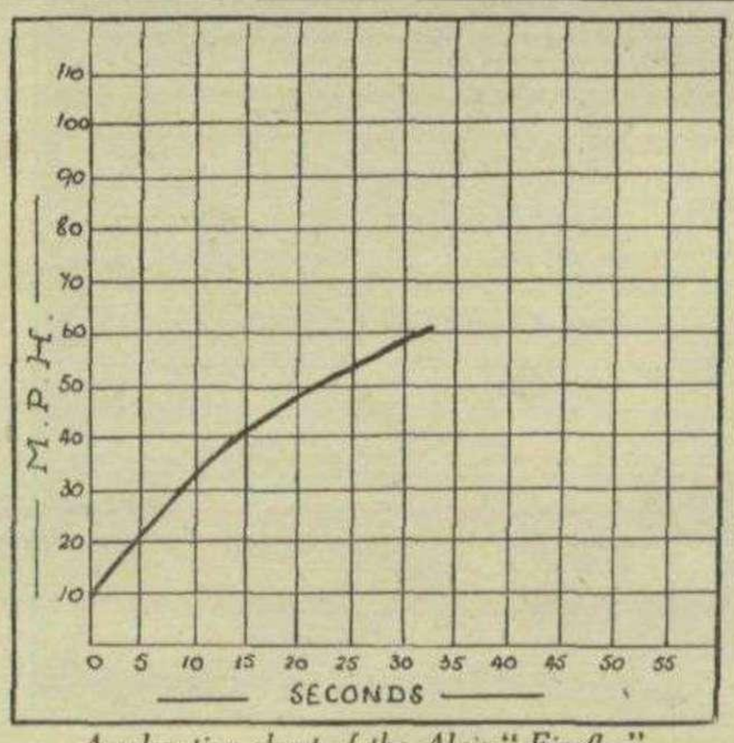


For sharp turns at walking pace on full lock, the writer found the steering rather heavy, especially in comparison with the light six he had previously been handling. But you can seldom have it both ways. The effort required at low speed was more than counter-balanced by the inherent steadiness of the Alvis when travelling fast over a rough surface, a circumstance in which the light six would be a "handful." The steering is high-geared, with pronounced caster-action, so that cornering is at all times safe and controlled. After all, the majority of a "Firefly's" life will be spent in cruising at 50 m.p.h. on main roads, and at this speed the steering is effortless and at the same time positive.

Suspension can make or mar the steering qualities of a car, so that a description of one must inevitably lead to an account of the other. The "Firefly" holds the road beautifully at all speeds, and although the shock absorbers were adjusted for fast work, no discomfort was experienced at low speed. Undoubtedly the long wheelbase, 9' 10½" is partly responsible for this, and indeed the general riding qualities of the car belong to a machine of greater size and horse-power.

It is common knowledge that a car, to be safe at its maximum speed, should be so designed that the chassis can hold the road perfectly at speeds a good deal higher than its actual maximum on the level, thereby providing a margin of safety. In order to test this margin of safety it is our custom, whenever possible, to take test cars to a certain stretch of road, straight and downhill. Here the car is driven at a higher speed than can be hoped for on the level, and a thorough test of the road-holding, and incidentally, the engine of the car under review obtained.

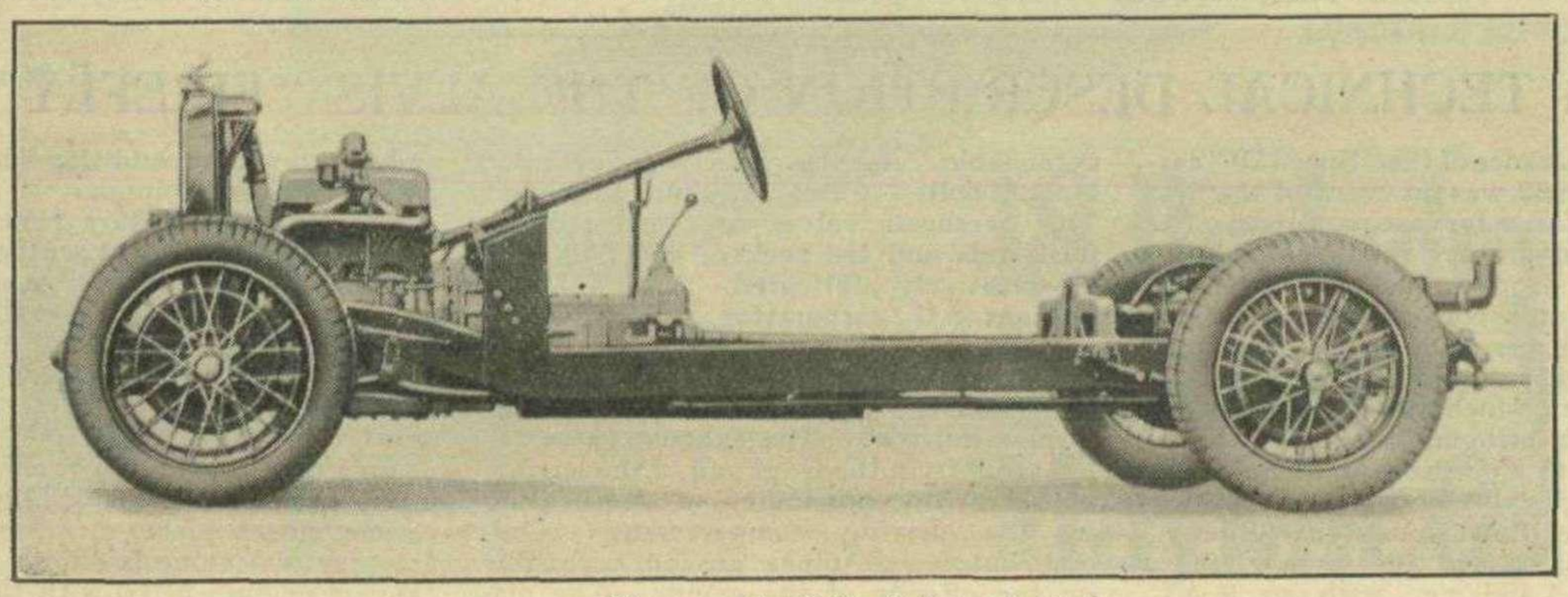
The Alvis "Firefly" came through this trial with flying colours. 70, 75, 80 m.p.h. was registered by the speedometer, and at this speed the car held the road like the proverbial leech. As for the engine, we had already demonstrated its readiness to turn over smoothly at 4,700 r.p.m. on third gear, so that we had no qualms about its safety. The speedometer, by the way, is accurate.



Acceleration chart of the Alvis "Firefly."

A 12 h.p. saloon with the dimensions of the Alvis "Firefly" naturally requires a long stretch of road in order to reach its maximum, and on such a highway we succeeded in reaching a speed of 75 m.p.h., with a full complement of driver and three passengers. On any good main road 70 m.p.h. can be attained, but special conditions are necessary for the extra 5 m.p.h. to be gained. The 'Firefly" cruises without any effort at 50 m.p.h.

The engine is flexible at low speeds providing that it is not required to pull too hard, and the ignition control on the steering wheel quadrant enables satisfactory results to be obtained. An owner of a "Firefly" will not be of the type of driver who wants to creep about on top-gear, and will probably prefer to use the gear-box, as should be done with a car of



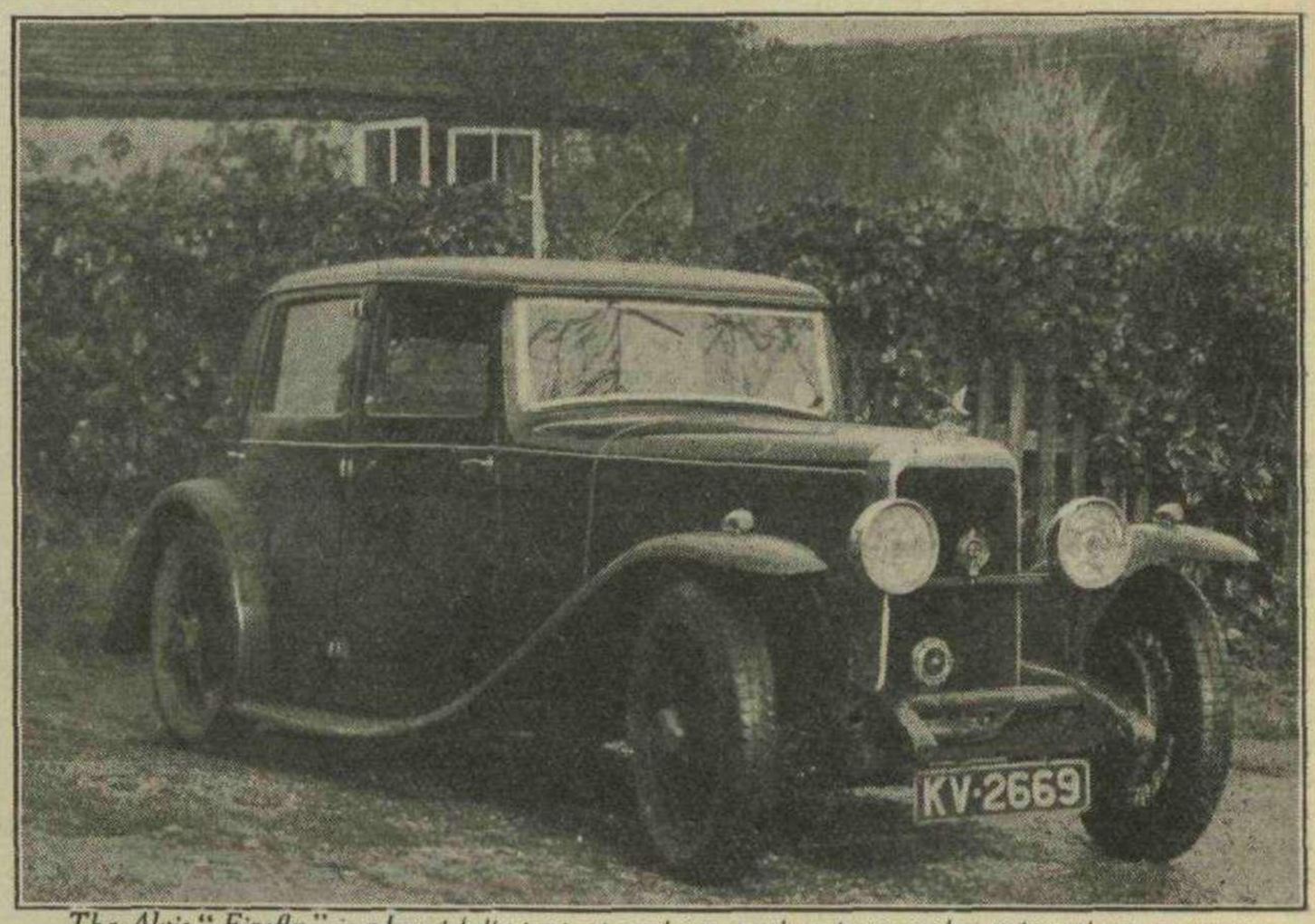
The new Alvis "Firefly" in chassis form.

A WEEK-END WITH THE ALVIS "FIREFLY"—continued.

its specification. By dropping down to second the car accelerates well even from walking pace, and on this gear a maximum of 38 m.p.h. is possible. Third is on the low side, which benefits the get away from usual town traffic. 50 m.p.h. was reached in comfort on several occasions, although it is probably better to change up at about 45 m.p.h. for the fastest acceleration.

The gear change requires a little practise in order to become completely at home with it. Precise timing has to be effected for quiet changes, the slightest delay making it impossible to engage the gears. Once the correct pause has been learned, however, no difficulty is presented at all. Unusually, changes down can be made easier at first than upward "gear-shifts," that from top to third being particularly delightful.

The brakes are well up to their work, and although they require considerable pressure for maximum operation, they can be applied to the exact amount necessary. The foot-pedal has a large surface, which adds to the driver's sense of security, and indeed the angle of all the pedals has been carefully designed—a point not as common as one would imagine.



The Alvis "Firefly" is a beautifully proportioned car in saloon form, and is extraordinarily roomy for a 12 h.p. machine.



The Alvis "Firefly" in a water-splash near Bury Hill. [*Motor Sport Photographs.*

The body of the car we tested was a coachbuilt saloon of generous proportions and very pleasing lines. Four wide doors enabled the interior to be reached without any acrobatic contortions, and the driving position was beyond criticism. A large boot at the rear provided plenty of room for luggage, and altogether the car was admirably suited to long distance touring. Our only criticism of the body was that the front doors, being hinged in the middle of the car, allowed a draught to enter the front cockpit, while another breeze seemed to find its way into the rear compartment from the foot-wells and from under the seat. These faults, however, may very well be only found on the actual car tested—and in any case should not be difficult to remedy. The equipment was complete, the Rotax headlamps giving a splendid driving light, and the British Berkshire screen-wiper coping satisfactorily with a blizzard of snow and sleet.

The price asked for the Alvis "Firefly" saloon is £495, and when one considers the strength of its construction, its lively performance, low tax, and the famous Alvis wearing qualities, the worth of the car can be readily appreciated.

A TECHNICAL DESCRIPTION OF THE ALVIS "FIREFLY"

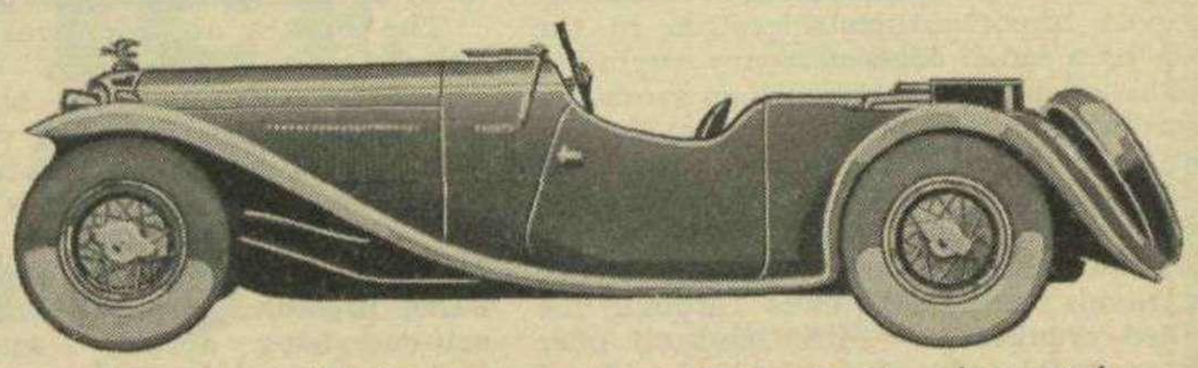
THE appearance of the "Speed 20" early in 1932 was an event of the first importance for fast motorists. The low centre of gravity made possible by the double drop frame, the excellent brakes and unit construction of engine and gearbox were all highly successful developments. All these features and various others which will be enumerated were used in bringing the four-cylinder "Firefly" into a position as advanced as that of the six cylinder car.

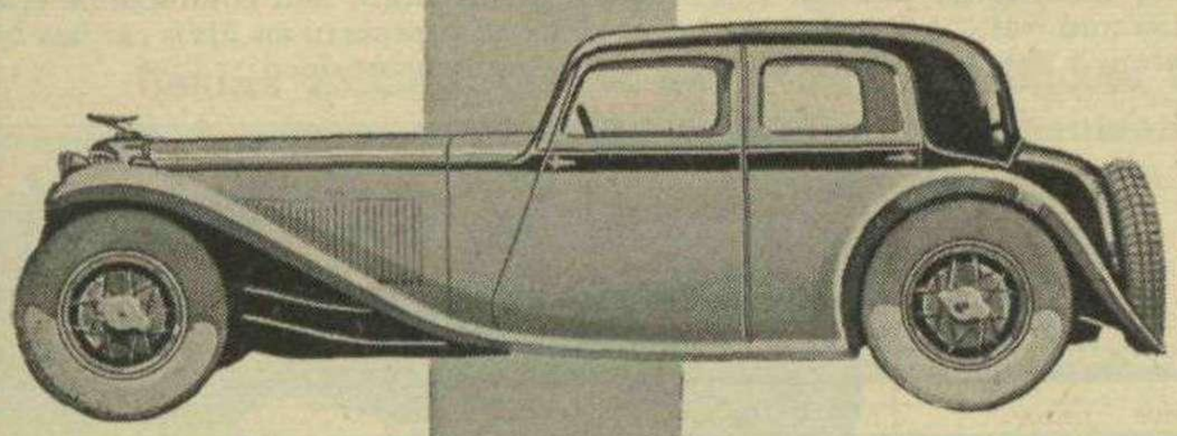
The cylinder dimensions of the "Firefly" are the usual 69 and 100 mm., giving a capacity of 1,496 c.c., with an R.A.C. rating of 11.9. The cylinder head is detachable, and the cast-iron cylinder block is bolted to an aluminium crankcase. The overhead valves are operated by push-rods and the rockers and ball-ends are positively lubricated. A semi-down-draught S.U. carburettor, supplied by a petrol pump, is bolted to a V shaped induction pipe, which is in contact with a flange on the centre exhaust branch to form a hot-spot. The exhaust gases are led away from the front end of the engine, avoiding any possibility of overheating in the driving compartment. Coil, distributor and plugs are all accessible on the off-side of the engine. The distributor embodies an automatic advance and retard with an additional hand control on the steering column.

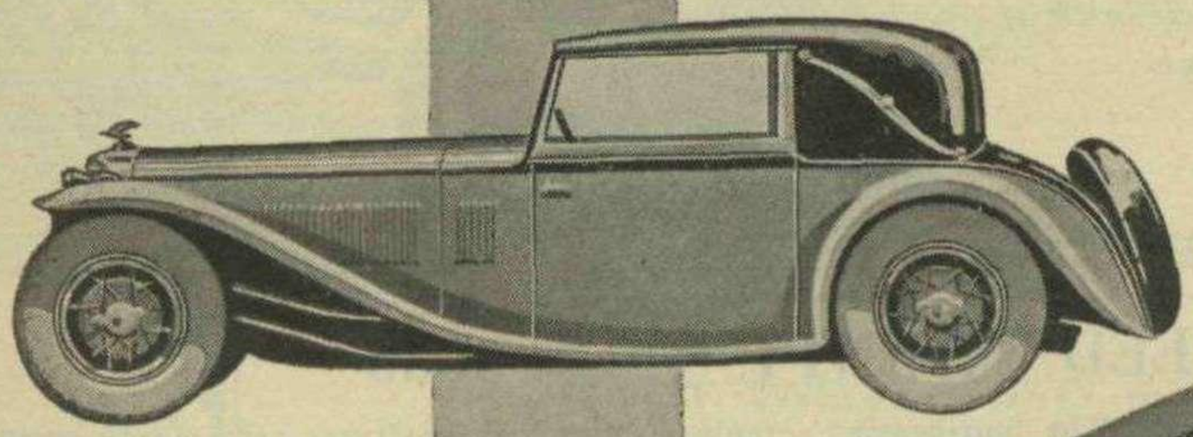
The aluminium alloy pistons carry 2 compression rings and 1 scraper. The big-end bearing surfaces, which are of white metal, are cast integral with the steel connecting rods and the three bearings for the balanced crankshaft are carried in webs extending the whole width of the crankcase. The camshaft is driven by chain from the rear end of the crankshaft, a lay-out which theory approves, but which finds a place on all too few cars. Its practical value is shown by the fact that on engines fitted with this rear dual location timing chains last at least four

ALVIS

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Above — a graceful sports four-seater, by Vanden Plas. Price **£725**. Left— a Saloon by Thrupp and Maberly, combining beauty of line with luxurious comfort. Price **£895**. Below — the prettiest four-seater drop head coupé ever built, by Vanden Plas. Price **£865**. You *must* see these cars to appreciate their qualities. Come to Berkeley Street and drive one.

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A TECHNICAL DESCRIPTION OF THE ALVIS "FIREFLY"—continued.

times as long as when the drive is taken from the forward end. The torque damper which was fitted to the 12-60 engine has been found unnecessary on the "Firefly" and is therefore not fitted.

The engine is cooled on the thermo-syphon system, and the heat is dissipated by a large honeycomb radiator. The cooling water passes from the block to the cylinder-head through an aluminium casing at the rear of the engine, and there are no passages which depend for their tightness on the cylinder-head gasket. The flow of all the cooling water along the whole length of the engine and back, and the generous water spaces round the hot parts of cylinder and head should give complete freedom from local overheating, a most important consideration in the case of a small high-efficiency engine.

The oil pump is gear-driven from the camshaft and forces oil through a Tecalemit filter to the various bearings and there is another filter on the suction side. A gallery along the side of the engine supplies the main bearings with oil, whence it travels to the big-ends through the drilled crankshaft. Filter and oil filler are accessibly placed on the near side of the engine.

Engine, clutch pit, and gearbox are bolted together to form one unit of immense strength and the whole is flexibly mounted at three points, one in front of the engine, and the other two brackets at the rear end of the clutch housing. A single dry-plate clutch is used, and the four-speed gearbox has a silent third gear and a centre ball change brought back so that the lever is under the driver's left hand. The speedometer is driven from the gearbox.

The propellor shaft is of the open type, tubular, and of large diameter. It is fitted with Hardy Spicer joints front and rear. The final drive is by spiral bevel, and the fully floating rear axle, a feature not often found nowadays, should ensure a long life for this much-stressed part of the transmission.

The chassis frame is double-dropped following the well-known lines of the Speed Twenty, but the dimensions are naturally somewhat less, the Firefly's wheelbase and track being respectively 9ft. 10½ins. and 4ft. 4ins. against 10ft. 3ins. and 4ft. 8ins. on the larger car. The double-dropped frame allows of a low floor line without restricting head room, brings down the centre of gravity very considerably and allows plenty of movement for the axles without striking the side members The latter are braced by six cross members, most noticable of these being the pressing which unites the side members at the front mounting of the rear springs. Half elliptic springs are fitted all round, with Hartfords back and front, those at the rear being carried parallel with the axle. A Marles-Weller steering box is used, with an unusually long drop arm.

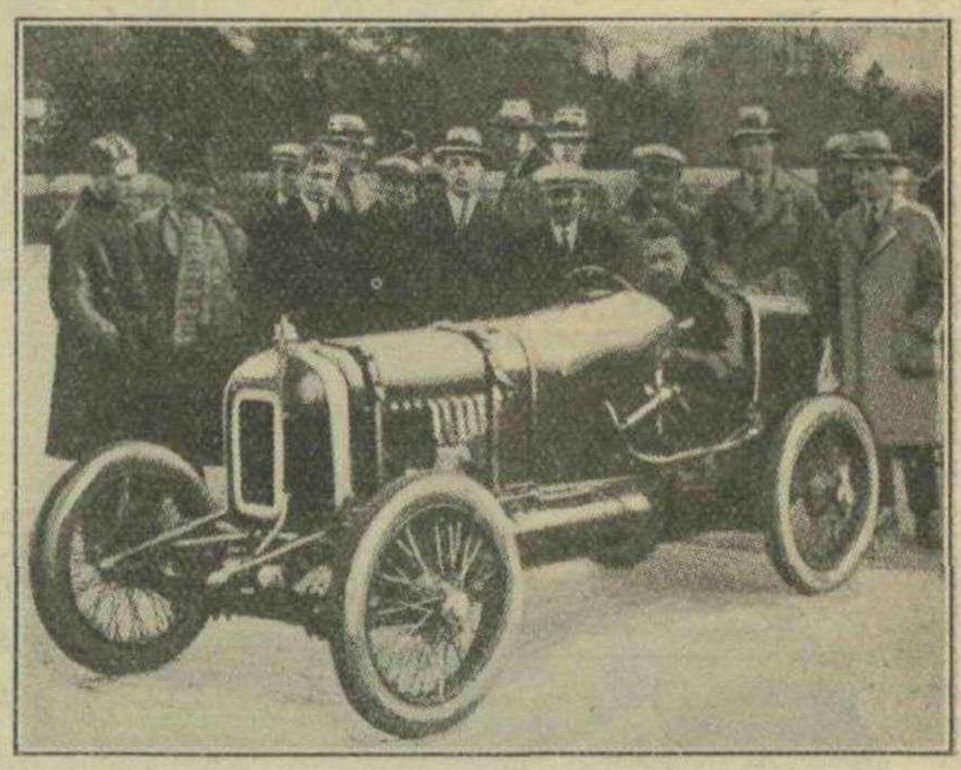
The brakes are identical with those fitted to the "Speed 20" and operate on 14 inch drums. The shoes are expanded by a floating lever which carries two pins. When the lever is moved by the control cable, one pin bears against the end of each of the two shoes. The floating layout ensures that each shoe exerts the same pressure, and the brakes have a self-energising action. Another good feature is that there is no joint or lever exposed to dirt and wet. A knurled knob projecting through the floorboards at the driver's side operates a master-adjustment, while there is an adjustable cable stop on each brake-cable to allow the effect of all four brakes to be equalised.

Wire wheels with knock-on single centre nuts carry 30in. by 5in. Dunlop tyres.

The electrical equipment is of the normal type, the dynamo being driven from the timing chain. Rotax head lamps are used and the two six-volt batteries are arranged one on either side of the propellor shaft. The lights are controlled by a lever in the centre of the steering wheel, and the switching mechanism is accessibly mounted on top of the steering-box.

Though the chassis is shorter than that of the "Speed 20," the 4 cylinder engine of the Firefly actually allows a greater amount of space to be devoted to passenger accommodation than on the larger car. A particularly handsome saloon with a sunshine roof, and also a drop-head coupé are offered at £495, while the open four-seater costs £20 less. A road-test of this latter model appears elsewhere in this issue, and shows that the traditional high performance and comfortable travel which one expects in an Alvis car has been more than maintained.

Alvis performance and longevity is the result of extensive racing. As long ago as 1923, C. M. Harvey won the 200 Miles Race at an average speed of 93.29 m.p.h.



THE ALVIS "SPEED TWENTY" FOR 1933

ONE of the most successful sports cars of 1932 was undoubtedly the Alvis "Speed Twenty." Its performance was terrific, both in acceleration and in maximum speed, and the open sports model could be purchased for £695! No wonder the car was popular!

Many new models are altered after a year's use in private owners' hands, but so much forethought had been expended on the design of the "Speed Twenty" that the car remains absolutelyunchanged for 1933.

Here are a few details of the specification of the car. The engine has six cylinders of 73 x 100 mm., giving a cubic capacity of 2,511 c.c. The head is detachable, and the water spaces are particularly generous, in order to provide really effective cooling. An interesting point is that the gasket is not used to make a water-joint, for there are separate passages made between the cylinder block and the head. The four-bearing crankshaft is heat-treated and balanced, and a vibration damper ensures complete smoothness throughout its range of revolutions (it can turn over at 4,500 r.p.m.). The pistons are of special alloy, and the con-rods have bearing-surfaces die-cast into position. Situated at the rear of the engine, the camshaft and auxiliary drives are operated by Duplex chain, and lubrication is by pressure to crankshaft main and big end bearings, and to the valve rockers and push rod ends.

Petrol is drawn from a 14½ gallon rear tank by an A.C. mechanical pump to three S.U. carburettors. Ignition is by B.T.H. polar inductor magneto as well as special coil for starting in case the magneto should fail to function, which is unlikely.

A single plate clutch and 4 speed gearbox transmit the drive to spiral bevel rear axle and thence to the road wheels. 14 inch brake drums, semi elliptic springs, one shot chassis lubrication and a double dropped frame complete the specification of one of England's outstanding sports cars.

The low chassis frame gives coachbuilders plenty of scope for bodies of beautiful lines. Vanden Plas (England) 1923, Ltd., have always been noted as specialists in sports coachwork and their range of bodies on the "Speed Twenty" Alvis are well up to their usual standard. Their models are a very good looking open four-seater, a two-seater sports, and a saloon. Messrs. Thrupp & Maberley, Ltd., turn out a beautifully finished sports saloon, which is entirely in accordance with this firm's reputation for luxurious coachwork on expensive chassis. Finally, the Mayfair Carriage Co., Ltd., produce a very striking saloon with beautiful lines, and here again a very high degree of finish has been obtained.

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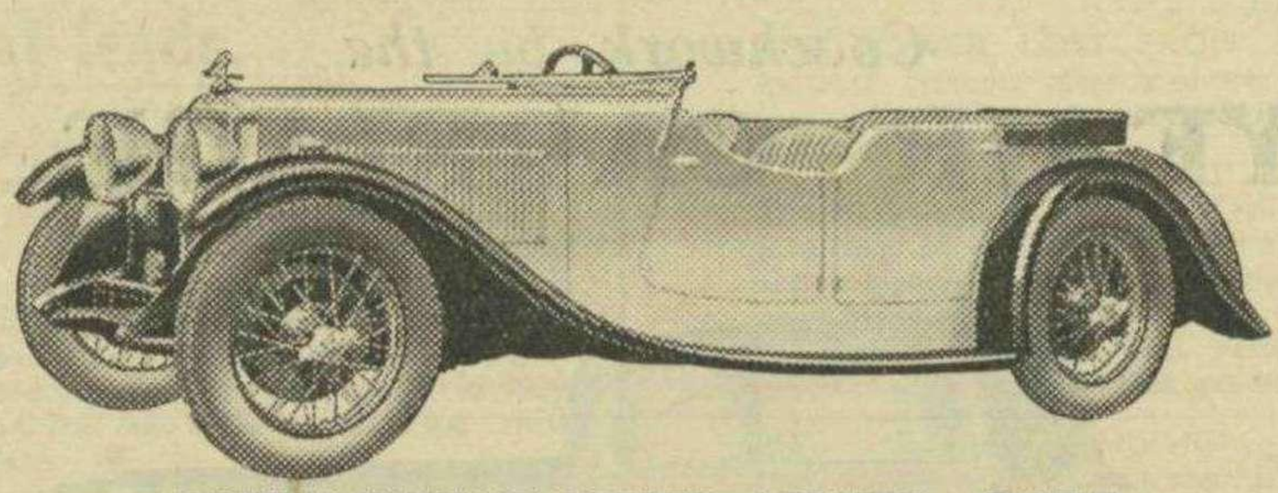
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MANNIN MOAR AND MANNIN BEG RACES.

THE DOUGLAS ROUND-THE-TOWN CIRCUIT FINALLY SETTLED.

AS forecast in our last issue, some alteration in the circuit for the Douglas races has been made in order to lessen the advantages of bigger cars. Instead of putting down artificial corners round sandbanks on the Promenade, the organisers have slowed down the course by taking it at right angles off the middle of the Promenade, and by cutting out the fast run up hill to past the motor-cycle stands and replacing it by a winding section below the playing fields. This leaves the fast Promenade section untouched, a decision which will meet with everyone's approval.

Since the circuit no longer passes the T.T. stands, another site for them has had to be found. They will be placed on the terrace of the Villa Marina, which is a municipal gardens and place of entertainment on the edge of the Promenade looking out over the Bay. The start and finish will take place here, organisation being simplified by the width of the road.

A hundred yards from the start the new course turns to the right through a right angle turn, followed by a similar left turn 50 yards further on. The road runs uphill from there to the Government Buildings, and the cars will sweep round the front of it in almost a hairpin bend to rejoin the original course at Bucks Road. Woodburn and Laureston Roads are followed with a left turn into Ballaquayle Road, but 100 yards further instead of keeping on as far as the top of Bray Hill, as was originally intended, the route turns right along the bottom of the Playing Fields, right again a hundred yards further on, then left, right, and then left on to Victoria Road. These corners are all right angles, so will put a premium on handiness and ease of control. Victoria Road is comparatively straightforward and leads upwards to the end of Glencrutchery Road, just at Governors Bridge. The famous Bridge is considered too narrow for cars and so they will take the main road which cuts straight across the dip, and so on to Onchan as had originally been arranged. The extra windy section at the top of the town adds slightly to the length of the circuit, which is now about 5 miles long. The races are each intended to be about 250 miles in length.

There will be no restrictions as to the dimensions of the bodies, but mechanics have to be carried. The race for the smaller cars is of course for those up to 1,100 c.c. blown and 1,500 c.c. unblown, the larger ones running on the second day. People with 1,500 c.c. supercharged cars will not care very much for this line of division, but there are a sufficient number of keen enthusiasts who will enter a race of this sort as long as they have a good run for their money to make sure that the requisite thirty entries for each race will be forthcoming. On another page we discuss at length the suggestion of having races for supercharged and unsupercharged cars, which has a number of points in its favour.

THE RALLY OF THE ROYAL SCOTTISH AUTOMOBILE CLUB.

THE Royal Scottish Automobile Club propose to hold a Motor Car Rally in Scotland during the second or third week in June.

It is meantime suggested that cars may start from Harrogate, Edinburgh and Glasgow.

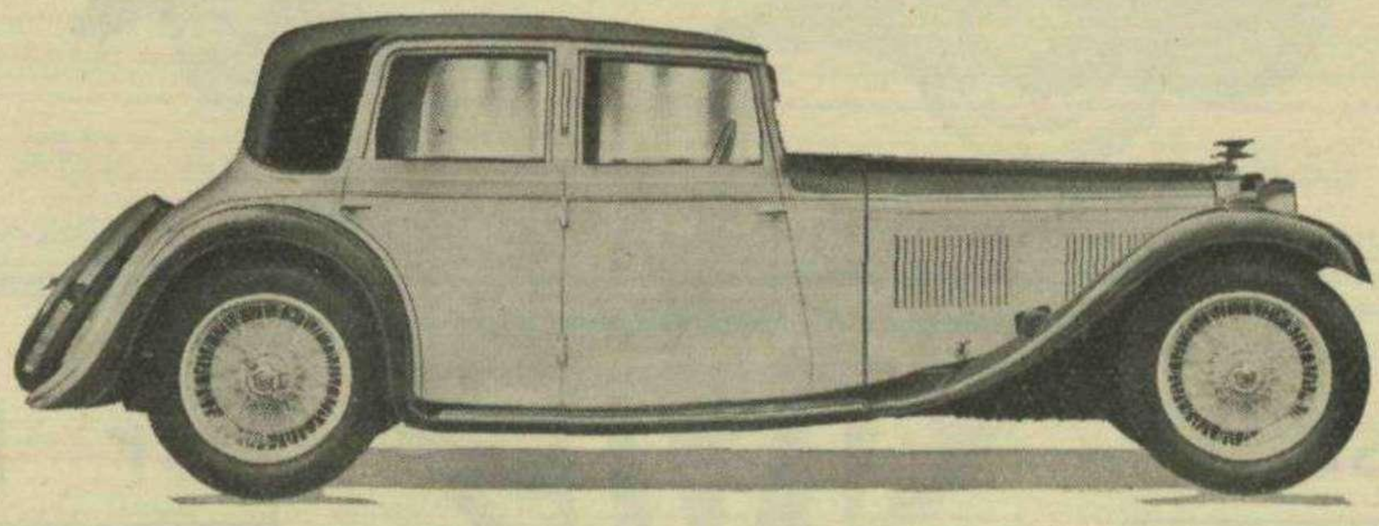
The routes to be traversed will extend to about 1,000 miles and will embrace the principal touring centres in Scotland and the finest and most picturesque scenery in the Highlands.

A preliminary Programme and Print of Rules and Conditions will be available towards the end of March or early in April.

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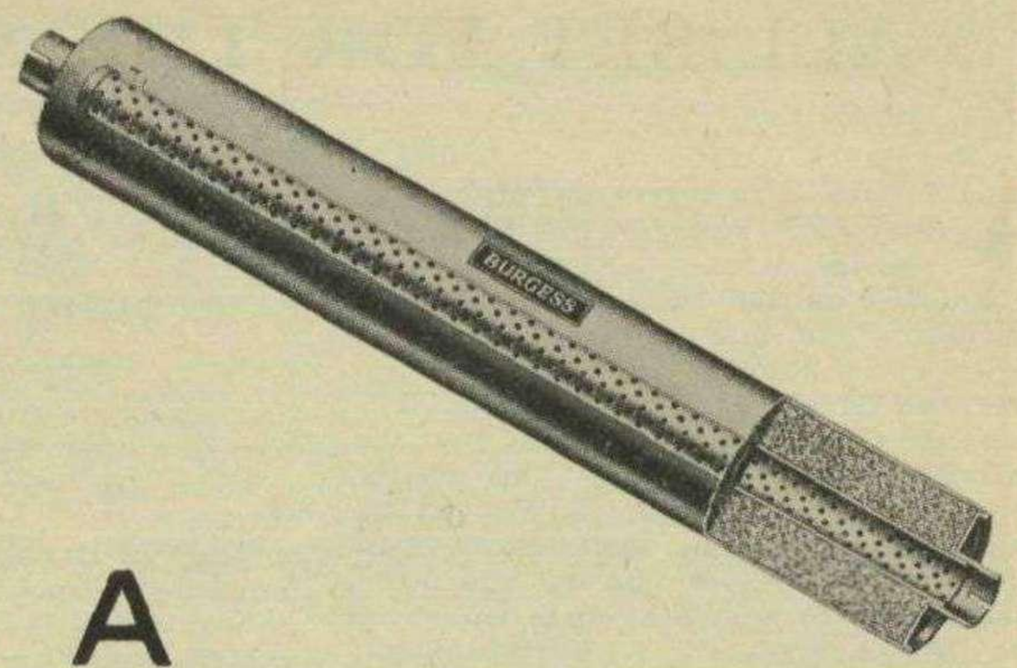
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The BURGESS SILENCING SYSTEM as fitted to the ALVIS range combines freedom from back-pressure with efficient silencing.

A DESCRIPTIVE LEAFLET giving full particulars of this interesting invention may be had from any good service garage, or post free from :

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"SPEED TWENTY"

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ALL SET FOR THE SWEDISH WINTER G.P. THIS MONTH

BY OUR SWEDISH CORRESPONDENT

ALTHOUGH of recent inception—the first race was run in 1931—the Swedish Winter G.P. is now firmly established on the International Racing Calendar. For many years, since 1906, high speed reliability trials had been run over the circuit of Râmshyttan, and it was accordingly not difficult for the authorities to decide that this circuit should be used for the race. The road is a typically Swedish one, generally covered with ice or snow, runs up hill and down dale, and at two points a loop is made over the frozen lakes at Râmshyttan and Sellnäs.

The organisation of the race is meticulously carried out by the Royal Automobile Club of Stockholm, under the direct supervision of Gunnar Andersson, the Clerk of the Course, and an immense crowd always attends the race, in spite of severe weather. The prices of admission to the circuit are reasonable, being paddock 4/-, on the lakes 3/-, and in the villages 2/-. A large entry is always secured by the fact of good prize money being subscribed, the winner generally receiving £500, the second man £150 and third £100. The circuit is 46 kilometres, or roughly 28 miles, and 8 laps have to be covered during the race.

Some details of the cars entered for the race to be run in February will probably be of interest to English readers. Bennstrôm, the 1932 winner, spent £300 on tuning his 24 h.p. Ford last year, increasing the b.h.p. from 40 to 65. Now he has a V.8 model, normally producing 65 b.h.p. and giving a road speed of 75 m.p.h. on top gear. He hopes to raise these figures to 120 b.h.p. and 110 m.p.h. The car is equipped with a neat 2-seater body weighing 71 kgs., with two spare wheels sunk into the rear panel. The weight of the whole car will be in the neighbourhood of 800 kgs.—approximately the same as W. Widengren's 2.3 litre Alfa Romeo.

Altogether there will be 10 Fords, 2 of which will be 4 cyl. models with Silvani heads and down-draught carburettors, the rest being V.8's. There will be a team, composed of Bennstrôm and the brothers C. G. and Thure Johansson.

There was a rumour of a team of Armstrong-Siddeleys being entered for the race, in which their self-changing gearboxes would prove a great advantage, but nothing has transpired. An interesting entry was the Reo belonging to Allan Westerblom, which was powered by a 200 h.p. aeroplane engine, but unfortunately the car cannot be prepared in time.

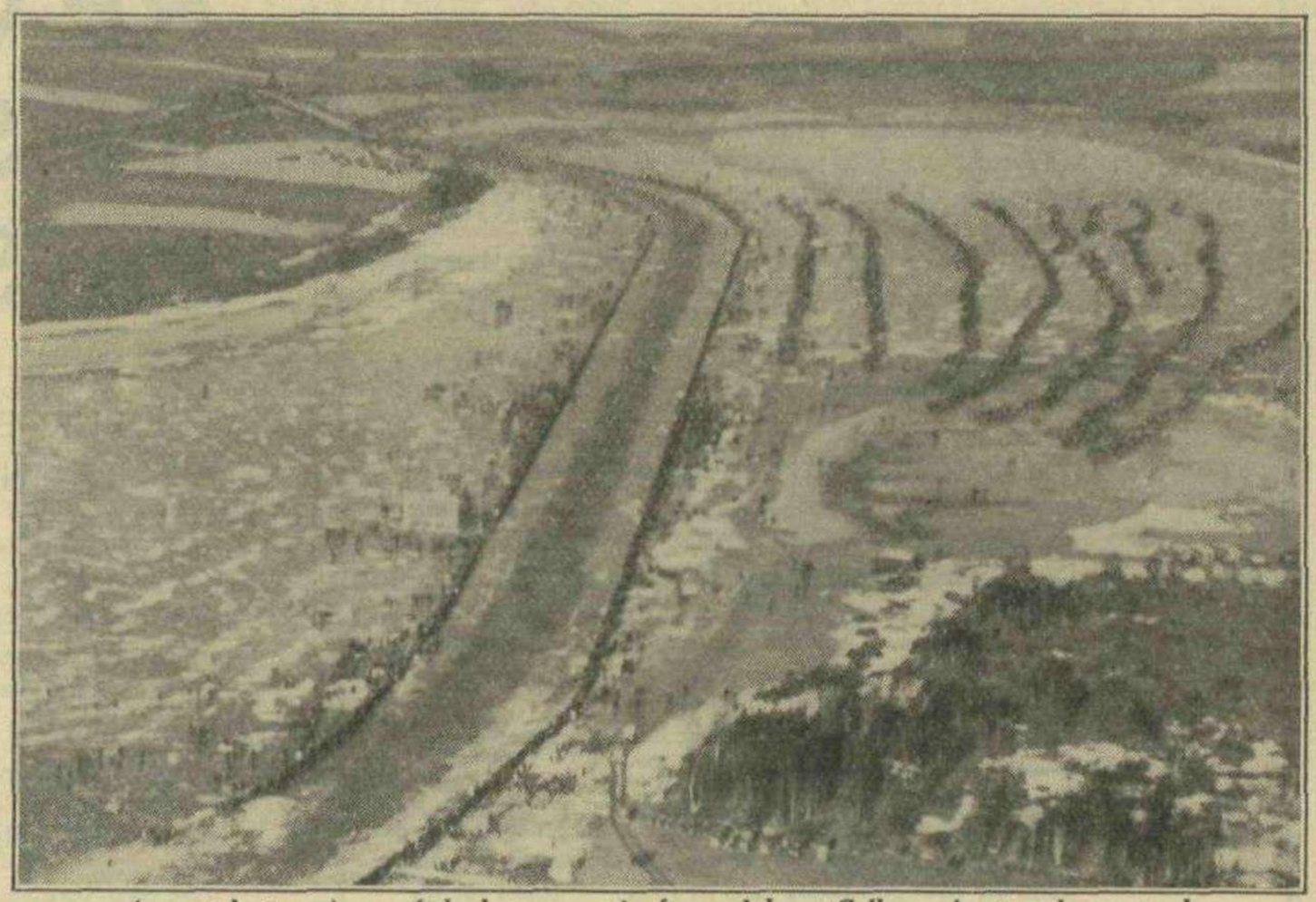
There are two 2.3 litre Alfa Romeos entered, one by Wiktor Widengren (brother of Henken who has raced occasionally at Brooklands) and with which he won the G.P. of Finland last autumn, and the other by Eugen Bjôrnstad. The latter went to Milan with the intention of buying a "monoposto," but was unable to, so went to Molsheim for a 4-wheel drive Bugatti. Here again he experienced difficulty, so he returned to Milan and bought a 2.3 litre racer once driven by Caracciola.

The Finnish driver, Ebb, will again pilot a Mercédès-Benz,—he will be remembered as the other driver who was involved in the incident of Whitney Straight's Maserati being ditched last year. Finland's "dare-devil" driver, Keinânen, will also continue with his car of previous years, a Chrysler. Sundstedt will be favoured as a winner on his Bugatti, for he led last year until a wheel came off. He will be hard pushed, however, by Ebb and Wiktor Widengren, while Henken Widengren will not stand much chance with Berger's Invicta against the three supercharged cars.

From the British point of view two interesting entries are J. C. Carlsson's Bentley and Wistedt's blown M.G. Midget.

Here is the full list of entries :—

Ford (V.8).	O. Bennstrôm.
	C. G. Johansson.
	T. Johansson.
	Franklin Eck.
	A. Wallenins.
	R. Zetterlund.
	Dr. S. Lindblom.
	X.
Ford (4-cyl.)	Harry Larsson.
	Axel Larsson.
Chevrolet	C. Bergstrôm.
	J. E. Ohlsson.
	M. Stromberg.
Chrysler	S. P. Keinanen.
	A. Ohlsson.
	E. Latrenz.
Bugatti	K. G. Sundstedt.
	Johnsson.
Mercédes	K. A. Ebb.
	B. Dahlin.
Alfa Romeo	W. Widengren.
	E. Bjornstead.
Reo	Jaakkola.
Fiat	P. Nas.
Hudson	B. Lindh.
Buick	E. Bake.
Dodge	M. Weyer.
M.G.	Weistedt.
Invicta	H. Widengren.
Bentley	J. C. Carlsson.



An aerial view of one of the loops over the frozen lake at Sellnas, showing the car park on the right hand side of the picture.

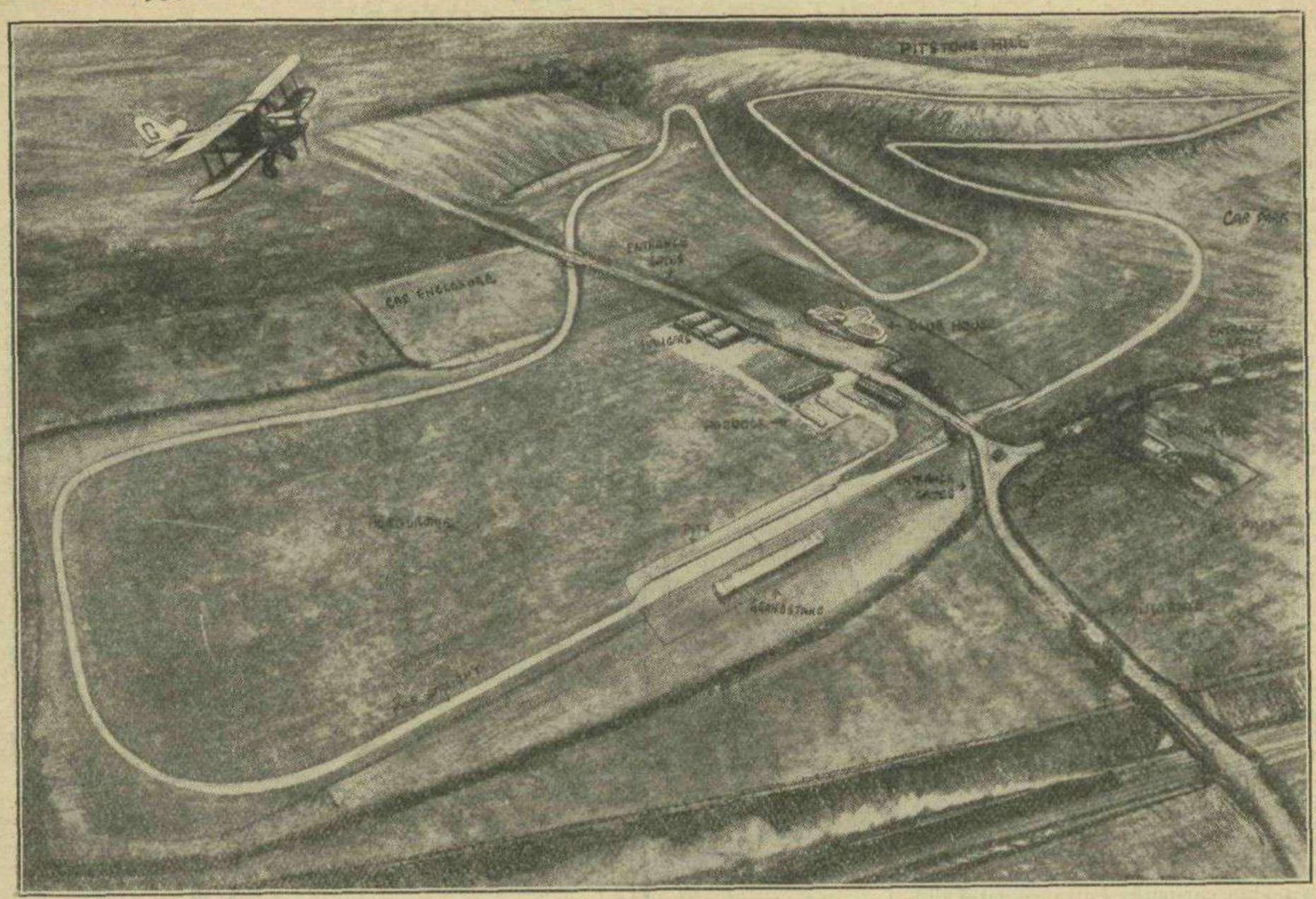
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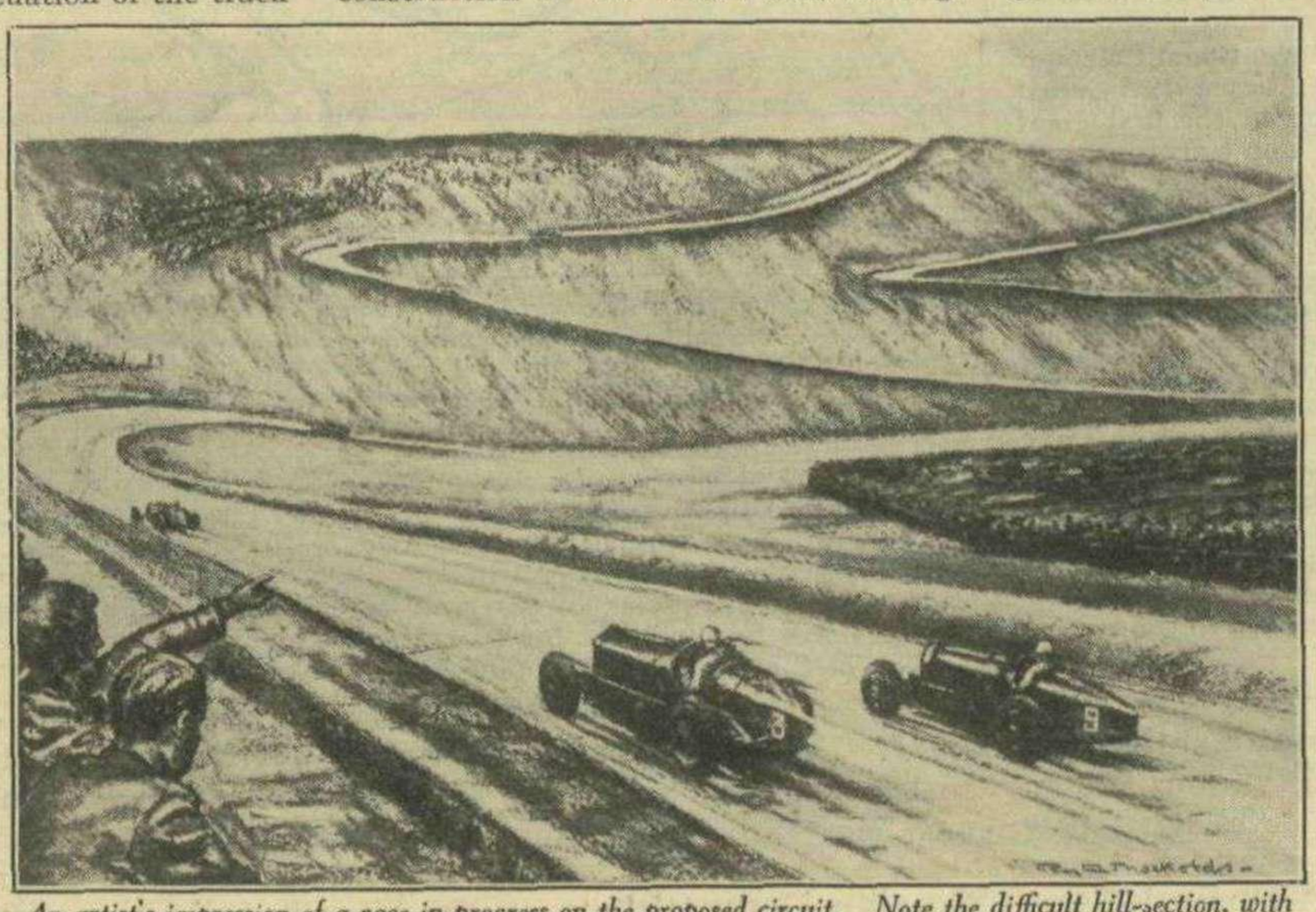


THE IVINGHOE ROAD-RACE CIRCUIT.

FULL DETAILS OF THE PROPOSED COURSE TO BE CONSTRUCTED ONLY 32 MILES FROM LONDON.

FOR some time past mention has been made in MOTOR SPORT of a proposed new road-racing circuit at Ivinghoe, near Tring. Full details as to the dimensions and situation of the track have not been available, however, for the promotors have wisely decided to withhold information of this nature until every item in its construction has been planned by engineers, architects and surveyors. The shape of the circuit has been decided with the assistance of Mr. G. E. T. Eyston, Mr. C. R. Whitcroft, and Mr. H. N. Edwards, Secretary of the B.R.D.C.

After months of this preliminary work the project has now taken on its final form, and during this month a public issue of shares will take place in order that the work of construction may be begun without delay. We are informed that the capital of the Company will be £200,000, of which £142,000 will be expended on the construction of the road itself, fencing, grandstands, club house, aeroplane hangars, refreshment rooms, paddock, entrance gates, etcetera, and the remainder will be available for working capital, contingencies and prize money.



An artist's impression of a race in progress on the proposed circuit. Note the difficult hill-section, with its "Targa Florio" hairpins.

One day last month, in the company of a party of pressmen, we visited the site of the proposed course and were deeply impressed with its natural potentialities. Anyone who has not actually seen for himself the astonishing suitability of the site for its purpose would be inclined to disbelieve that the proposed circuit could be constructed for the comparatively small sum of £142,000.

However, the constructional details have been planned under the guidance of a civil engineer with wide experience of arterial road construct-

THE IVINGHOE ROAD-RACE CIRCUIT—continued.

ion, who is satisfied with the estimated cost.

The land is absolutely open; no trees to be cut down and rooted up. The subsoil is hard chalk, so that a minimum of foundation will be required for the road and buildings. These two points alone will reduce the constructional costs to the lowest possible figure.

The circuit will be exactly four miles in length, to facilitate timekeeping, and as will be seen from the accompanying illustrations, will be well up to the standard of the most difficult Continental circuits, excluding of course, the Targa Florio and the Nurburg Ring. From the spectator's point of view, however, the Ivinghoe circuit should be superior to both of these, being shorter and allowing him to move about from point to point. The hand of experienced racing motorists can be discerned in the wise provision of several very fast corners, on which skill has more scope than on sharp hair-pins—although the latter are essential, of course, on such a steep gradient as Pitstone Hill. The maximum gradient will be 1 in 5, up, while downhill the steepest piece will be 1 in 10—calling for a car of all-round performance and driving skill of the finest degree. The road will have a concrete surface, and will vary in width from 60 feet opposite the Grandstand, to allow for pit-work, to 18 feet on the hill-section.

From the plans shown to us we formed the opinion that every detail for the public's and the competitors' comfort has been thought of. Capacious grand-stands, view-points, car-parks, entrance-gates and refreshment buffets on the one hand, and compact paddock buildings and permanent pits on the other.

The club-house seemed a particularly well designed proposition, being planned for the specific purpose in view and not adapted from an existing building.

At last it seems that England is to have the chance for which she has been waiting for years, for our drivers, with such a practise course at their constant disposal, will be able to compete on level terms with the so-far supreme Continental aces.

A fixture on the International Calendar has been secured for August 19th, so if you want to be present at the first great road-race in England, don't arrange your Summer holidays in August!

Here are a few points of interest about the proposed circuit:

The site is 435 acres in area.

Pitstone Hill, included in the site, rises 711 feet above sea level.

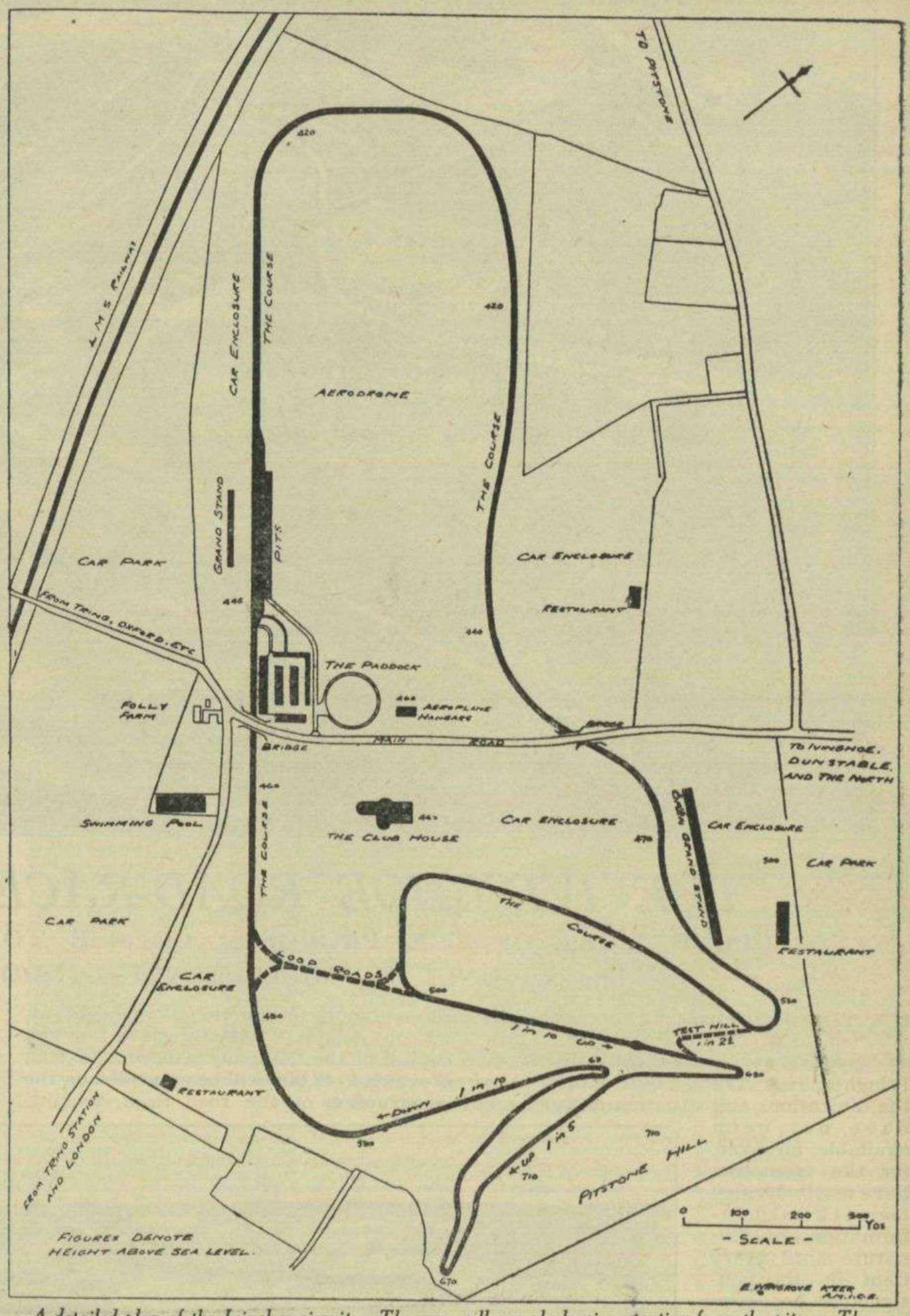
There is a population of nearly 9,000,000 people within a radius of 40 miles.

Ivinghoe is 32 miles from Hyde Park corner—mostly over arterial road.

Tring Station is little over 1 mile away.

The aerodrome will be in the centre of the fast stretch of the course, and is entirely free from trees.

700 men will be employed in the track's construction.



A detailed plan of the Ivinghoe circuit. The cars will run clock-wise, starting from the pits. The "straight leg" is a mile in length, and the whole circuit four miles exactly.

Nearly every well-known racing-motorist has visited the site and expressed his complete approval of the site.

By means of loop roads, five alternative circuits will be available.

There will be a special hill-climb road, with a maximum gradient of 1 in 2½.

More than 100 acres of reserved enclosures will be available for spectators. In two of these, naturally sloping ground will enable spectators to witness the racing from their cars.

An almost complete tour of the course will be possible by spectators.

The main grandstand will accommodate 10,000 spectators.

3,000 vehicles per hour will be able to pass through the special entrance gates.

75 acres of outside car parks will be provided.

1932 Italian Championships.

The winners of the various Italian championships for 1932 have now been decided, the results being as follows: *Drivers:* Unlimited, Tazio Nuvolari; up to 1,500 c.c. S. Corsi; up to 1,100 c.c., D. S. di Cerami. *Cars:* Unlimited, Alfa-Romeo; up to 1,500 c.c., Maserati; up to 1,100 c.c., Maserati.

Foreign Competitions.

Copies of the Regulations for the tenth International Winterfahrt Garmisch - Partenkirchen which takes place from 30th January to 3rd February, and the Belgian 24-Hours Grand Prix, 1st-2nd July, have been received by the R.A.C., and may be obtained on application to the Secretary.

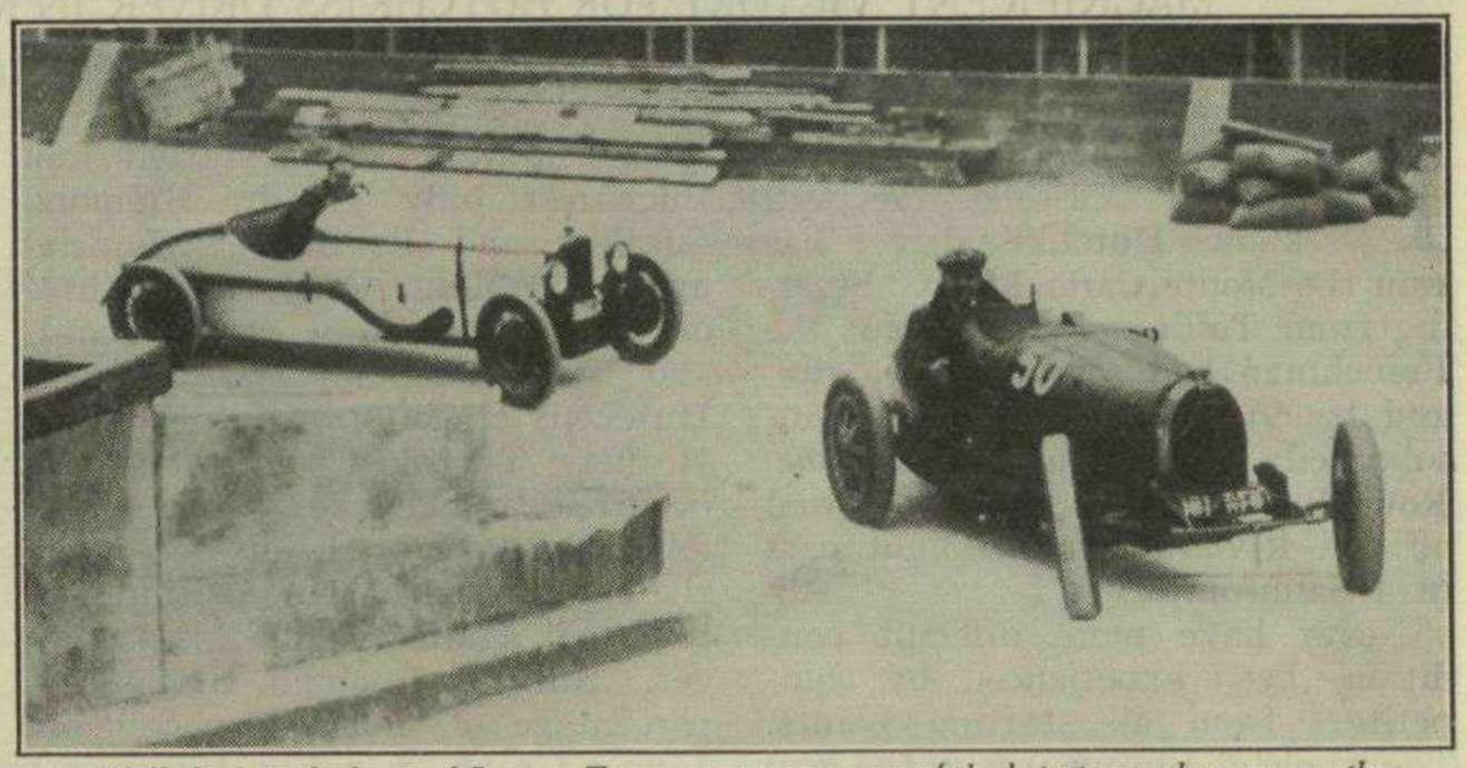
"VIVE LE SPORT!"

ORIGINAL CEREMONY AT THE OPENING OF A NEW GARAGE IN PARIS.

FOR many years it has been the custom in Paris to celebrate the opening of new multi-floor garages with a hill-climb up the ramp connecting the various stories. Last month this ceremony was carried out at a new garage in the Rue de la Tombe-Issoire, Paris, the "hill" being about 300 yards long and finishing on the fifth floor.

Many well known racing motorists took part, Robert Benoist, Philippe Etancelin, Druck, Pierre Felix, Senechal, Monneret, Vallon, etc.

The garage is being managed by Armand Girod, who has raced Donnet cars for some time, and partnered Felix last year in the French G.P. at Rheims. Incidentally, Girod has bought up the racing stock of the Salmson concern, and hopes to do great things next season with two specially built cars of his own construction.



A hill-climb in the heart of Paris. Two competitors on one of the hairpins as they race up the ramps of a new garage.

A Proposed New Club.

We have received the following suggestion of the formation of a new club from Mr. W. Boddy, of 13, Hillier Road, London, S.W.11, who invites any other enthusiasts to whom the idea appeals to get in touch with him so tnat some definite move can be made.

"MAY I take up some of your valuable space to suggest that a club might be formed to cater for all real enthusiasts. As no definite rule can be drawn up to define a "real enthusiast" it is necessary to attempt, by limiting membership to certain classes of owners, to attract only those people to whom this description applies. Therefore it is suggested that membership should be limited to owners of :—

(a) Racing cars built more than five years ago.

(b) Sports cars that are no longer in production, and

(c) Certain types of home-built cars.

Such a club could organize, at suitable places, meetings at which members could examine each other's cars. Speed races and speed hill-climbs open to other clubs could be arranged, while club lap records for Brooklands, to be attempted on non race days with club officials in attendance, would provide a novel feature. It might be possible to arrange town-town records, providing the safety-first factor was rigidly enforced. Incidentally all members would be expected to observe a high standard of ordinary driving and to keep their cars clean in appearance and quiet in operation. A library of instruction books and technical works should be easily acquired, and, eventually, it might be possible to obtain a workshop for club use. Lectures on technical subjects would provide another sphere of activity. The social and trials side of the club would proceed on conventional lines. If anyone would care to attempt to organise such a club the writer will do everything in his power to assist, and already there are several prospective members."

A Wonderful Racing Stable.

The lack of official Alfa Romeo participation in the big races of 1933 will be considerably atoned for by the news that the Ferrari stable, of Modena, has outlined an ambitious programme for the coming season. First, as to drivers. All are Italians, with the exception of Stuck von Villiez, the Shelsley record holder, who, however, will only race occasionally. The others are Nuvolari, Borzacchini, Brivio, Carraroli, Comotti, d'Ippolito, Siena, Tadino, Taruffi, and Trossi.

The list of cars is just as impressive, There are 18 in all, made up of 6 racing 2.3 litre Alfa Romeos, and 5 sports editions of the same type, 2 racing 1,750 c.c. Alfa Romeos, 3 M.G. Magnettes (one of which will probably be unblown) and finally 2 single seater 3 litre Maseratis.

Needless to say, the Maseratis will be entrusted to Nuvolari and Borzacchini, except when the former is piloting the new Fiat sports model in the Targa Florio, the Monaco G.P. and the Coppa Ciano.

The first event in which the stable will be represented is the Grand Prix of Tunis, when Nuvolari and Siena will be sent to the line.

Altogether, the Ferrari stable seems likely to provide very stern opposition to the official teams racing throughout the season.

A Free Offer.

Nothing tends to produce excessive wear in the engine and chassis of a car so rapidly as lack of lubrication, or alternatively the inferior quality of the oil and grease used.

Many greasing points on cars are often so obscurely placed as to be easily forgotten, with attendant bad results, and the surest way of avoiding this is to refer to a lubrication chart of the chassis of one's car. In order to avoid soiling the chart in an instruction-book with greasy fingers, the Filtrate oil people have hit upon the excellent scheme of producing chassis lubrication charts for individual cars, of a size sufficient to be pinned on the wall. The charts, which are finished with a varnished, damp-proof surface, are available for the following cars: Armstrong Siddeley 12 h.p., 15 h.p. and 20 h.p., Morris Minor, Morris Ten, Morris Cowley, Morris Major, Ford Model A.B. and A.B.F., Ford V.8, Austin Seven, Austin Ten-Four, Austin Twelve-Six, Austin light Twelve-Four, Wolseley Hornet, Wolseley Hornet Special, and Wolseley Sixteen.

Owners of any of the above cars, on mentioning MOTOR SPORT, will be able to obtain copies of these useful charts, post free, from the Filtrate people, whose address is Messrs. Ed. Joy & Sons, Ltd., Filtrate Works, Leeds.

THE INVICTA GOES NORTH (*continued from page 152*).

himself. Narischkine (Fiat) stopped to give him oil, as his sump plug was damaged. He was able to get out and reached Riga. Mrs. Vaughan (Standard) had the misfortune to overturn a few miles from the start, luckily without serious injury to the rest of the crew—particularly bad luck after her determined efforts to get to the Start. Other arrivals are Hobbs (Riley) and Huntley Walker (Riley), but the latter was bothered with his silencer touching the ground. The Peugeot of Lavalette was remarkably good, being able to keep up 50 m.p.h. over the ruts—owing to independent wheel-springing.

Tomorrow we leave for Lithuania—and snow is reported!

VASSELLE DOES IT AGAIN!

MAGNIFICENT VICTORY FOR HOTCHKISS DRIVER IN MONTE CARLO RALLY.

RIGOROUS CONDITIONS FROM ALL STARTING CONTROLS.

FOR the second year in succession M. Vasselle, the well known Hotchkiss driver, has won the Monte Carlo Rally. Starting from Tallinn, in Esthonia, the Frenchman had a trouble-free run, and his victory for France is consolidated by the fact that Mme. Rouault and M. Quinlin carried off the Riviera Cup for light cars in a Salmson.

Never have more difficult conditions been experienced by competitors from all starting points. The whole of Europe was in the grip of Arctic weather, there being heavy snow on all routes, while an icy road-surface was the general rule. The first ten cars all came from Tallinn, the road from Athens being impassable and only two cars, Rupert Riley's Riley and Trevoux's Hotchkiss surviving the *étape* to Belgrade. Still more unfortunate were those starting from Bucharest, who found the first stage to Jassy completely blocked with 18 ft. of snow, and had to change their starting points to Jassy, Lwow and Warsaw.

The chief difficulties against the Tallinn group were snow, ice and extreme cold, sometimes amounting to 35 degrees of frost. A. C. Lace and his crew in an open Invicta with small aero windscreens had to retire from frost-bite. Miss Riddell was last heard of with petrol-feed troubles on her Speed Twenty Alvis, while Huntley-Walker (Riley), Lace, J. Hobbs (Riley), and D. M. Healey (Invicta) were late at the Warsaw control. Healey came across Belgrave's Magna in the ditch and towed it out, the trouble being caused by a failure of lights owing to a battery lead coming adrift. Just before Warsaw, Healey was passing a sleigh, which pulled out and blocked the road. Healey took to the loose snow at the side of the road and skidded into a tree, damaging the Invicta's radiator beyond repair. Mrs. Vaughan crashed soon after the start, and was reported to have broken her arm. Another lady, Mlle. L. Jaffe overturned her Wanderer without serious injury.

From Athens no competitors got through to the finish at all, while of those who were to have started from Bucharest only F. du Bremond (Mathis) and R. Stoclet (Lancia) arrived at Monte Carlo. Only three of the Umea group dropped out, and six from Stavanger, F. S. Hutchens crashing on his Wolseley Hornet. The most serious accident occurred to Schenke, whose Buick fell into a lake. Schenke got out of the car through a window, but had to dive in again to rescue his passenger. Naturally enough, the highest percentage of finishers came from John o'Groats, which is the easiest starting control. Bainbridge had a smash with his Rolls-Royce on the way up, but got to Monte Carlo eventually, and H. S. Linfield (Essex Terraplane) was late at several controls. What might have been a catastrophe occurred in France when the Riley Gamecock driven by Mrs. Montague - Johnstone overturned through skidding on an ice-bound road. By a miracle neither of the occupants was injured, and with remarkable courage proceeded to right their vehicle, and set off once more minus hood and windscreen. Despite great cold and discomfort, they succeeded in reaching Monte Carlo, which shows what stuff the true Rally driver is made of!

The results are not encouraging from the British point of view, for of the first ten in the final list of awards there is not a single British production-car—for the Gardiner-Bentley is only an experimental model. France's victory is a complete one, for of the remaining nine cars, eight are French and one Italian. Vasselle and the Hotchkiss Company are to be congratulated on their success. To win two years running is no accident, and can only be the result of careful preparations and driving. The Renault's second place was well deserved, while the Salmson concern have re-entered the competition field in great style by winning the small car class and being placed third in the general classification. Mme. Schell's Talbot was a meticulously prepared car with a home-made fabric body weighing only 2 cwt. The Gardiner-Bentley, driven with his usual skill by Lord de Clifford, has scored a great triumph for the C.I. type by finishing fifth, and its prestige should be greatly enhanced.

An outstandingly good show was put up by the little Fiat "Balila" driven by Prince Narischkine, which is a really cheap production and has shown its worth in no unconvincing manner. In negotiating the miles of 10 inch ruts between Tallinn and Riga light cars are at a distinct disadvantage when compared with the big fellows like Guyot's Renault and Vasselle's Hotchkiss, and the performance of small machines like the Salmson, Amilcar, Fiat and Peugeot is therefore all the more creditable.

RESULTS.

1. M. Vasselle (Hotchkiss 3,485 c.c.).
2. R. Guyot (Renault 4,232 c.c.).
3. Mme. Rouault-M. Quinlin (Salmson 1,495 c.c.).
4. Mme. L. Schell-L. Schell (Darracq 2,505 c.c.).
5. Lord de Clifford (Gardiner-Diesel-Bentley 5,570 c.c.).
6. R. Bravard (Amilcar 1,243 c.c.).
7. L. Braillard (Bugatti 3,257 c.c.).
8. Prince Narischkine (Fiat 995 c.c.).
9. H. Battu (Citroen 2,644 c.c.).
10. G. de Lavalette (Peugeot 1,465 c.c.).

All the above started from Tallinn.

The following also finished:—

From Tallinn.—Baron de Montpellier (Chrysler), F. Pousse (Amilcar), Mme. M. Mareuse (Peugeot), H. Schreiber (Tatra), M. Lacroze (M.G.).

From Bucharest (after re-start from Lwow.—F. du Bremond (Mathis), R. Stoclet (Lancia).

From Umea.—C. de Cortanze (Peugeot), G. F. Dennison (Riley), Mrs. R. Gough (Riley), Mlle. Stackelberg (Hupmobile), Norman Black (Essex Terraplane), Comte van Heiden (Panhard).

From Stavanger.—G. Larue (Peugeot), J. W. Whalley (Ford), K. Bryde, jun. (Studebaker), M. Bergan (Austin).

From Athens.—None.

From John o' Groats.—H. T. van Marken (Chrysler), Mrs. Montague Johnstone (Riley), P. E. Cremetti (Riley), Lt.-Cmdr. G. Maltby (Riley), P. Runciman (Alvis), F. Longman (Andre V.6), D. C. Love (Lagonda), J. S. Couldrey (Essex Terraplane), Mrs. L. Martin (Hillman), W. T. Townend (Talbot), H. C. Hobson (Austin), L. Martin (Humber), V. A. P. Bridge (Standard), W. T. Platt (M.G.), R. H. W. Jaques (Rolls-Royce), Col. A. H. Loughborough (Lanchester), J. B. Bainbridge (Rolls-Royce), T. C. Mann (Lagonda), J. V. Crisp (Alvis), F. M. Lightfoot (Morris), F. S. Barnes (Singer), G. W. J. H. Wright (M.G.), H. J. Aldington (Frazer Nash), Miss S. P. Richardson (Ford), G. E. Stott (Daimler).



HISTORY REPEATS ITSELF

THE LIGHT AEROPLANE MOVEMENT OF 1924 IS INITIATED ONCE AGAIN BY THE LOWE-WYLDE "PLANETTE"

WHEN aircraft designers turned their attention to popular civil flying after the War, they produced a number of small machines with low-powered motor-cycle engines. On the grounds that these light aircraft were not capable of dealing with heavy weather, they were abandoned in favour of larger types, which gradually increased in size until the so-called "light" aeroplane became as powerful as most pre-war fully fledged machines.

For some years MOTOR SPORT has advocated a return to the really light aeroplane, not for utility purposes in all weathers, but as a pleasurable amusement, and we have been of the opinion that such a machine would eventually come to oust the glider—with its attendant time and trouble for a very short flight—from popularity.

Now the cycle has been completed by the introduction of the 6-h.p. ultra-light aeroplane by Mr. C. H. Lowe-Wylde, who is well known as England's pioneer glider manufacturer. In order to demonstrate the extraordinary qualities of this interesting design, National Flying Services Ltd. recently arranged a Pylon-Race meeting at the London Air Park, Feltham.

Let us say at once that we were delighted with the capabilities of the new 6-h.p. aeroplanes, and we prophesy a big future for pylon-racing with them. On the more practical side, no finer way could be found of getting prospective pilots used to being in control of a machine in the air, and a course of instruction on a Planette would be much cheaper and just as effective as the normal methods in use to-day.

The meeting opened with a four-lap race between C. J. Longmore, W. A. Andrews, Capt. E. D. Ayre and C. H. Lowe-Wylde, which was won by the latter. In the next event, however, Longmore turned the tables on Lowe-Wylde, who was second. There seemed to be little difference in the speed of the four machines, a lead being gained entirely on cornering skill. Then Capt. Ayre went up alone, and gave us a very pretty exhibition of crazy flying, with his wing-tips only a few feet from the ground.

Then came some match races between people well known in flying and motoring circles. In the first heat Kaye Don was pitted against Flt.-Lt. Stainforth, and by dint of steep cornering close in to the pylons beat the Schneider Trophy pilot by a good margin. Then Mrs. Victor Bruce and Mr. C. W. A. Scott were sent away, but the lady pilot cut a corner a bit too fine and flew over a pylon, instead of round it, and so was disqualified. The third heat was between Wing Commander Probyn and Flying Officer Leech, the latter winning through Wing Commander Probyn being disqualified. In the final Scott beat Don.

Two other interesting items were races between a Planette, piloted by Mr. Andrews, and a horse, ridden by the Master of Sempill. The machine had to fly as slowly as possible, with the result that the horse had an easy win. Then Stainforth had a real race with the Master of Sempill, giving him half a lap start, and beating the horse amid great excitement by 2/5ths sec.

Finally, in order to demonstrate the general good behaviour of the little craft, a Follow-my-Leader show was given.

On the next day Mr. Lowe-Wylde carried out an altitude test. After passing through two cloud layers he reached a height of 4,300 feet, when his petrol supply became exhausted. This is no reflection of the machine's inability to climb still higher, for only one gallon is carried, and when the engine stopped the official barograph was recording a rate of climb

HISTORY REPEATS ITSELF—continued.

of 120 feet per minute. The machine was carrying a load of 45 lbs. per horse power.

An interesting advantage of the Planette over normal aircraft is the extraordinary gliding range. This is accounted for by the fact that the Planette is in fact a Lowe-Wylde glider, with a 6-h.p. Douglas engine super-imposed. From a height of 4,000 feet it is estimated that a pilot has an area of nine square miles in which to choose his landing ground, a fact which should largely counteract the handicap of having only a 2-cylinder motor—even if it is of the undoubted reliability for which Douglas products are renowned.

So far no statement has been issued by the Air Ministry in regard to recognising the Planette as an approved type, but the Director of Civil Aviation was an interested spectator at the demonstration at Feltham, and the official attitude towards the machine will be eagerly awaited by all interested in the development of popular aviation.

A LOSS TO BRITAIN

IT was with a feeling of irretrievable loss that we heard the news of Winifred Spooner's death last month, from a heart attack while suffering from influenza. At the early age of 32 she held a unique position in aviation circles, both in England and on the Continent. An indefatigable entrant in races and competitions, Winifred Spooner never carried off the honour of first prize, but, nevertheless, her skill was second to none—indeed, it is doubtful whether any man was her superior.

Publicity was the last thing she ever craved, and it is therefore not surprising that many of the public have never heard of some of her most amazing feats. One is worth recalling. In returning from having witnessed the 1927 Schneider Trophy Race at Venice, her engine stopped near Genoa, and she brought the machine safely to land, entirely undamaged, in a suburban street.

Winifred Spooner was an extremely brave woman. In 1931, while flying a Desoutter monoplane to South Africa in company with Mr. E. C. T. Edwards, they fell in the sea, and Miss Spooner swam a mile to the shore for help.

She was one of the few women to possess a "B" licence, and before being appointed to the sole charge of Mr. Lindsay Everard's private aerodrome at Ratcliffe, she was a much-sought-after taxi pilot. The possessor of a cheerful disposition and considerable charm, Winifred Spooner turned casual acquaintances into firm friendships wherever she went, which makes her deeply regretted death more keenly felt all over Europe.

No woman ever gave more valuable service to her country in Aviation, and in appreciation of this service we cannot do better than to quote the "Times" memoir notice: "She was, in fact, the best example of the enthusiast who is determined to make flying of practical use. She had no sense of mission in this, but her success as a professional pilot is probably one of the soundest pieces of aviation propaganda which any woman has done."

BROOKLANDS ACTIVITIES

THE aerodrome has been afflicted with fog and cold weather, but in spite of this, work has proceeded steadily whenever possible.

Improvements to the Aerodrome.

The new snack bar is proving very popular, and is more or less besieged during the "rush-hours" when food is a popular item. It is a great convenience to those who do not wish to spare the time for a full meal, for a snack is always obtainable here at a low price.

The Brooklands Magazine.

Several important changes are announced with regard to the Brooklands Aerodrome Magazine. This has now been adopted by the Brooklands Automobile Racing Club as its official organ. The magazine is thus now the official organ of the Brooklands Automobile Racing Club, the Brooklands Aero Club, the Brooklands School of Flying, the College of Aeronautical Engineering, and the Cinque Ports Flying Club.

Five Guineas for a Design.

The present cover features the aerodrome only, and obviously is not suited to a paper which includes both the flying and motoring sides, and a prize of £5 5s. is being offered, for a new design, suitable for the magazine in its altered form. Full details were published in the January number, but the results are not yet available.

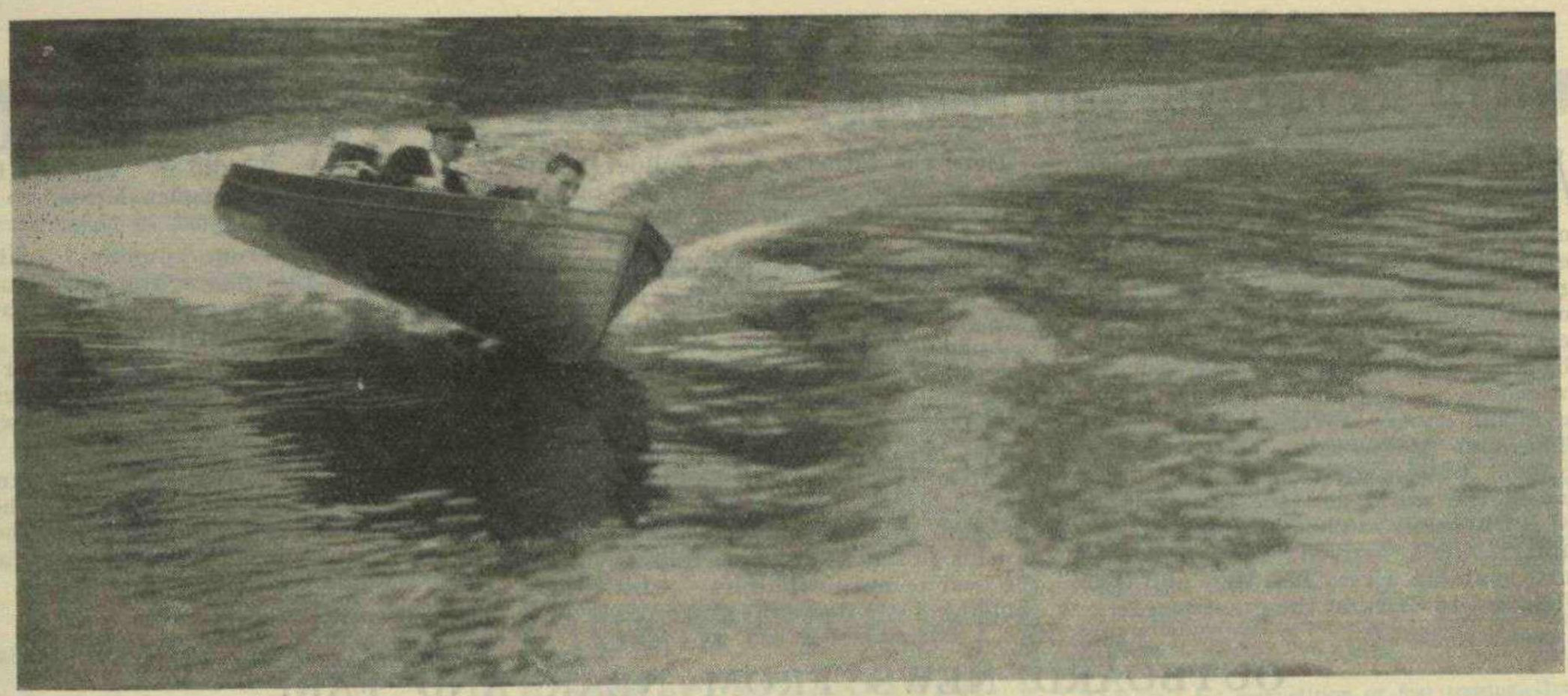
Arrangements for 1933.

Details of the 1933 programme are still not quite completed, but they will soon be ready for publication. The new plans will be made public as soon as they are completed.

An effort will be made to bring efficient flying instruction within the reach of the man in the street. Whatever happens, there will of course be not the slightest lowering of the present Brooklands standard, and indeed new ideas are in preparation which mean that in many ways the present service is to be increased and improved.

Rationalised Flying.

A system of "rationalisation" is being developed. This is a word which has been much abused, and applied to all sorts of re-organisations, but at the Brooklands Aerodrome it just means running things in the best possible way from the economic point of view. This they are of course all out to do, and any benefit that they can derive from their efforts in that direction will be passed on to their members and pupils. That is all there is to it.



A WORD TO OUR MOTORING READERS.

By THE MOTOR BOATING CORRESPONDENT.

AS you stand in the queue at the County Hall with several pounds of good English money in your hand, and your log book between your teeth, don't you sometimes think : "Oh ! to live in the old days when normal people could afford to have a reasonably sized car." And, as you fumble for your insurance certificate, don't you feel it would be wonderful to be free of all these taxes and restrictions.

Well, as a speedboat owner, you are ! You have no tax to pay, no driving licence, and no compulsory insurance.

Now let us go into the cost of being a speedboat owner.

A two seater speed dinghy with a 10 or 14 h.p. motor now costs about £45. This craft would have a speed of about 22 m.p.h. and is sufficiently seaworthy to travel anywhere round the coast in reasonable weather. The cost of the craft rises slightly as the maximum speed is increased. Thus a 40 m.p.h. speed dinghy would cost about £55.

Now imagine that you are a proud master of craft. You must find a place to house it. Here you will have an agreeable surprise. Storage for a speed dinghy never costs more than half a crown a week and is sometimes as low as one and sixpence. That, apart from petrol and oil, is all the expense you have to face.

The use of one of these craft is unlimited. You can travel from Richmond to Westminster Bridge in about half an hour. You can visit say, Southend and come back the same day.

A week end trip can be made to Rochester or Dover or any other port within reasonable distance, and you can carry a fair amount of luggage, too.

There is also another aspect of speed dinghy ownership. There is a lot of pioneering work to do. A great many records are open to be broken with comparative ease. Here are some of them :— London to Brussels (present record, 3 days). London to Amsterdam (present record, about 2 weeks). London to Antwerp (present record, 2½ days). London to Paris (present record, a month). No one has yet piloted his own boat into Germany. (The total cost of an adventure of this sort would be about £30.)

The present record for the double crossing of the channel is held by a woman at an average speed of about 26 m.p.h.

The list of adventures that can be undertaken by a speed dinghy is a long one, and cannot be published here.

It is to be hoped, however, that all those people who have energy and determination to spare, will think seriously about the speed dinghy, for the British motorboat community has no reason, at the moment, to be proud of itself.

We need more motor boatists and we need them badly. We need better motorboatists. People who can control a boat with a certain amount of precision and common sense ; and above all, we need younger motor-boatists.

The season is fast approaching ; so give this motor-boating idea a thought. If you would like some advice or criticism on a prospective purchase, or if you cannot find a suitable craft, write to the Motor-boating Editor at this office. Helping people like you is part of his job.



The Motor Boating Editor of "Motor Sport" "taking off" from Westminster for Brussells. This craft as you see it, costs £45, and will go "anywhere."

AN OUTBOARD RACING FILM.

THE "SPEED DEMON" SHOULD NOT BE MISSED.

WITH an air of resignation, we bade "good afternoon" to the manager and paid for our seats. The film had just started. For some moments the struggling boat builder had been talking to the rather "green" hero when round the corner danced the boat builder's pretty daughter. I pleaded with my two colleagues. "What if they *had* seen the plot before?" "Hadn't we come to see the racing shots? Well, then!"

The film progressed. The hero told the boat builder that he was the best pilot in the world and the boat builder said "Oh yeah." Then the day of preliminary trials arrived. The hero, of course, puts up a very fast time and is to be allowed to drive in the great race.

Here the fatherly boat builder hands him an Elto propellor for use on his "Johnson 16" and the scene draws merrily to a close.

During the lunch interval, however, the hero is trapped into drinking an almost invisible cocktail and becomes completely "blotto" As you may have guessed, he turns over in the race and the boat builder and his daughter are annoyed.

The hero is then transformed into a tramp and rescues a little boy from drowning. Adoption of the boy. At bed time the hero decides that the boy ought to say his prayers, and here follows one of the best scenes in the film. "Isn't there something you do before you go to bed?" asks the hero. "I did it," says the boy innocently. My colleagues decided to see the film through, "just in case."

After some "rum running" and a brush with the police the hero turns up late for the big race and takes over from the boat builder's daughter.

Instantly the rather sulky motor is transformed into one of the most amazing "Johnson 16's" ever seen, and he wins the race.

Although the usual rather hackney story is employed, this film should help to make the general public "speedboat minded" for the racing shots are really fine.

Well worth a visit!

OUTBOARD NEWS FROM NEAR AND FAR.

THERE are several new motors in the course of production at the moment.

In our own country we are shortly to have a new Utility lightweight selling at £22 10s. The lowest priced outboard motor of conventional type. This is the "T.S.D. pup," a single cylinder motor of ingenious design with a variable length drive shaft and all the refinements of the larger motors, including variable ignition and a single lever carburettor.

We have made a short test of this motor, and it is no exaggeration to say that it actually does all those things that similar sized twins are supposed to do. Starting is absurdly easy and there is ample power to propel quite large vessels at a good turn of speed.

Slow running is excellent, partly due to the variable ignition and partly to the ingenious rotary valve. With the motor ticking over the boat is practically at a standstill. The "T.S.D. pup" will be ready for delivery by the end of February and should enjoy the immense popularity that its price and quality merit.

Meanwhile, our old friend, Mr. Sharland, has been busy in Sweden, producing several entirely new outboards. They will be known as the "Trim" motors, and a batch of 500 engines of different types is in course of construction.

The range includes three utility models, one baby, of 4-5 horse power, a medium power twin of 6-8 h.p., weighing 60 lbs., and a 30 h.p. high speed "Runabout" model. Sixteen C. class racing engines are also in the course of construction.

The "Trim" is a new outboard company, but the manufacture of the engines is being carried out by Messrs. Bolinders who are famous for the manufacture of diesal engines.

Another new model is announced by the Penta factory. This is a 350 c.c. monoblock twin of 10 h.p. The cylinders are situated under the petrol tank at the rear similar to the Johnson "12," and the plugs are completely enclosed. The weight of this engine is 90 lbs. and the bore and stroke is 60 mm. by 61.5 mm.

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ALFA-ROMEO

1928 ALFA-ROMEO 1½-litre 6-cylinder 4-door saloon, recently thoroughly overhauled and in faultless condition, taxed, £195. Apply Box 27, c/o MOTOR SPORT.

1928 1½-litre ALFA-ROMEO drop-head coupé by Young of Bromley, nice condition. Apply Box 28, c/o MOTOR SPORT.

80 m.p.h. 1929 ALFA ROMEO 1½-litre 2-seater sports. 6 cylinder engine with twin overhead camshaft. In perfect condition mechanically. Owner going abroad. Will take £450. No dealers.—Box Q 102 MOTOR SPORT.

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READY for competition or fast touring, Grand Prix Bugatti, 1½ litre, 1928, cycle type mudguards, Triplex, Marchal headlights, radiator cowl, spring wheel, revolution counter, thermometer, Bonniksons time speedometer, spare oil tank, cellulose finish blue, cream wheels, engine recently dismantled and overhauled where required, approximate mileage 15,000, excellent tyres, whole car in magnificent condition throughout; carries six months written guarantee; very carefully maintained and nursed. One of the best conditioned Bugattis obtainable, £269. Taylor's, 280, Wheeler Street, Birmingham. Northern 0447.

£45 BUGATTI 11.9 Brescia, smart all-weather body by Young's, gunmetal finish, completely overhauled last summer, battery replated, very good tyres. Box 45, c/o MOTOR SPORT.

BUGATTI, Genuine 1930 1½-litre type 40 Grand Sports 4-seater, carefully used, small mileage, exceptionally fast, first-class condition throughout, £185. Apply Box A511, c/o MOTOR SPORT.

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1926 12/40 Lea-Francis 4-seater. The whole car is in sound condition, and has not been used for twelve months. Only one owner since new. Tyres good. Dark red, coachbuilt body. £10. 'Briarwood," Sweetcroft Lane, Hillingdon, Middlesex.

1928 12-50 h.p. Brooklands Lea-Francis in excellent condition, new tyres, wire wheels (6), vacuum brakes, twin carburetters, leather upholstery, two-colour blue cellulose of extremely pleasing appearance, very fast; £75. Box 41, c/o MOTOR SPORT.

LEA-FRANCIS 1929 series 12-40 h.p. 2-seater sports, excellent condition, mechanically perfect, 50 guineas. Box 49, c/o MOTOR SPORT.

£95. LEA-FRANCIS, 1929, 12-60 hyper-sports saloon, supercharged, ultra low build, V front, dome back, inclined radiator, real morocco leather interior and bodywork spotless throughout, R.-W. wire wheels, 2 spares, excellent tyres, most lavish equipment, including fog light, luggage grid, blinds, shock absorbers, etc., specially tuned, 4-speed close ratio gears. Box 40, c/o MOTOR SPORT.

Motor Sport Classified Advertisement Section—*continued.*

USED SPORTS CARS FOR SALE (*continued*).

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£105 M.G. MIDGET, 1930 sports coupé, sun roof, morocco leather interior and bodywork tip-top, cycle guards, wire wheels, excellent tyres, chromium fittings, safety glass, many extras, small mileage, tip-top mechanically, particularly fast and attractive. Box 37, c/o MOTOR SPORT.

1932 SERIES Montlhéry Midget. Mileage negligible. Black and red, very fast, open to any trial. Bargain, £185. Part exchange, deferred terms. Tudor Garage, 923, Fulham Road, S.W.6. Putney 7108.

M.G. MAGNA.

M.G. MAGNA 12/70 h.p. 6-cylinder, late 1932 Sliding Roof Foursome Coupé, Black and Cream, mileage guaranteed 4,832 only, absolutely as new and unscratched—guaranteed—inspection and trial at any time. £195 (Terms), Middlesex Motors, Station Road, Harrow.

O.M.

£98 16 h.p. 6-cyl. 2-carburetter O.M. long chassis, sports engine, beautiful 6-seater Victor Broom saloon, new battery, fog lamp, 6 wheels, guaranteed perfect, genuine £1,000 car. Box 36, c/o MOTOR SPORT.

RILEY

1931 (Aug.) 9 h.p. Brooklands Riley, racing green; approximate mileage 14,000; numerous extras including detachable luggage carrier, dipping headlights, cycle type wings turning with wheels, and 4 new Dunlop Fort tyres; whole car in excellent condition throughout. One owner; taxed for year. Accept £250 or offer. Apply Box H.M., c/o MOTOR SPORT.

TALBOT.

1931 (1932 specification) TALBOT 75 type A.M. coachbuilt sportsman's saloon, blue, hide upholstery, sunshine roof, exceptionally fine condition, most carefully maintained by one experienced Talbot owner. Box 136, c/o MOTOR SPORT.

TALBOT 14-45 dark grey tourer, one owner; this car has only done 15,000 miles, has been most carefully looked after, rear tank, leather upholstery, right-hand change, single-type front seat. Box 133, c/o MOTOR SPORT.

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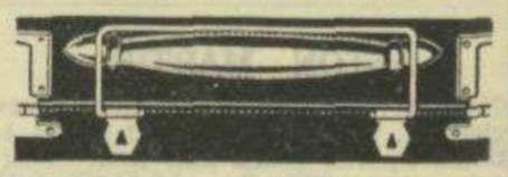
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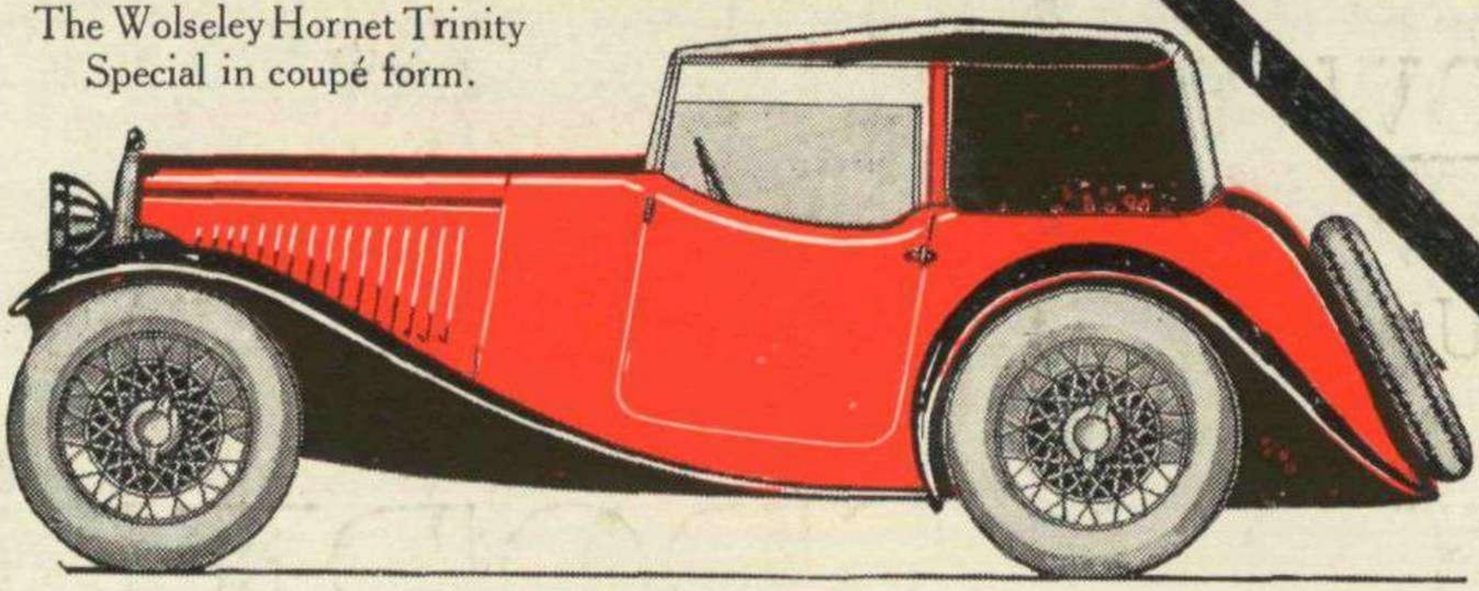
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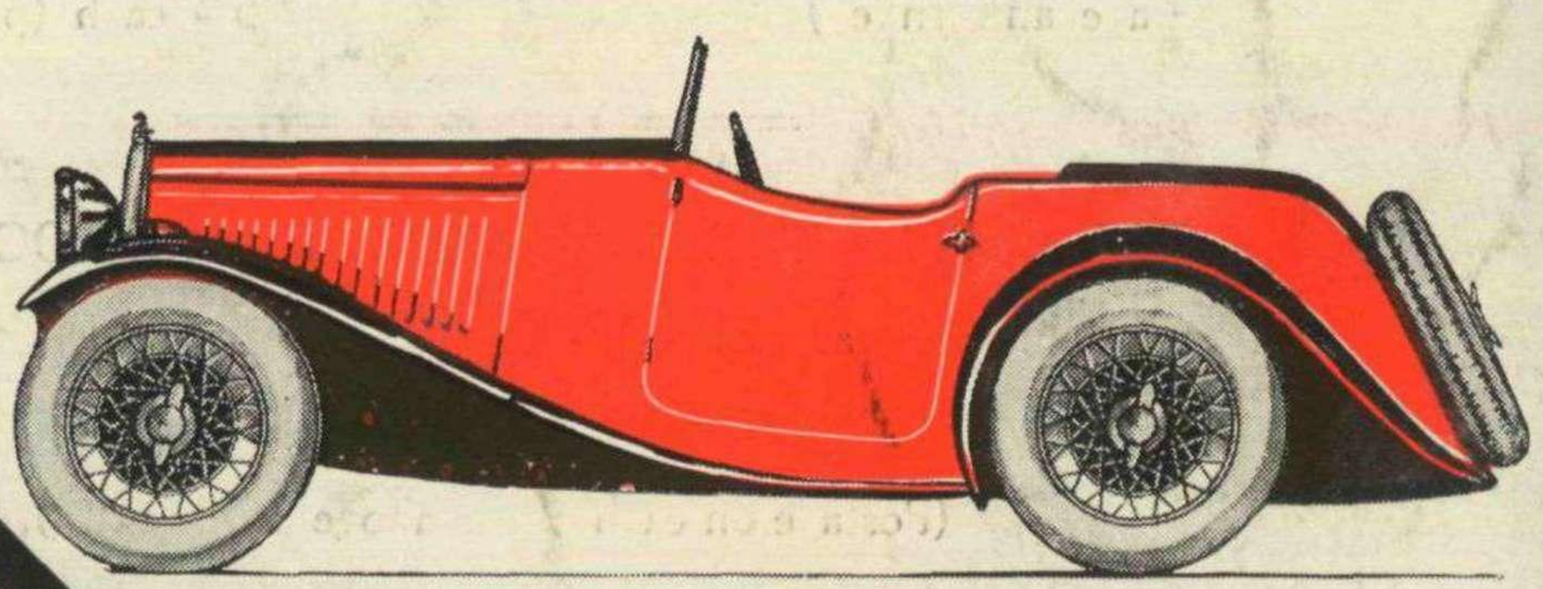
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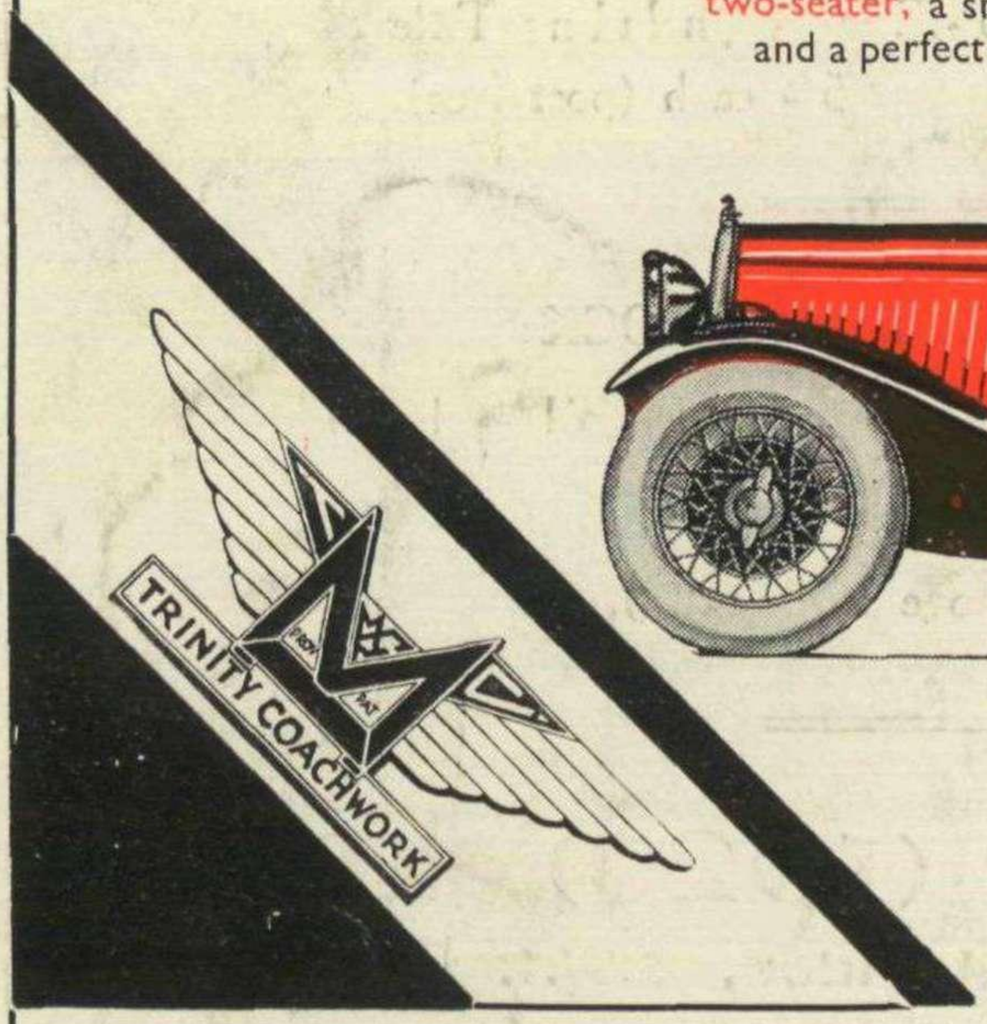


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