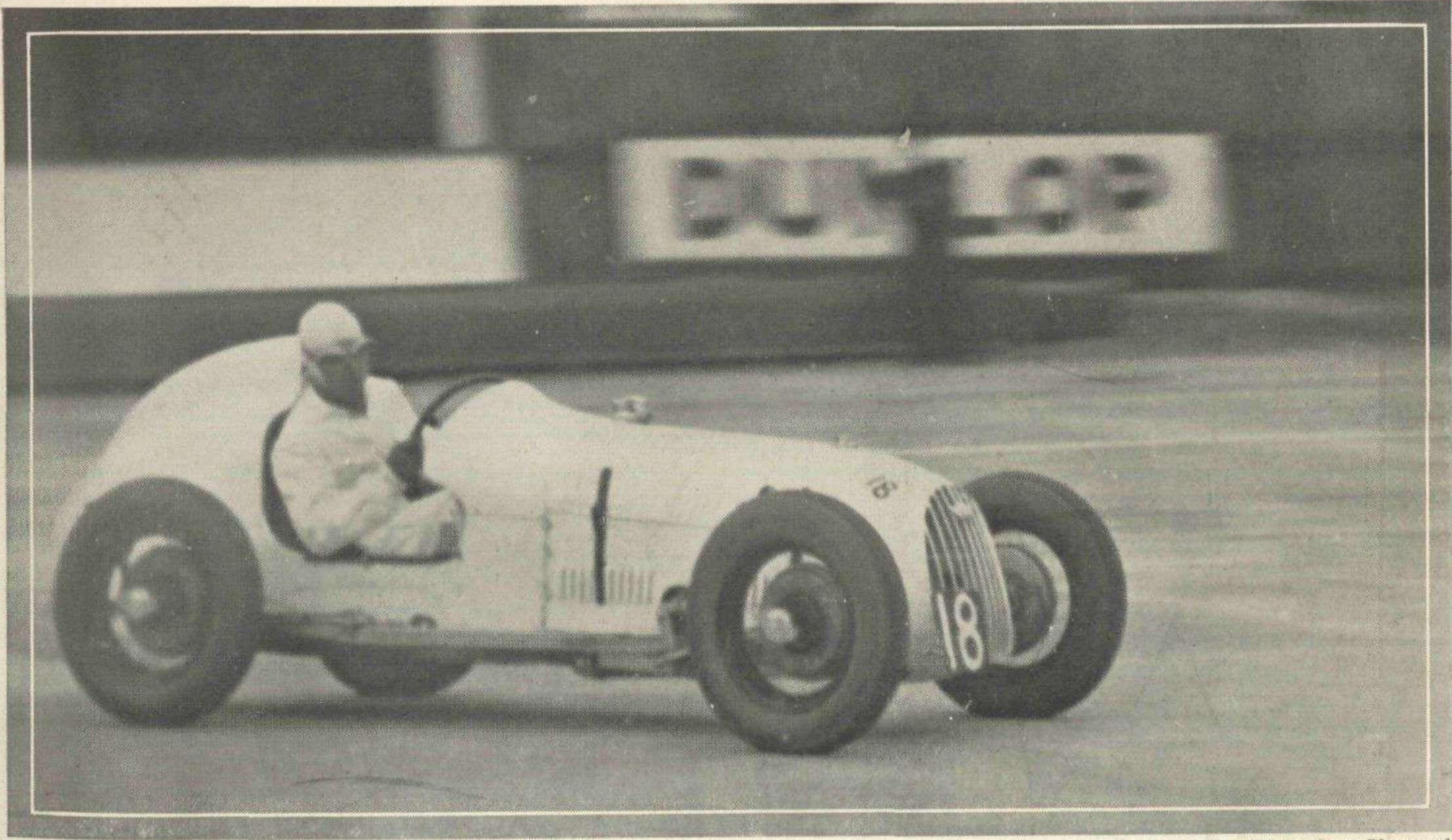


MOTOR SPORT

LAND - AIR - WATER

SIXPENCE MONTHLY



[Motor Sport Photograph.]

Round the Mountain, L. P. Driscoll and the little white single-seater Austin are star performances on the Brooklands "road" circuit.

1,000-MILE ITALIAN RACE

STERN TEST OF MEN & MACHINES. **FERODO** AGAIN BRAKES WINNERS

Road racing is the supreme test of brake efficiency. No other part of the car's equipment has to stand up to more constant wear, relentless use, and terrific strain. See that the same linings which have gained the almost universal testimony of racing drivers are fitted to *your* car. There is a *right type* of Ferodo lining specially made for your brakes.

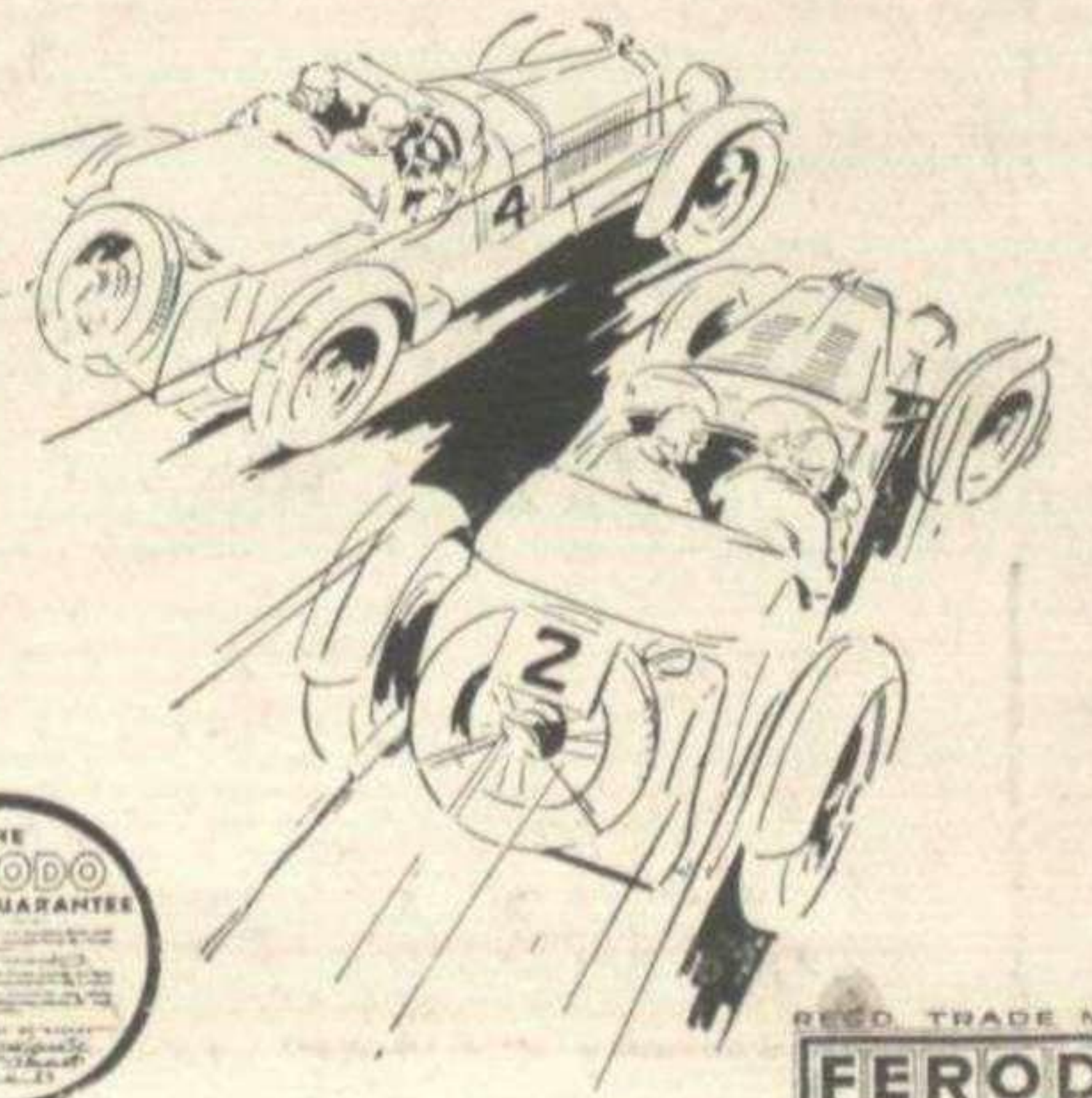
Always specify

FERODO

BRAKE LININGS and get the **GUARANTEE**

FERODO LIMITED, CHAPEL-EN-LE-FRITH

- 1 **Pintacuda & Della Stufa**
(Alfa Romeo)
- 2 **Tadini & Chiari**
(Alfa Romeo)



REGD. TRADE MARK
FERODO
BRAKE LININGS

MOTOR SPORT PHOTOGRAPHS

THE MONACO G.P., 1935.

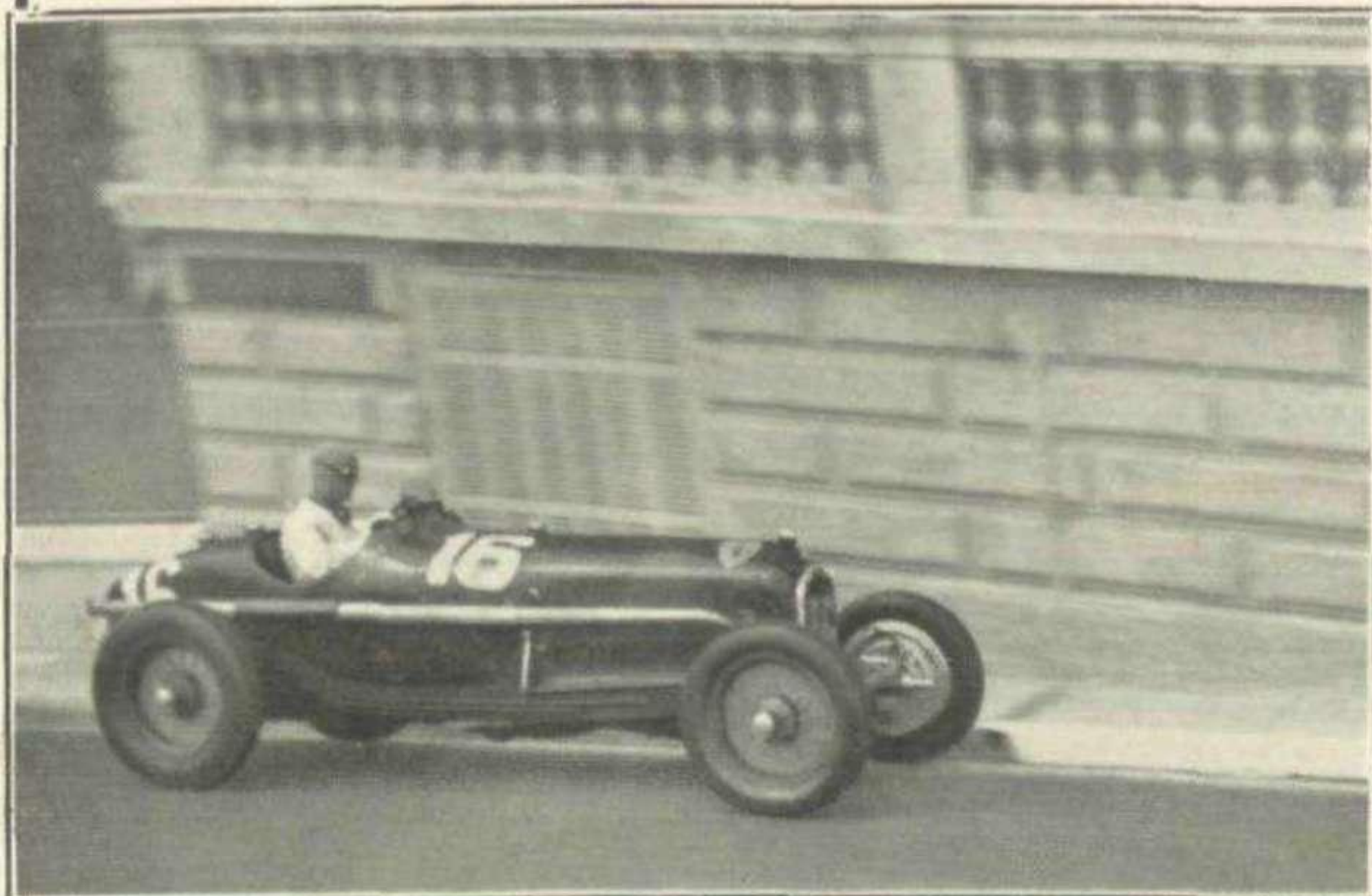


Dreyfus, Etancelin, and Soffietti in close formation, approaching the Gas Works hairpin.

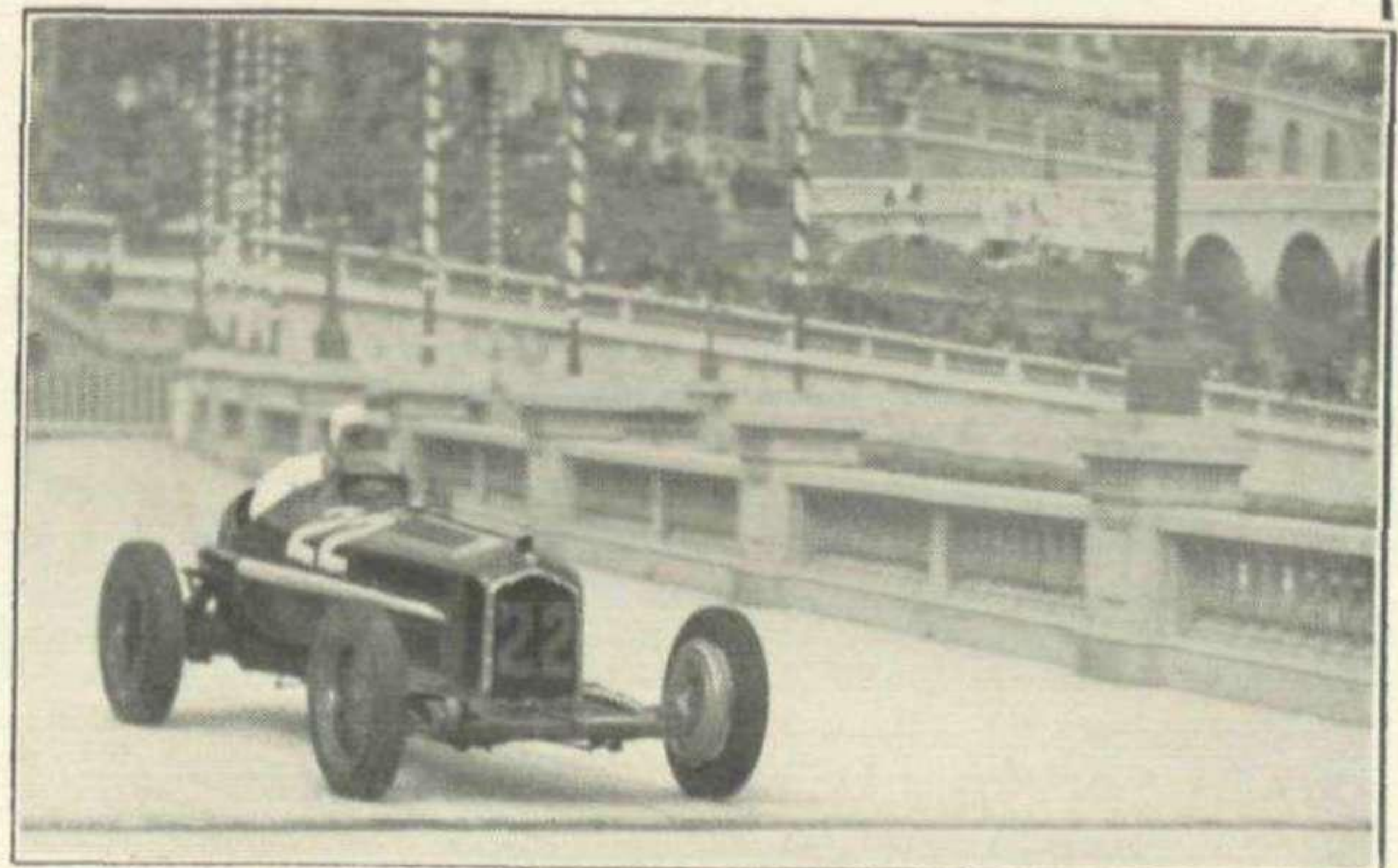
PRICES for "Motor Sport"
Photographs are as follows:—

8" x 6" - - 2/-
10" x 8" - - 3/-
CASH WITH ORDER.

PRINTS are available of
all Photographs Published, also
many others taken at the
various meetings.



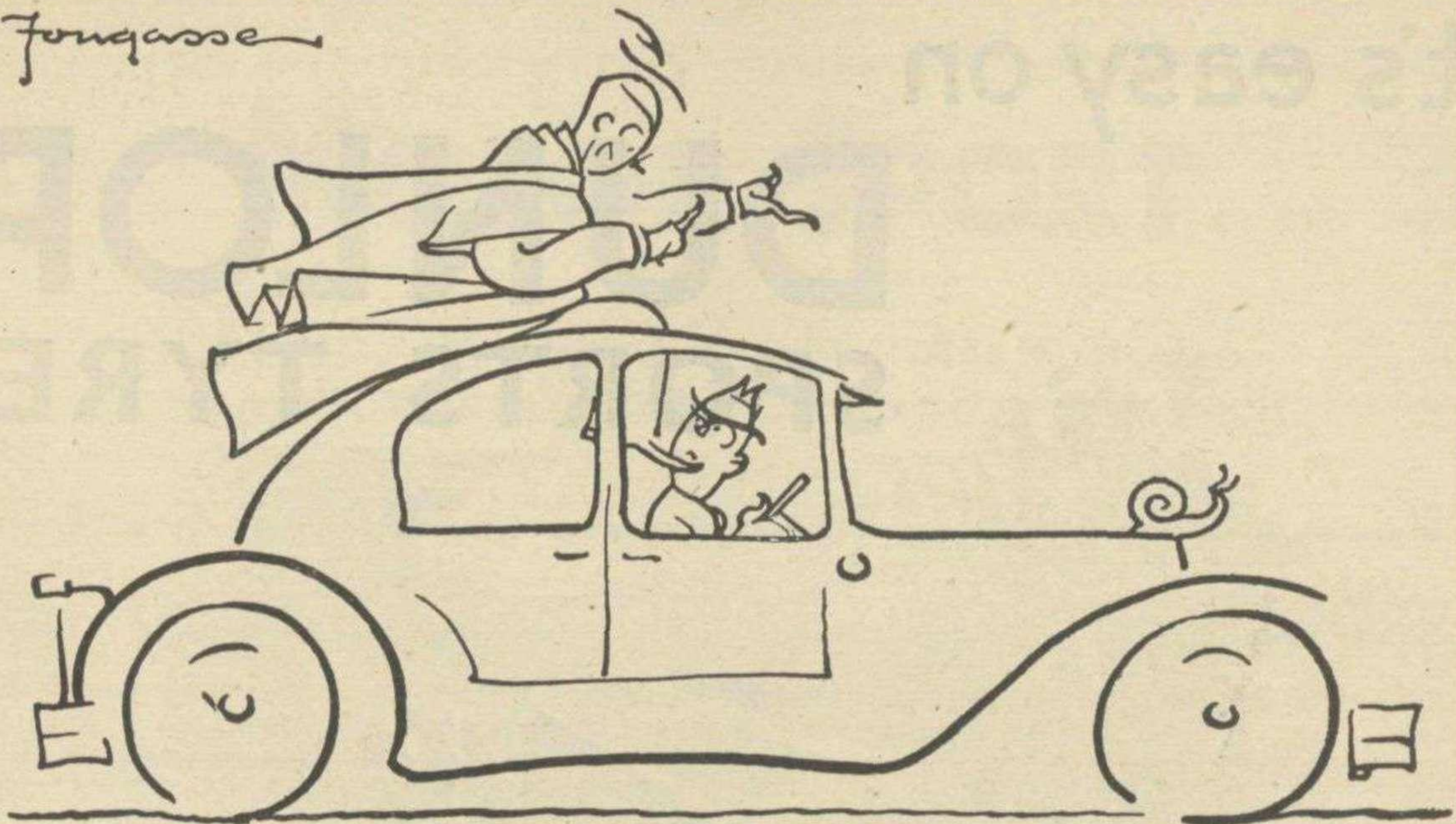
Chiron at speed on his Alfa-Romeo, which had the new front suspension.



New blood for the Ferrari stable. Brivio, who finished third at Monte Carlo, on his Alfa-Romeo.

MOTOR SPORT (1929) LTD., 39, VICTORIA STREET, LONDON, S.W. I.

Fougasse



"Your engine pinks

because the accumulation of carbon on piston and cylinder heads has *decreased* the size of the combustion chamber and so *increased* the compression ratio of 6 to 1 beyond the anti-knock limit of the petrol you are using."

"All right, Prof., but how can I stop it?"

"Use a spirit with alcohol in it. Alcohol is *the* anti-knocking agent, and with Cleveland Discol, the alcohol spirit, your engine won't pink even if you raise the compression ratio to $8\frac{1}{2}$ to 1.

"The overwhelming superiority of Cleveland Discol over any other motor spirit is that it not only absolutely prohibits pinking but that it gives such an extraordinary power output and amazingly quiet and smooth running. Cleveland Discol makes driving a pleasure, even at 30 miles an hour, and it's good for your engine."

CLEVELAND DISCOL

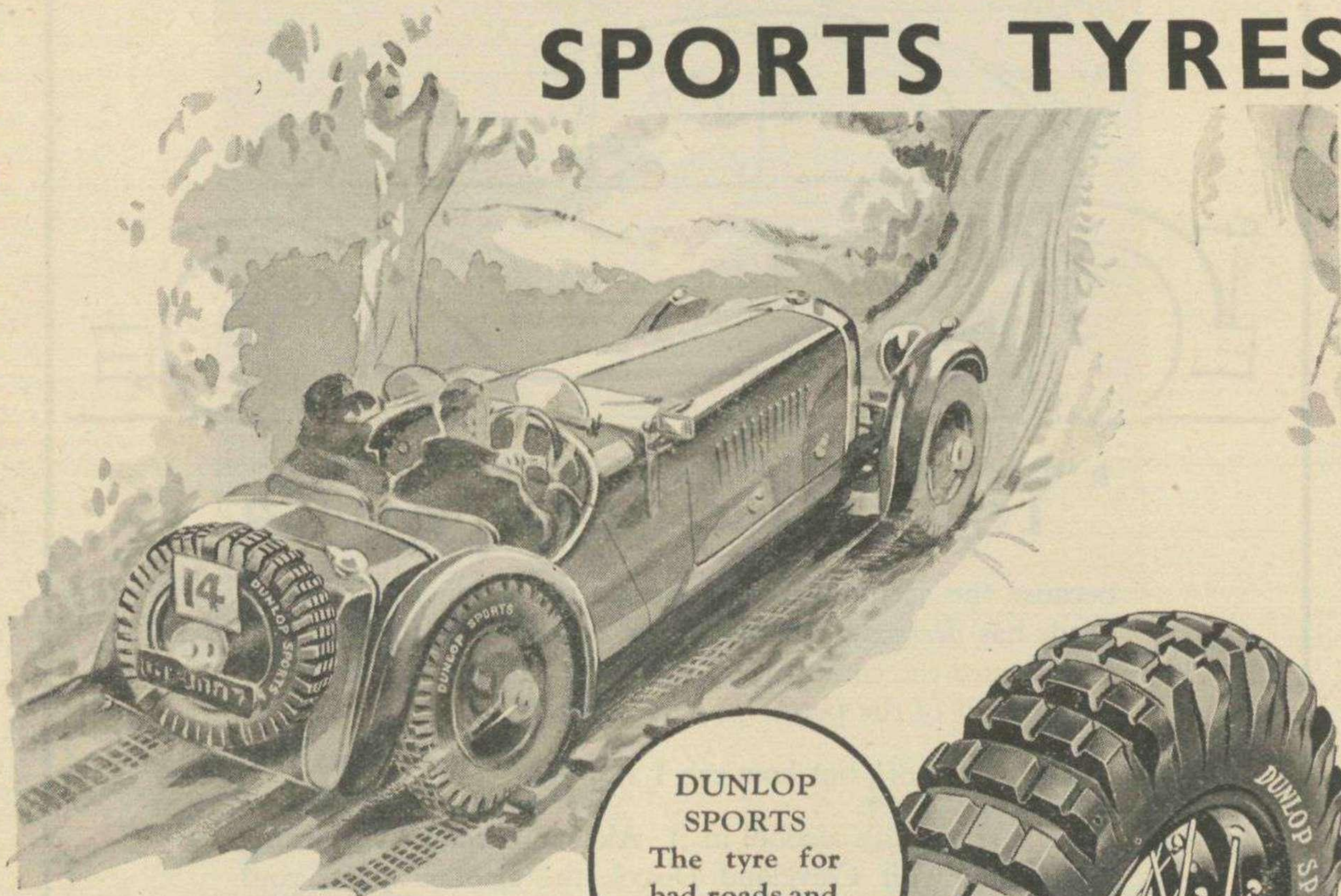
The alcohol spirit

"Cleveland" is the Trade Mark name of Petroleum Storage and Finance Corporation Ltd. and "Discol" is the Trade Mark name of The Distillers Company Ltd.

Please mention MOTOR SPORT when corresponding with advertisers.

It's easy on

DUNLOP SPORTS TYRES



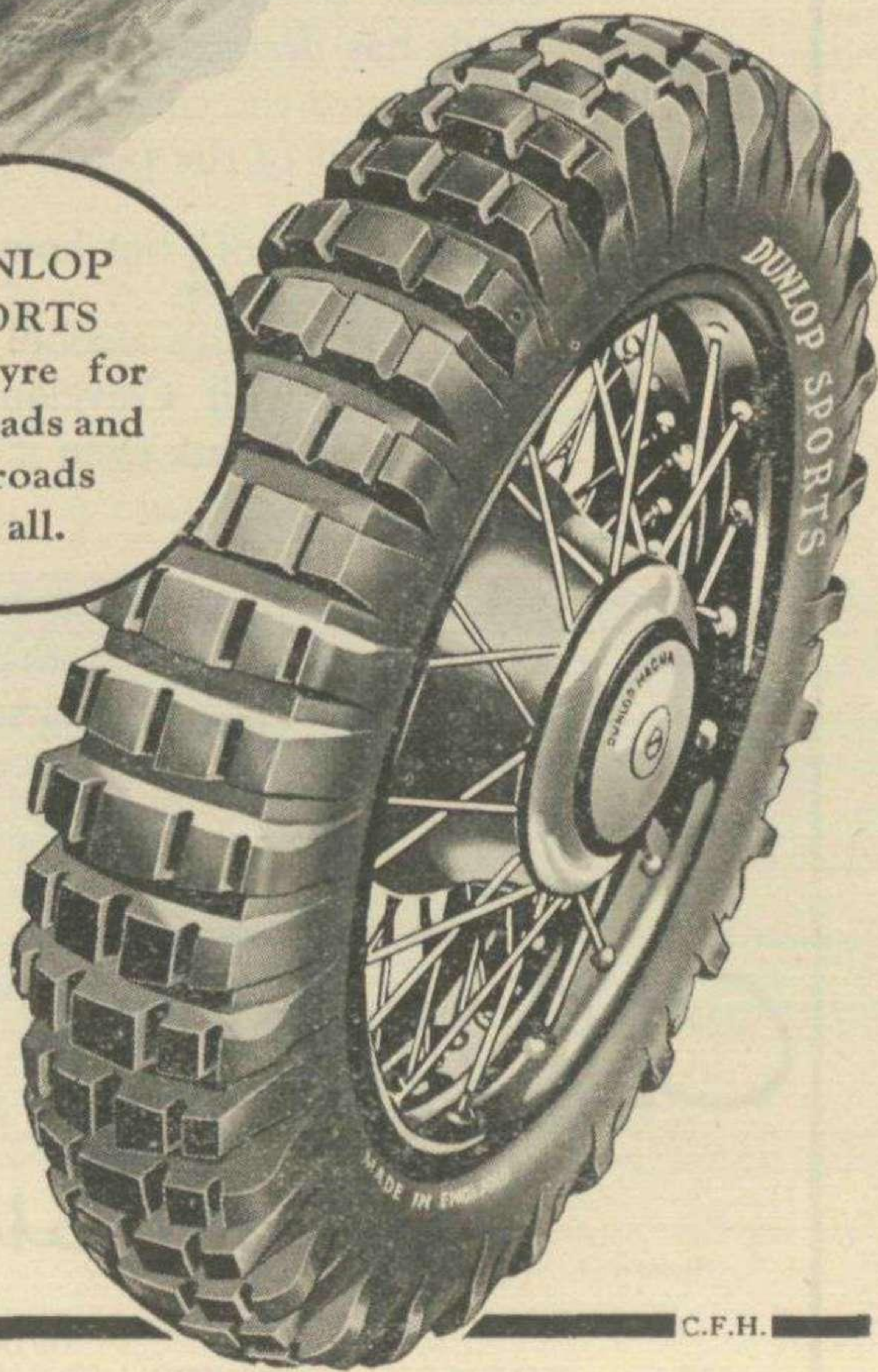
**DUNLOP
SPORTS**
The tyre for
bad roads and
no roads
at all.

Hill climbs and reliability trials will be robbed of most of their difficulties if the driving wheels are fitted with Dunlop Sports Tyres.

The deeply broken tread pattern reduces wheel spin. Mud and soft earth are expelled and clogging is prevented. A "paddle" effect is obtained on loose or porous soil.

DUNLOP RUBBER Co. Ltd.
Fort Dunlop, Birmingham.
Branches throughout the World.

Available in the following sizes :—
4.00—18
4.00—19
4.50—17
4.50—18
4.50—19
4.75—18
4.75—19
5.00—19
5.25—17
5.25—18
5.25—19



SUBSCRIPTION RATE
7/6 PER ANN. POST PAID

MOTOR SPORT

INCORPORATING THE BROOKLANDS GAZETTE

Editorial, Publishing & Advertising Offices
39, VICTORIA STREET, LONDON, S.W.1

Telephone: Victoria 5218.

THE GENTLE ART OF KILLING THE GOOSE

RECENT conversations with various racing-drivers who regularly compete at Brooklands Track have left us no alternative but to call attention, in clear terms, to the serious cleavage between drivers and authorities at Weybridge.

This growing antagonism has been fanned into a state of open hostility by the two latest moves of the authorities, first as regards record-breaking and second as regards handicapping.

Dealing with record-breaking, we refer to the decision that record laps of the Outer and Mountain circuits made during B.A.R.C. races will no longer be recognised. The new position is that if a driver wishes to attack a lap record he must pay the five-guinea fee for the timing apparatus to be brought out for a special run on a deserted track or during a race.

The first objection we have to this procedure is that it is contrary to the accepted practice ruling in the real home of motor-racing, the Continent, where record-laps are only recognised when made during an actual race. Times without number lap-records are broken in practise, but only those made under the normal conditions of racing with other cars on the road are accepted as records.

Our second difference of opinion with the Brooklands' authorities on the wisdom of this decision is more in the nature of an appeal. Racing is a sufficiently expensive game, or profession, as it is. Surely it is worth the while of the authorities to give drivers the satisfaction of breaking records put up under racing conditions, rather than compel them to pay a further sum to have their efforts officially recognised? The public are equally interested in these achievements, and in view of the heavy charges for admission and parking, may they not be allowed to know

that the cars they are watching are faster than those they have seen in previous years?

The second cause of much bitter discussion wherever drivers meet is the question of handicapping. We will grant from the outset that the task of the handicappers is an unenviable one, and that many drivers, in order to recuperate part of the heavy expense of racing at Brooklands have been unable to resist the financial temptation of improving their own handicap by means of last-minute tuning and careful pressure on the throttle-pedal during the first of two races in which they compete.

On the other hand these well-known subtleties on the part of the drivers are no justification for the incongruous handicapping which marred the race meeting on Easter Monday. At least two cases were so far removed from the publicly-known performance of the cars that the drivers concerned could only be applauded if they vowed never to race at Brooklands again.

It surely needs no emphasis that drivers, by means of their entry fees, contribute a substantial sum annually to the revenue of Brooklands, and that to kill the goose which lays this very acceptable golden-egg would be to the ultimate disadvantage of the Track.

There is a third cause of dissatisfaction at Brooklands, this time of a more intangible nature. It can best be summed up by saying that there is too much atmosphere of school-master and schoolboy in the relations between the authorities and the drivers. Trivial offences are treated with a solemnity which would be amusing if it were not so irritating to drivers upon whose reputation the Track depends for its "gate." With competent marshals it should be easy enough to distinguish between dangerous driving and minor incidents which harm no one.

CONTENTS

	PAGE
Monaco G.P., The	280
Easter Monday at Brooklands	285
Rumblings	288
M.G. Gives Britain a Lead	292
R.A.C. Rally, The	294
World's Most Unorthodox Car, The	300
For Your Bookshelf	301
A supercharged 1,500 c.c. Vale Special	302
Ferrari's Reply to the German Cars	304
Readers' Opinions	306
Club News	308
Mille Miglia, The	310
Continental Notes	314
Grand Prix Cars at Donington	318

MERCEDES & ALFA SHARE THE HONOURS AT MONTE CARLO

FAGIOLI WINS AT 58.17 M.P.H. DREYFUS AND BRIVIO CARRY THE FERRARI COLOURS INTO SECOND AND THIRD PLACES. A FIERY DISPLAY BY ETANCELIN ON THE NEW SIX-CYLINDER MASERATI.

WHAT better event could one have to open the racing season than the Grand Prix de Monaco? The crowds, the noise, the cars in close proximity, all these factors combine to produce an atmosphere which is unique, and which brings racing enthusiasts together from all parts of Europe. After five months of hibernation the sport is once more in full swing, familiar cars and drivers again take the course, while new types often make their first appearance on this hardest of testing grounds.

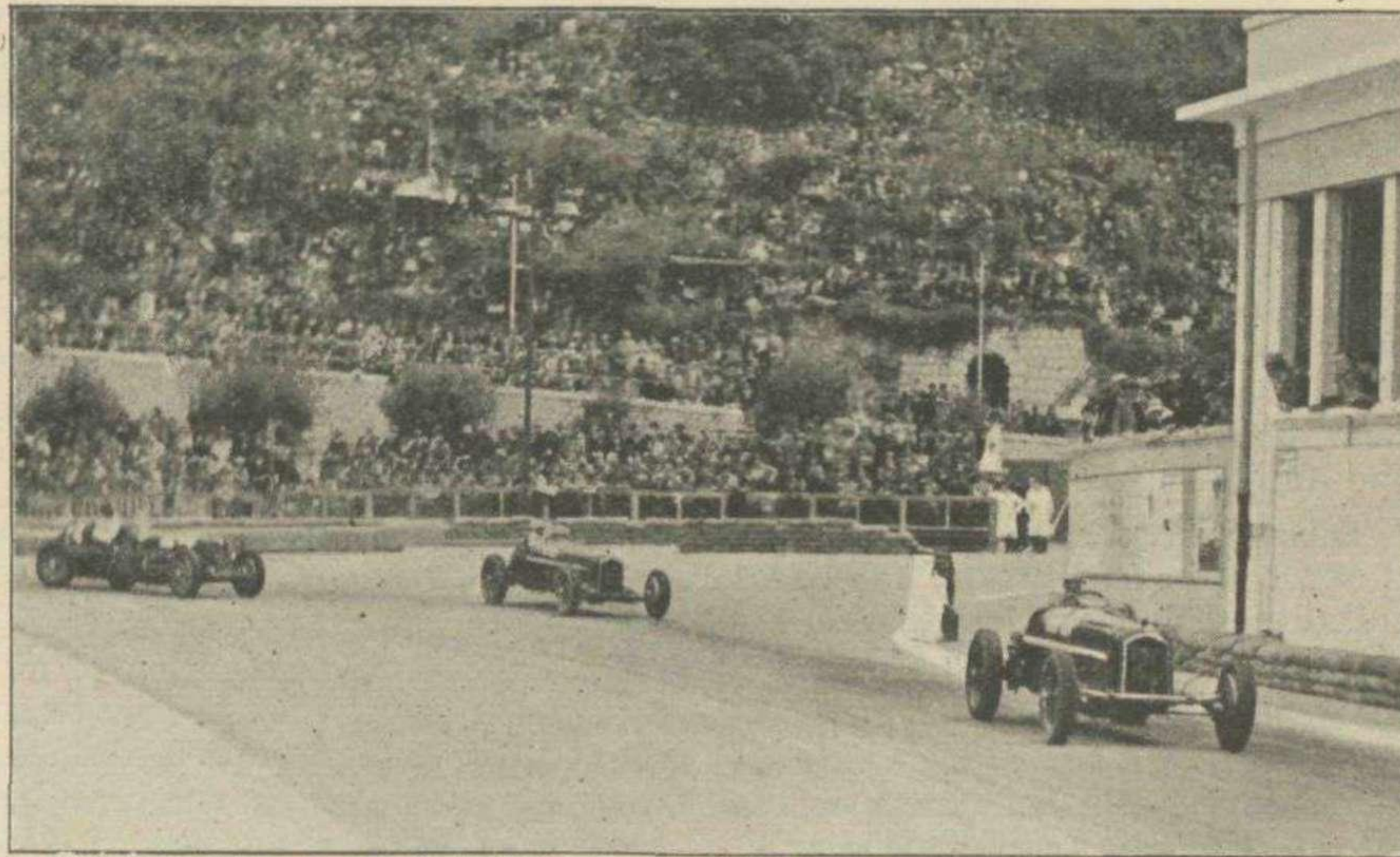
FAGIOLI'S success in the Grand Prix de Monaco was no surprise to those who had seen the German cars in action. After the terrific laps set up in practise by Caracciola and von Brauchitsch these two drivers were also expected to figure prominently in the final order, but fate decided otherwise. Caracciola was beaten in fair fight, while Brauchitsch was eliminated right at the start, and as for the two drivers of the Alfas which were second and third, Dreyfus has already revealed himself as a pilot of the highest class, and Brivio's unhurried skill at Monaco shows that he is a force to be reckoned with in the races which are to follow.

The weather was unsettled on Easter Sunday, and a little rain fell, but next morning conditions were ideal, with the sun lightly veiled with cloud and a pleasant breeze. Dense crowds surged round the circuit, and inspected the corners, already black with the brake marks of the practise mornings. but at half-past eleven the course was cleared and shortly afterwards the racing cars roared up in groups and took their places in front of the pits, which are situated half-way down the Quai de Plaisance. The red painted cars of Italy were in the majority, with the Ferrari Alfas, tended by mechanics in spotless blue overalls at the first pit and the Maseratis at the other end of the line. The German cars with the low-hung dart-shaped bodies panelled in aluminium and with numbers in red had an attraction of their own, and there was something a little uncanny about the

bulbous grilled radiator guards, the long louvered bonnets and the carefully faired axles. Lord Howe's Bugatti, beautifully kept like all his cars, was painted dark-green, while Villapadierna's Maserati was striking with its canary-yellow body-work. Only one car carried the blue of France, Sommer's Monoposto Alfa, for Lehoux's Sefac has yet to make its appearance.

cheering when Nuvolari and Chiron were sighted with their Alfas, and Etancelin was also greeted with terrific applause.

The cars then formed up on the Boulevard Albert I, the order being Fagioli, von Brauchitsch and Caracciola, Nuvolari and Dreyfus, Sommer, Chiron and Brivio, Farina and Etancelin, Soffiotti, Earl Howe and Zehender, and finally Villapadierna and Dusio, the first-named in



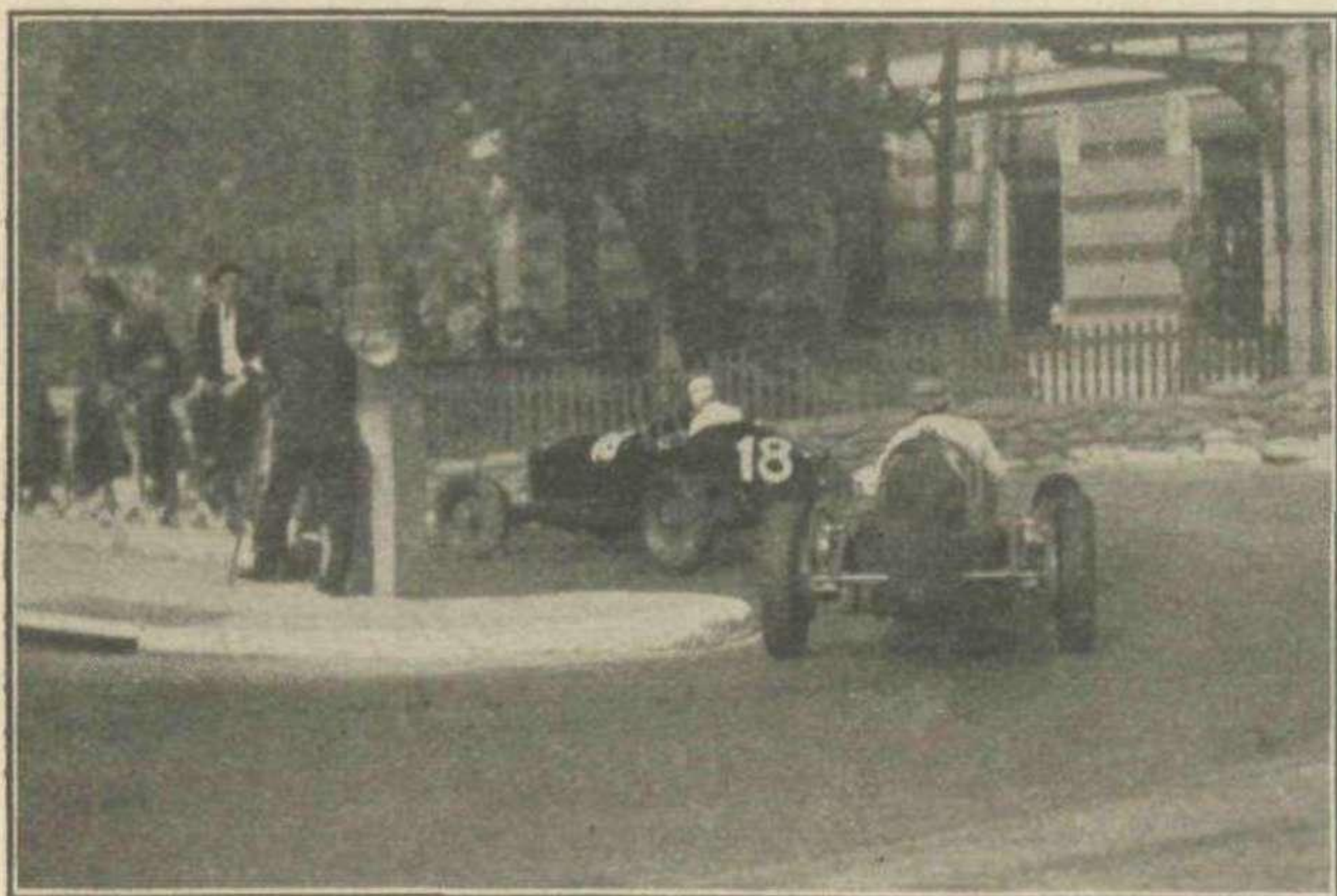
Dreyfus, Etancelin and Soffiotti in close formation approaching the Gas Works Hairpin.

At Monte Carlo the cars are lined up for the start in alternate rows of three and two. The positions are decided by the times put up by the various drivers during the period of practise. The three fastest laps had been set up by the German cars and they were the first to be pushed down the course towards the starting line, only to be greeted by terrific whistles and cat-calls from the crowds on the hill; Frenchmen find it difficult to forget their nationality.

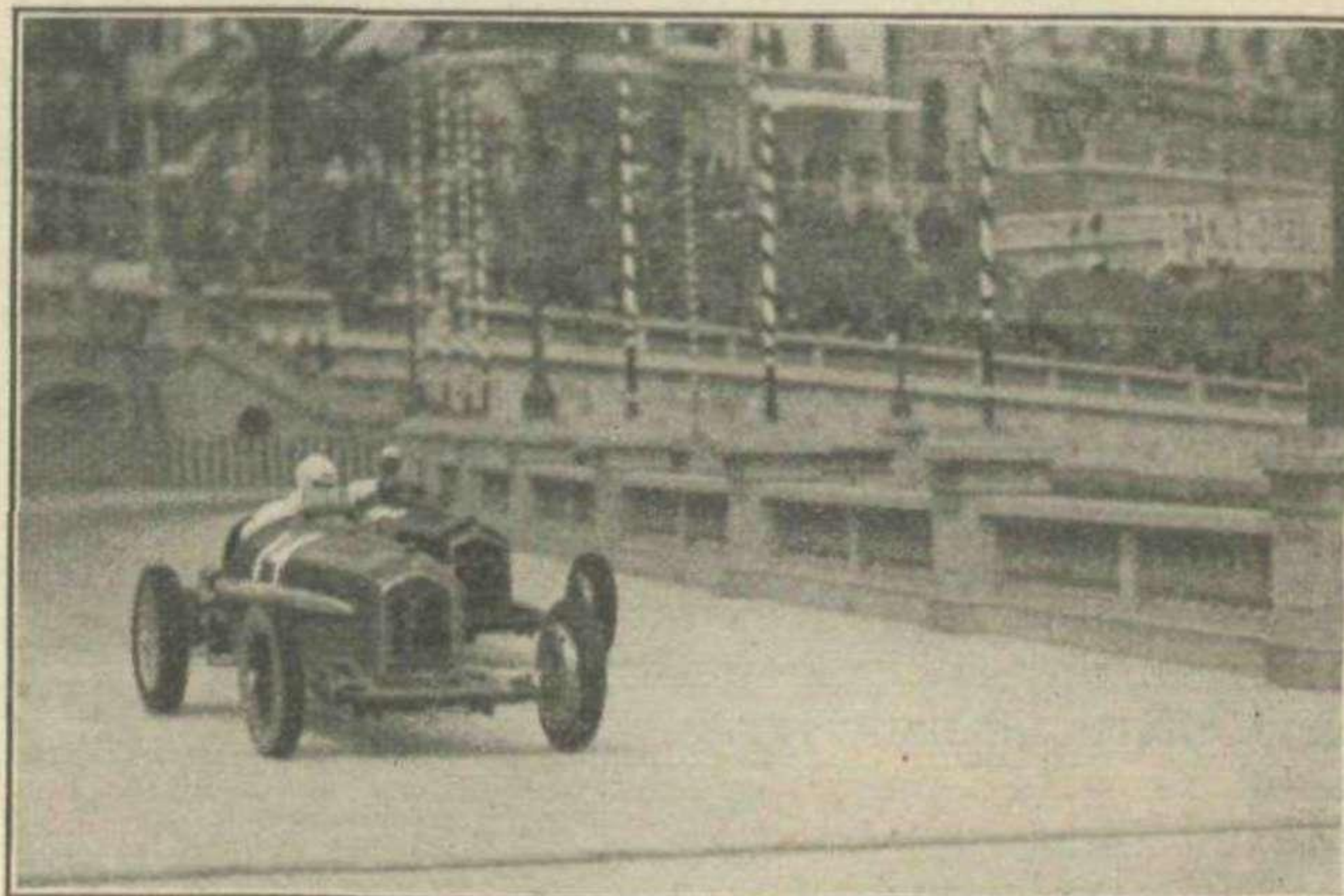
The derisive noises gave place to

each group having the outside position.

The engines were started two minutes before the start and everything was dominated by the wail from the superchargers of the three Mercedes-Benz, which literally made one's scalp creep, and completely drowned the exhaust notes of the other twelve cars. The veteran Charles Faroux raised his flag, the cars in the front two rows rocked on their wheels as the drivers "felt" their clutches, and as the Tricolour touched the road Fagioli was away, followed closely



Etancelin's Maserati suffered in the struggle with the Mercedes, but "Phi-Phi" hung on grimly. Here he is, close behind Dreyfus on the Station Hairpin.



Sommer, who was making his first appearance at Monte Carlo, about to be passed by Brivio on the Quai Albert.

THE MONACO G.P.—continued.

by Caracciola, Dreyfus, Nuvolari, and then Etancelin, Chiron and Brivio, who was driving the car allotted to Trossi, with the rest of the field strung out more or less in their starting order. Villapadierna lost half a minute through stalling his engine, but was soon in pursuit of the rest.

A short pause then while the spectators got their breath back, and then the howling mob appeared again from the tunnel. The two silver-coloured cars were still in the lead, with Fagioli in the first one and both of them already starting to pull away from the Alfas and Maseratis. Dreyfus was running strongly and we noticed that his car which was fitted with normal front suspension was much steadier than Nuvolari's, which snaked as

but was unable to pass him. In his efforts to get by he swung out too wide on St. Dévote corner, and the tail of his car slide right round and struck the sand-bags. Petrol spurted from the tank and the driver tumbled out, climbing along the sacks to a place of safety. Luckily Fagioli and the other leaders were on the other side of the course and were flagged down before they reached the scene of the accident. The car was quickly removed. Almost at the same time came the news that von Brauchitsch had retired at the pits with a stripped gear-wheel.

Fagioli's first lap, which was made, of course, from a standing start, was accomplished in 2 mins. 2.2. secs., and his time for the first five was only a fraction over

German cars being caught, especially as Fagioli continued to open out, his speed for the 6th lap being 1 min. 58.6 secs. or 60.08 m.p.h. There was plenty of excitement going on amongst the Alfas, however, for by the 5th lap both Etancelin and Brivio had displaced Chiron who was evidently having an off-day, and the fiery "Fifi" was close on Nuvolari's heels. There were squeals and blue smoke from the tyres of the Maserati every time it accelerated away from the Gas Works corner, and though Nuvolari had closed considerably on Dreyfus, Etancelin passed Nuvolari on the 18th lap and pressed hard on Dreyfus who was lying third.

Modern racing conditions try the brakes to the utmost and the Alfas and the Maseratis were bouncing up and down and jaggling and juddering as they slowed for the hair-pin. The hydraulic ones on Nuvolari's car proved particularly troublesome, and the near-side front wheel locked every time he came up to the corner. Zehender was at the pits adjusting his about the same time, while Maseratis suffered another loss when Farina's 6-cylinder car dropped out with fuel stoppage.

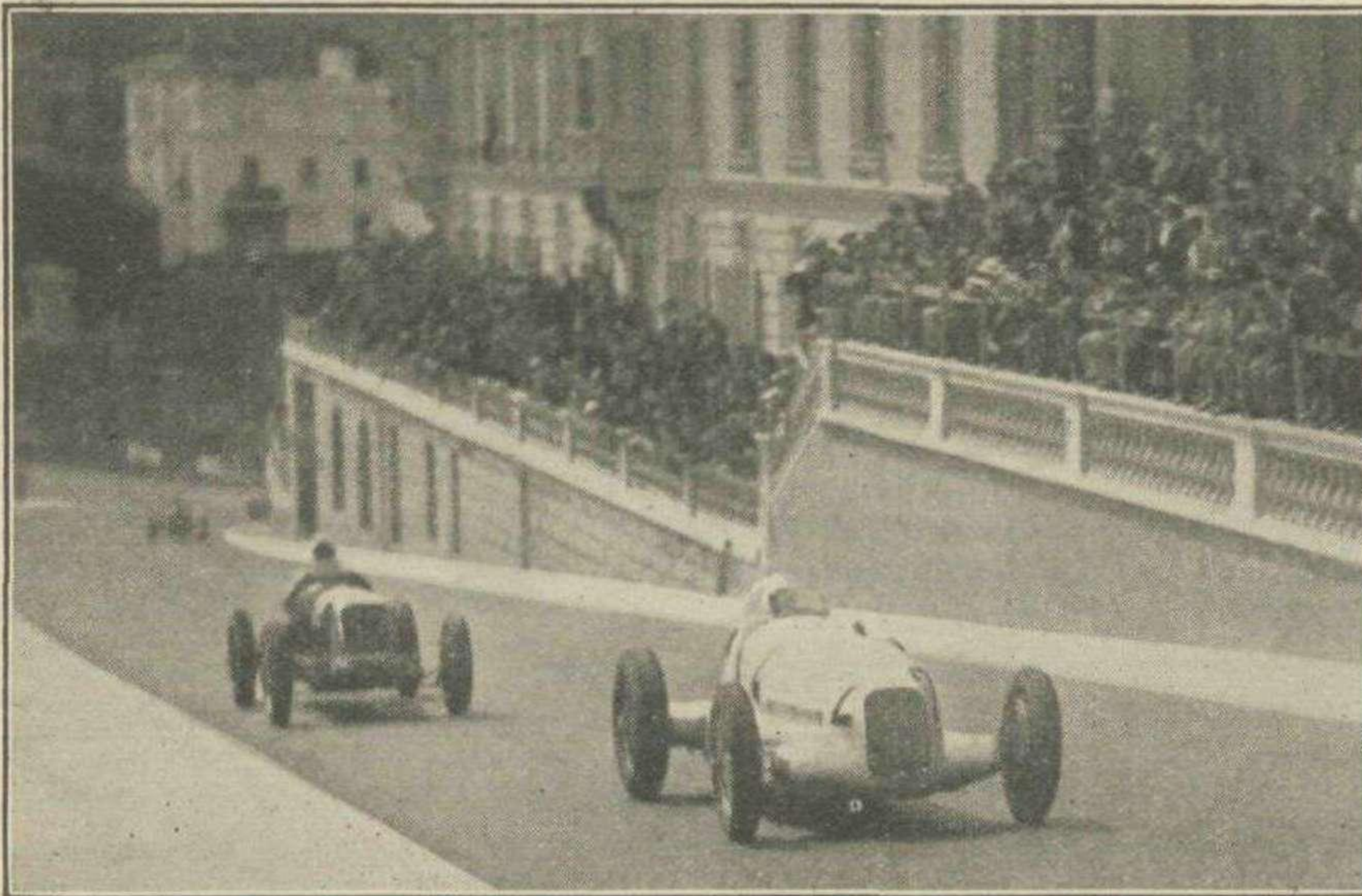
At the 20th lap Etancelin was seven seconds behind Dreyfus, and though the latter had pulled up seven seconds on Caracciola by the 25th, Etancelin would not be denied, and by the 13th had succeeded in passing this leading light of the Ferrari stable. As will be seen from the order at the 30th lap, Brivio had by then overtaken Nuvolari.

Positions at the 30th lap:

1. Fagioli (Mercedes-Benz), 1h. 0m. 02s. Speed 59.25 km.
2. Caracciola (Mercedes-Benz), 1h. 0m. 24.2s.
3. Etancelin (Maserati), 1h. 0s. 52.7s.
4. Dreyfus (Alfa-Romeo), 1h. 0m. 58.7s.
5. Brivio (Alfa-Romeo), 1h. 01m. 19.7s.
6. Nuvolari (Alfa-Romeo), 1h. 01m. 28.2s.

Shortly after this Lord Howe, who had been running consistently on the Bugatti, and had worked his way up into ninth place charged the barrier at the Chicane at the top of the harbour, through a brake locking, and was compelled to give up. Lord Howe himself was unhurt, and jumped out in disgust to inspect the damage. Exactly the same thing happened later on to Villapadierna, the Spanish driver, and he also retired.

Fagioli was a safe winner, barring accidents, and had slowed down his lap



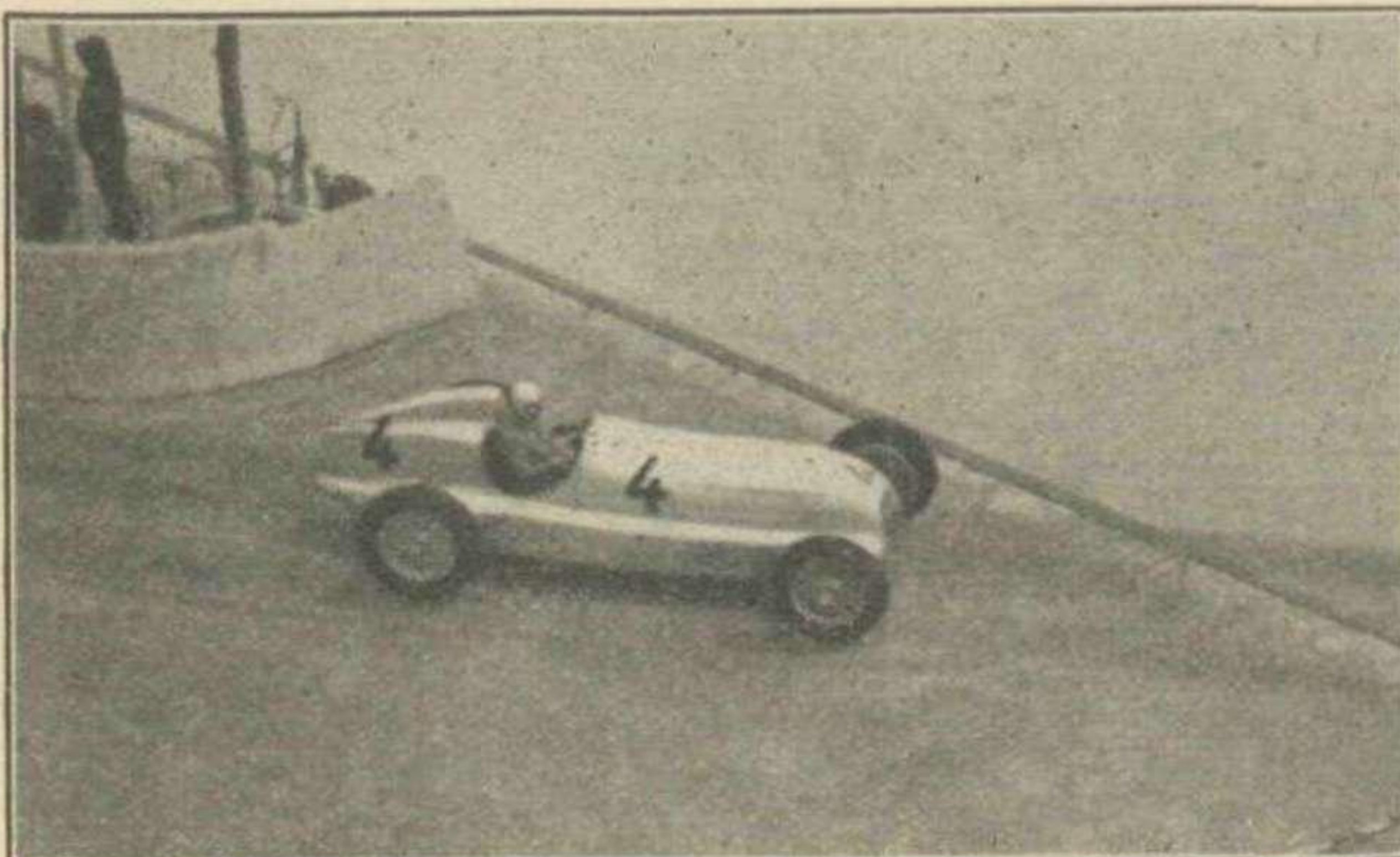
Caracciola (Mercedes-Benz) passes Soffietti at full speed up the Avenue de Monte Carlo. Stancelin is in pursuit a hundred yards behind.

it entered the Quai Albert. The other three in the first group remained the same, with Brivio in close pursuit of Chiron.

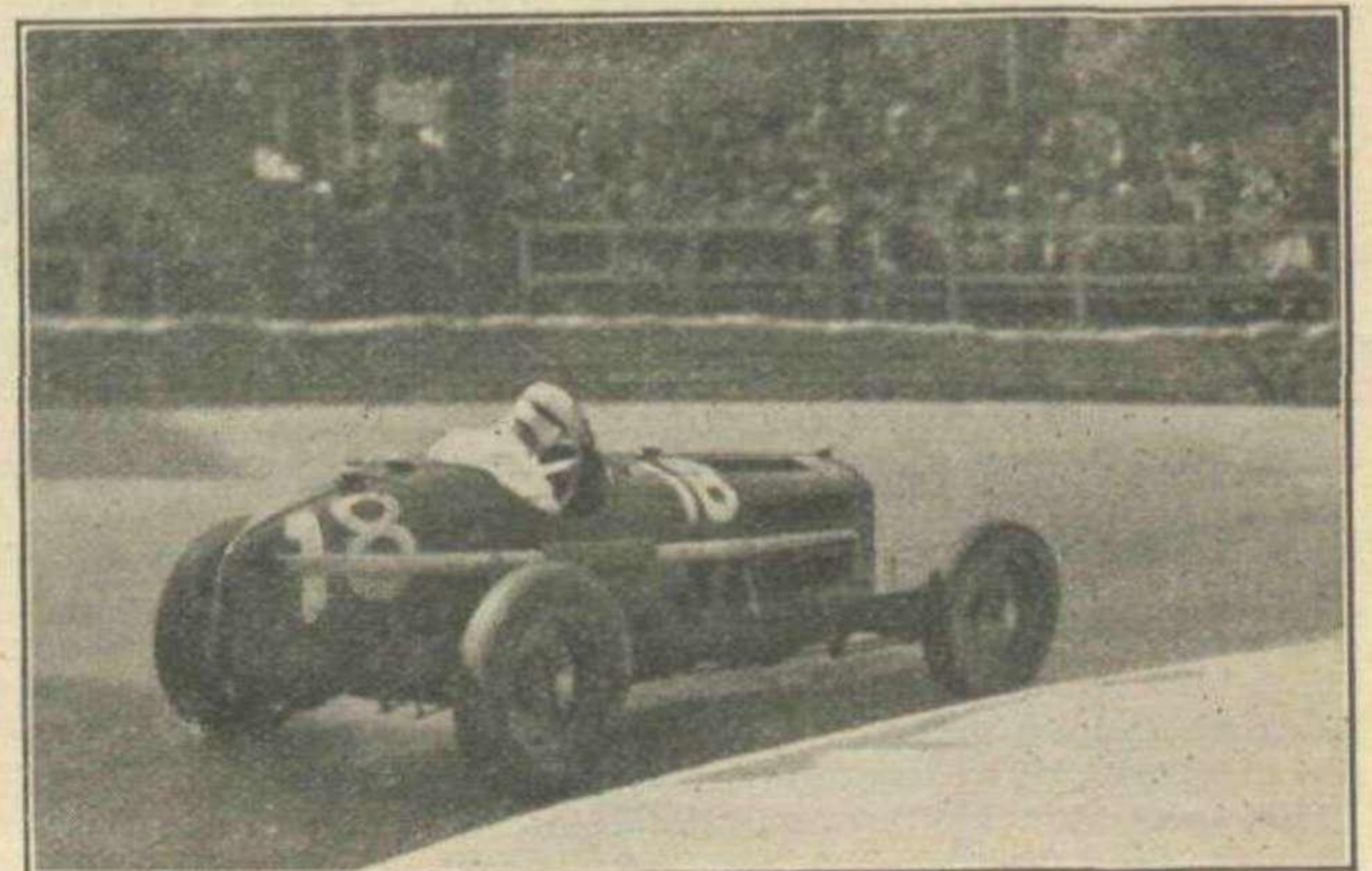
A couple of laps and the field was stringing out. Some of the drivers who had been badly placed at the start were trying to improve their positions, amongst them Dusio, who kept close on Soffietti's tail,

ten minutes. This meant that he was running at a speed close on the record lap speed of previous years, which stood at 1 min. 59 secs. Caracciola was then 34 secs. or about 150 yards behind. Dreyfus was hanging on gamely but was quarter of a mile to the rear.

There seemed little chance of the



Shooting the Chicane. Fagioli, the winner, makes light of the new corner on the Quai de Plaisance.



Dreyfus, who drove a first class race, close in on the bend through the Casino Gardens.

THE MONACO G.P.—continued.

speed to 2 mins. 2 secs. Caracciola, however was slowing too, while Etancelin had dropped back 10 secs between the 35th and the 40th lap. However, at this point he received a signal from his pits, and started driving full bore once again, a real picture of a driver "hurrying," with intent face, his cap back to front, and shirt half open, and every time he roared up the Avenue de Monte Carlo, the crowds rose and shouted encouragement. Although Caracciola speeded up to 2.2, the red car gained on the corners down by the station, and on the 49th lap, to the crowds delight, Etancelin tore round the harbour a couple of lengths behind the Merc., nipped inside at the Gas Works hairpin, and passed his rival.

The Maserati gained steadily, first three and then five seconds, but Caracciola wasn't finished yet, and got his foot firmly down, taking a far-from-straight course up the Avenue to pass Etancelin on the 56th lap. The effort proved too much for the Mercédès, however, and though "Carratch" retained his second place until the 60th lap, steam could be seen issuing from the bonnet louvres and he retired at the pits a lap later, with a broken valve. Etancelin's car had also suffered from the duel and the driver complained of low oil-pressure and weakened brakes. He was compelled to slow down considerably and dropped to fourth place, which he retained to the finish of the race.

At the 60th lap Fagioli had over a minute in hand, and stopped at his pit for re-fuelling, which was carried out in 35 secs. When Etancelin dropped back second place was taken by Dreyfus, who had driven consistently and steadily throughout the race. At the Station hairpin he and Brivio were quite the neatest, in contrast to Etancelin, who worked like a demon to get his car round, though admittedly his brakes were failing when we watched him. Fagioli took it all as a matter of course, Caracciola seemed a little flustered by the pursuing Etancelin, while one of the neatest of the newcomers to the course was Sommer on the Alfa-Romeo, who worked his way up to 6th place in the 70th lap and stayed in this position.

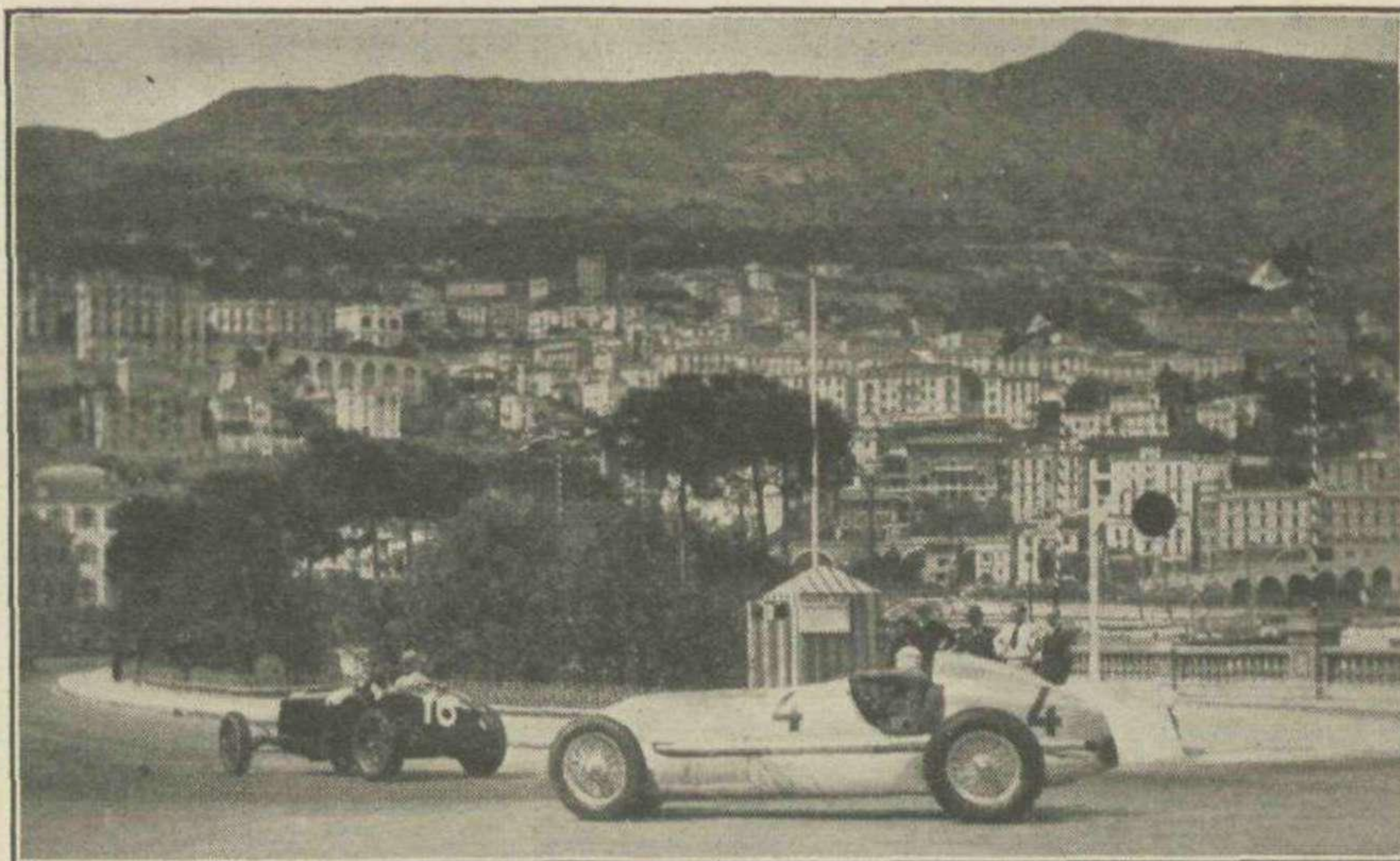
Of the other Alfa drivers, Chiron seemed discouraged throughout the whole race, and kept making disparaging signs with his hands as he drove along, and the only

time he really got going was after being twice lapped by Fagioli. He then decided to chase the German car, and maintained his distance behind it for several laps. With two laps to go he had a final bout of misfortune, when his car conked out in front of the stands with fuel shortage, but after frenzied conversation with Marinoni, who had run along from the pits, and much work with the hand-pump, he was able to continue.

Nuvolari handed over his car to Trossi at the 39th lap, and after the latter had given some hectic displays at the corners, notably at St. Devote, the car was with-

drivers, the German National anthem was played repeatedly and was duly broadcast to Germany from the special station which had been set up down on the circuit. Then the Italian anthem was played for Fagioli's own benefit and after being presented to the celebrities in the Royal Box, the slightly embarrassed winner was allowed to go away with his friends.

Though less exciting than many of the previous events held on the Monte Carlo circuit, the 1935 race does seem to show that drivers are still half the battle. Without being pressed Fagioli beat by four minutes Varzi's record of 57 m.p.h., set



Where Champions Meet. Fagioli (Mercédès-Benz) about to pass Nuvolari after taking the Gas Works hairpin.

drawn. Evidently the hydraulic brakes are not yet completely "au point."

Zehender who was driving the Maserati with the new independent front springing also called at the pits three times for brake adjustments and nearly came to grief at the Station through their locking on. The car in any case did not seem very quick, so there was no chance of seeing the advantages if any of the new system.

The race ended uneventfully, with Fagioli half a lap ahead of Dreyfus, and Brivio 400 yds. behind. The other cars were flagged in, the enormous bouquets of red and yellow tropical flowers were produced and presented to the first three

up in 1933 on a 2.3-litre Bugatti, and if Germans had two more men of the same calibre it might easily have been a 1, 2, 3, victory.

Time and experience can make a racing driver, but it seems that genius in this direction is the monopoly of the southern nations.

1. L. Fagioli (4-litre Mercédès-Benz), 3h. 23m. 49s. Speed, 58.17 m.p.h.
 2. R. Dreyfus (3.2-litre Alfa-Romeo), 3h. 24m. 21s.
 3. L. Brivio (2.9-litre Alfa-Romeo), 3h. 24m. 56.2s.
- P. Etancelin 1 lap behind (3.7-litre Maserati).
L. Chiron (2.9-litre Alfa-Romeo), 3 laps behind.
R. Sommer (2.9-litre Alfa-Romeo), 6 laps behind.
F. Zehender (3.2-litre Maserati), 7 laps behind.
Soffietti (3-litre Maserati), 9 laps behind.

NOTES FROM MONACO

THE COURSE, THE CARS AND THE MEN

This year the most important newcomers were the Mercédès-Benz team. The cars were of course the same as those which had been so successful last year on the road and track circuits, but this was the first time they had taken part in a Round the Town race. Unfortunately none of their protagonists, the Auto-Unions, had been entered, as it was considered that their long wheelbase and low build would make them too difficult to handle. This was doubly disappointing, for it meant that Varzi, who can get a car round the Monaco circuit a good deal quicker than most people, was for once

an absentee.

During the six years in which the Grand Prix of Monaco has been held the circuit has remained the same, though the corners have been slightly eased and the surface much improved, notably in 1932, when the tramlines running up the Avenue de Monte Carlo were removed. This year the course was slightly modified. Instead of entering the Quai de Plaisance through the fast Chicane of S-bend half-way down, the cars continued straight on for another 200 yards, where barriers and sandbags had been arranged to give a more abrupt S-bend than before. This

ensured that all cars should brake for the obstacle, and lessened their chances of turning round or shooting into the harbour. The circuit measures 3.18 km., and the length of the race is one hundred laps.

Now as to the cars and drivers. First on the list come the three Mercédès-Benz driven by Fagioli, Caracciola and Von Brauchitsch. Fagioli had been second in 1929 and third in 1932, while Caracciola was third in 1929 and second in 1932. Von Brauchitsch of course was new to the circuit. A fourth car had been brought

BENTLEY

The Silent Sports Car

“I have now had my car six months and have done 12,000 miles in that time. It has been driven hard and under practically every condition that it is possible to get in this country, and has never failed to give me anything but extreme pleasure. As for the trouble and maintenance, I did not believe it could be reduced to such a fine art, especially with a car of this sort and with such a high performance. It apparently maintains its tune and its behaviour with almost monotonous regularity. I can truthfully say that I have never had a car that gave me so little bother and such endless satisfaction.”

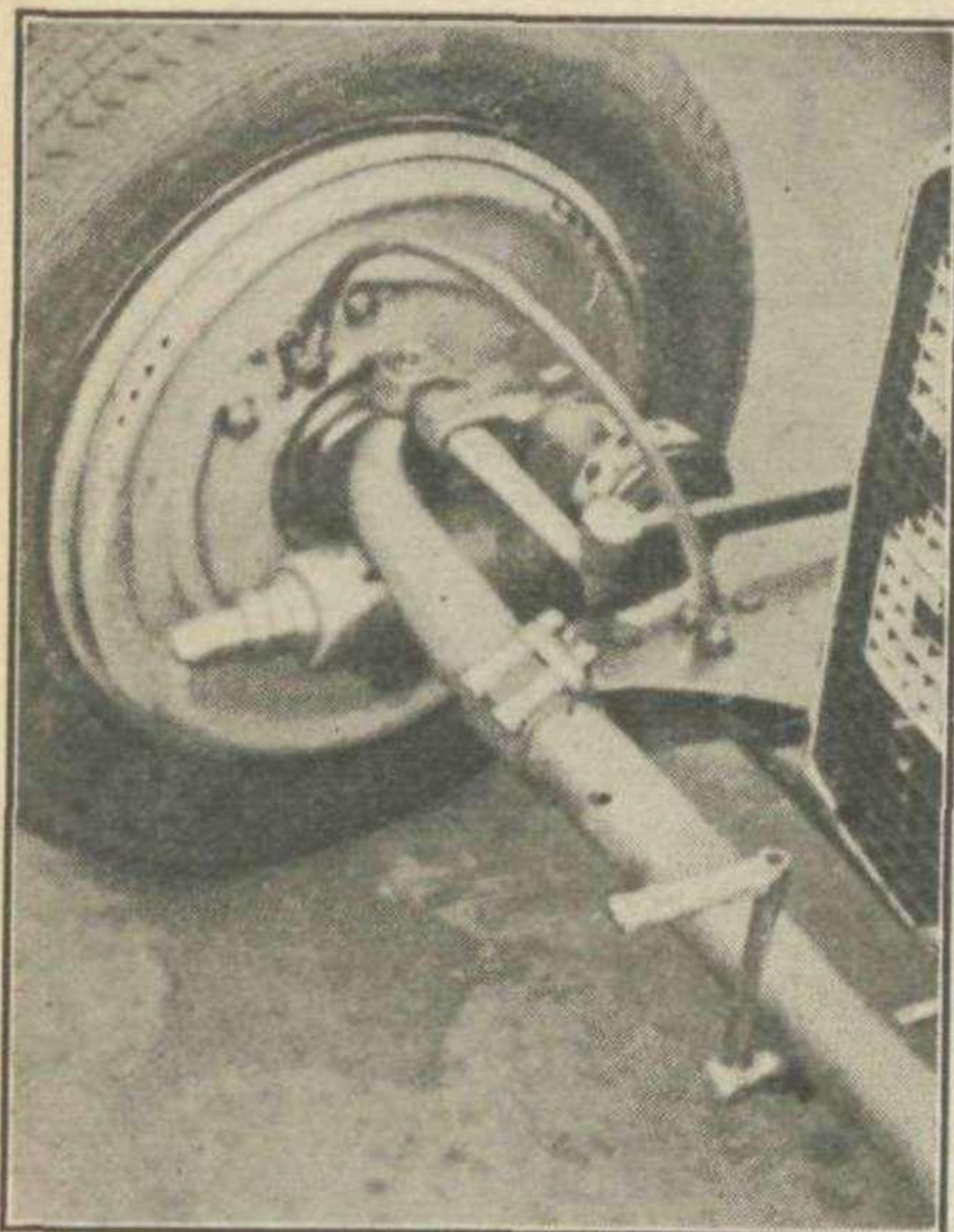
Owner's letter

BENTLEY MOTORS (1931) LIMITED

16 Conduit Street London W1 Telephone Mayfair 4412

Buy a Car Made in the United Kingdom

MONACO G.P.—continued.



The Alfa-Romeos driven by Nuvolari and Chiron were fitted with tubular front axles, and suspension of the Dubonnet pattern, and also hydraulic brakes, as this picture shows. The external friction shock-absorber is seen behind the steering arm.

from Stuttgart in case of accidents, and was driven during the practices by Geier and Lang, the latter a new discovery.

The cars had the 4-litre eight-cylinder engines with two overhead camshafts, and were identical as far as could be learnt with those raced last year. An interesting point we noticed was that some yellowish fluid was used to replenish the radiators, probably ethylene glycol

or some other substance with a high boiling point.

Lord Howe was driving his new 3.3-litre Bugatti and found it very much easier to handle than the Maserati. He only used third and top gears the whole time and said the engine was so flexible that it would have made the whole run on top alone if he had wanted.

There were four Monoposto Alfa-Romeos entered by the Scuderia Ferrari. Those driven by Chiron and Brivio had the 2.9-litre engines, while those of Dreyfus and Nuvolari were bored out to 3,160 c.c. All four were fitted with reversed quarter-elliptic springs, *à la* Bugatti, and had double hydraulic shock-absorbers of a simple piston type. This lay-out is claimed to give the effect of independent springing and all the drivers considered it a definite advantage over the conventional arrangement. In addition, the cars of Nuvolari and Chiron were fitted with tubular front axles and independent springing of the Dubonnet type. They were also fitted with the new Ariston hydraulic brakes, made by the firm of Farina, but these were so fierce that they threw the cars about badly when applied.

Two Maseratis were entered by the Scuderia Subalpina. Etancelin's car was one of the new six-cylinder cars with a capacity of 3,724 c.c., developed it appears from the four-cylinder car driven at Monte Carlo last year by Taruffi and with the same bore and stroke. The car which Farina drove was of the same type, and actually belonged to Rovere.

Zehender's car was fitted with torsion rod front suspension, the bars for each wheel running outside the chassis, with arms at right angles to support the wheel pivots and friction shock-absorbers transversely mounted and connected to the forward extremities of the bars. Normal

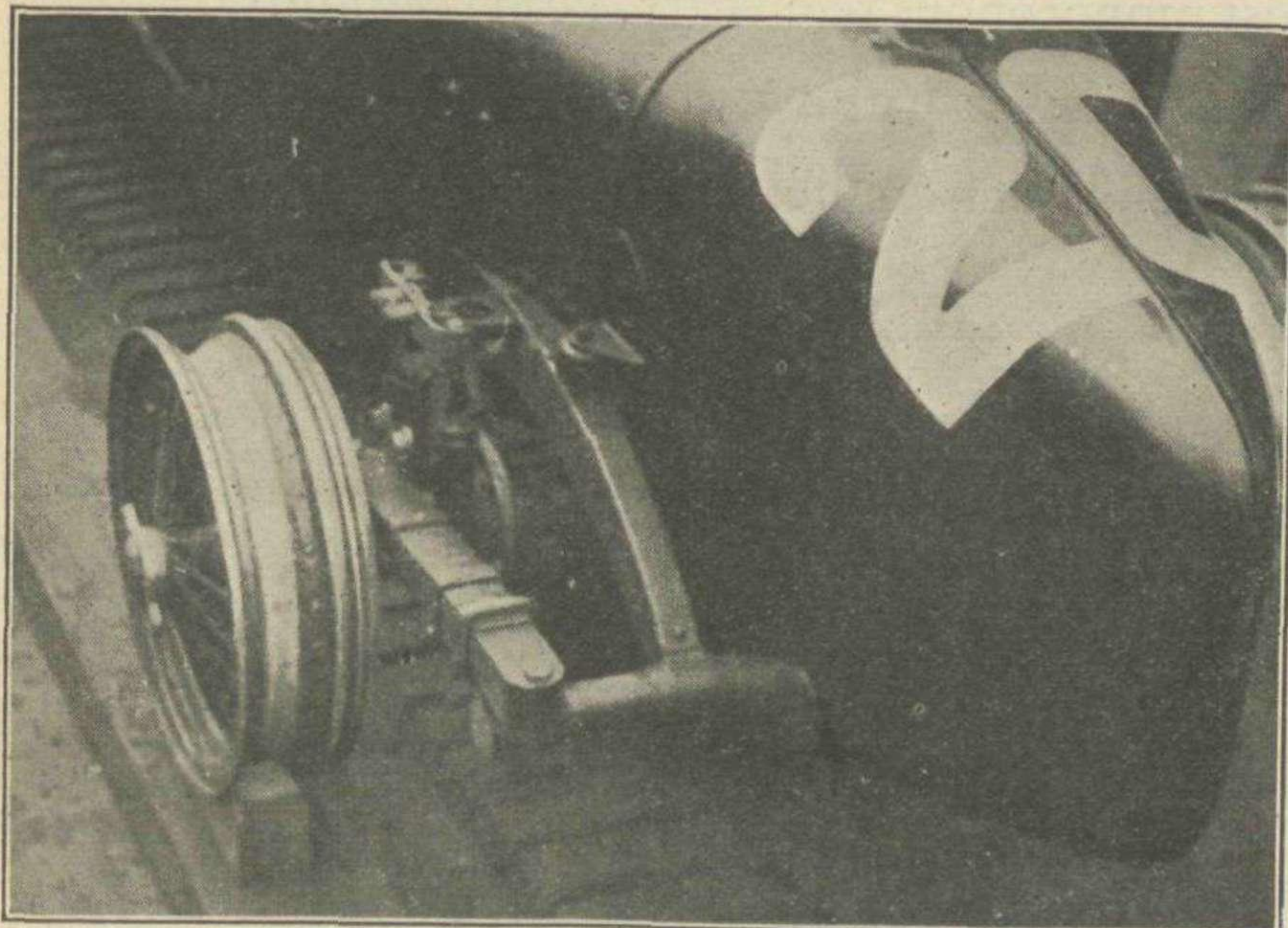


This is the Maserati system of torsion-bar suspension. The rod itself can be seen running parallel to the chassis frame, and above the steering rod. The shock absorber is connected up by means of a system of links.

half-elliptic springs were used at the rear. The engine of Zehender's car was an eight-cylinder, bored out to 3.2 litres. The remaining Maseratis were of the normal eight-cylinder three-litre type. The S.E.F.A.C. entered by Lehoux was a non-starter, and it is believed that the car is not yet completed.

The first day of practising opened fairly quietly, the fastest time being made by Nuvolari with 2 mins. 2 secs.; Dreyfus lapped in 2 mins. 3 secs.; von Brauchitsch equalled this, though this was his first time on the course. The second day the German cars really got going, and Fagioli equalled the lap record of 1 min. 59 secs.; von Brauchitsch again whipped up the horses and at the end of the session put up the record to 1 min. 57 secs., but was definitely dangerous on all the corners and swung wickedly once opposite the pits. This was not the limit of the car's capacity, for on the last day of practice, while Fagioli improved to 1 min. 57.3 secs., Caracciola raised the record higher to 1 min. 56.6 secs., without looking nearly so disturbing. The next fastest laps were those of Dreyfus and Nuvolari in 1 min. 59 secs., and this meant that the three Mercedes-Benzes would be placed in the front row at the start.

Herr Neubauer, the Mercedes racing manager, was a little disappointed with the circuit, which did not give his cars a chance to show their full speed, while it was so well surfaced that independent springing was of less importance than on normal roads. In spite of this, on paper the German cars were likely to finish in the first three places if the drivers kept their heads. How far the indications of the practise runs were carried out may be seen from the account of the race itself.



Quarter-elliptic rear springs were used on the Ferrari Alfas. Friction shock-absorbers were discarded in favour of piston type hydraulics, which can be seen between the spring and the bevel casing.

EASTER MONDAY AT BROOKLANDS

HIGH SPEEDS BUT FEW CLOSE FINISHES. MRS. PETRE WINS A RACE AT 118 M.P.H. AND OLIVER BERTRAM ONE AT 124 M.P.H. GOOD "MOUNTAIN" RACES.

BROOKLANDS is a queer place. Sometimes a B.A.R.C. Meeting is crowded with close finishes—and the spectators go away dissatisfied. At other times the handicapping is indifferent—and yet everyone is enthusiastic at the finish and leaves the track full of *joie-de-vivre*.

The Easter Monday Meeting was of the latter variety. At least five of the nine races were runaway victories, and yet we have seldom attended a more enjoyable B.A.R.C. meeting. The reason is possibly to be found in the number of really fast cars entered, and the excellent idea of running four Mountain races as three heats and a final, the whole event being called the "British Mountain Handicap."

The weather was threatening throughout the afternoon, and at one time a few spots of rain actually fell. Immediately after the last race the wind, which had worried people on the Members' Banking, died down and a perfect summery evening descended on the Track.

No less than 15 cars paraded for the first race, the only non-starter being Briault's Alta. The handicappers thought better of putting Esson-Scott's 2-litre Bugatti on scratch in company with two Magnettes and a blown Frazer Nash, and altered his handicap to "owes 5 seconds," to the intense relief of the three drivers concerned.

After a lap had been covered the six leading cars bunched together in a solid pack, making an impressive sight as they roared round the Member's Banking. Bowler was clinging to his limit lead on his well preserved 3-litre Bentley, chased by Collier's Frazer Nash, Oats's Alvis, Briggs's Frazer Nash, and Roy Eccles and Percival on similar cars. But already the winner was clearly going to be Hartwell's white M.G. Magnette, which had left behind its fellow scratch cars, "Tim" Davies's Frazer Nash and Seyd's "Q" type Midget, and had passed Beaver's Vauxhall (*sans compresseur* this time), Windsor-Richards's 30/98, Baker's Graham Paige, Lace's Alta and Kelway's Bugatti.

On the last lap Hartwell caught the leaders at the Fork and ran in a comfortable winner at 102.21 m.p.h. Oats won the six-fold dogfight to take second place, with Collier a mere 10 yards astern. Hartwell, incidentally, netted his followers a very nice ten-to-one.

After the race Baker was called before the Stewards and informed that he had been just a little too quick in leaving the starting line, but as he was not placed in the final result nothing further would be done about it. His Graham Paige looks very smart, and wears the dark blue colour borne in so many races by the same driver's Minerva.

Easter Junior Short Handicap.

Distance about $6\frac{1}{2}$ miles. 15 ran.

1. G. R. Hartwell (M.G., 1,087 c.c. S.), scr.
 2. R. F. Oats (Alvis, 1,496 c.c.), 38s.
 3. M. T. U. Collier (Frazer-Nash, 1,496 c.c.), 42s.
- Won by 250 yds. at 102.21 m.p.h., 10 yds. between 2nd and 3rd.
- Betting—10—1, 6—1, 20—1.
- Also ran: H. P. Bowler (Bentley), 52s.; G. Briggs (Frazer Nash) and R. G. Percival (Frazer Nash), 42s.; R. H. Eccles (Frazer Nash), 35s.; A. C. Kelway

Bugatti), 28s.; A. C. Lace (Alta S.) and G. L. Baker (Graham-Paige), 23s.; C. W. E. Windsor Richards (Vauxhall) and R. A. Beaver (Vauxhall), 16s.; "Tim D. Davies" (Frazer Nash S.), and V. L. Leyd (M.G. Magnette S.), scr.; A. Esson Scott (Bugatti), owes 5s.

The second race was full of promise. In practice the Barnato Hassan, now enlarged to 8 litres, had been lapping round about the 140 m.p.h. mark in the hands of Oliver Bertram. Then Mrs. Kathleen Petre was down to drive the Delage with which she holds the Ladies' Lap Record, and Miss Doreen Evans had entered the single-seater Midget, while C. J. P. Dodson was making his Austin debut on a side-valve single-seater. Another interesting car was Manby-Colgrave's streamlined *monoposto* Midget.

At the end of the first lap things looked promising for Dodson, with the possibility of a challenge from Eccles's 1½-litre Bugatti and the Barnato-Hassan. On the second lap Eccles worked his way into third place with Bertram 8th, but the Austin was faltering and the Bugatti

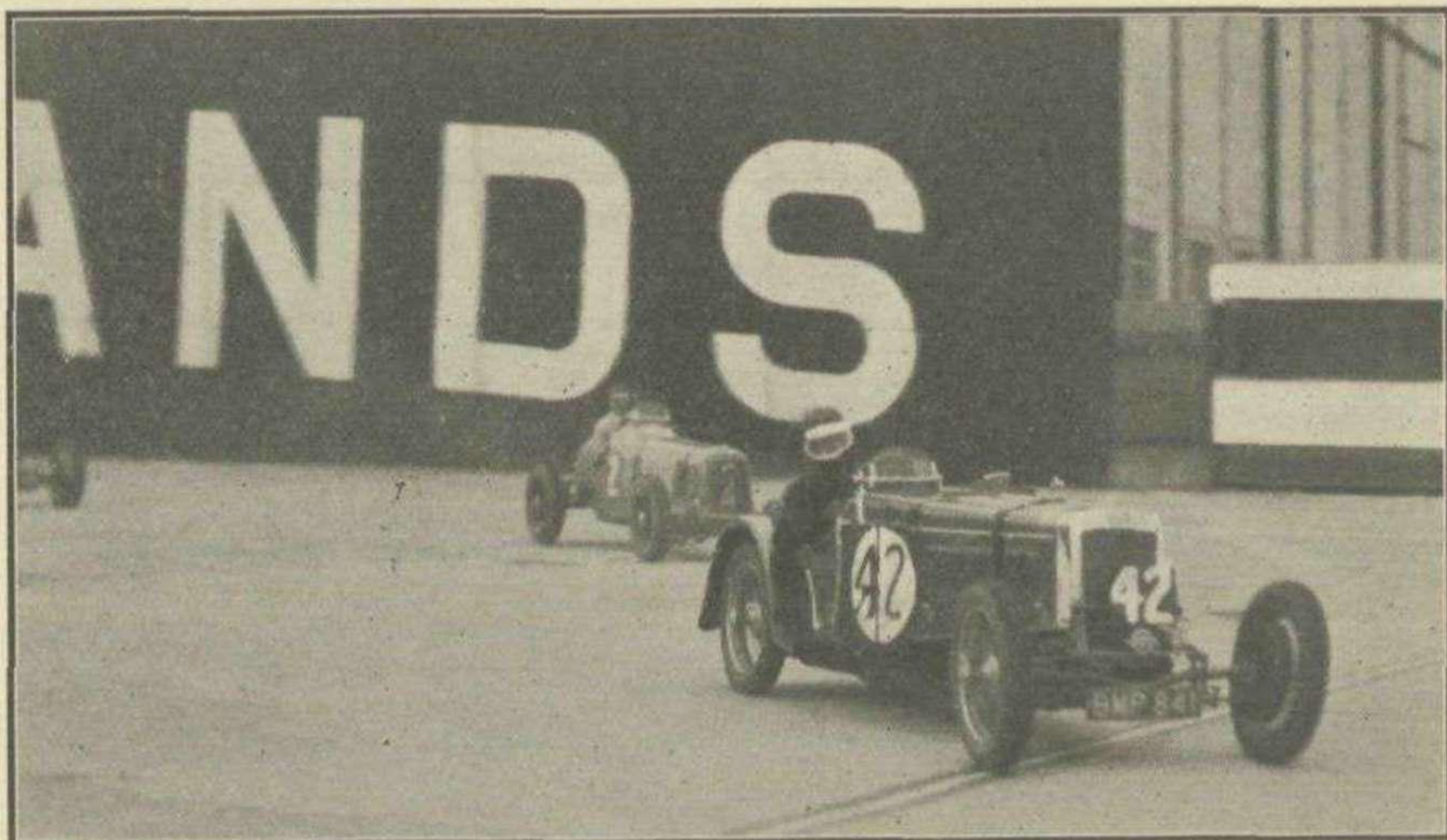
Won by 100 yds., at 122.33 m.p.h. 150 yds. between 2nd and 3rd.

Betting—2—1, 4—1, 16—1.

Also ran: C. G. H. Dunham (Alvis), and M. P. Simpson (Riley), 39s.; C. J. P. Dodson (Austin), F. J. Fielding (Bugatti), W. M. Couper (Talbot), and H. Rose (Alfa-Romeo), 30s.; G. F. A. Manby-Colegrave (M.G., 747 c.c. S.), 24s.; R. T. Horton (M.G., 1,087 c.c. S.), 18s.; Mrs. K. Petre (Delage), scr.

The third race was one of the best we have seen at Brooklands for many a long day—in spite of a 300 yards victory for the winning car. That it was going to be a really fast race could be judged by the entry: the Delage, Eccles's new "3.3," Froy on the "four-nine," the Leyland Thomas, Marker's Bentley, Jarvis on the 2.5 Maserati, Rayson's very quick 1½-litre Bugatti, Bainton's 4-cylinder "Bug," and Samuel's "Q" Midget on the limit mark.

Bainton led at the end of a lap, but the situation was developing rapidly at the rear. Bertram knew only one position for the accelerator pedal, and fairly tore by Froy (4.9 Bugatti) and Rose (2.5



E. G. Hughes (Frazer Nash) is chased by Raymond Mays (E.R.A.) into the Fork Corner during the second heat of the British Mountain Handicap.

shot into the lead. Bertram had been forced to go very near the outside in coming off the Members' Banking, but he kept going at great speed and swooped on to the Bugatti to win by a hundred yards. Miss Evans caught Dodson on the last run to the post, the Austin falling right back. Mrs. Petre ran a careful race with the big Delage, but the front wheels wobbled ominously after taking the bump.

It would have been interesting to have known Bertram's fastest lap. For all we know he may have broken the lap record, but as record-attempts and record laps are no longer to be recognised or announced during B.A.R.C. meetings we shall have to be content with congratulating him on a splendid average speed of 122.33 m.p.h.

Easter Senior Short Handicap.

Distance, about $6\frac{1}{2}$ miles. 12 ran.

1. O. Bertram (Barnato-Hassan Special, 7,963 c.c.), scr.
2. A. H. L. Eccles (Bugatti, 1,493 c.c. S.), 18s.
3. Miss D. B. Evans (M.G., 747 c.c. S.), 24s.

Maserati) as they passed the Fork. On the Members' Banking he came up behind Eccles (3.3 Bugatti) and Marker (Bentley) both of whom were comfortably placed on the Banking. Bertram promptly forced the Delage down at the critical moment and rushed away down the Railway Straight on the inside. Now there only stood Bainton's and Rayson's Bugattis between the Delage and victory, and the wonderful old car caught them both ere the Aeroplane Sheds were reached. In the lead with practically a lap to go! Even after easing up his speed for the race was 124.26 m.p.h.

Rayson was going magnificently with the 8-cylinder Bugatti, whose exhaust note was a delight to the enthusiastic ear. He was closely followed by Marker, Eccles and Froy. The latter had now got into his stride, and passed Eccles and Rayson on the inside coming off the banking. Marker just kept ahead, however, and took second place by 10 yards.

EASTER MONDAY AT BROOKLANDS—continued.

Samuel (M.G.) and Jarvis (Maserati) both retired, and Munday's Leyland-Thomas carried a hopeless handicap from the 9 secs. mark, only 4 secs. ahead of the 4.9 Bugatti with its known lap speed of 135 m.p.h. Parry-Thomas at his finest could not get the car to lap at more than 129 m.p.h., and yet the handicappers expected Munday to beat this by several m.p.h. with an un-streamlined body!

Easter Lightning Short Handicap.

Distance, about 6½ miles. 9 ran.

1. O. Bertram (Delage, 10,688 c.c.), scr.
2. R. R. K. Marker (Bentley, 6,597 c.c.), 13s.
3. D. Froy (Bugatti, 4,975 c.c. S.), 5s.

Won by 300 yds., at 124.26 m.p.h., 10 yds. between 2nd and 3rd.

Betting—10—1, 10—1, 3—1.

Also ran: A. R. Samuel (M.G., 747 c.c. S.), 35s.; A. G. Bainton (Bugatti), 29s.; E. K. Rayson (Bugatti), 26s.; R. Jarvis (Maserati), 13s.; R. J. Munday (Leyland Thomas), 9s.; A. H. L. Eccles (Bugatti, 3,255 c.c. S.), 5s.

The proof of Mountain Race popularity was shown by the entry for the "British" Mountain Handicap, for which no less than 45 entries were received. These were divided into three heats of 15 cars, the first five in each heat qualifying for the final.

The first race was a trifle disappointing, for two of the most fancied competitors were both virtually out of the race on the first lap. Kayson suffered from faulty brakes on approaching the Fork and shot down the "escape road." He rejoined the course, but retired after a slow crawl for one lap. Then Charles Martin did the same thing on his twin-camshaft Bugatti, retiring at the Fork.

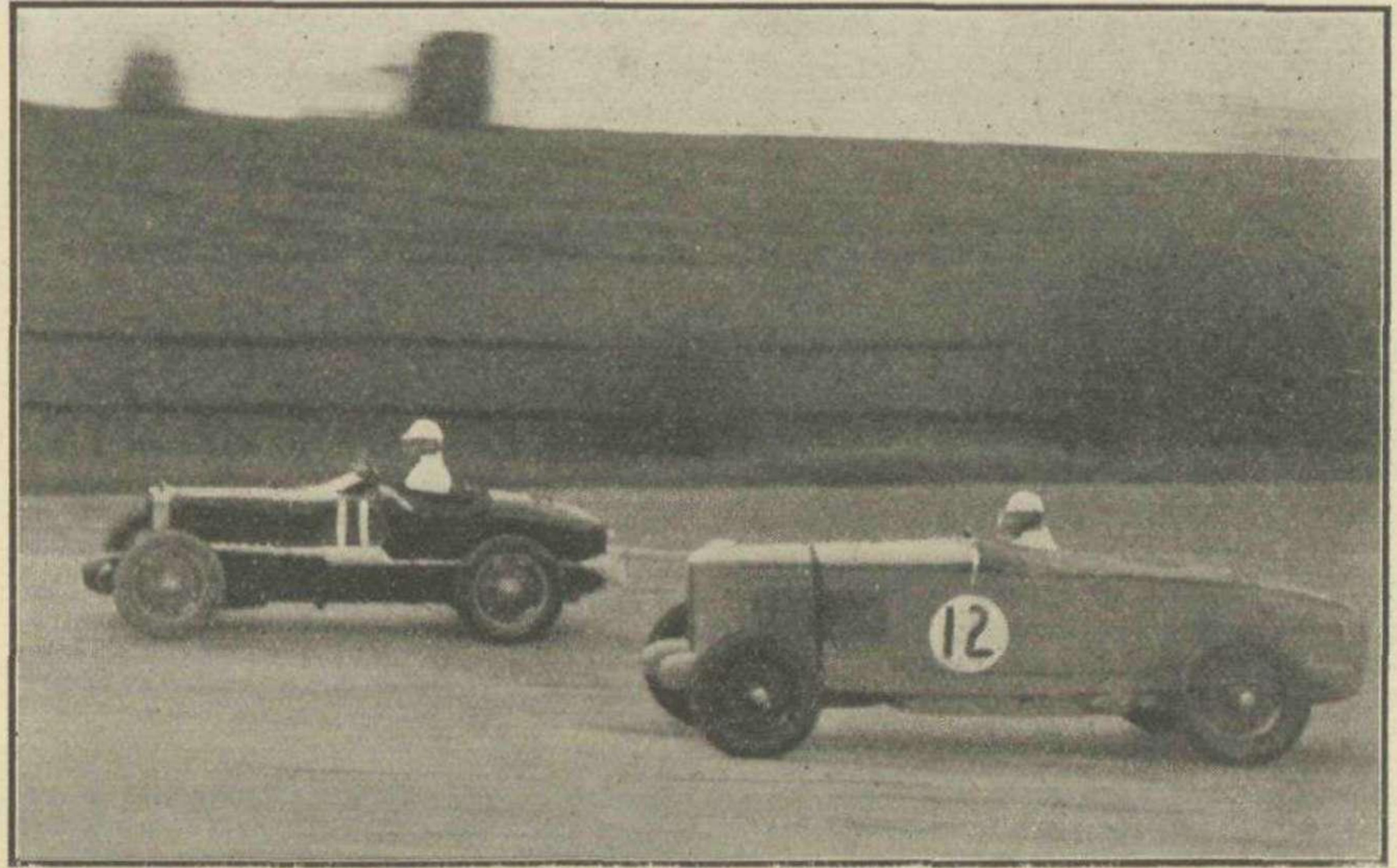
Meanwhile Cholmondeley-Tapper (on Smith's Bugatti) was holding his limit

fast, but the former failed to catch Evans by 25 yards, with Eccles 15 yards further back. T. S. Fotheringham was fourth and Richardson fifth.

First Heat of "British" Mountain Handicap.

Distance, about 6 miles. 12 ran.

1. K. D. Evans (M.G., 747 c.c. S.), 23s.



An incidental duel was waged in the eighth race between R. E. Tongue's M.G. Magnette and W. M. Couper's Talbot, victory going to the former.

2. H. W. Cook (E.R.A., 1,486 c.c. S.), 13s.
 3. A. H. L. Eccles (Bugatti, 3,255 c.c. S.), scr.
 4. T. S. Fotheringham (Bugatti, 2,263 c.c. S.), 9s.
 5. C. A. Richardson (Riley, 1,089 c.c.), 40s.
- Won by 25 yds, at 69.74 m.p.h., 150 yds. between 2nd and 3rd.

actually took part in the race. It was an easy thing for Dr. Roth's Talbot, but that did not detract from his very fine handling of a car not ideally suited for the Mountain circuit. He wiped out Hughes (Frazer Nash) 8 seconds start in one lap, and was

thereafter never challenged. Baker-Carr (Bentley) and Wilkins (Alfa-Romeos) held the next two places for four laps, and the latter finally finished third. The best of the back-markers was C. S. Staniland, driving T. A. S. O. Mathieson's twin-camshaft Bugatti. He started from the 9 secs' mark and drove magnificently to finish in second place. L. P. Driscoll might have done better than fourth had he not been delayed on the 2nd lap by Jock Leith, who did a most spectacular *tête-à-queue* at the Fork right in the path of the Austin. P. G. Fairfield (E.R.A. 1,100 c.c.) finished fifth, while Raymond Mays had a most uncomfortable passage on the 2-litre model. The car was misfiring soon after the start, and suddenly belched forth clouds of smoke which filled the cockpit and practically blinded the driver. He pluckily continued. Dr. Benjafield was not too happy on the recently acquired 2.6-litre Alfa-Romeo, and seemed to lack practice.

Second Heat of the "British" Mountain Handicap.

Distance, about 6 miles. 14 ran.

1. Dr. E. J. H. Roth (Talbot, 2,970 c.c.), 43s.
 2. C. S. Staniland (Bugatti, 2,263 c.c. S.), 9s.
 3. R. S. Wilkins (Alfa-Romeo, 2,336 c.c. S.), 27s.
 4. L. P. Driscoll (Austin, 747 c.c. S.), 19s.
 5. P. G. Fairfield (E.R.A., 1,090 c.c. S.), 19s.
- Won by 75 yds. at 66.44 m.p.h., 150 yds. between 2nd and 3rd.

Betting—3—1, 4—1, 20—1.

Also ran: A. A. Rigby (M.G., 1,087 c.c.); E. G. Hughes (Frazer Nash), 51s.; C. T. Baker-Carr (Bentley) 40s.; H. Rose (Alfa-Romeo); J. H. T. Smith (M.G., 1,087 c.c. S.), 27s.; G. R. Hartwell (M.G., 1,087 c.c. S.), 23s.; Hon. J. Leith (Bugatti), 16s.; Dr. J. D. Benjafield (Alfa-Romeo), 9s.; R. Mays (E.R.A., 1,980 c.c. S.) scr.

The third heat was a most exciting affair, as seen from the Fork. Phenomenal avoidance succeeded phenomenal avoidance, a barrel was sent flying and one car did a terrific broadside.

Bowen-Buscarlet's Riley, the limit car, had reached the Fork before R. O.



Round in a cloud of smoke and dust. The cars are A. H. L. Eccles (Bugatti No. 1), T. P. Cholmondeley-Tapper (Bugatti No. 38) and C. A. Richardson (Riley No. 32).

lead well, followed for two laps by J. H. Bartlett (Bartlett-Salmson), who gave way to C. A. Richardson (Riley). This went on for four out of five laps, until Kenneth Evans caught the leaders on the rush down to the Fork. Behind the "Q" Midget Cook (E.R.A.) and Eccles (3.3 Bugatti) were both travelling very

- Betting—2—1, 4—1, 5—1.
- Also ran: T. P. Cholmondeley-Tapper (Bugatti), 40s.; J. H. Bartlett (Bartlett-Salmson), 40s.; D. A. Aldington (Frazer Nash), 36s.; A. Esson Scott (Bugatti), 27s.; D. N. Letts (M.G., 1,087 c.c. S.), 23s.; E. K. Rayson (Bugatti), 19s.; C. E. C. Martin (Bugatti; 2,263 c.c. S.), 3s.
- Fourteen cars lined up for the second heat, but that was as far as A. A. Rigby got with his Magna, so that 13 cars

EASTER MONDAY AT BROOKLANDS—continued.

Shuttleworth's *monoposto* Alfa-Romeo was given the flag. The excitement began on the second lap, when Dobbs found himself going too fast to get round smoothly and had a distinct "moment" in avoiding the barrels. Reggie Tongue was not so successful, and hit one for six. Incidentally the barrels are now filled with sand, and don't roll so well as they used to. The great thrill came with the arrival of L. Fontes, with the 2.3-litre Alfa-Romeo raced last season by John Cobb, and before him by Brian Lewis. He slid right round in a long skid, stalling his engine and giving the people behind an anxious time. He terrified everyone by restarting and turning the car in the face of oncoming traffic. Finally A. R. Samuel approached at terrific speed on the "Q" Midget, and was duly applauded at the conclusion of a successful wrestle with his rampant steed!

The crowd wiped their perspiring brows and settled down to watch the remaining laps with fatalistic calm. No one misbehaved for the rest of the race, however, except J. W. Lucas, whose special Riley seems to suffer from ague in the front wheels. After frightening everyone for several laps he then got into a dangerous slide at the Fork which left him heading straight for the unfortunate Bowen-Duscarlet. The latter, being a Squadron Leader in the R.A.F., and, therefore thoroughly accustomed to a "dog-fight," extricated himself from the jaws of impending doom with great adriotness. For this pretty display Lucas was called before the Stewards. Curtain, please.

In the middle of all this excitement it was somewhat difficult to remember what was actually happening in the race. Shuttleworth drove a great race with the *Monoposto*, and had got into third place on the 4th lap. Freddie Dixon, making a welcome re-appearance after his recent air-crash, had by this time reached fifth place. On the final lap Shuttleworth got to the front, Dixon passed Dobbs, who kept ahead of Jarvis (Maserati) and Duller (Bugatti).

Third Heat of the "British" Mountain Handicap.

Distance, about 6 miles. 13 ran.

1. R. O. Shuttleworth (Alfa-Romeo, 2,906 c.c. S.), scr.
 2. Fred W. Dixon (Riley, 1,808 c.c.), 16s.
 3. H. G. Dobbs (Riley, 1,486 c.c.), 24s.
 4. R. Jarvis (Maserati, 2,514 c.c. S.), 6s.
 5. R. L. Duller (Bugatti, 2,263 c.c. S.), 13s.
- Won by 150 yds., at 76.31 m.p.h., 50 yds between 2nd and 3rd.

Betting—8—1, 3—1, 5—1.

Also ran: W. A. Bowen-Buscarlet (Riley), 1m. 8s.; J. W. Lucas (Riley), 53s.; A. Baron (Bugatti), 46s.; R. H. Eccles (Frazer Nash), 40s.; G. Casswell (Frazer Nash), 37s.; R. E. Tongue (M.G., 1,087 c.c. S.), 24s.; A. R. Samuel (M.G., 747 c.c. S.), 20s.; L. Fontes (Alfa-Romeo), 10s.

The next event on the programme was the triumphal parade of "Blue Bird" by Sir Malcolm Campbell, recently returned from Daytona after setting up a new Land Speed Record of 276.82 m.p.h.

The seventh race was an outer-circuit affair, and was noteworthy for a really magnificent performance by Mrs. K. Petre, at the wheel of Shuttleworth's 2.3-litre Bugatti. Starting from scratch, with 13 cars ahead of her, Mrs. Petre passed them one by one to get into the lead on the last lap and win as she liked by 500 yards. Her speed for the race of 118.12 m.p.h. was splendid, especially as she cut out near the finish.

Hughes (Frazer Nash), had a good lead for some time, but was then passed by Miss M. Allan (Bentley), and F. Monkhouse (Amilcar), who finally finished second and third behind Mrs. Petre. Dobbs finished a very good fourth, coming up very fast.

Easter Junior Long Handicap.

Distance, about 9 miles. 14 ran.

1. Mrs. K. Petrie (Bugatti, 2,263 c.c. S.), scr.
 2. Miss M. Allan (Bentley, 4,398 c.c.), 1m. 5s.
 3. F. Monkhouse (Amilcar, 1,093 c.c.), 1m. 9s.
- Won by 500 yds. at 118.12 m.p.h., 25 yds. between 2nd and 3rd.

Betting—3—1, 3—1, 8—1.

Also ran: S. G. Greene (M.G., 1,087 c.c.), 1m. 34s.; E. G. Hughes (Frazer Nash), 1m. 24s.; R. F. Oats (Alvis), 1m. 13s.; G. L. Baker (Graham-Paige), 57s.; I. F. Connell (Vale Special), 44s.; M. P. Simpson (Riley), C. G. H. Dunham (Alvis), 37s.; C. J. P. Dodson (Austin), H. G. Dobbs (Riley, 1,089 c.c.), 29s.; Miss D. B. Evans (M.G., 747 c.c. S.), 15s.; D. Froy (M.G., 747 c.c. S.), 12s.

The senior long resulted in yet another runaway victory, but this time the in-

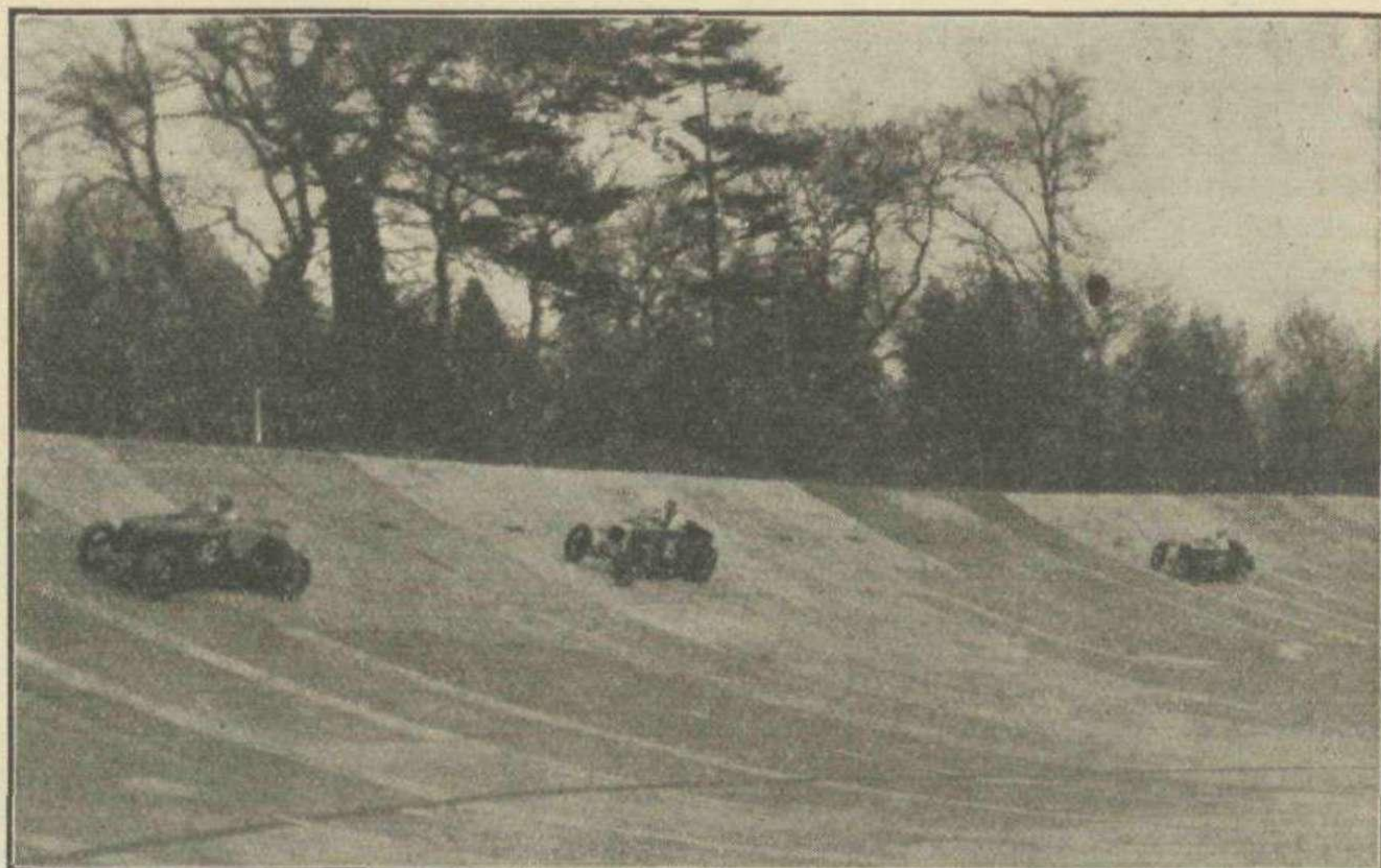
Betting—2—1, 10—1, 20—1.

Also ran: H. G. Dobbs (Riley, 1,089 c.c.), 48s.; W. M. Couper (Talbot), 45s.; A. G. Bainton (Bugatti), 36s.; R. T. Horton (M.G., 1,087 c.c. S.), 26s.; R. O. Shuttleworth (Bugatti); R. R. K. Marker (Bentley), 6s.; D. Froy (Bugatti), scr.; O. Bertram (Barnato-Hassan), owes, 15s.

The last race of the day was the final of the "British" Mountain Handicap over 10 laps, and it proved to be a fitting close to a good day.

For some time Dr. Roth held the lead on his Talbot, but on the 5th lap he was passed by Dobbs, who was handling his Riley really well, cornering with a steady power-slide. At this stage, Dixon was already making his presence felt and was lying third. Two laps later he was in the lead.

Meanwhile some splendid duels were being waged in the rear. Cook (E.R.A.), Evans (M.G. Midget), Staniland (Bugatti),



There were some evenly matched cars in the first race. Here is R. F. Oats (Alvis) leading a brace of Frazer Nashes driven by M. T. U. Collier and R. H. L. Eccles.

accuracy of the handicapping was excusable. J. C. Davis has had a good deal of bad luck with his 1½-litre Delage, but this time he had got the car going really well, and fairly surprised everybody.

Dobbs was limit man, but he had lost the lead to Tongue (M.G. Magnette) after one lap. Davis then went into the lead on the next lap, and streaked round at terrific speed, going unpleasantly near the top of the Home Banking on each lap. So near did his offside wheels approach the retaining wall that a great cloud of dust went up, and we waited for his reappearance on the Members' Banking with some anxiety. Tongue was still second, with W. M. Couper (Talbot), third, but A. P. Hamilton (Alfa-Romeo), was creeping up, as were Shuttleworth (Bugatti), Marker (Bentley), Froy (Bugatti) and Bertram (Barnato-Hassan).

Tongue held his second place on the next lap, and Davis had an easy win by 700 yds. Hamilton was a close third.

Easter Senior Long Handicap.

Distance, about 9 miles. 11 ran.

1. J. C. Davis (Delage, 1,484 c.c. S.), 36s.
 2. A. P. Hamilton (Alfa-Romeo, 2,336 c.c. S.), 11s.
 3. R. E. Tongue (M.G., 1,087 c.c. S.), 45s.
- Won by 700 yds., at 113.03 m.p.h. 50 yds. between 2nd and 3rd.

Jarvis (Maserati), Fotheringham (Bugatti), and Duller (Bugatti), did several laps in a close bunch, making a stirring sight as they howled round the Fork. Staniland, incidentally, was another example of extraordinary handicapping, his 2.3-litre Bugatti, being put on the same mark as Lindsay Eccles' 3.3-litre model!

Eccles was slowly picking up place after place, and on the 8th lap got into 4th place.

Some mild excitement was caused in this race when Richardson's Riley caught fire behind the Members' Hill. He stopped the car and got out before the flames touched him, and the Pyrene people did the rest.

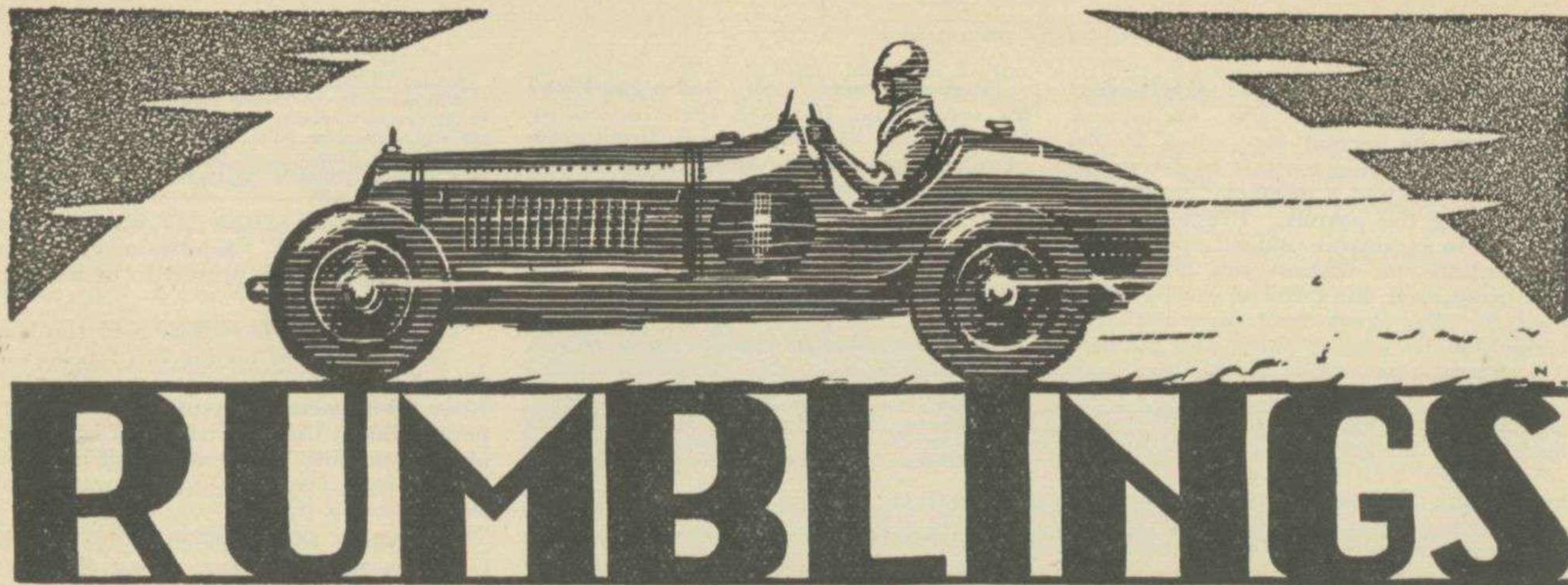
Final of the "British" Mountain Handicap.

Distance, about 12 miles. 15 ran.

1. Fred W. Dixon (Riley, 1,808 c.c.), 32s.
 2. A. H. L. Eccles (Bugatti, 3,255 c.c. S.), 8s.
 3. H. G. Dobbs (Riley, 1,488 c.c.), 46s.
- Won by 400 yds., at 74.68 m.p.h. 30 yds. between 2nd and 3rd.

Betting—3—1, 5—1, 16—1.

Also ran: C. A. Richardson (Riley), 1m. 15s.; Dr. E. J. H. Roth (Talbot), 56s.; L. P. Driscoll (Austin); P. G. Fairfield (E.R.A., 1,090 c.c. S.), 40s.; K. D. Evans (M.G., 747 c.c. S.), 35s.; R. L. Duller (Bugatti); R. S. Wilkins (Alfa-Romeo), 32s.; T. S. Fotheringham (Bugatti), 25s.; R. Jarvis (Maserati), 17s.; C. S. Staniland (Bugatti), 8s.; R. O. Shuttleworth (Alfa-Romeo), scr.



A Pressman's Holiday.

I HAVE often thought how interesting it would be to have a register of all the old sports and racing cars in England with a history behind them. London would probably be the richest hunting ground and there must be several hundred stowed away in mews and garages within ten miles of Charing Cross.

Last month I was told that the two Brescia Bugattis which Raymond Mays used to race were to be seen somewhere in the Paddington district, so when I had a little time to spare I went up to Sports Spares whose showroom is close to the station. There indeed was the Brescia, which was supposed to be "Cordon Bleu." As far as one could see, it might well have been the old car with its bolster tank and scanty body, though some later owner had added front wheel brakes. A second suggestion was that it was the car which Marshall drove in the Boulogne Grand Prix.

Another historic car I saw there was a two-seater Eldridge Special, which I believe was built for Indianapolis, and looked an exciting sort of vehicle. The induction system must surely have been unique, for the induction pipe runs from the blower in front of the engine down the near side, under the crank-case, and up the off-side to the manifold. The chassis passed under the front axle, all the oil was carried in a tank behind the driver's seat, and the radiator header tank was just in front of the dash. There were lots of other exciting points about the car, one of them being that it was reputed to have cost £6,000 to build.

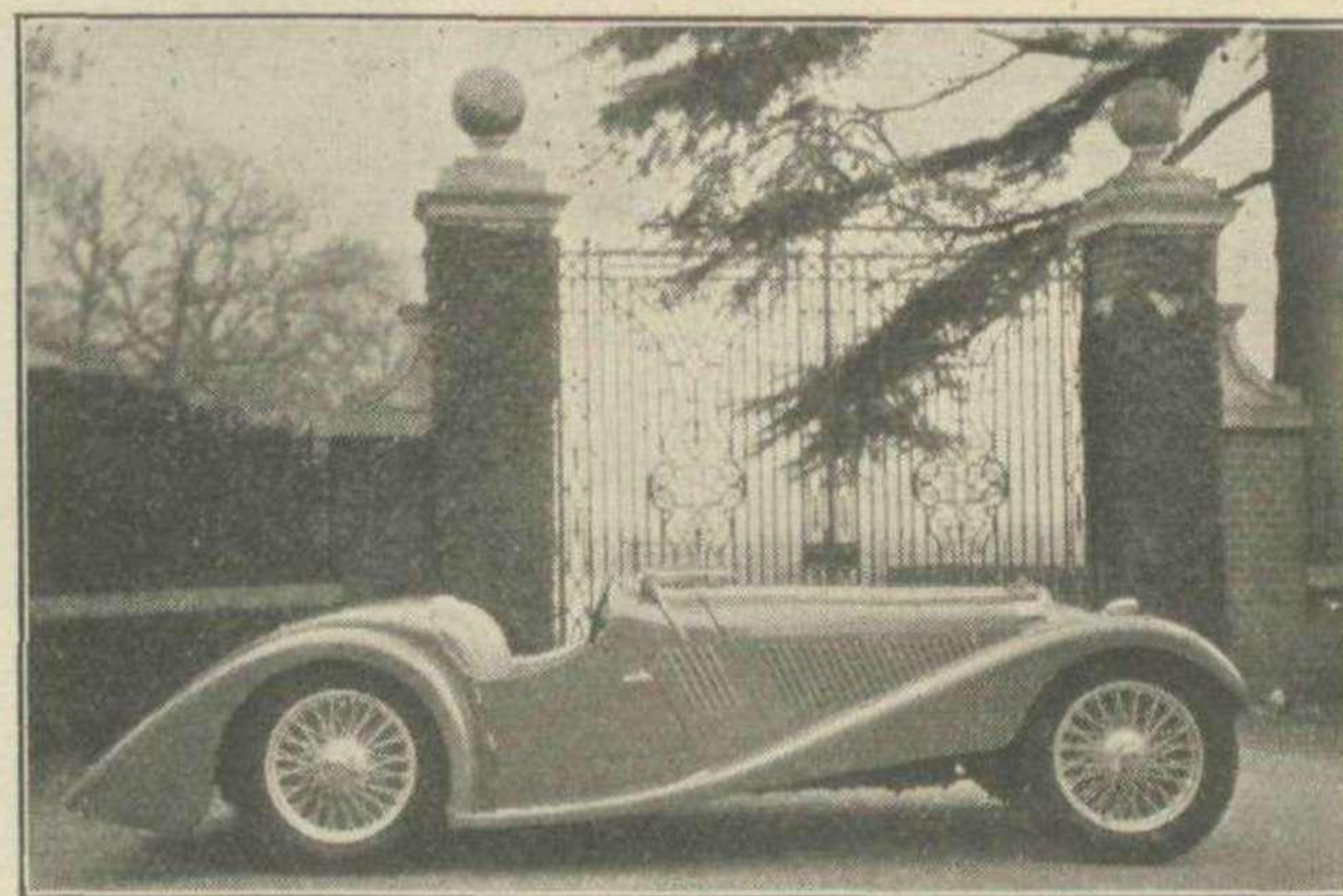
Horstmans and all that.

For the other Brescia I was directed to try Mr. A. J. Griffiths, whose garage is in the same district, but here I was disappointed. He had Jack Robinson's old Brescia, and a full Brescia in a touring Brescia chassis but "Cordon Rouge" was not amongst his collection. He had, however, a 1924 200 Miles race Horstman which was supposed to have been driven by Purdy or Cambell and to have lapped Brooklands at 98 m.p.h., and which had later been fitted with a tubular front axle and front wheel brakes, with shock absorbers acting as radius rods; a "30-98" which might have had Mundy's Gold Star engine in it but probably had not, and the Hon. Jock Leith's two-litre Grand Prix Sunbeam. This is a rather remarkable car, since it weighs only 12 cwt.,

but the chassis is so light that the front of the car just goes straight on when the wheels are locked over on a rough-surfaced corner. Something like this must have happened at Donginton, I think, for the car upset on its new owner at the opening meeting.

More Specials.

Returning once more to Eldridge Specials, Booth and Croft are building an Eldridge engine, reputed to be from



A thoroughbred in line and performance. The new 1½-litre Squire in two-seater form is remarkably good-looking.

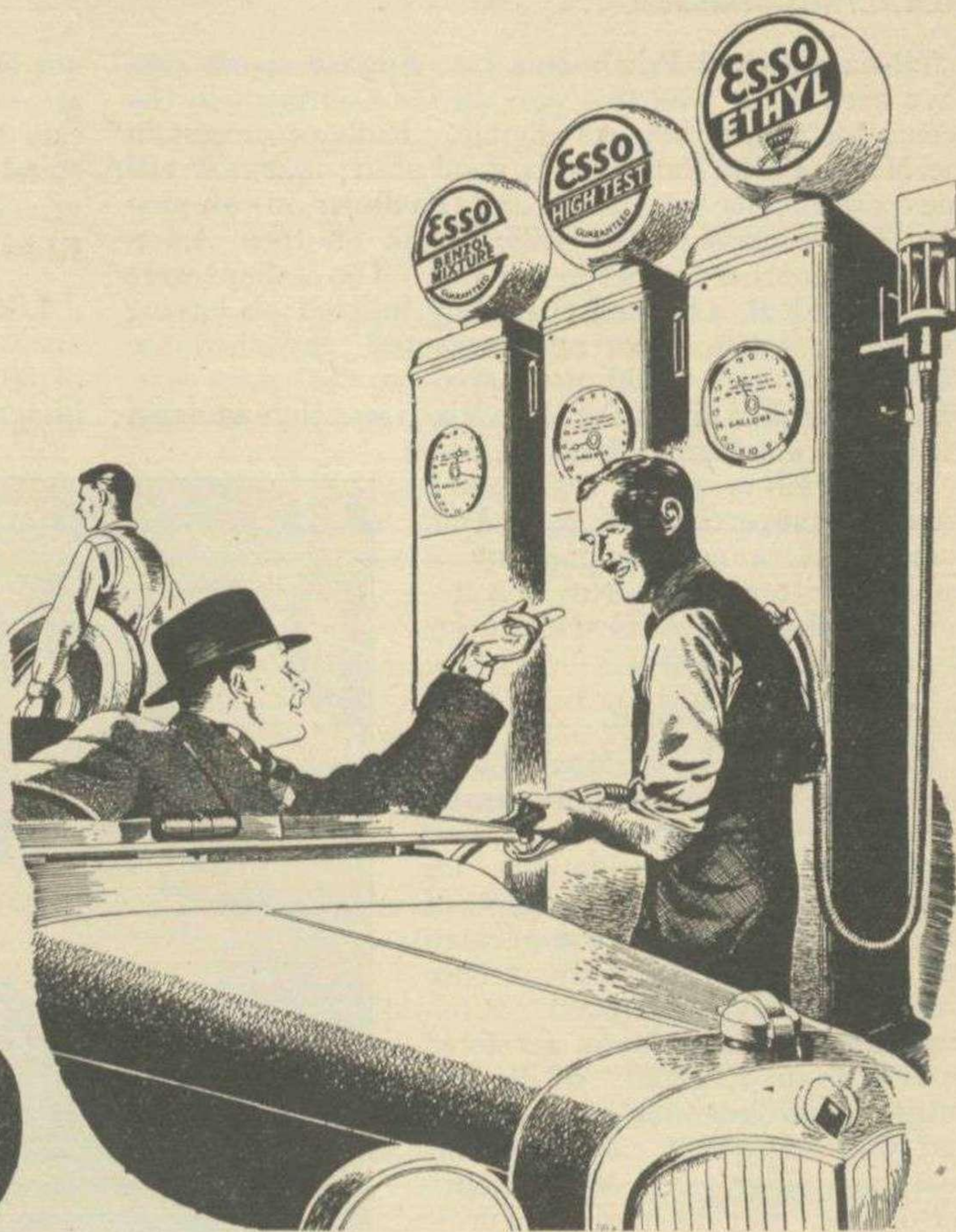
the single-seater racing car, into a special chassis, with chain-drive transmission in the Frazer Nash tradition, but with semi-elliptic rear springing. The chassis members are straight and carried very low under both axles, and it would make an attractive job when finished.

A good deal of "special-making" is also being carried on by Bentleys just now, and I have seen an eight-litre engine fitted into a four-litre chassis, a three-litre supercharged by means of a Cozette blower driven from the rear of the cam-shaft, and which is said to do 100 m.p.h. with a petrol consumption of 30 m.p.g., and best of all a 6½-litre engine fitted into a three-litre chassis, which gives a bonnet-length quite worthy of one of the "Chittys."

Britons Abroad.

Though we have not yet reached the stage of building

Pratts
now
becomes
ESSO



WORLD'S MOST ADVANCED PETROLS

MOTOR SPIRITS now enter an entirely new phase. Old standards are gone as surely as yesterday has gone. A new range of petrols takes the place of Pratts at garages and filling stations throughout the land—petrols so notably advanced in quality that they are being sold in all countries under a new name—ESSO.

These new petrols, which are available in all four of our popular grades, have been developed by leading technologists in the world's largest petroleum research laboratories. They have not only responded to the most exacting laboratory tests, but have given overwhelming proof of their superiority in practical tests over millions of miles of British roads, under British climatic conditions, in British cars, motor cycles, lorries and public service vehicles—even in cars anticipating the future trend of engine design!

ESSO ETHYL

Still further advanced in anti-knock and power-producing properties. Faster than ever! Remarkable hill-climbing and top-gear performance. Sold in other countries at a premium, but the same price as ordinary petrols in Great Britain.

ESSO HIGH TEST

A perfectly balanced petrol, crystal clear. Double-quick starting, unfaltering power, with a degree of acceleration that makes driving delightful.

ESSO BENZOL MIXTURE

Highest quality British benzol with pure Esso, perfectly blended by the newest scientific methods.

A revelation in anti-knock! A new thrill in acceleration! Better climbing than ever!

ANGLO-AMERICAN OIL COMPANY, LTD. (ESTABLISHED 1888), 36, QUEEN ANNE'S GATE, WESTMINSTER, S.W.

Please mention MOTOR SPORT when corresponding with advertisers.

RUMBLINGS—continued.

a full-sized Grand Prix racing car, English sports cars have been doing well this year on the Continent in the events for which they are eligible. Ridley's success in the Monte Carlo Rally was a good start, and now the fine performance of Clarke and Faulkner in winning the 1½-litre class in the Mille Miglia on their Aston Martin is another feather in our cap. The Italians were so surprised at its speed that they insisted on having the engine taken down and measured, and then the official measurers could not agree on the exact size. One thing I liked about the Mille Miglia was that amongst the entries was Signor Mercanti, who is an official in the R.A.C.I., and drove a supercharged 2.3 Alfa. Somehow I cannot imagine any of the Committee of the Royal Automobile Club at the wheel of a Bentley or Lagonda in the T.T.

Rallying down South.

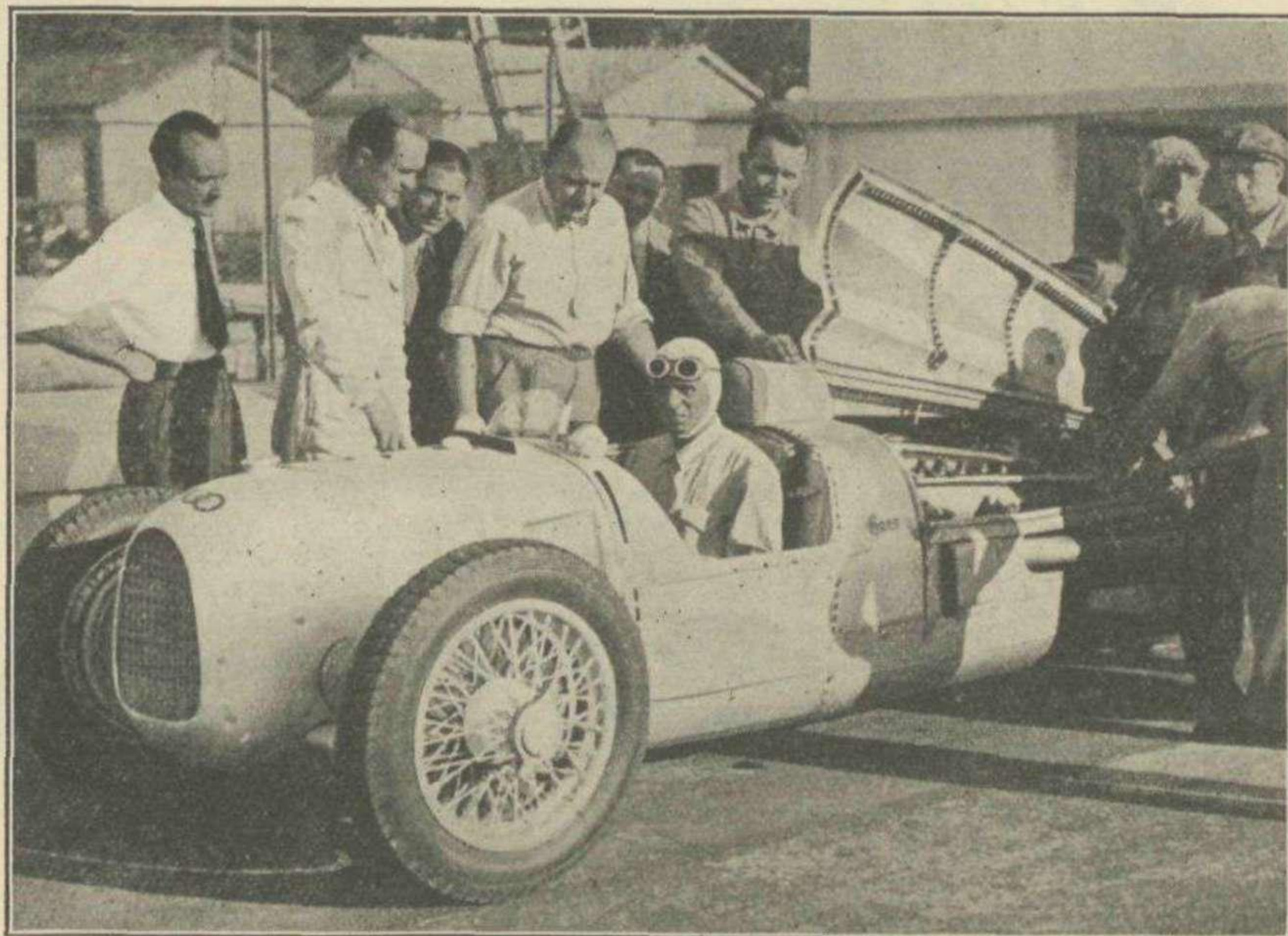
Like its neighbour at Monte Carlo, the Paris-Nice Rally only really begins when the cars reach their destination. The regulations for body sizes and other matters of specification are most complicated and exacting and the tests at Nice are extremely complex. Consequently it has seldom attracted entries from England, so it was gratifying to find that F. S. Barnes had won the small car class, this year, on a Singer, with Miss Astbury third, and that in the La Turbie Hill Climb which follows it they were first and second in the 1½-litre class. Kiklaus on an M.G. won the 750 c.c. sports class and Maillard-Brune repeated this success in the racing class, also on an M.G.

Barnes told me that the Singer Company were this year concentrating on the 9 h.p. car in competitions. He had intended to enter one or more in the Belgian 10 Hour Race, but this event is now cancelled. However, there is a race for sports cars at Rheims on the same date between the heats of the Grand Prix, and the length, some 120 miles, is not too exacting, so I should

not be surprised if a number of our fast small cars are seen over there. There is, incidentally, a class for cars up to 5 litres, in which Lagonda Rapides should stand an excellent chance.

Blowing the Speed Limit.

Like most people who have to travel much in built-up areas, I felt a little despairing at first about the effect of 30 m.p.h. limit on average speeds. After a period of temporary despression with thoughts of selling my



Varzi at the wheel of the Auto-Union which he drove last month for the first time in a trial run on the Avus Road. Willie Walb, the Auto-Union racing manager, is seen in shirt sleeves behind the car, and on his right Chiron, who went along to Berlin to watch the fun.

sports car and taking to a pony, I've decided that a supercharged car which can take full advantage of the short stretches of de-restricted road is the only thing. The only thing is that if I attach a blower to my old charger, what will the effect be on its second-hand value? I am confident fortunately that its works are strong enough to withstand the strain.

From what little experience I have had of supercharged cars I feel that a car with a capacity of not more than three litres, blown would be the ideal sports car for England. Other things I would specify are mechanical (and efficient) brakes, a simplified electrical system, and a manually operated gear-box. I don't know how far my preference for the latter would be shared amongst sports cars owners. The self-changing pattern is certainly very rapid.

The Gold Standard.

One effect of our speed limit must be to keep away those continental visitors who would otherwise visit the pleasant land of England. With petrol at 1s. 5d. to us, what must it be to them, but they are not going to be attracted by the long and pointless limits such as the six-mile stretch from Colnbrook to Slough.

M.G. Midget 750c.c. Super Charged

This car has been specially prepared for road racing. Tuned by THOMSON & TAYLOR. Over £200 spent on modifications. Will do 108 m.p.h. Fitted oversize brake drums. Splendid condition. Can be seen in London.

Price £195

Apply "Box O 19," Motor Sport.

RUMBLINGS—continued.

Incidentally, a financial friend tells me that there is quite a chance that France will go off the Gold Standard, in which case the franc will drop to 200 to the pound. In that case they will need to put on a double service of steamers across the channel to accommodate the sports car owners who are longing to open out on the Routes Nationales.

Record Breaker for International Trophy.

I have it from the mouth of Signor Farina himself that the car he will be driving in the International Trophy at Brooklands on Jubilee Day will be the 3.7-litre car which he ran at Monaco. The car and driver made an excellent showing until fuel feed trouble set in, a trouble to which Maseratis seem to be prone. If I am not mistaken, a frozen-up needle valve in the carburetter of Hamilton's car in the Grand Prix de Tripoli last year caused him to drop out when lying and probably the same thing occurred to Farina.

Rovere hopes to be driving the 1,100 c.c. Maserati which broke the kilometre record this year, and as this car is fitted with quite a compact single-seater body, it should do well on the Brooklands course.

The V8 Maserati.

There were rumours a fortnight before the Monaco race that the new five-litre car would be ready, but I was told by Zehender that it was not intended to be launched until the Grand Prix of Tripoli. At any rate it will be a lot more manageable than the old 16-cylinder, and with the "Bimotore" Alfa-Romeo, which is des-

cribed elsewhere in this issue, will give race-fans at that thrilling spectacle something to think about.

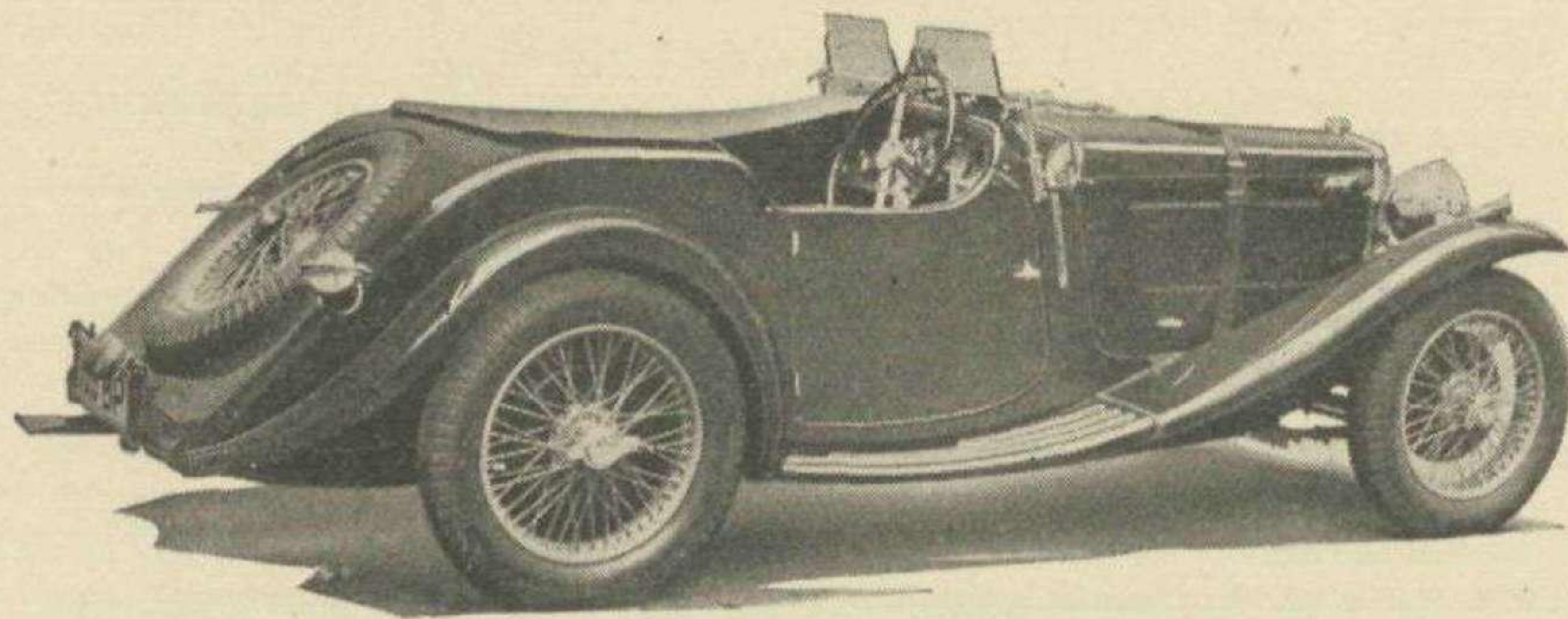
Big Tyres.

One or two cars at the La Turbie Hill climb were fitted with twin rear wheels, but I should think they would cause too much drag on corners, besides being too heavy, ever to be used in long races. I noticed, however, that Etancelin, Zehender, and Farina had taken a leaf from the E.R.A. book and were using 7-inch low-pressure Dunlops on 16-inch wheels. 6 or 6½-inch tyres on 18-inch rims were the sizes favoured on the Alfas, but the Mercedes-Benz cars had colossal ones, nominally 6.50 by 19, but much wider and more bulky than one expects even for that size.

Harking back to the E.R.A., a number of the drivers down there were anxious to see these new English racing cars in action on the Monte Carlo circuit, but they would hardly have stood much chance against the "heavy metal," with its three and four litres of engine size. However, this year there will be plenty of 1½-litre races, in which they should be able to make their mark.

Best Wishes.

Congratulations to Whitney Straight on his engagement to Lady Daphne Finch-Hatton, daughter of the Earl and Countess of Winchelsea. I hope we shall see him in motor-races from time to time, for Straight has a genuine flair for handling a car which places him head-and-shoulders above the normal run of drivers. Aviation, and particularly the Monospar, is taking up a good deal of his time just now.



The remarkable success of the "N" Type M.G. Magnette has prompted us to design a de-luxe type of body which will appeal strongly to all practical motorists.

SPECIFICATION: Ash Frame, special alloy panels effecting considerable reduction in weight. Upholstery and body in colour to order. Upholstery in Connolly hide. Fully adjustable seats with Float-in-Air cushions. Folding windscreen side flaps, usable as aero screens. Disappearing hood, exceptionally complete side curtain equipment. 11½-gallon rear tank. Quick filler caps. Spring steering wheel. Special luggage accommodation. Price £375.

CRESTA MOTOR COMPANY LIMITED

BROADWATER ROAD :: WORTHING.

Telephone:
WORTHING 2585.

Directors:
A. N. L. MACLACHLAN,
J. C. ELWES,
R. C. ELWES,
C. E. C. MARTIN.

M.G. GIVES BRITAIN A LEAD

THE NEW R TYPE MIDGET RACING MODEL INCORPORATES TORSION-ROD INDEPENDENT SPRINGING FOR ALL FOUR WHEELS, INDEPENDENT STEERING, A Y SHAPED BOX FRAME, GIRLING BRAKES, AND PRE-SELECTOR GEAR BOX. PRICE, READY TO RACE, £750.

APRIL 25th, 1935, may well rank as a milestone in British automobile history. On that day a little gathering of racing personalities assembled at a Piccadilly showroom, where Mr. Cecil Kimber had invited them to inspect the latest product of the M.G. Car Company.

And what a magnificent engineering achievement this new car is! The Monoposto M.G. Midget Racing Model (Type R.) stood in the centre of the large room, almost submerged by the peering heads of the guests, while those who had already examined its remarkable features stood around and unburdened their enthusiasm on their equally enthusiastic listeners.

Dealing first with the chassis, for it is in this respect that the Type R differs radically from all other British productions, we find that the normal chassis frame has been discarded in favour of a Y-shaped frame built up into a box section of electrically welded 16 gauge steel. It is internally braced, and although weighing only 57 lbs. is far stronger than any conciform construction of the same weight. Each road wheel is carried on two horizontal wish-bone brackets mounted above and below the frame, on which they pivot. The lower bracket is connected to the torsion rod, which is placed parallel to the chassis-frame and is fixed on a special bracket at the far end. With this form of springing, of course, it is essential that adjustment of the torsion bars should be possible, so that the car can be held at the correct height from the ground and the angles of the "wish-bones" be arranged in normal relation to the stops limiting the wheel movement. The M.G. system provides for adjustment of the torsion-bars at their fixed ends. The stops, incidentally, are forged in one piece with the wheel-carrier brackets. Luvax shock-absorbers are used, with exceedingly light fluid-containers made of hiduminium.

In case any of our readers may doubt the safety of the torsion-bar suspension, it will interest them to hear the following experiment which was made at the M.G. factory. For the adequate springing of

Detailed Specification of the Monoposto M.G. Midget Racing Model (R type).

Engine: Four cylinder, 57 x 73 mm., 746 c.c., 108 b.h.p. at 6,500 r.p.m. Pressure lubrication, with 8 pints spare oil supply. Zoller-M.G. compressor giving 22 lbs. per sq. in. normal boost, and 28 lbs. per sq. in. maximum boost. S.U. carburetter. 14 mm. plugs.

Transmission: Wilson pre-selector gearbox. Ratios: top direct, third 1.3 to 1, second 1.84 to 1, bottom 3.09 to 1, reverse 4.15 to 1. Rear drive ratio 4.125 to 1. Wheel size 3.00 x 18 rims. Tyres 4.75 x 18.

Sundry: Tank capacity 22 gallons. Fuel feed by twin S.U. pumps. Track, front 3 ft. 10 in., rear 3 ft. 9 in. Wheelbase 7 ft. 6 in. Weight empty 11 cwt.

Price, ready to race: £750 ex works.

the monoposto Midget the bars have only to twist through an angle of 35 degrees, but in an actual test no less than eight complete turns (2,880 degrees) were made before the bar snapped. There's a margin of safety for you!

The steering-gear, too, is a complete departure from previous M.G. practice. The front wheel steering arms are attached to long drag links which pass alongside the body to a cross-shaft which extends on each side of the chassis and is held in two bearings. This is operated by a twin-steering box bolted to the bulkhead. It will be seen that this system provides absolutely independent steering of the front wheels, the usual track-rod being eliminated. In actual practice the great advantage lies in the fact that the "kick" from one wheel does not affect the steering of the other.

The new Midget carries the highly successful Girling brake drum and brake back-plate assemblies, the former being made of high manganese steel and the latter of elektron. A feature of this system is that the braking efficiency does not fall off at high temperatures.

Turning to the engine, the power-unit of the "R type" is really a modified version of the "Q type." The latter was sometimes prone to overheating, however, and this has been cured by means of an improved three-branch water manifold, which materially assists the cooling of the head. A Zoller-M.G.

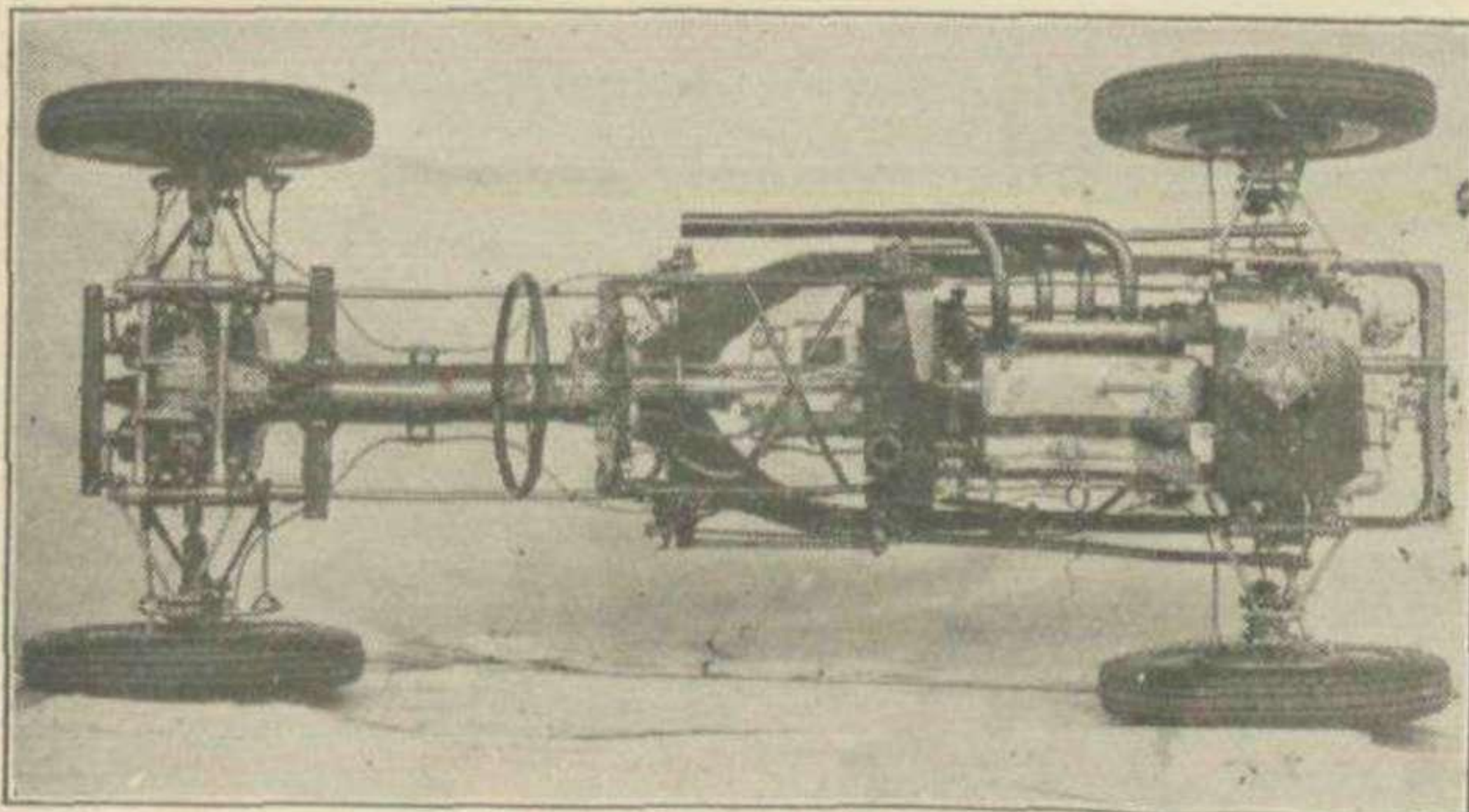
compressor is fitted in the usual forward position, and draws the mixture from a large-bore S.U. carburetter. At 6,500 r.p.m. incidentally, the engine develops a b.h.p. of 110, more than any four-cylinder in the world of its size. The blower gives a maximum boost of 28 lbs. per square inch.

The drive is transmitted through a disc-type clutch and a pre-selector gearbox manufactured under Wilson patent. The clutch is so arranged that it cannot be operated by the pedal controlling the gear-bands, but only comes into operation should, in changing to a lower gear, the engine revs place a strain on the transmission in excess of a pre-determined slip-load. The gear-selection is made by means of a normal quadrant mounted on the steering column, thus eliminating the necessity of removing one hand from the steering wheel.

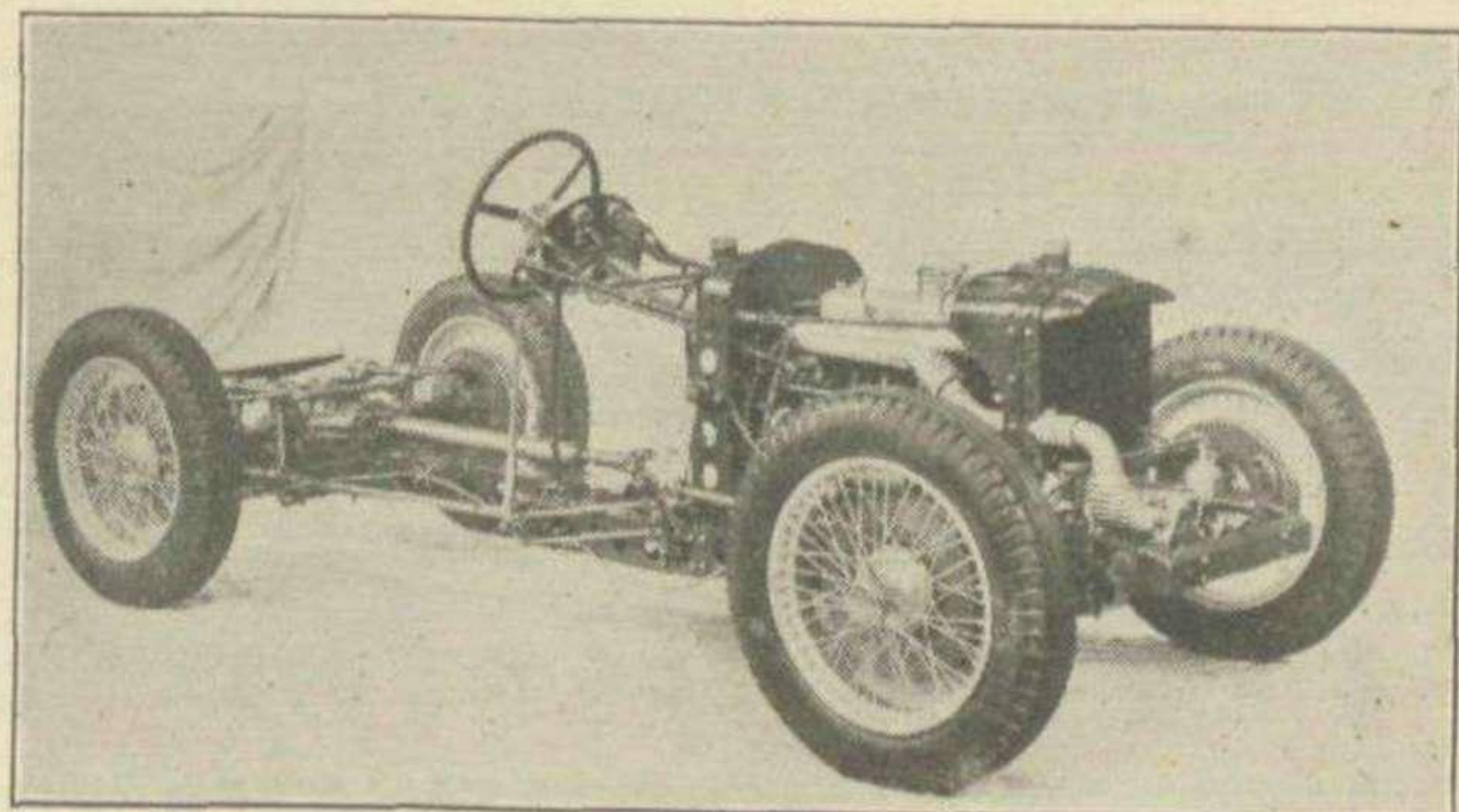
From the gearbox the torque is taken to the rear through a Hardy-Spicer propellor-shaft which is balanced at 8,000 r.p.m. The shaft runs on top of the single chassis-member. The differential assembly is composed of straight cut teeth crown wheel and bevel pinions and a four twin differential. The aluminium casing is mounted on the chassis member and the cross tube to which the "wish-bones" are attached. The power is finally transmitted to the rear wheels by way of short Hardy Spicer shafts.

At the price of £750 the Monoposto Midget is an amazing proposition, being a genuine Grand Prix racing car in miniature. Nothing like it has ever been within reach of motor-racing enthusiasts at the price, either in England or on the Continent.

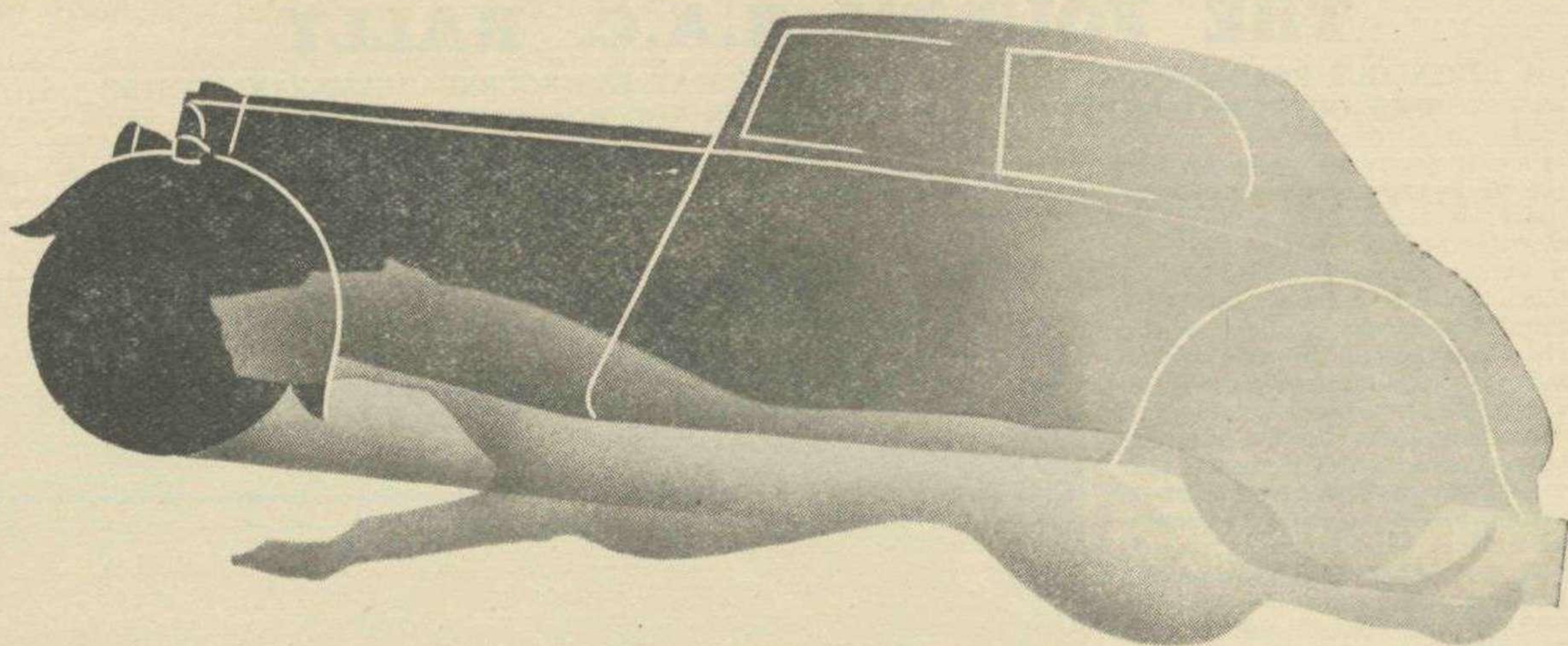
No description of this outstanding racing car would be complete without a tribute to Mr. Cecil Kimber for his courage in breaking away from orthodox design. The result is a car which will be the admiration of the rest of the world. Is it too much to hope that, following the tradition of the M.G. Company of incorporating in their production cars features tested in racing, that we shall see independent springing on M.G. sports cars?



A top view which shows the Y-shaped chassis. The torsion rods for the rear suspension can be seen running parallel to the stem of the "Y."



Short and compact, with central steering column. The "R" type Midget will be fitted with a neat single-seater body, with a cowling coming right forward to enclose the supercharger.



**"I'M NOT MERE MACHINERY—
but lithe as a Panther"**

You'll always remember your first run in an Aston Martin. I possess an eagerness, an air of adventure that whispers 'motoring will always be fun—for you and me.' No pulling at the wheel on corners. Steering is no more than holding a feather between your fingers. Every part of me is sturdily built; strength where strength is needed—to last without continual adjustment—to withstand the fiercest driving. With it all I'm an economy car; in tax and insurance—only 11.9 h.p., 4 cylinder; in tyres and petrol—25/30 m.p.g. Illustrated particulars and name of nearest Agent from Aston Martin Ltd., Feltham, Middlesex. 'Phone Feltham 218.

12-70 H.P. "Le Mans Mark II" 2/4 Seater model on 8' 7" Chassis £610
 12-70 H.P. "Le Mans Mark II" 4 Seater model on 10' 0" special Chassis £640
 12-70 H.P. "Le Mans Mark II" Sports Saloon on 10' 0" Chassis £700
 12-80 H.P. "Ulster" 2 Seater 100 m.p.h. model on 8' 7" Chassis £750

ASTON  **MARTIN**
 "lithe as a panther"

THE FOURTH R.A.C. RALLY

A STRENUOUS ROAD SECTION PRECEDES FINAL TESTS AT EASTBOURNE—"GYMKHANA TESTS"
SEED OUT THE UNSKILFUL—HANDSOME CARS IN THE COACHWORK COMPETITION.

OF the 281 competitors who set out at the end of last month to take part in the R.A.C. Rally, 36 failed to arrive at their destination, and 51 more were penalised for late arrival at controls *en route* or in the Examination for Condition which took place at the end of the thousand-mile journey, which had to be covered by all cars at an average speed of 26 m.p.h.

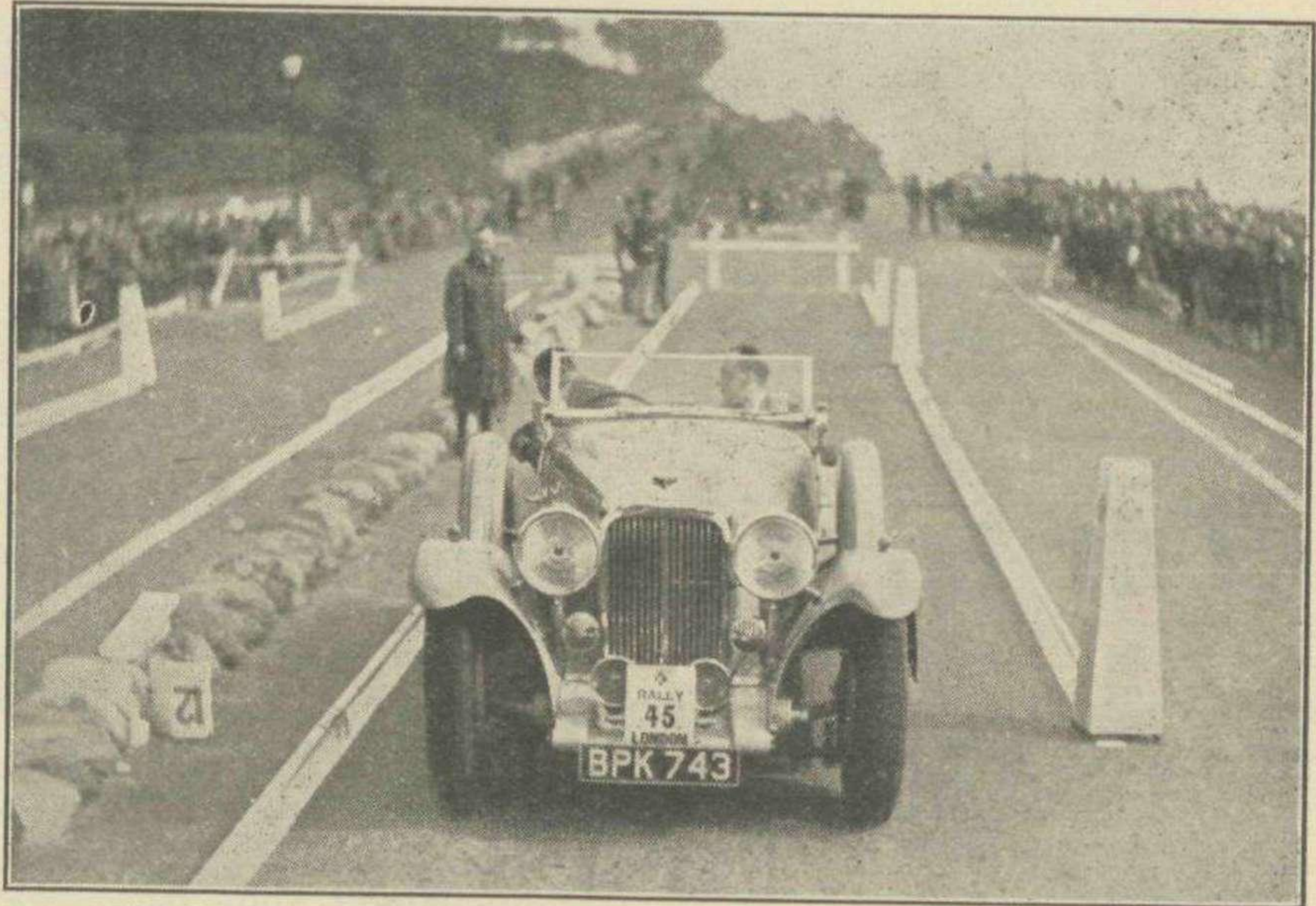
The Eastbourne Rally differed from the three previous ones in that there were no "winners." Instead, the cars were classified according to their rated horse-power and whether they were open or closed, and the 33 per cent. most highly placed in each group received First Class Awards, the next 33 per cent. Seconds and the rest Third Class or "bronzes." To qualify for the first two, incidentally, the car had to come through the road section and the final examination on arrival without loss of marks, putting a heavy penalty on a scratched wing or a damaged side-lamp.

This alteration to a Trials systems of award detracted somewhat from the interest of the Rally as a means of comparing individual cars, but as there was no inducement for the trade to prepare and enter specially prepared cars, the private owner for once felt that he was competing with cars of characteristics similar to his own.

Two factors combined to make the road-section more difficult than in former years, namely the 30 m.p.h. speed limit and the fact that the routes from all but one starting point included a strenuous and to most of the drivers, unknown section along the Welsh coast.

observed the limits strictly, and the great majority did, found themselves falling well behind the set speed, calling for

trouble with the police, who were active all over the country, their "successes" including bagging a score of cars on the



This photograph gives a good idea of the general layout of the testing ground on the Front. The car is A. E. Dobell's Lagonda.

full throttle driving on the smaller cars when the restricted areas were left behind. Fortunately for them the rules differed from those of the Monte Carlo Rally. In the R.A.C. event, marks are only lost

road coming out of Newcastle, and traps on the Sea Front at Llandudno, the latter effort particularly uncalled for after inviting the R.A.C. to arrange their routes to pass through the town. There was considerable activity in other parts of Wales, in Sheffield, a fruitful spot near Pangbourne, and a final effort by the Sussex police just outside the boundaries of Eastbourne. However, competitors did not allow themselves to be too downcast by the new motoring misfortune. Nigel Holder drove round the country in his Bentley with an alarm clock close at hand, hoping to "gong" policeman on bicycles, but unfortunately the species seemed quite extinct. Humphrey Symons solemnly lapped a memorial in Stratford-on-Avon until the driver of a pursuing police car gave up the chase, while other drivers just slowed right down to ten miles an hour when followed by members of the motorised force, giving them clearly to understand that they had no intention of contributing to the local funds.

To those who were visiting Wales for the first time the steep and twisting climb and descent from Llandudno to Dolgelley came as a real surprise, comparable almost to some of the lesser Alpine climbs. Those who covered this part of the route in the daylight hours made their way south in cheerful bands, driving in glorious sunshine, which made up for the discomforts of the earlier hours. Comic relief was provided by two men in an Austin who had taken a string of sausages with them and proceeded to stop and cook them at the summit of the pass. Unfortunately, their enterprise was not rewarded as the sausages proved uneatable and had to be thrown down the mountain-side. Com-



On arrival at Eastbourne the cars were pushed in the yard of the Coach Station. Miss Doreen Evans is seen joining the throng.

As to the first point, many of the routes passed through the industrial areas of Lancashire and Yorkshire. Those who

by those behind schedule at the first check. Drivers who disregarded the traffic regulations found themselves in

THE R.A.C. RALLY—continued.

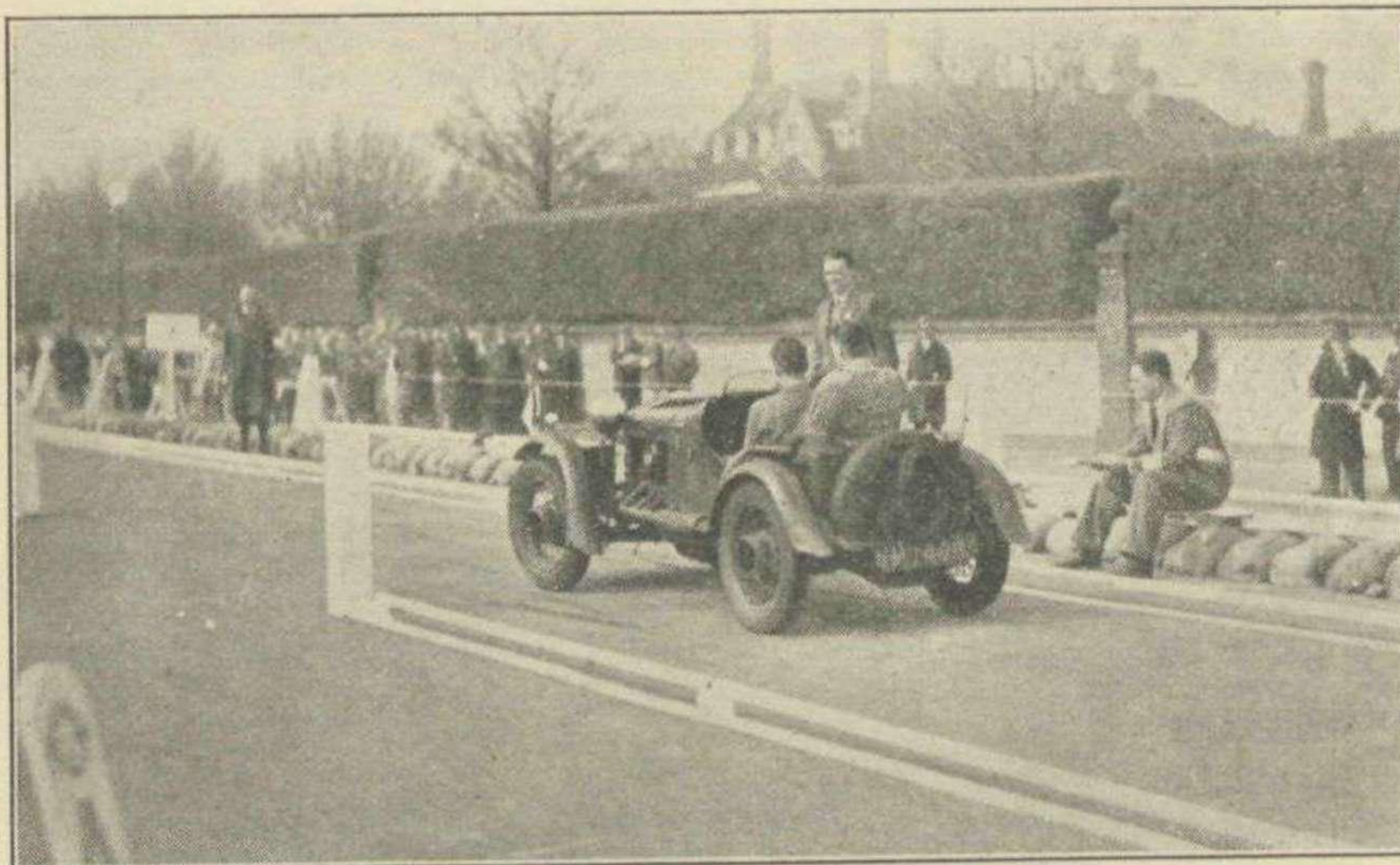
petitors from Edinburgh, Harrogate, Liverpool and Yarmouth, all had to pass over this section of road by night and they had a different tale to tell, having difficulty in finding their way on the winding

to respond. Then came the two Eliminating Tests. The first of these took place on Granville Hill, a road on the outskirts of the town with a reputed gradient of 1 in 6 and a tarmac surface, on which

through it successfully, though few of them took full advantage of the width of the road when stopping preliminary to backing through the gap, while others lost time by using reverse and then being unable to engage first gear.

With such a large entry it is difficult to single out individual performances, especially when no official times were published, but one of the fastest ascents must have been that of H. Parkinson on a supercharged N Type Magnette, who made full use of his self-changing gear-box and shot over the finishing line with spinning wheels and some detonations as one or more plugs cut out higher up. Another small car which made an excellent performance was the 1½-litre Singer driven by A. G. Imhoff which came within 4/5 seconds of the fastest time. The V8 Fords were impressive and quiet, and much steadier than the various American closed cars against which they were competing. The 3½-litre Bentleys acquitted themselves with their usual effortless, while a high 6½-litre saloon, driven by R. D. Gregory, showed that there was life in the Old Brigade as well.

The only car to run back into the barrier was J. A. Driscoll's Standard, though an Ulster model Aston Martin stalled at the critical moment owing to a high bottom gear and lost a little time, and Thomson on an open Railton also "lost his prop" at this point. The Lagonda Rapier coupé, driven by Lord Walpole, sounded very feeble and only completed the climb with difficulty, unlike another of our motoring peers, Lord Waleran, who placed his Ford de Luxe very neatly just through the gap and shot away with the minimum of delay.



The entry list for the Rally was by no means composed entirely of concours d'elegance motor cars. Here are three hardy wights who were fully exposed to the weather on their 1,000 mile journey.

roads, on which there were few signposts.

Fine weather and bright sunshine were experienced almost everywhere during the daytime, but there was widespread fog at night, stretching all along the South Coast and from Kings Lynn south to Eastbourne. Several crashes occurred as the result of bad visibility, Charles Follett's Alvis was completely wrecked when his spare driver ran into a stone wall at a sharp corner not far from Truro and another Alvis, stationary this time, was run into from behind by an S.S. to the detriment of the latter car, while an Aston Martin driver avoided sharing the same fate by careering off the road up a bank. Mechanical troubles were not unknown, even to such experienced drivers as the Hon. Brian Lewis, whose new short-chassis S.S. suffered from clutch trouble, making it impossible to complete the road-section on time. Another sufferer was Miss Allen, whose A.C. disintegrated its water circulation system. The drivers of a Wolseley which started from Liverpool reported fitting a new gasket and two big-ends *en route*, some other car was seen in the Newcastle neighbourhood with its gearbox in small pieces on the road, while there were the usual tales of burnt out dynamos and elusive "shorts" which just shows that the modern car still requires a certain amount of attention before undertaking a thousand mile journey.

Thursday morning saw the 241 survivors converging on Eastbourne, once more in brilliant sunshine, and after passing through the Final Check on the sea front were directed to the Coach Station, where the cars were parked in the open.

Proceedings opened on Friday with a Starting Test for which the time limit was five minutes and only five cars failed

the course was outlined by wooden beacons and "kerbs" of iron. From a standing start on the gradient the competing cars had to run up the hill a distance of fifty yards, reverse back through a gap to the other side, and then continue on for a further 55 yards to the finishing line.



One of the most striking cars in the Rally was the airstream Tatra entered by C. W. Neville. The engine is at the rear and the car is scientifically streamlined.

The test was a fair and comparatively simple one calling principally for a well-tuned engine, a gear-box with a suitable ratio and powerful brakes to control the car when backing downwards across the hill, and the majority of drivers came

The Test on the Parade.

The second test was more complicated, and found out the weak points of a large number of cars and drivers. It consisted of a 75 yard run up the Promenade to

THE R.A.C. RALLY—continued.

the beginning of the reversing bay, through which the car had to be backed for some 40 yards. This brought the car opposite a second gap through which the original stretch was reached, and from there, there was a run of 200 yards to the finish. Drivers suffering from stage fright found the backing far from easy. Two of these courses were laid out alongside one-another, and cars were dealt with as fast as they arrived from the first test.

As might be expected, large saloons with streamlined tails, especially those American vehicles with soft suspension were at a great disadvantage in the backing section, though much of the difficulty could be overcome by a competent driver, as was shown by Thatcher, who took his Airflow Chrysler through without touching anything. Symons was chary of damaging the bodywork of the beautiful 3½-litre Bentley saloon entered by Jack Barclay, while Nigel Holder made a particularly good showing on a car of the same make, coming within two seconds of the fastest time in his class. He was obviously much aided by the excellent visibility afforded by his car. Kingston Whittaker's Railton, fitted with a drop head body and a tiny rear window was at great disadvantage from this cause, but made up on acceleration. Of the large open cars a smart blue-and-grey Bentley, driven by Miss Watson received well-deserved applause, and Dobell and Mann were excellent with their Lagonda Rapides, though the latter came within an ace of hitting the "kerb." Gootnick found his magnificent two-seater Mercédès rather long for the gap and was greeted by the fatal clang of falling pipes.

Other drivers made much worse jobs of it, and we noticed amongst others, H. M. Trickett in an Austin 10 who ignored the reversing altogether, Miss Joan Richmond who did the same thing, and

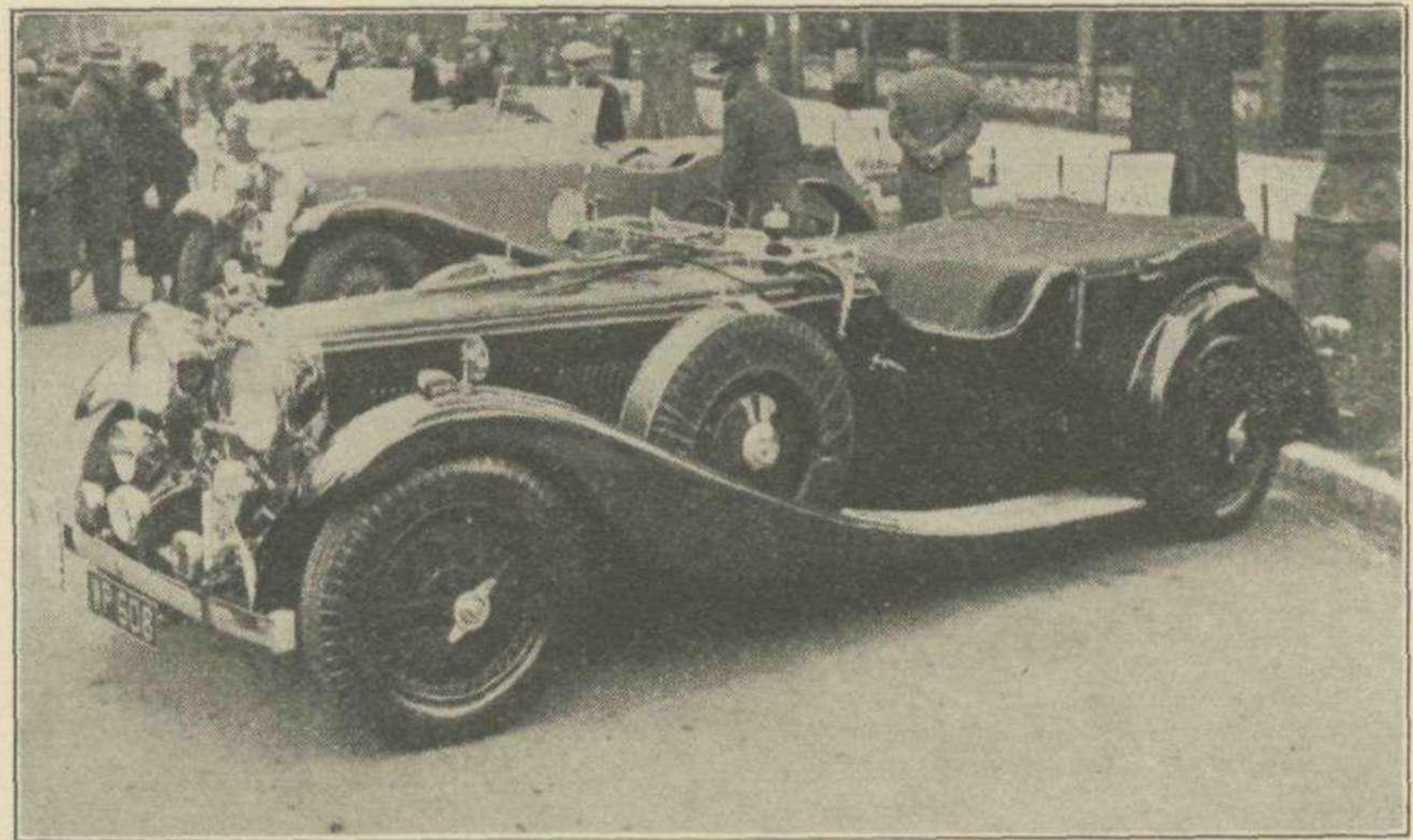
then nearly ran over a group of officials, and Wells in a Riley, who knocked down obstacles and missed his gears. The streamlined Tracta, driven by Commander Graham White, must have been awkward to manage as louvers are used instead of a rear window; in the excitement of the moment the car stalled and refused to start for some time.

The smaller cars, of course, were much easier to handle and two closed cars which made rapid evolutions were a Rover, driven by Burden who kept his tongue out during the critical moments and Captain Fitzmaurice's Airstream Singer.

The open cars of this later marque scored their usual success, some of the fastest being F. S. Barnes, Langley and Eason Gibson, while Parkinson's

blown M.G. and the neat unblown ones, which Miss Doreen Evans and D. G. Evans have been using lately in reliability trials, also nipped through at commendable speed. Manby Colegrave was handling the first of the new Squire cars and though he was rapid on the straights, got involved with a "kerb" on first having to back. Brian Lewis had a similar experience on the S.S. 90.

To determine the awards, the cars were divided into eight classes, up to 8 h.p., over 8 to 14 h.p., over 14 to 20 h.p., and over 20 h.p., with separate groups for open and closed cars. The marks gained in the two tests formed a very fair basis of comparison between the various cars and the R.A.C. is to be congratulated on a splendidly organised competition event which satisfied everyone who took part in it.



Adequately equipped for fast motoring; W. E. C. Watkinson's Alvis Speed Twenty which won the Coachwork Award for open cars from £701—£1,000.

THE RALLY RESULTS.

The First and Second Class competitors lost no marks on arrival or on inspection; their awards were governed by the eliminating tests.

FIRST CLASS, GOLD AWARDS, ARRANGED ALPHABETICALLY.

Key to starting places: B, Buxton, E, Edinburgh; Y, Great Yarmouth; H, Harrogate; LE, Leamington; LI, Liverpool; L, London; T, Torquay.

- A. E. Ansell, Chevrolet (26 h.p.), L E.
- C. M. Anthony, Aston-Martin (12 h.p.), L.
- J. M. Archer, Riley (9 h.p.), E.
- F. C. Ashby, Ford V-8 (30 h.p.), LE.
- Miss J. Astbury, Singer (13 h.p.), L.
- E. H. Banfield, M. G. Midget (8 h.p.), L.
- F. S. Barnes, Singer (13 h.p.), LE.
- C. L. Benbridge, Riley (12 h.p.), B.
- H. C. Berry, Armstrong Siddeley (17 h.p.), LE.
- R. A. Bicknell, Singer (9 h.p.), LE.
- A. J. Blake, Crossley (10 h.p.), B.
- G. L. Boughton, Triumph (11 h.p.), L.E.
- N. Bracey, M.G. (8 h.p.), L.
- F. A. Bullock, Ford (8 h.p.), L.
- O. H. Burden, Rover (14 h.p.), LE.
- Miss I. M. Burton, Vauxhall (14 h.p.), LE.
- L. K. Calver, Austin (7 h.p.), L.
- A.G.D. Cleave, S.S.I. (20 h.p.), T.
- G. E. Coppen, Alvis (20 h.p.), T.
- G. H. Crossley, Bentley (26 h.p.), B.
- L. W. Cutler, Triumph Gloria (11 h.p.), B.
- J. A. Davies, M.G. (8 h.p.), L.
- S. C. H. Davis, Triumph (11 h.p.), L.
- A. E. Dobell, Lagonda (30 h.p.), L.
- C. Dodd, Lagonda (16 h.p.), Y.
- H. C. Dryden, Ford (8 h.p.), L.
- A. C. Dutton, Standard (16 h.p.), L.
- J. Eason Gibson, Singer (9 h.p.), LE.

- R. B. Eddleston, Alvis (17 h.p.), LI.
- J. R. Edwards, Singer (9 h.p.), L.
- Miss D. B. M. Evans, M.G. Magnette (12 h.p.), L.
- D. G. Evans, M.G. Magnette (12 h.p.), L.
- Capt. D. Fitzmaurice, Airstream Singer (11 h.p.), T.
- J. Flint, Alfa-Romeo (16 h.p.), E.
- C. M. Foss, Rover (12 h.p.), LE.
- H. Friend, Junr., M.G. (8 h.p.), L.
- R. Gaspar, Vale Special (10 h.p.), L.
- R. Gough, Singer (9 h.p.), LE.
- E. Griffiths Hughes, Frazer-Nash (12 h.p.), T.
- W. G. K. Griffiths, M.G. (12 h.p.), LE.
- A. G. Grimmond, Railton (29 h.p.), L.
- T. B. Hague, Aston-Martin (12 h.p.), B.
- C. A. Hall, Singer (9 h.p.), B.
- C. W. P. Hampton, Lancia (12 h.p.), LE.
- G. H. Harrington, M.G. Magnette (12 h.p.), L.
- G. Hartwell, Alvis (17 h.p.), T.
- A. C. Hess, British Salmson (12 h.p.), L.
- H. N. Holder, Bentley (25 h.p.), L.
- H. S. Hollings, Wolseley Special (12 h.p.), LI.
- A. H. G. Hooper, S.S.I. (20 h.p.), L.
- L. J. Hollingsworth, Ford V-8 (30 h.p.), L.
- R. D. Hunnam, S.S.I. (20 h.p.), E.
- K. Hutchison, Ford V-8 (30 h.p.), L.
- A. G. Imhof, Singer (12 h.p.), L.
- Miss M. Jennings, Rover (14 h.p.), B.
- S. J. Jones, Morris (10 h.p.), T.
- J. H. Kemsley, Riley (9 h.p.), LE.
- J. Kingston-Whittaker, Railton Terraplane (28 h.p.) H.
- C. M. B. Kite, Wolseley Hornet (12 h.p.), T.
- Mrs. E. E. Lambert, Riley (9 h.p.), T.
- G. P. Law, Riley (9 h.p.), LE.
- S. M. Lawry, Triumph (11 h.p.), L.
- C. Mann, Ford V-8 (30 h.p.), LE.
- T. C. Mann, Lagonda (30 h.p.), Y.
- J. N. Marsden, Rover (12 h.p.), L.
- K. G. Marsh, Triumph (11 h.p.), T.
- J. McEvoy, Ford de Luxe (10 h.p.), LI.

- M. A. McEvoy, Alvis (16 h.p.), B.
- F. G. McKim, Citroën (15 h.p.), LE.
- D. Monro, Invicta (20 h.p.), H.
- C. W. Moss, Singer (9 h.p.), T.
- B. W. Murrell, Standard (12 h.p.), LE.
- S. H. Newsome, S.S.I. (20 h.p.), LE.
- W. C. N. Norton, British Salmson (12h.p.), L.
- G. W. Olive, S.S.I. (20 h.p.), LE.
- G. W. Olive, Standard (12 h.p.), L.
- A. H. Oxenford, Standard (12 h.p.), LE.
- H. Parkinson, M.G. Magnette (12 h.p.), L.
- V. L. Parry, S.S.II (12 h.p.), LE.
- R. G. Percival, Ford V-8 (30 h.p.), LE.
- H. W. Poultney, M.G. (8 h.p.), LE.
- G. J. Redgrove, Rover (14 h.p.), L.
- C. A. Richardson, M.G. (8 h.p.), LE.
- G. Ross, Rover (16 h.p.), L.
- K. W. B. Sanderson, Alvis (20 h.p.), E.
- J. L. Sears, Alvis (20 h.p.), LE.
- S. E. Sears, Bentley (26 h.p.), LE.
- W. J. Shakespeare, Austin (10 h.p.), LE.
- A. W. F. Smith, M.G. Midget (8 h.p.), LE.
- Dr. C. H. Smith, Morris-Oxford (16 h.p.), B.
- E. Smith, Singer (9 h.p.), L.
- D. G. Silcock, Lagonda (16 h.p.), L.
- W. G. D. Stanton, Armstrong Siddeley (12 h.p.), L.
- M. Stockbridge, Triumph Gloria (13 h.p.), Y.
- C. E. Stothert, Fiat Balilla (11 h.p.), LI.
- A. J. Stott, Bentley (26 h.p.), B.
- I. W. H. Thomson, Railton (29 h.p.), B.
- C. J. Turner, Wolseley Hornet (12 h.p.), L.
- W. G. V. Vaughan, S.S.I (20 h.p.), L.
- The Rt. Hon. Lord Waleran, Ford de Luxe, (10 h.p.), B.
- A. P. Watson, Singer (13 h.p.), Y.
- Miss E. V. Watson, Bentley (26 h.p.), LI.
- J. W. Whalley, Ford de Luxe (10 h.p.), Y.
- G. G. White, Aston-Martin (12 h.p.), L.
- Mrs. T. Wisdom, S.S.II (12 h.p.), LE.
- T. C. Wise, M.G. (8 h.p.), H.



ROLLS-ROYCE

The Best Car in the World

ROLLS-ROYCE LTD. 15 CONDUIT ST. W.1. Mayfair 6201

Please mention MOTOR SPORT when corresponding with advertisers.

THE COACHWORK COMPETITION

THE organisers of rallies in which a Coachwork Competition forms part of the event must find it puzzling to decide what proportion of marks shall be awarded for sheer elegance of appearance and how much for fittings of practical value on a strenuous run. The R.A.C. award 30 marks out of 100 to appearance, with an additional 10 for condition, 20 for the comfort of driver and passengers and another 20 for general arrangement, visibility and so forth, the remainder being allotted to luggage tool stowage and minor details. The majority of the cars entered in the lower-priced classes belonged to private owners, and one did not see that lavish equipment which characterised the "works entries" on previous rallies. Judging by difficulties experienced by many drivers in the unexpectedly thick weather conditions met with on the road section, more attention will be paid next year again to fog-piercing appliances and the other Christmas Tree equipment which one sees at the conclusion of the Monte Carlo event.

Rolls Royce and Bentley shared the honours in the Premier Awards, the winners being Mr. W. M. Park's Rolls Royce in the four-door closed car class, Mr. S. E. Sears' Bentley in the two-door group, while Captain Oxborrow gained the open car award with another Bentley.

Mr. Park's car was finished in an attractive light blue shade called appropriately Jubilee blue, with unusual dull chromium mouldings. The roof line ran smoothly into a swept tail which provided accommodation for several fitted suitcases,

a winding rear blind operated by electric motor from a switch on the dash. The interior of the car was light and airy, and

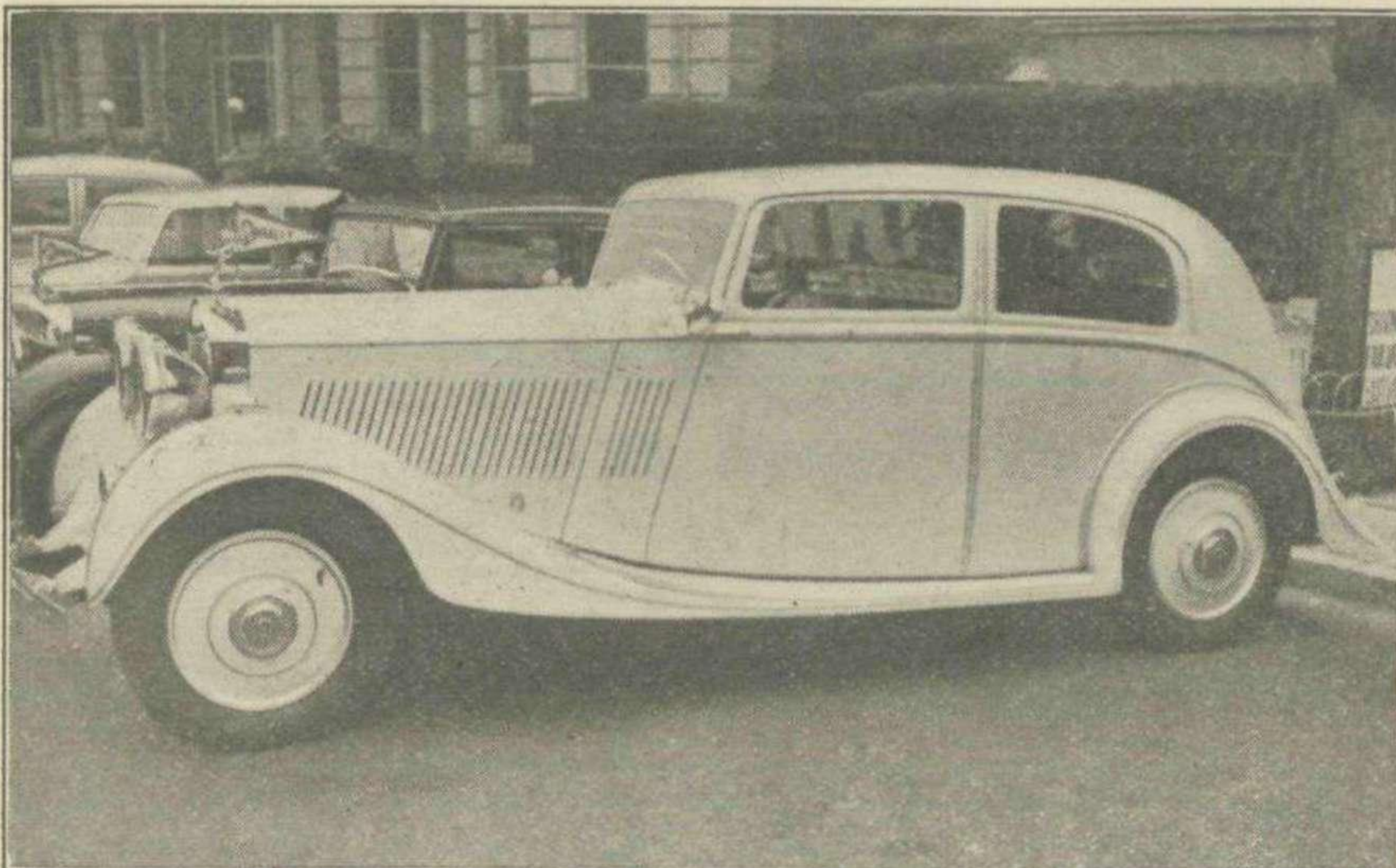
and a Smith chronograph clock were added to the usual array of dashboard instruments. The rake of the front seats



One of the many beautiful motor-cars to be seen at Eastbourne at the conclusion of the R.A.C. Rally was Mr. W. F. Watson's 3½-litre Bentley, here seen during the Coachwork Competition.

it had a sliding roof. Altogether an example of British coachbuilding which compares favourably with the finest that any foreign country can show.

The Park Ward Rolls was closely challenged by a Freestone and Webb Bentley saloon in "grey dust" finish



This handsome Rolls-Royce with Park Ward coachwork was finished in "Jubilee Blue," with dull chromium mouldings. It won its class, driven in the Rally by Mr. W. M. Park.

while the dropping panel functioned as a luggage platform.

The leather upholstery was a marvel of softness and finish, and an effective use was made of white maple for fascia board and trimmings. Practical details included the stowing of the smaller tools in a locker by the front passenger's feet, companions let into the back of the front seats and

entered by Jack Barclay. The contours of the body were more rounded than usual in this type of car and took in the large luggage locker at the back, which was surmounted by a grid to provide further accommodation for long tours on the Continent. Special large diameter headlamps were fitted, swivelling with the front wheels, while an aneroid barometer

COACHWORK AWARDS. Premier Awards.

- Open Cars.**
Capt. C. C. Oxborrow (Bentley).
- Two-door Closed.**
S. E. Sears (Bentley).
- Four-door Closed.**
W. M. Park (Rolls Royce).
- Up to £160.—Four-door Closed.**
J. W. Whalley (Ford de Luxe).
- £161-250.—Open.**
1. C. A. Hall (Singer).
2. B. W. Murrell (Standard).
- £161-250.—Two-door Closed.**
F. W. Barnes (Standard).
- £161-250.—Four-door Closed.**
1. A. H. Oxenford (Standard).
2. R. T. Grantham (Rover).
- £251-£350.—Open.**
1. H. E. Gibbon (Rover).
2. W. P. Maidens (Rover).
- £251-£350.—Two-door Closed.**
H. L. Gill (S.S.I.).
- £251-£350.—Four-door Closed.**
1. H. L. W. Dry (Rover).
2. G. S. Cooper (Rover).
3. A. J. Blake (Crossley).
- £351-£500.—Open.**
1. Mrs. G. Daniell (A.C. Ace).
2. Col A. H. Loughborough (Rover).
- £351-£500.—Two-door Closed.**
1. R. D. Hunnam (S.S.I.).
2. G. W. Olive (S.S.I.).
- £351-500.—Four-door Closed.**
1. Major C. White (Daimler).
2. H. C. Berry (Armstrong Siddeley).
- £501-£700.—Open.**
L. Prideaux-Brune (Aston Martin).
- £701-£1,000.—Open.**
W. E. C. Watkinson (Alvis).
- £701-£1,000.—Four-door Closed.**
J. Margerison (Sunbeam).
- Over £1,000.—Open.**
Captain C. C. Oxborrow (Bentley).
- Over £1,000.—Two-door Closed.**
S. E. Sears (Bentley).
- Over £1,000.—Four-door Closed.**
W. M. Park (Rolls-Royce).
- Special Consolation Prize from Judges.**
J. Barclay (Bentley).

THE COACHWORK COMPETITION.—continued.

was adjustable and the car should be ideal for effortless long-distance touring.

Mr. Sears' Bentley with Salmons body was attractive and practical with its four-light body and sweeping wings. Ventilating flaps were fitted at the front of the two doors.

Luggage accommodation had been well studied on this car, as on all the expensive models, and it was noticeable that the cars of "non-streamline" contour were quite as well furnished in this respect as those with exaggerated tails. A point we noticed about the late Bentleys is that it has been possible slightly to increase the body space to the advantage of the back passengers, while on all the latest cars there is a tendency to bring the mudguards well down in front, giving better protection from mud and reduced wind-resistance.

The R.A.C. Trophy for the best open car was won by Captain Oxborrow with a very smart Bentley fitted with O.F.

convertible coachwork. The car was finished in white with black wings and waist moulding, with matching upholstery. Hammock-type front seats were used, slung on chromium plated tubular frames. When used as an open car the windows disappear completely, but the front ones can be wound up to use side curtains, while the rear ones hinge up out of special recesses. The flush fitting hood may be raised in a few seconds giving the protection and visibility of a permanently closed body.

Another drop-head coupe which scored a success in an open class was L. Prideaux Brune's Aston Martin, while Watkinson's open Alvis Speed Twenty looked every inch the fast tourer with its battery of lamps and its two spare wheels. In the class for cars costing between £350 and £500 Mrs. Daniell's trim dark blue A.C. Ace showed how attractive this rather neglected type of body can be, and Colonel Loughborough's four-seater Rover

which was second in the class was a good example of small four-seater design, the special front seats with their high backs being particularly welcome when Rally driving is contemplated. Rovers and Standards fitted with factory-built coachwork were well favoured by the judges, gaining respectively six and three of the awards, while closed S.S. cars gained three awards with normal two-door and the latest Airline saloons. There were few novelties amongst the more cheaply priced open cars, but we were interested in a fawn-coloured streamlined two-seater Aero Minx, and C. V. Well's black Riley Imp was another little car of attractive line, though rather lacking in luggage accommodation. Extended tails seemed to be the fashion in the small closed classes, and though their utility is doubtful from the point of view of wind resistance, they form a more æsthetic solution of the luggage problem than the pressed steel grids which previously festooned the rear of the miniature saloons.

WHAT IS "OILINESS"?

The answer to this question can be found in a little booklet issued by Germ Lubricants, Ltd., of 735-741, Salisbury House, London, E.C. 2. This booklet, a copy of which can be obtained by MOTOR SPORT readers from the above address, gives a description of the special

features of the Wells-Southcombe Process. There are some interesting graphs, and a note on the latest development showing how a new polar substance has been found which gives even greater "oiliness" with the improved type "Germ" oils than with the old type.

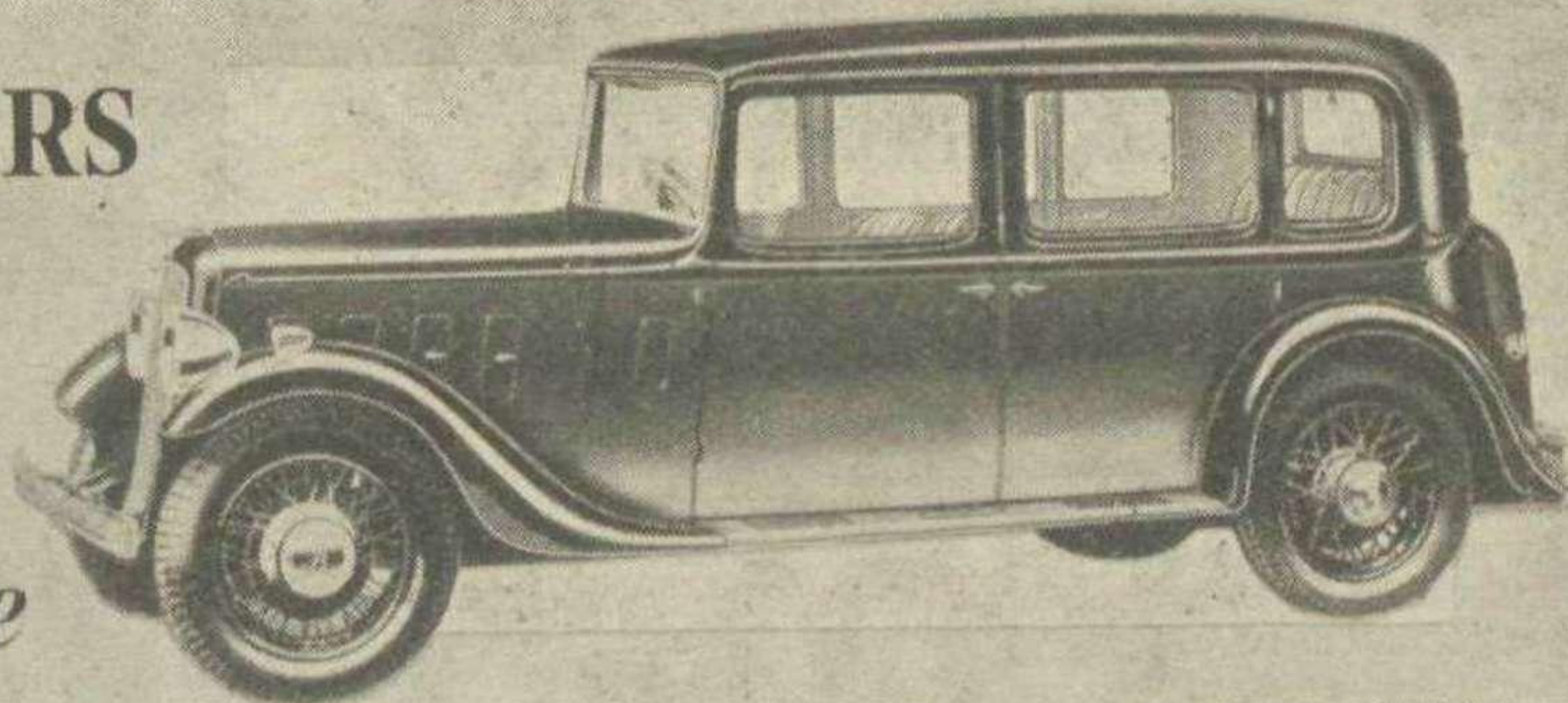
Flying people will be interested in the photograph of the Puss Moth owned and operated by Germ Lubricants for their business in Great Britain and Europe. The booklet contains a list of the aerodromes where Germ Oils are stocked and sold.

THE MANUFACTURERS

OF

Austin

CARS use

**'Belco'**

TRADE MARK

THE BETTER CAR FINISH

The Austin Company has used 'Belco' for the past nine years because of its durability and good appearance. Maintain the beautiful appearance of your car with 'BELCO' No. 7 POLISH and 'BELCO' POLISHING WAX.

These materials may be ordered from any garage or dealer and are stocked at the Halford Cycle Co.'s shops, &c. Write us for our leaflet "Valeting your car"

NOBEL CHEMICAL FINISHES LTD., SLOUGH, BUCKS

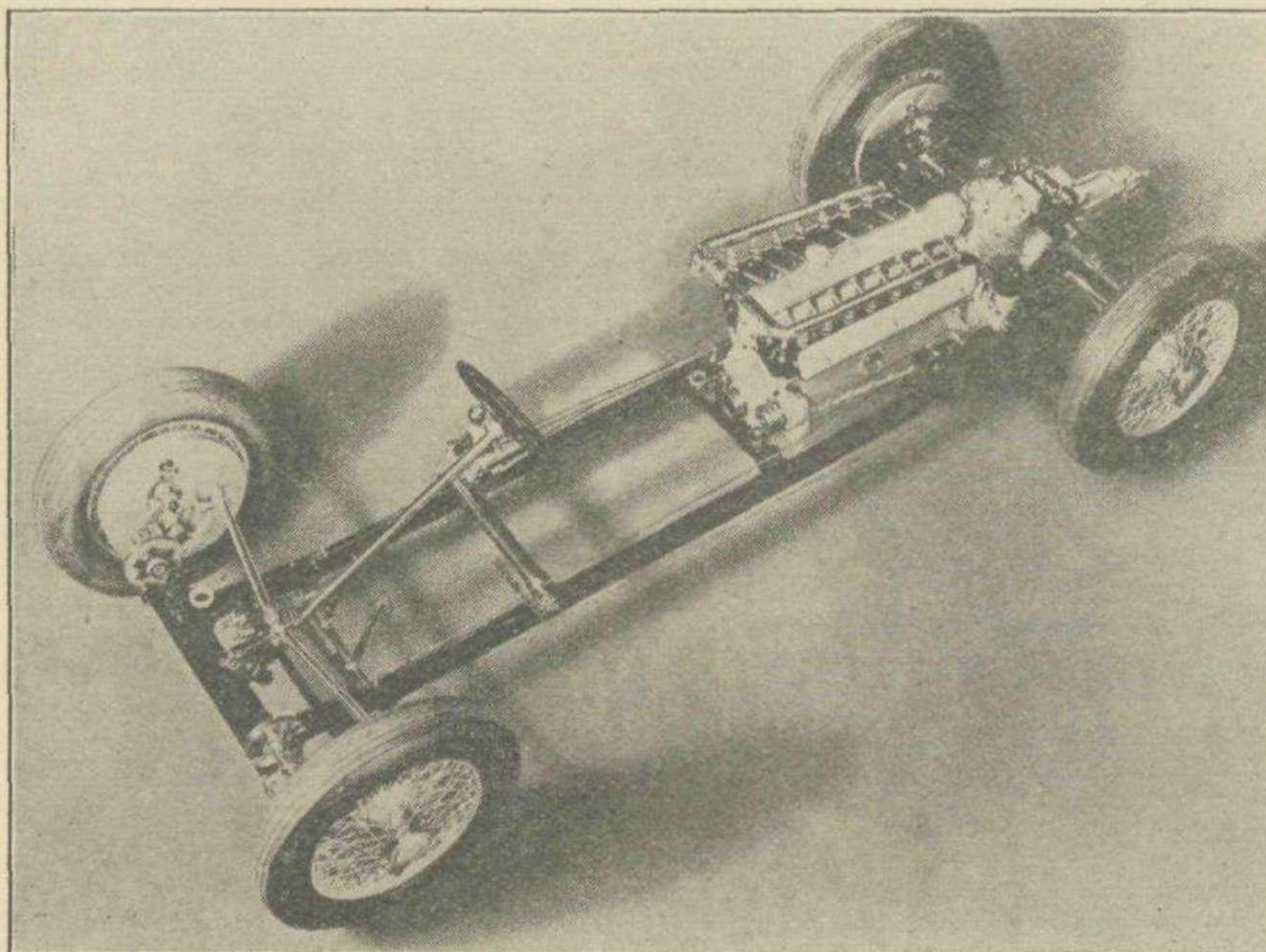
(Associated with Imperial Chemical Industries Ltd.)

The following manufacturers also use 'Belco':

Alvis
B.S.A.
Citroën
Clement-Talbot
Crossley
Daimler
Frazer-Nash
Hillman
Humber
Singer
Sunbeam
Vauxhall

THE WORLD'S MOST UNORTHODOX RACING CAR

THE AUTO-UNION LAID BARE.



The tubular chassis and the engine gear-box unit of the Auto-Union racing car are clearly shown in this photograph.

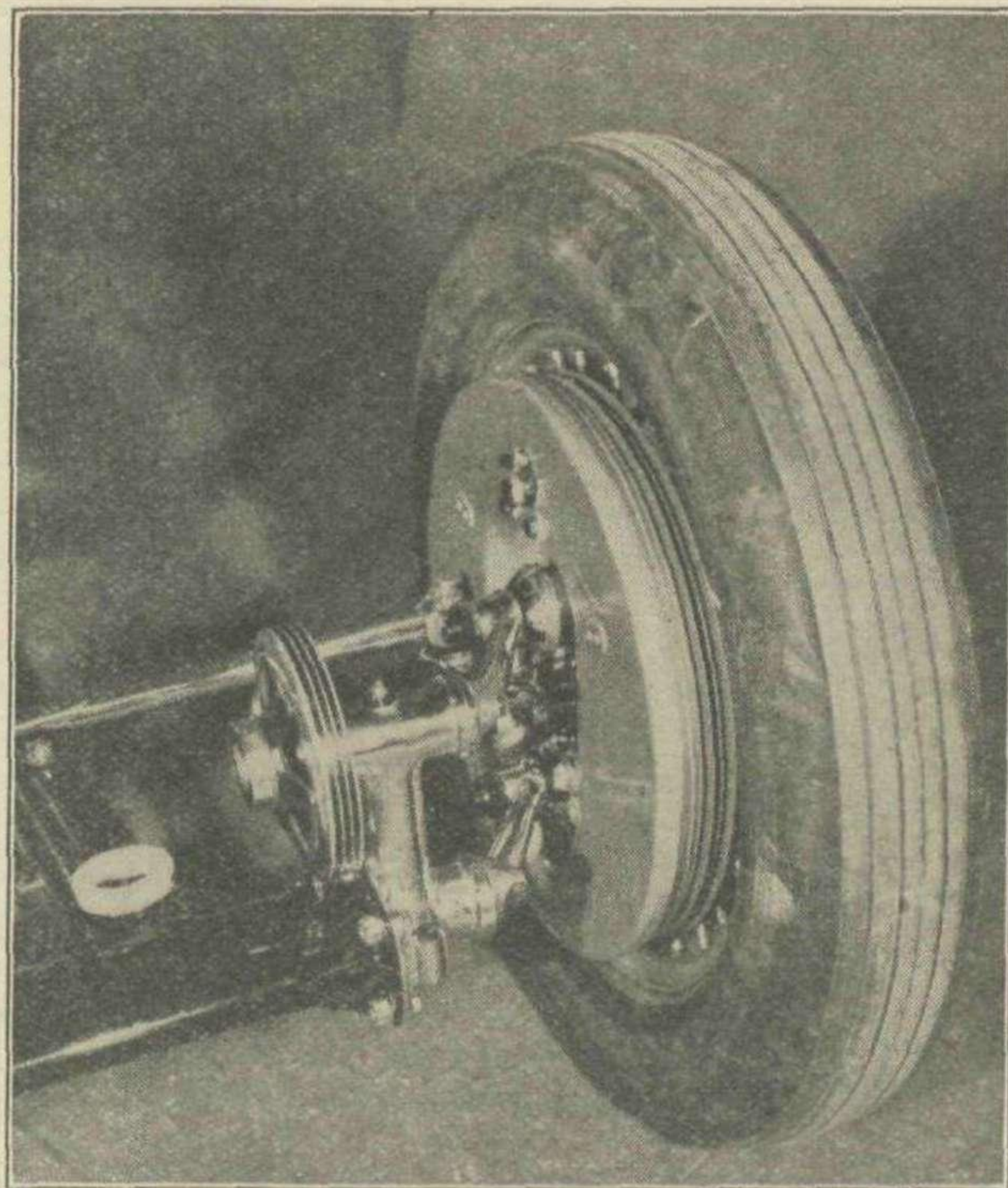
READERS of "MOTOR SPORT" will already be conversant with principal features of design embodied in the very successful Auto-Union racing car, its tubular frame, 16-cylinder 5-litre engine and independent springing, but only in the last few weeks has the chassis itself been exposed to the public gaze. We reproduce two photographs sent to us by the factory which reveal the lay-out of the various components.

The chassis itself is a simple, not to say fragile, tubular structure, and one's respect is divided between Dr. Porsche who conceived this unorthodox design and the drivers, Stuck and his companions, who have travelled at such speeds with this framework beneath them.

At the front end of the chassis, on either side, will be seen a white ring, and these form the water connection to the forward-mounted radiator. Cool water flows back along the near-side tube and is drawn into the engine by the water pump at the front end of the latter, the pump being driven by two belts at the front end of the crank-shaft. Heated water is collected by the two manifolds seen in the picture and returned to the radiator through the other side member.

The worm and wheel steering mechanism with its track-rods is seen on the left of the illustration, and beneath it the two cylinders for the hydraulic braking system. The clutch and accelerator

Magnificent workmanship are shown in this view of the front axle and brake drum. Note the water connection (the white ring) on the chassis tube.



pedals are linked up to their operating points by means of cables, while the gear lever is connected to the gear-box by a long shaft.

Between the cylinder-blocks of the V engine will be seen the cover of the single camshaft which actuates all the valves. The inlets are of course in the centre, operated by short rockers, while the exhausts are dealt with by means of the enclosed push-rods which may be seen projecting on each side of the centre casing. The sparking plugs are disposed in the centre of the heads, with two magnetos at the back of the engine. Above them can be seen the finned casing of the supercharger and behind it the two carburetors.

The five-speed gear-box with its starting handle projects behind the back axle, and the independently sprung halves of the latter, with the transverse spring and the radius rods hinged to the chassis near the rear end of the engine, can also be discerned.

The other illustration, which is almost self-explanatory, shows the front suspension and one of the beautifully ribbed drums. The torsion rod which is used as a front chassis spring runs through the cross-member, while the top arm supporting the steering pivot is connected to a friction shock-absorber, ribbed for cooling.

A NOVEL SUGGESTION FOR THE G.P. FORMULA.

SIR,—Like many people, the problem of the limitation to be placed on future racing cars has interested me. My suggestion is a mechanical one. Briefly, I suggest that the differential

ratio, with a certain specified sized tyre, should be fixed, say at $4\frac{1}{2}$ to 1. (No over-drives or what-not allowed in the gear boxes). Would-be builders of large engines would find their power negated by the

calamitous possibility of over-revving, etc.

I am, yours, etc.,

J. C. DAVIS.

Venblis.

FOR YOUR BOOKSHELF

"MOTOR RACING IN
NEW GERMANY."

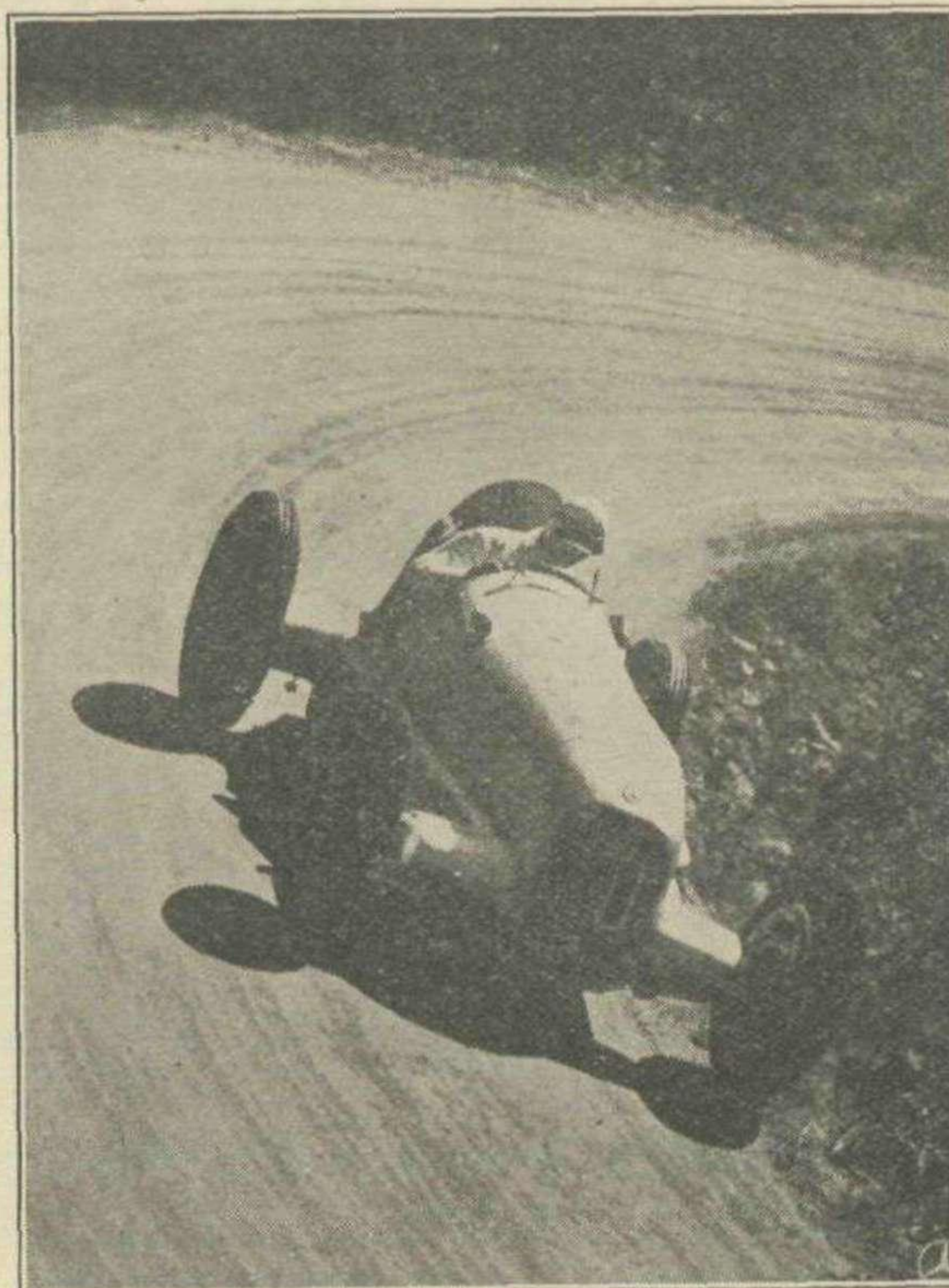
German thoroughness is a by-word, and in no other activity has it been more strikingly demonstrated than in motor-racing. Two seasons ago Germany was not represented in Grand Prix road racing, and the Italian productions were supreme. It was decided that something must be done about it, and the O.N.S., or Official Notional Motor Sport Committee was formed, with Korpsführer Hühnlein at its head. At the same time Dr. Porsche and the late Dr. Nibel set to work designing and constructing the Auto-Union and Mercedes-Benz racing cars.

As all the world knows, this national effort has been extraordinarily successful, so much so that the G.P. cars swept all before them in their first season. The whole scope of the O.N.S. activity has now been reviewed in a beautifully produced book, entitled "Der Kraftfahrersport im neuen Deutschland," published by Verkehrsverlag Deutschland G.m.b.h., Columbushaus, Potsdamer Platz 1, Berlin, W. 9, Germany, and selling at 2 marks 80 (at the present rate of exchange 4s. 8d).

The book consists of close on 200 pages, profusely illustrated with that distinctive photography which characterises so many Continental journals and booklets. A semi-stiff cover is used, with a striking coloured study of a driver's head by the well-known German motoring artist Theo Matejko. A feature of the book is the detailed analysis of all German motor competitions, including races, hill-climbs and trials. The contents have been compiled and edited by Adolf Maurer.

A point which is stressed continually throughout the book is that a new view of motor-racing is now taken throughout Germany, and that national feeling runs high in the desire to see the German cars triumph in international competitions. What a contrast to the official and public attitude towards motor sport in this country!

An early chapter dealing with the problems confronting Dr. Porsche and Dr. Nibel points out that independent springing, to which the German G.P. cars owe so much of their success, was developed by such difficult cross-country



This action study is one of the many fine illustrations in the book "Motor Racing in Germany to-day" reviewed on this page.

trials as the Hartzfahrt in the Hartz mountains. Only the finest metals could withstand the strain of these events; but even with the benefit of this knowledge the designers of the racing cars were aware that they were, to a certain extent, gambling when they equipped their 200 m.p.h. racing cars with independent springing. But their faith in the system, and courage, have been amply vindicated.

The post-war history of motor-racing is traced, culminating in a brief description of the Alfa-Romeo, Bugatti and Maserati—the cars which Germany set out to beat. The speeds of these cars are given as 170 m.p.h. in the case of the 3.2-litre Alfa, and 155 m.p.h. in the case of the 3.3-litre Bugatti and the 3-litre Maserati.

The German designers tackled the job individually, and both produced cars which developed 300-320 h.p., attained a speed of anything up to 200 m.p.h., and weighed 748 kilograms. For record-

breaking purposes, however, the power output went up to something like 380 h.p. In both cases the engine speed was 6-7,000 r.p.m., but the two cars were totally different in layout and construction.

Independent springing does not only allow higher maximum speeds to be attained on normal roads with 750 kilogram cars, but it also provides progressive acceleration without any wheel-spin and lastly it greatly reduces tyre wear. It is really remarkable that the German cars went right through the 500 kilometre races at Avus, Monza and San Sebastian without changing their tyres! This alone is sufficient to enable a car to win, without the increased speed and better road-holding. There is an interesting photograph showing the condition of the tyres after various races, from which it can be seen the Monza involved the greatest strain. Avus is normally very hard on the tyres, but last year's rain kept the tyres cool, and the Auto-Unions barely showed any signs of wear at all.

A good deal of space is devoted to trials like the 2,000 kilometre trial last year. It is instructive to see the difference in the organisation and general conduct of these events from that of our own R.A.C. Rally. Instead of the rather furtive road-section of

the Rally, harassed by mobile police in built-up areas, and the absence of any kind of popular spectacle at the finishing point and controls, we find a universal enthusiasm, spectators lining the course and storm-troopers stationed at all turnings to direct the competing cars on their correct route.

Motor-cycling as a sport is immensely popular, and the photographs of mass-starts of trials and races are deeply impressive. It cannot be gainsaid that motor-racing gains immensely by spectacular organisation, such as is seen in this country only at the motor-cycle speedways. An astonishing motor-cycling event in Germany, incidentally, is the Police Rally at Nurburg Ring!

Altogether this book is a wonderful testimony to the determination of modern Germany to attain a high position in the world of motor sport. It is beautifully printed and composed, and many of the photographs of cars at speed will delight the racing enthusiast.

The use of really efficient competition tyres is vitally important for successful participation in trials. Owners of V8 Fords and 24 h.p. Fords were faced with the snag that no standard sports tyre would fit their wheels, until the Invicta Motor Engineering Works, of 23, Lower Bridge Street, Canterbury, produced a re-treaded tyre for this purpose.

These Invicta competition tyres have

"COMP" TYRES

been used with conspicuous success by such well-known trials competitors as Messrs. H. Hillcoat, G. M. Denton, Hon. A. D. Chetwynd, J. Whalley and C. Mann. The powerful grip of the Invicta tyre has resulted in many enquiries being received from sports car owners for tyres of different sizes, and in order to meet

this demand the re-treading plant at Canterbury has been enlarged and the following sizes are now available: 18×5.25, 17×5.50, 19×4.75, 19×4.50, 19×4, 18×4.75 and 18×4.50.

The success of the Invicta re-tread is largely due to the actual trials experience of the Managing Director, Mr. J. B. Thompson, whose V8 Ford is a regular competitor in all big events.

A SUPERCHARGED 1500 CC. VALE SPECIAL FOR RACING AND ROAD WORK

AN ENTERPRISING DESIGN WHICH INCLUDES A BELT-DRIVEN SUPERCHARGER, INDEPENDENTLY STEERED FRONT WHEELS AND AN UNDERSLUNG CHASSIS.

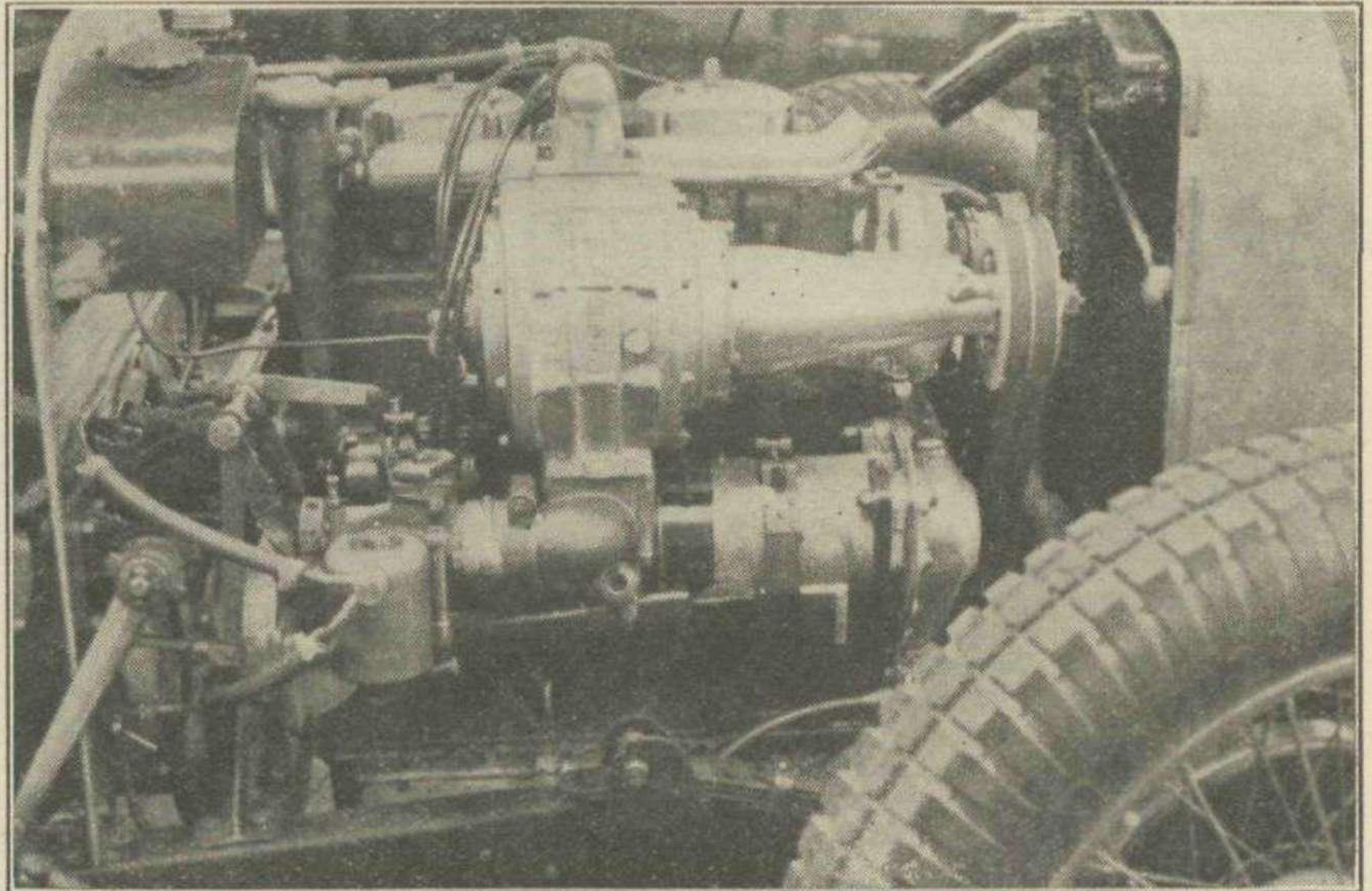
ON first encountering the Vale Special two or three years ago we were much struck by the way it handled and the care with which it was built. At that time it was powered by an 850 cc. unit, which naturally limited the speed and performance, but since that time it has been found possible to install either an 1,100 cc. or a 1½-litre unit into the same chassis. One of the most interesting of the new cars is a supercharged model which has been completed to the order of Mr. I. F. Connell and which we saw in process of building in the workshops of the Vale Engineering Company. It is intended primarily for racing, and will be driven at Donington and Brooklands, but later on will be fitted with hood windscreen and lamps and used on the road.

The engine, which is a sturdy-looking four-cylinder specially built for the Vale Company by Coventry Climax, is the first part of the design to be considered. A four-cylinder unit with overhead inlet valves operated by push-rods and side by side exhausts, it has a bore and stroke of 69 and 100 mm. respectively, giving a capacity of 1,496 cc.

The off-side of the engine is dominated by the Centric supercharger, which is driven by twin rubber belts from the front end of the crankshaft. The induction port is in the centre of the top surface of the cylinder-head and the blower is mounted opposite this and connected through a short pipe with a blow-off valve. This position called for an extended drive to the blower, which has been carried out

by means of a short shaft supported at its extremity with a ball race, carried in its turn by a conical housing bolted on to the blower itself. The small quantity of oil

the oil to its destination. A Solex horizontal carburettor is connected to the lower side of the supercharger by means of a short induction pipe with a right-angle



The 1,500 c.c. Vale Special engine, showing the belt-driven Centric supercharger. The car is owned by Mr. I. F. Connell, and is the first of its type.

required for lubricating this component is supplied from a one-gallon tank on the dash. The induction pipe is connected to the tank through a small-bore pipe, and the pressure built up there helps to force

bend, and is at once accessible and close to the accelerator pedal to which it is connected by short and simple linkage.

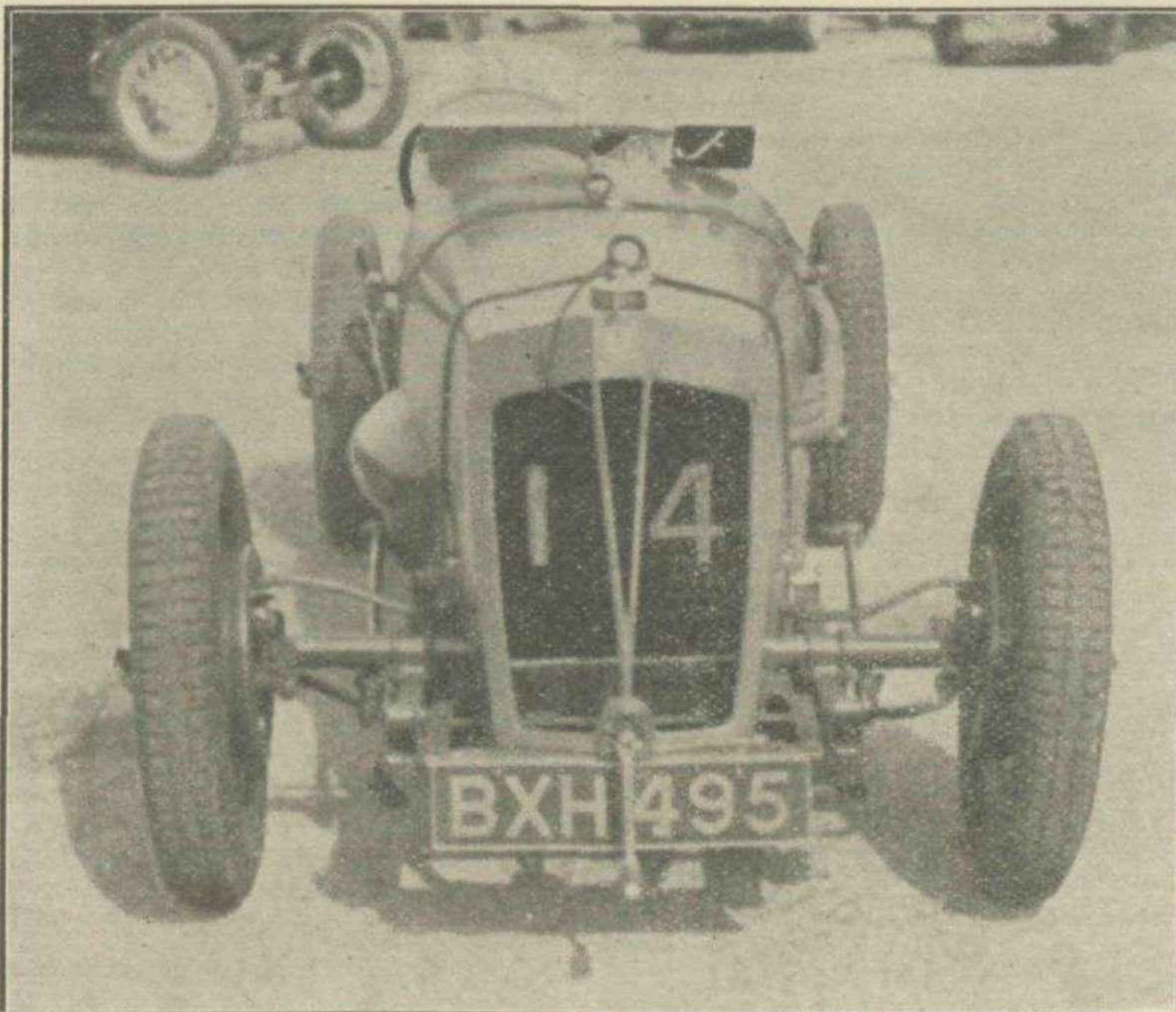
The camshaft and auxiliaries are driven by silent chain located at the front end of the engine. The dynamo and the Scintilla magneto are connected in tandem, and there is a separate swinging adjustment for the latter to give fine variations of timing. The water pump is bolted to the front end of the cylinder block, and is driven by a rubber belt from the crankshaft, independently of course of the supercharger drives.

On the near side of the engine is seen a large Tecalemit oil filter, which cleans the oil as it is forced to the bearings from the 2-gallon sump. A funnel-shaped oil filler is brought up level with the top of the cylinder-head.

Turning to the internals, the crankshaft is machined out of the solid, and fully balanced, and runs in three main bearings. Plain bearings are used for the crankshaft and big-ends, the connecting rods are of steel and the pistons, machined from solid forgings, Aerolites. The cylinder block is made of Chromidium.

The compression ratio is 7.5 to 1, and the blower gives a pressure of 7½ lbs., giving an effective compression of about 10 to 1. The fuel is 50 per cent. benzol and 50 per cent. racing Shell, and the engine is said to develop 97 h.p. at 5,700 r.p.m., with a top limit of "six-four" if the driver wants to use it.

The transmission is quite orthodox, with a Borg and Beck clutch, an E.N.V. four-speed straight-pinion gear-box with



The front view of the 1,500 c.c. Vale Special. The above photograph was taken in the paddock at the last Donington Park Meeting.

A SUPERCHARGED 1,500 c.c. VALE SPECIAL—continued.

central gear-lever, open propeller shaft of large diameter with needle-roller universals and spiral bevel back axle. The final reduction is 3.8 to 1, giving overall ratios of 3.8, 5.2, 7 and 12 to 1. Lockheed hydraulic brakes are fitted with a special push-on racing hand brake lever. Friction shock-absorbers are used front and rear, with two pairs controlling the rear axle.

The chassis is of channel-section steel with four cross-members and additional bracing strips at the rear. A tubular front axle is used and following the design of the previous Vale Special models is actually carried above the side members, which are thus underslung and carried at a low level without introducing any complication. The chassis also passes under the rear axle and special springs with semi-elliptic silent bloc bushes in front, and rollers at the rear are used for both axles. The steering lay-out differs

from any other car at present on the road in being made without a track rod, with each front wheel steered by a drop arm from a cross-shaft carried across the chassis. The steering box is made by Messrs. Cam Gears. We recall that a similar system of linkage was successfully employed two years ago on Sir Malcolm Campbell's Blue Bird, and it should prove equally good on a road-racing car, where accurate steering is of the same importance.

The rear end of the body is devoted to a 16-gallon fuel tank, with two large Ashby filler caps in which are screwed special release valves similar to those used on heating radiators. These release valves will only be required when the electric petrol pump is in use, the feed normally being by means of a hand-operated pressure pump. Another product of the House of Ashby used on the new Vale, is the special spring-spoke steering wheel which has spokes and

rim made out of the light weight Hiduminium alloy.

This promising 1½-litre is fitted with a rakish two-seater body of racing outline with staggered seats, enclosed rear springs, and an attractive louvred bonnet, which has been built by the Berkeley Coachwork Company. As has been said, the car is produced as a dual-purpose vehicle, and will be fitted with lighting and starting equipment, light mudguards and other all-weather gear which will not detract from its appearance or speed. The car weighs complete 14½ cwt. and costs £625, while a similar car without supercharger is available at £400. Fitted with a four-cylinder 1,100 cc. engine the price is the same, and the chassis may be specified either with the racing or the standard Vale coachwork. The address of the makers is the Vale Engineering Company, Warrington Gardens, Portsdown Road, W. 9.

Forethought.

"Forethought saves Afterthought" is the purpose behind a booklet published by the Dunlop Rubber Company, Ltd., which every motorist, however experienced he may be, would do well to study. As is pointed out in the Introduction, tyres really need very little attention, but that little is essential.

After surveying the principle and purposes of the modern tyre, the important subject of inflation pressures is fully discussed. This section contains a vast amount of useful information, and no motorist with the knowledge given here will allow his tyres to wear excessively through ignorance. Realising the results of certain treatment, he will automatically take the necessary precautions to relieve his tyres of unnecessary strain.

Other subjects dealt with fully are valves, pressure gauges, storage, repair of cuts and other damage, alignment of wheels, and an interesting chapter on "Why Tyre Results Vary." Those who find difficulty in the attaching and removal of tyres will find the solution of their difficulties in this booklet, and there is a table of data with regard to interchangeability.

"Forethought" is profusely illustrated, and a careful study of its interesting pages is bound to result in reduced tyre wear and lower running costs. MOTOR SPORT readers can obtain copies, post free, from the Advertising Dept., Dunlop Rubber Co., Ltd., St. James's House, St. James's Street, London, S.W. 1.

A Well-made Performance Meter

If a sports car is to be kept in perfect tune some guide as to its performance is essential. None better can be found than a reliable gradient and performance meter, and one of the finest instruments of this type we have ever inspected is the Ottway. The manufacture of instruments and gauges is a highly skilled craft, requiring years of experience, and the firm of Messrs. W. Ottway & Co., Ltd., Orion Works, Ealing, has specialised in this work since the year 1604. Such delicate devices as naval gun sights,

telescopes, surveying and mining instruments, micrometers, etc., demand a degree of accuracy which places their latest product, the Ottway Gradient and Performance Meter, on a very high standard indeed.

As its name implies, the instrument enables the driver to ascertain the gradient of hills and to know whether he is obtaining from his car the performance which should be expected, both as regards the pulling power of the engine and the efficiency of the brakes. The Ottway meter depends for its operation upon the deflection of a pendulum, which is suspended in an oil-filled container for damping out any violent oscillations due to road shocks. The pendulum is geared to the pointers, of which there are three, one after another, so as to give a good open scale for accurate readings.

In addition to measuring the gradient of hills, which should be done with the car stationary or running at a constant speed, the Ottway Meter will provide an accurate indication of the acceleration and braking efficiency of the car, the gradient which the car can surmount on each gear (particularly useful when a caravan-holiday is being planned), and the power of the hand brake to hold the car on a gradient.

Altogether a most instructive accessory for the keen sports-car owner, accurately constructed and beautifully finished.

"Blue Bird's" Records.

The four world's records annexed by Sir Malcolm Campbell with "Blue Bird" have now received the official confirmation of the A.I.A.C.R. The car is designated the Campbell Special, and the speeds attained were as follow:—

1 kilometer (f.s.), 276.16 m.p.h. (Campbell, 272.46 m.p.h.).

1 Mile (f.s.), 276.82 m.p.h. (Campbell, 272.11 m.p.h.).

5 kilometres (f.s.), 268.47 m.p.h. (Campbell, 257.30 m.p.h.).

5 miles (f.s.), 251.40 m.p.h. (Campbell, 242.75 m.p.h.).

It is interesting to observe that on this occasion the mile record is faster than the kilometre, whereas in 1933 the position was reversed.

DRIVER, KNOW YOUR PLUGS!

HOW many drivers of touring cars could tell without looking under the bonnet the type of sparking plug fitted to their engines? Probably not more than one in ten, for the engine in this class of vehicle probably remains undisturbed until renewed at the annual "decoke" and overhaul. The sports car owner takes a much closer interest in the workings of his mount, while to the racing driver who warms up on "soft" plugs, probably tries a few practise laps, and finds signs of fouling or overheating, such a knowledge is essential.

It is not difficult to memorise a few of the type numbers, but the range of plugs is continually being expanded, especially in the high-duty range, and the latest Champion Type Selector shows some thirteen of the 18 mm. size and seven of 14 mm. pattern plugs suitable for fast cars. This variety of types is a little confusing even to the enthusiast, since the numbering is more or less arbitrary, but with the aid of an ingenious but simple indicator integral with the chart, the wisest type can be selected without difficulty.

The lists are printed in parallel columns, and a perforated slider is moved so that one of its slots reveals the type of plug in use. If a cooler-running type is required the two next highest in this direction are shown in a second window, while to combat oiling-up or sooting, use would be made of one of the two hotter-running types shown in the window below. The back of the Type Selector gives a list of sports and touring cars and the type of plug recommended.

The chart is printed on stiff glazed card nine inches by three, and may be obtained from the Champion Sparking Plug Company, 83, Pall Mall, London, S.W. 1, on mentioning "Motor Sport."

THE FERRARI REPLY TO THE GERMAN CARS

A CLOSE-UP OF THE NEW TWIN-ENGINE ALFA-ROMEO DESTINED TO RACE AT TRIPOLI, TUNIS AND AVUS—
NUVOLARI DOES 212 M.P.H. DURING THE FIRST TRIALS.

ON the 16th of December last the Scuderia Ferrari celebrated its annual banquet, and talk naturally turned to the problem of challenging the new German cars. Signor Enzo and his colleagues realised that the 3-litre Type B Monoposto Alfa-Romeo, even when bored out to 3.2 litres and fitted with a specially streamlined body, could not hope to compete with the 4- and 5-litre Mercedes-Benz and Auto-Unions. What, then, was to be done?

It was at this point that Signor Bazzi, technical director of the Scuderia, came forward with his idea of a solution to the problem. Briefly, this was to couple up a brace of 3-litre engines in a Monoposto chassis, and fit it with independent springing and a streamlined body. The result: a 225 m.p.h. motor car, eminently suitable for the non-formula races of Avues, Tunis and Tripoli.

Thus was born the Alfa-Romeo *bimotore*. Signor Bazzi, assisted by his able henchman, Signor Arnaldo Roselli, promptly got to work in his drawing office, and now, three months later, the actual car has been completed and made its first trials. Before going on to describe the layout of this remarkable car, it must be pointed out that although designated an Alfa-Romeo, all the work of its design and assembly has been carried out in the workshops of the Scuderia, at Modena. Signor Jano has given it no more than his blessing. Truly might the *bimotore* be called a Ferrari-Alfa.

First of all, a Monoposto chassis was lengthened, but only by 15 cm., and into this were installed two Type B 3-litre engines. The chassis members are of C section. In passing, these power units have 8-cylinders of 68 mm. bore and 100 mm. stroke, with a capacity for each engine of 2,905 cc. Thus the *bimotore* has a total cubic capacity of 5,810 cc. Each 3-litre engine gives 270 h.p., at its peak revs of 5,500 r.p.m. The power output is therefore about 90 h.p., per litre, as opposed to the 76 h.p. per litre of the German cars. Two Roots type superchargers are used on each engine, with twin Weber carburettors.

The front engine is situated in a normal position, while the rear unit occupies the centre of the triangle formed by the back axle and the two-propellor shafts, *i.e.*, the position used for the driver's seat in the 3-litre Monopostos. In the new car the driver sits on top of the gearbox, in between the two engines.

The engines, are synchronised, the rear one being placed back to front and connected to the gearbox by means of internal gearing in its flywheel. The dry plate clutch is of unique design, and is constructed of Duralfa and Steel. The gearbox provides three forward speeds and reverse, all being of the constant mesh type.

Outside the gearbox is an arrangement of dogs which disconnects the two engines to facilitate starting. First one and then the other is started up, and they are then coupled together. In the event of one engine giving trouble, it is possible for the

driver to continue at reduced speed on a single engine.

The differential is placed immediately behind the gearbox shaft, and consists of conical gears. The drive is then transmitted to the back axle by way of the usual twin propellor shafts, set at an angle. The rear axle is of special design jointed in the middle and steadied by radius rods which allow a certain amount of independent movement on the part of the two half axles.

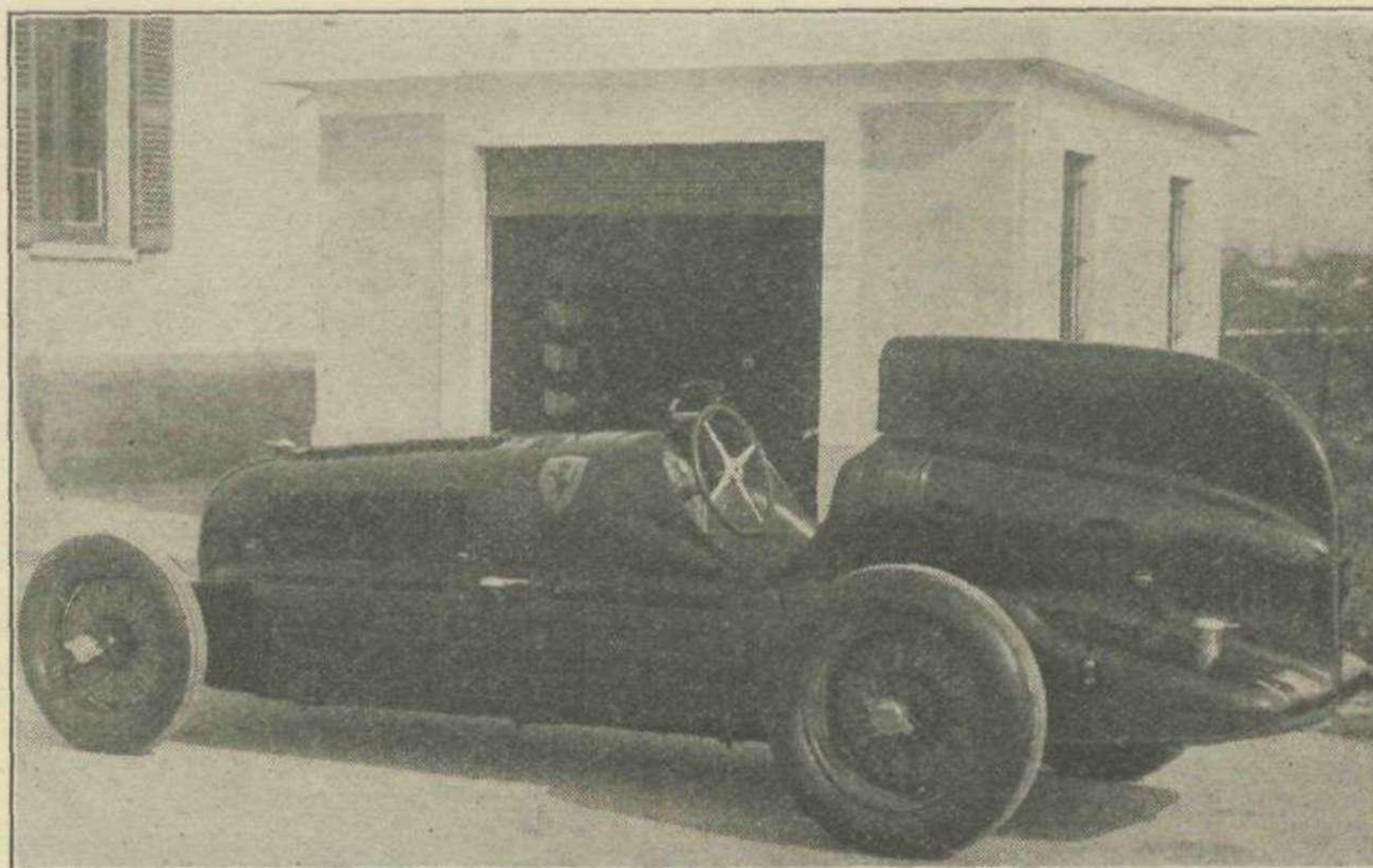
The rear springs are semi-elliptics as heretofore, but with the addition of special shackles which give a floating effect.

The front suspension is by the Dubonnet independent system, which incorporates oscillating arms and cylindrical coil

long petrol tanks, one for each engine, but inter-connected so as to ensure even balance. Sufficient fuel is carried for a run of 300 kilometres. A large oil tank is carried in the tail.

The dimensions of the *bimotore* are as follow: Wheelbase 2,800 metres, track 1,380 metres, ground clearance 135 cm., maximum height from ground level 1,390 metres, overall length 4,160 metres, tyre sizes, front 19 x 5.50, rear 19 x 6.50, weight, 1,000 kilograms.

This projectile was brought out for its first trial during last month. The Brescia-Bergamo Autostrada was used and the car was watched by a gathering of well-known personalities including Comm. Enzo Ferrari himself,



The *bimotore* Alfa-Romeo looks more like a single-engined car than a twin-engined machine. It will be seen in action this month at Tunis, Tripoli and Avus.

springs. Built in with the cylinders are two shock absorbers per wheel, one hydraulic and one friction. The advantages of the Dubonnet suspension, apart from the independent springing of each wheel, are firstly the reduction in unsprung weight and secondly, the stability of steering control due to the operating mechanism being securely attached to the chassis and therefore comparatively free from road shocks.

The brakes are of the Ariston hydraulic pattern, as described in "Rumblings" last month. Briefly, the chief feature is that all parts are kept under pressure from a special reservoir with a spring-loaded plunger, which prevents the possibility of air leaking into the piping when the brake pedal is released—an important advantage when braking from 200 m.p.h.! The Ariston brake system is the work of the Farina coach-building concern in Milan.

The large radiator is split into two sections, each of which cools an engine. The cooling of the rear engine is, of course, assisted by large air-ports in the tail.

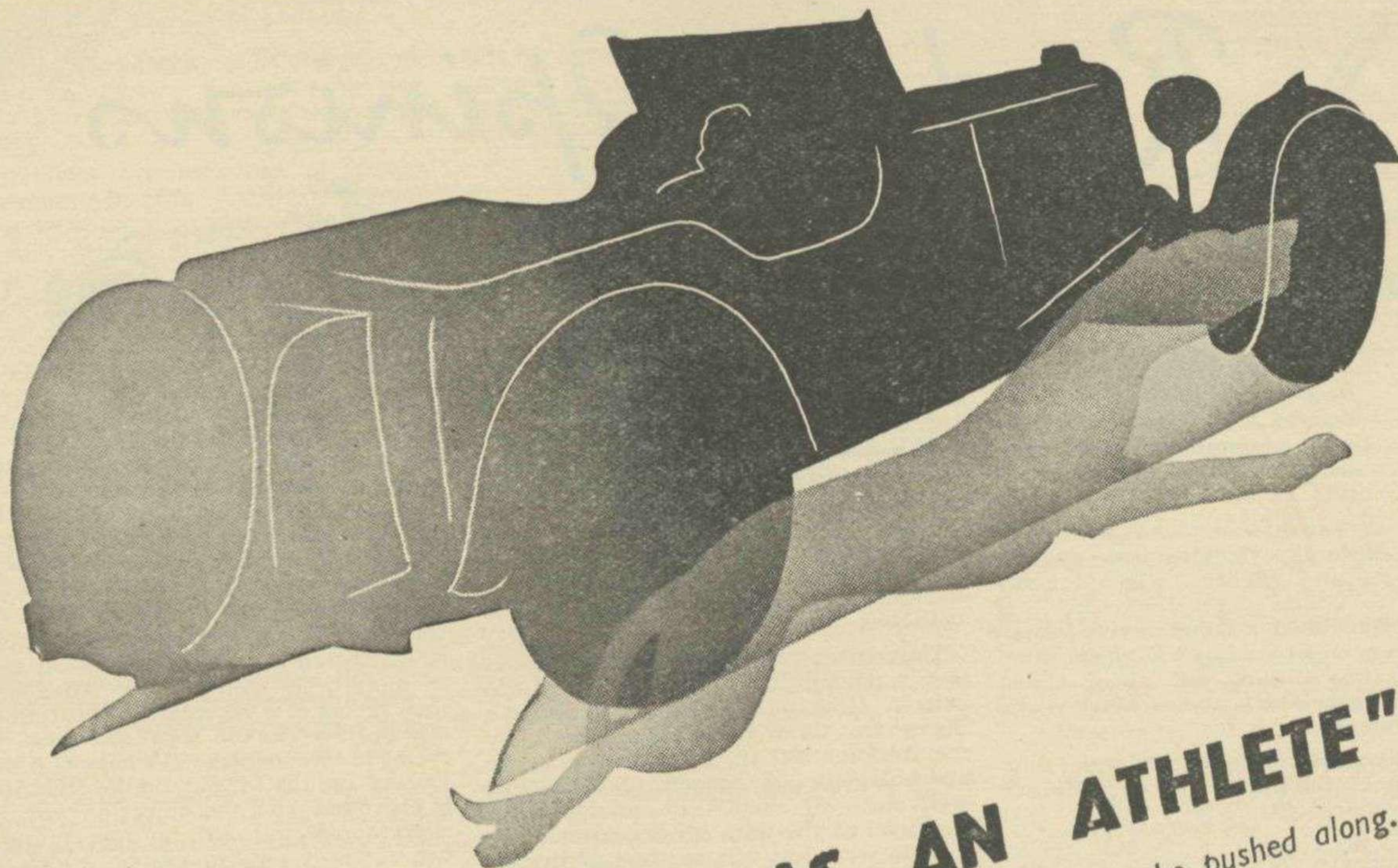
On each side of the chassis are slung

Comm. Vittorio Jano, technical director of the Alfa-Romeo Company, Cav. Perego, of the Pirelli Tyre Company, and various drivers such as Tadini and Comotti.

The first run was made by Attilio Marinoni, Chief mechanic of the Scuderia Ferrari, who satisfied himself that the car was functioning perfectly before handing it over to Tazio Nuvolari.

The "Mantovano volante," as he is dramatically called in Italy, made one or two runs up and down the autostrada at a mere 175 m.p.h., or 4,500 r.p.m., in order to get accustomed to the feel of the car. At this speed the *bimotore* ran effortlessly, so he proceeded to give her the gun. The car roared past the little group of watchers at a colossal speed, which stop-watches and rev counter (which read 5,300 r.p.m.) showed to be 212 m.p.h.

When Nuvolari returned he was most enthusiastic about the car. Everything about it, he declared, was perfect; the steering, the brakes, the road holding, and the vast reserve of power. He thinks there will be no difficulty in reaching the car's maximum speed of 225 m.p.h.



"I'M EAGER AS AN ATHLETE"

Consider me not as something mechanical, which needs to be pushed along. Rather am I an athlete who runs for the love of running . . . and keenly strives to go faster. You can drive me relentlessly . . . because I have dry sump lubrication and a special oil-cooling system. At 3,000 r.p.m., 2 gallons per minute pass through my entire engine! And the oil temperature cannot exceed 75°C. Even so, your purse can afford me comfortably because of my low upkeep, and running costs. Engine only 11.9 h.p. four cylinders for economy, small tax and insurance. 25/30 m.p.g. Gordon Watney offer every facility for part exchange for your present car, deferred terms and after sale service. Full range of models on view, so call to-day or

SEND FOR CATALOGUE.

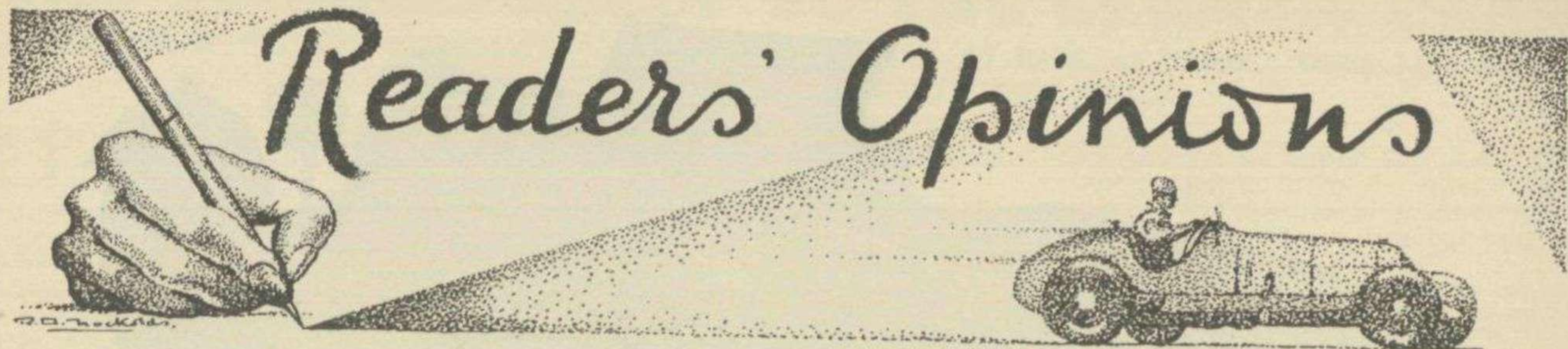
ASTON MARTIN

SOLE DISTRIBUTORS FOR LONDON AREA:

GORDON WATNEY & CO. LTD.

31, BROOK STREET, LONDON, W. 1.

'Phone: Mayfair 0267



Readers' Opinions

A Vauxhall Query.

SIR,—I wonder if I may presume to occupy the hospitality of your paper—to ask for assistance in the matter of modernising an old car?

I am a Vauxhall enthusiast—besides being a Motor Sport enthusiast—and in addition to an "Eighty" which I have brought to a high stage of efficiency. I have just acquired a 30/98 twelve years' old. She is OE54, and as Vauxhalls were at that time turning out about three 30/98's a week—she is about twelve years old this month.

She has been untouched since the day she first took the road, as far as modifications are concerned.

She has her old 820 × 120 B.E. tyres. Can anyone tell me what the present day equivalent would be? Later cars had 32 × 4½ S.S., and I assume that 6.00/20 would probably be a suitable size. I do not think that there should be any great difficulty in procuring a set of suitable wheels from one of the firms who dismantle cars, but before doing so, I should be glad of advice regarding the size.

She has also, of course, rear wheel brakes only, which need care. I had one of the old E type side-valve models in 1927, and I was surprised to find how much more care is needed now. I don't know whether it is because I have got so used to the excellent brakes on my other Vauxhall, or because all the small "road lice" have got such improved brakes since 1927.

I know that many of these cars have been converted to F.W.B., and I should like to do the same. I am told that the front axle of a 20 h.p. Star will fit without any drilling. The Bentley and Sunbeam axles also can be made use of, I believe. Could any of your readers who have dealt with this problem write and tell me what method was adopted?

I am, yours, etc.,

ROBERT PEATY.

6, Christchurch Road,
Winchester.

The G.P. Formula and Special Fuel.

SIR,—I am writing this letter to put in a plea against the abolition of doped or special fuels in racing.

The high performance of the modern small sports car has been made possible by the fact that fuels of fairly high octane number are now universally available (if you don't believe this try running your car on some of those "no name" commercial brands, which incidentally, have a higher octane number than No. 1 petrol of

1920 or so). If fuels of an octane No. of 100 were available to the masses the B.H.P./Litre of sports car engines could be increased by some 50 per cent. without any increase in fuel consumption. According to Mr. Fedden, the designer of the Bristol Aircraft engines, it would be possible to build a petrol engine just as efficient as a C.I. engine if such fuel was available.

Unfortunately the limit has just about been reached in the octane No. of natural petrols. How can it be further increased? There are three principle methods by the addition of (1) aromatic or cyclic hydrocarbons (e.g. benzol), (2) alcohol or methanol, (3) metals in soluble form (e.g. lead as the tetra ethyl comp.). The trouble with the first method is that it requires very large quantities before there is a worthwhile increase in the octane No. and there is not enough and could not be enough produced for this method to be universally used. In the case of alcohol it also requires a high per cent., but there is no limit to the amount of alcohol which could be cheaply produced if the demand occurred. There is, however, another snag, the low energy value of alcohol. This is somewhat offset by its high latent heat of evaporation and by the fact that engines running on alcohol can, if properly designed, be more efficient than when running on petrol. The last method is probably the best. It is cheap, very effective, and the materials required are available in enormous quantities. The only catch is that such parts as plugs, exhaust valves, etc., do not take too kindly to this method but this could be got over by designing the engines to suit leaded fuels.

From this brief summary it will, I hope be seen that the second two methods are those which are most likely to be used in the future and are the most used in racing, in fact, it is largely owing to racing that they and engines suitable for their consumption have been developed. Hence my plea.

I am, yours, etc.,

"METHANOL."

Douglas, I.o.M.

British Drivers.

SIR,—I beg leave to plunge into what looks like a very promising discussion.

Last month one of your correspondents drew attention to the little-known truth that although this country boasts no car drivers of first rank importance in road racing, it does possess road racing experts whose pre-eminence has never been successfully challenged. These are the

motor-cycle, road-racing masters, Woods, Guthrie, Simpson, Dodson and a host of others of almost equal fame. As a motor-cyclist of fairly long standing and some experience of competition, and furthermore as one who has had occasion to compete with many of our best riders, I can claim to some knowledge of the motor cyclist's case.

Car racing on the continent seems to be carried on in somewhat the same spirit as motorcycle racing here. That is, in road racing it is necessary to beat all the other competitors in a straight race. Car racing in this country (I include, of course, Ireland and the I.O.M.), on the other hand is organised with the object of providing every competitor with an opportunity to win. The handicap system which has flourished for so long at Brooklands has always provided a nice day's entertainment and rendered motor racing palatable to those who might not like it without dilution. In this respect, and insofar as the system suits the spectators, the Brooklands handicap system serves a useful purpose. But it is significant to observe that Brooklands results are given very little attention in the motor cycling world. Those motor cyclists who cannot actually see a Brooklands meeting, who are not interested in the mere spectacle of the thing, seldom concern themselves with what is going on at the track, and certainly do not consider it of any real interest. What they do think important is a road race. But does anyone imagine that this interest in the T.T. the Ulster, or any of the continental G.P.'s would be maintained if these races were run on a handicap basis which permitted a 175 c.c. two-stroke, as good a chance of winning as Stanley Woods with his 110 m.p.h. "500."

If the T.T. and similar motor cycling events had been run on a handicap basis they would not have survived to this day. We cannot say whether, under the handicap system, the 500's would have attained to their present day high average speeds or whether the riders would have evolved that mastery of road racing tactics which to-day places them above foreign competition; but we can realise that the interest of the general motor cycle buying public—which means, in other words, the importance of the race—would not have survived, and that means that there would be no pre-eminent racing men at all in this country to-day; for you can only make racers in races.

The recent G.P. at Pau drew its crowd of more than 20,000 spectators because, barring catastrophe, the winner would be the man who covered the course in the shortest time and could be cheered as the victor without having to make any

READERS' OPINIONS—continued.

distracting allowances and having to compromise with clocks. And indirectly that is why Nuvolari exists as a road-racing genius.

I recollect the occasions of Varzi's appearances in the I.O.M. He rode Sunbeams at the time when George Dance and Alec Bennet were in their prime, and on his form then, and discounting the likelihood of any special aptitude for four wheels, I cannot regard him as their superior or—to be frank—even nearly their equal. In fact, in one T.T. race in which he rode, there must have been a good dozen faster men riding against him. Yet Varzi later became champion of Italy on cars.

It brings to mind the words of a rider of my acquaintance who was famous as a specialist on lightweights. He took to small car racing with some success, and when asked why he had deserted two wheels for four, he said simply: "For a holiday." And if any four wheel enthusiast resents that remark let him attempt seven laps of the I.O.M. on that modern version of the rack, the high speed motor cycle at an average speed of nearly 80 m.p.h.

If, therefore, any of our manufacturers feel the urge to challenge the Merc's, the Alfas, the Auto Unions and the rest, but are withheld only by the grim spectres of Varzi, Nuvolari and Co., from making an all-British attempt, let them go over to Douglas in June and meet some of the

lads of the village on the happy hunting grounds where Stylists and Geniuses and Greatest-Road-Racers-of-all-time learn their profession.

I am, yours, etc.,

BERNARD RYDER.

Monton House, Monton Street,
Moss Side, Manchester.

A Rally Analysis.

SIR,—The following analysis of the performance of popular makes of car competing in the R.A.C. Rally, may prove of interest to your readers. I have only taken makes with at least eight cars competing, as I do not think a fair figure of average performance can be arrived at with less than that number. I have allotted marks as follows: 4 for a 1st, 3 for a 2nd, 2 for a 3rd, 1 for a finisher, with no award, and 1 deducted for every retirement. Non-starters are ignored. Without going beyond two places of decimals, the following gives a very good idea of the average performances of the 14 makes in question.

Make.	No. of Entries.	Average Marks.
Ford	15	3.60
Triumph	11	3.27
Lagonda	8	3.00
Alvis	12	2.92
Bentley... ..		
M.G.	26	2.80
Aston-Martin ...	9	2.78
Singer	30	2.65

Make.	No. of Entries.	Average Marks.
S.S.	16	2.62
Rover	21	2.60
Morris	8	2.37
Austin	11	2.27
Standard	11	2.18
Riley	23	2.13

I am, yours, etc.,

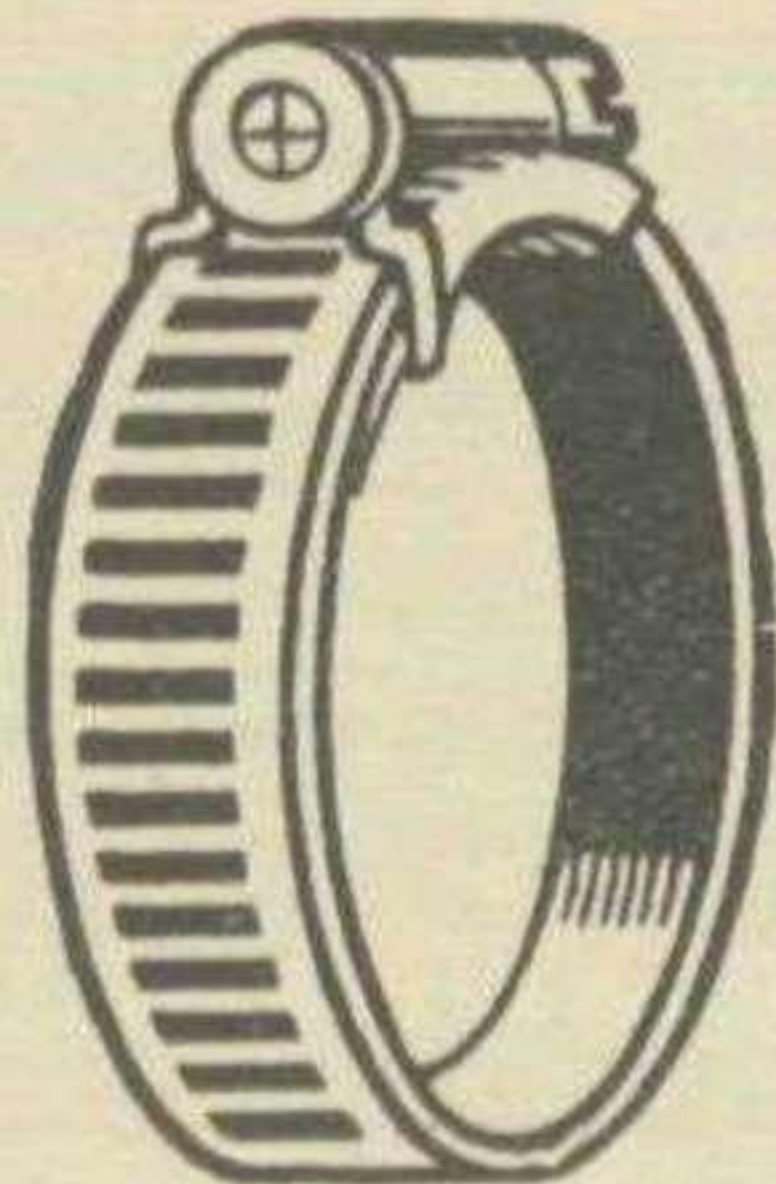
LEWIS E. MILES.

4, High Street,
Fordington, Dorchester.

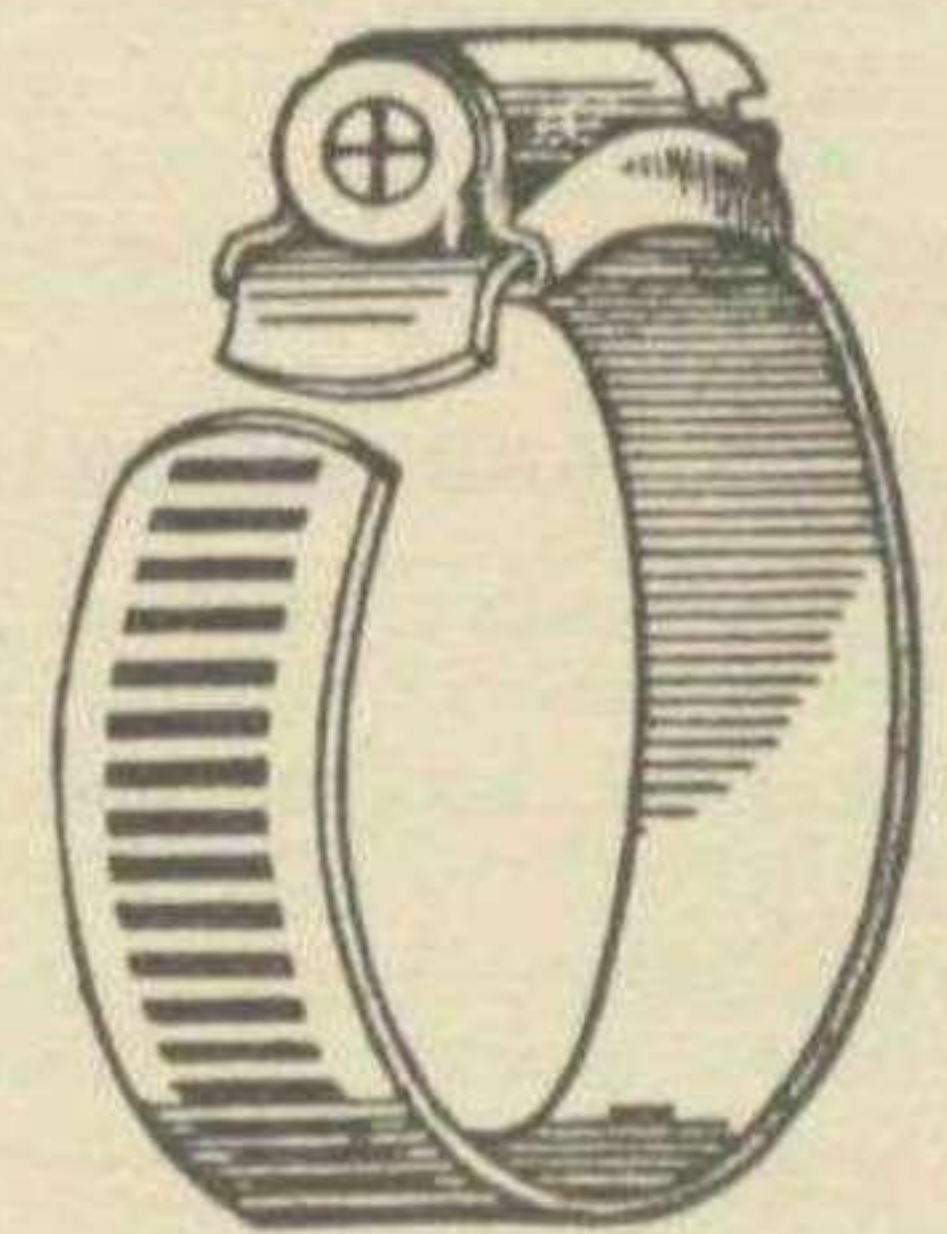
WE welcome letters for publication in these columns. Letters intended for publication must be written on one side of the paper only and they may be signed with a nom-de-plume, but the name and address of the writer must be enclosed as a guarantee of good faith. No responsibility is taken for the views expressed by the writers. Letters intended for publication should be addressed to the Editor, Motor Sport (1929) Ltd., 39, Victoria Street, London, S.W. 1.

JUBILEE WORM-DRIVE CLIPS

THE BEST POSSIBLE TO GET



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



**ALL IN ONE PIECE.
EASY TO FIT.**

**NO PARTS TO LOSE.
GUARANTEED NEVER TO LEAK.**

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

STOCKED BY ALL GARAGES
& ACCESSORY DEALERS.

MANUFACTURERS:

L. ROBINSON & Co.,

2, London Chambers,
GILLINGHAM, KENT.

Club News

BRIGHTON AND HOVE M.C.

Starting from Lobscombe Corner at 1 a.m. on the morning of April 6th, the 70 odd entrants in the annual 12 Hour Trial set out on a winding route to Blandford.

The first hill lay beyond Chard, but first of all a stop was made at the Wind-whistle Hotel. Between Chard and East Horner, the first hill, a deepish water splash was suddenly encountered. East Horner itself was quite simple, as were Bray Farm Hill and Woodhayne Farm Hill.

Then came Waterloo—for a third of the entry. A greasy surface and a steep gradient kept drivers busy, to say nothing of a nice little 4-foot drop at the side of the road at the top. Some of the best performances were those of the Evans trio (M.G. Magnettes) and R. L. Appleton's nice-looking Frazer Nash. The most spectacular effort was that of M. H. Lawson, who slipped down the 4-foot drop with his Singer.

An acceleration test was held on Eggardon Hill, in which fastest time was made by R. L. Appleton (Frazer Nash), 7 secs., followed by M. H. Lawson (Singer), 7.2 secs., and D. G. Evans (M.G. Magnette) and J. E. N. Whitelock (Wolseley Hornet), both of whom clocked 7.4 secs.

The brake test gave little difficulty, and the field moved on to the last hurdle, Shillingstone. Here impressive climbs were made by the Evans trio on their three Magnettes, roaring up in splendid style. Appleton, too, was good with the Frazer Nash, after a false start.

LANCS. AND CHESHIRE C.C.

The Derbyshire district proved too much for all the 78 entries in the Annual Sporting Trial, and no one succeeded in getting through without loss of marks.

Starting from Buxton at 11 a.m. the competitors quickly encountered a stiff obstacle in Cow Low, where the entire field save one failed. The doughty one was M. A. McEvoy, on a normal-looking Singer 11 saloon, which concealed a neatly fitted Zoller supercharger beneath its guileless exterior.

Rocky old Blacket Mill came next, and here again McEvoy did his stuff in a most convincing fashion. A. G. Imhoff was also outstanding on a Singer Le Mans. Then came Litton Slack, whose days as a trials hill are unfortunately numbered. Beyond the usual amount of failures, the chief incident of note was the misfortune which befell G. B. Goodman (M.G.), who clouted his sump on a rock and emptied the contents thereon.

Eyam Bank and Bamford Clough were distinctly worrying to many of the drivers,

who then had to face their most difficult task at Jenkins Chapel. Competitors were allowed one reverse round the sharp hairpin, but this was unnecessary for the small cars. Outstandingly good were the Singer team composed of Messrs. Langley, Patrick and Avery, while others of equal merit were J. B. Terras (M.G. Midget), H. Quick (Ford Ten) and J. D. Mundella (Morris Minor).

In view of the fact that this was only the second Derbyshire Trial organised by the Club, and that the entry was more than double that of last year, the delay which occurred towards the end was excusable. At all events, complaints were soon forgotten during an excellent dinner and dance at the Palace Hotel afterwards.

Great interest was attached to the announcement of the results, and congratulations are due to A. Frew for his victory with a P type M.G. Midget. He only lost 10 marks, and scraped home ahead of M. A. McEvoy's Singer saloon, which lost 11.

PROVISIONAL RESULTS.

Quick Trophy (for best performance of the day).—A. Frew (M.G. Midget, P type).

Mawrey Trophy (best performance by a member of the organising club).—M. A. McEvoy (Singer).

Ladies' Prize.—Mrs. A. E. Moss (Singer).

Team Prize.—Scottish Sporting Car Club team: A. Frew (M.G. Midget, P type), J. S. Hepburn (M.G. Midget), and W. K. Elliott (Singer).

GLOUCESTER M.C. AND C.C.

The results of the Northern Trial, held recently, have now been announced as follow:—

Eggleton Cup.—J. Stoats (Frazer Nash).

Box Cup.—K. B. Steadman (M.G.).

First Class Awards.—C. C. Evans (M.G.).

The Hon. Secretary is Mr. K. D. Stephens, c/o Messrs. Kingscote & Stephens, London Road, Gloucester.

W.A.S.A.

Howard's Park Hotel, or strictly speaking the gravel drive leading to that establishment, was the scene of a Speed Trial organised by the Club last month. The course was about 330 yards in length, with a loose surface which might have been difficult for really fast machines. Unfortunately Donington clashed with the event, so that many of the Cambridge U.A.C. who were invited to compete were unable to turn up.

Fastest time of the day was made by Miss P. McOstrich, on a supercharged Frazer Nash, but her time of 17.1 secs. did not rank as the best performance of the day owing to the fact that supercharged cars carried a handicap of 10 per cent. of their times. This honour, therefore, fell to J. D. Stewart, whose 30/98 Vauxhall clocked 17.54 secs.

An interesting competitor was the hybrid machine driven by J. A. Lloyd, Jun. It consisted of a Buick engine in a T.T. Vauxhall frame, the whole being fitted with a monoposto body. He recorded 17.95 secs.

The 1,100 c.c. class was won by R. H. Cole (Singer Le Mans) in 19.2 secs., while the over 1,100 c.c. closed car class went to Mrs. H. Wood's Alvis.

In spite of the fact that each competitor was allowed three runs, the whole programme was run off in the usual smooth "Wara" manner, and the whole programme was finished before teatime.

AUSTIN OWNERS CLUB.

We are asked by the Hon. Secretary to inform our readers that the Austin Owners' Club has been formed and that a badge is being designed and will shortly be available.

All those interested should get in touch with the Hon. Secretary, Dr. D. Y. Livingstone-Smith, 64, Primrose Mansions, Prince of Wales Road, London, S.W. 11, or with Mr. E. H. Cavendish, 30, Albert Mansions, Albert Bridge Road, London, S.W. 11.

M.G. CAR CLUB.

The regulations of the Abingdon to Abingdon Trial are now to hand. The trial is open to members of the promoting club, and to the following: Brighton & Hove, N.W. London, Singer M.C., Sunbac, and W.A.S.A.

The course will be roughly 120 miles in length, and the start will take place at 10.30 a.m. The usual acceleration and brake test, manoeuvring and stop-and-restart tests will be held, and some good hills.

A fine list of awards will be competed for, including the following: University Motors Jubilee Cup, M.G. Challenge Trophy, Watkinson Cup, University Motors Trophy, P. J. Evans Cup, and M.G. Car Club Inter-Centre Trophy.

R.P.M. CLUB.

The results of the Langdon Trial, held in the Nenthead district on April 7th, were as follow:—

RESULTS.

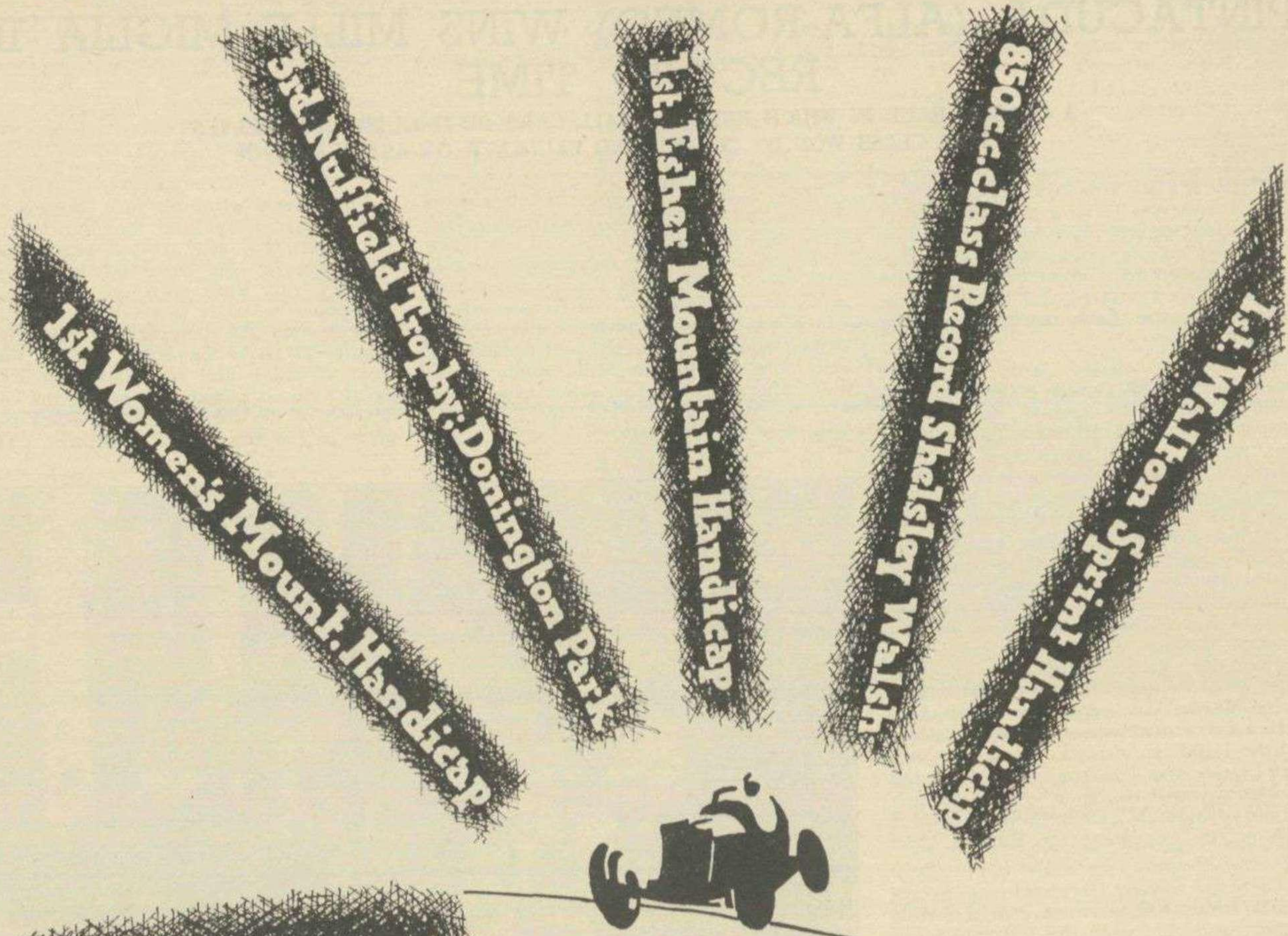
First Prize.—R. P. M. 1935 Committee Trophy (to be held for one year) and replica: Miss K. Taylor (M.G. Midget), 2 marks lost.

Second Prize.—Tankard: Mrs. R. S. Ross (M.G. Midget), 15 marks lost.

Third.—D. K. Roberts (Riley), 22 marks lost.

The Team Prize, to be held for one year, was won by Team B, composed of Mrs. R. S. Ross (M.G. Midget), D. K. Roberts (Riley) and R. R. Miller (Singer).

The Hon. Secretary is Mr. J. L. Fawdon, 2, Collingwood Street, Newcastle-upon-Tyne.



13 awards in racing events and 16 1st. class awards gained in reliability trials during 1934

highly commendable performances which fully endorse the capabilities of our staff in the tuning and overhauling of cars. The same thorough attention which enabled us to capture these awards will be given to **your** car. Why not write for an estimate?

AGENTS for



and



cars



BELLEVUE GARAGE & SERVICE STATIONS Ltd.

Director & Manager : D. G. EVANS

18-19 BELLEVUE RD., WANDSWORTH COMMON, S.W. 17.

TELEPHONE BATTERSEA 0478 (2 lines)

PINTACUDA (ALFA-ROMEO) WINS MILLE MIGLIA IN RECORD TIME

A CLASSIC RACE IN WHICH BRITISH SMALL CARS DISTINGUISH THEMSELVES
1½-LITRE CLASS WON BY CLARKE AND FAULKNER ON ASTON-MARTIN

THE Italian Thousand Mile race this year was lacking in that spirited duel for first place which characterised most of its predecessors, but this was redeemed to a great extent by the variety of cars entered and the changing fortunes of the back markers and the smaller cars.

No longer worried with the rival attraction of the Coppa d'Oro, the unwieldy and unsuccessful Round-Italy race of last year, the Italian manufacturers and racing stables were able to concentrate on the well-established Brescia classic, and the entries totalled no less than 106. The race was won by Carlo Pintacuda, driving a 2.9-litre Alfa-Romeo, who averaged 71.25 m.p.h. and beat the record time set up last year by Varzi in unfavourable weather with a margin of 3½ minutes. Tardini on a 2.6 Alfa finished second with Battaglia on a similar car third. Only three English cars were entered but of these Hall's Aston-Martin lay second in its class to within a short distance of Rome, Gazzabini led the 1,100 c.c. class to the same point, and Clarke and Faulkner carried off the 1½-litre award on their Aston, which should considerably strengthen the respect felt on the Continent for English light cars.

There are usually few cars of a capacity greater than 3-litres running in the Mille Miglia, and this year the unlimited and the 3-litre classes was combined. As usual the entry in this class consisted principally of Alfas, the majority of which were of Grand Prix type, with mudguards and two-seater bodies. Varzi was playing a lone hand on a six-cylinder Maserati, of which more anon. A 4½-litre Lagonda was entered by Miss Ellison, but did not run.

The most formidable of the Alfas was the 2.9-litre car entered by the Scuderia Ferrari and driven by Pintacuda, the young Florentine driver who won the Coppa D'Oro last year driving a Lancia saloon. The Alfa was one of the Monoposto racing cars fitted with a two-seater body, mudguards, a tiny hood and electric lighting and starting. The engine developed 250 h.p. and the car was capable of about 130 m.p.h. Incidentally it had the reversed quarter-elliptic springing now being tried on the racing cars.

The other outstanding figure in the race was Varzi, who was driving one of the new 3.7-litre six-cylinder Maseratis. This car too, was of more or less racing type, though the wider chassis of the Maserati allowed of coachwork rather more roomy than that fitted to the Alfa.

The Maserati was even more powerful than its rival, developing about 300 h.p., though it was somewhat de-tuned for the Mille Miglia, and with a weight of 1,200 Kg. was reckoned to be capable of some 135 m.p.h. Altogether a pretty useful sports car.

Other useful runners in this class were Tardini, Battaglia, and Santinelli, who were driving 2.6-litre cars. Ruesch the Swiss champion, and Balestrero, on 2.3-litre cars. The second Ferrari entry was a 2.3-litre six-cylinder Alfa-Romeo saloon which was entrusted to Rosa, the veteran driver who has competed and finished in every one of the nine Mille Miglia races, and other cars of the same type were driven by Cortese and by "Ignis," otherwise Mercanti.

For a week before the race, Brescia had lost its customary calm, and bunting and the distinctive red arrows which point the route in this thousand mile cross-country run were seen on every side. The police tactfully ignored the crackling exhausts of the competitors and their friends as they converged on the town from all sides, and the place was in its usual ferment of excitement for the verification of the cars, which as usual took place in the Piazza della Vittoria. This



The scene at Brescia presented the usual animated scene. Motor-racing is given its proper due in Italy.

There were no English cars in the 2-litre class, all the entries, but one, being Alfas, with an Australian, McEvoy in one of them as second driver to Ghersi. In the 1½-litre class we had two representatives, Hall on a newly-purchased Aston-Martin, and Clarke and Faulkner, who were making their debut in Italy, on the car which was driven last year in the T.T. by Penn-Hughes. In this class there were in all 19 cars, two Maseratis of which that of Scarfiotti was the most fancied and a number of Lancia Augustas, several of them closed. The 1,100 c.c. class number no less than 51, though not all of them started. Fiats, of course, were in the vast majority with a sprinkling of Maseratis, including Strazza, the official works entry, and Max Bondy and Gazzabini on an M.G. Magnette.

The course this year was the same as the one used in 1934, and the rules were unaltered except for some new awards. Il Duce had presented a cup for the fastest time from Brescia to Rome, there were prizes for the first ten Fiats home, for the oldest and the youngest "coppia," and a welcome innovation, all who finished the race had their entry fee refunded and were given gold medals.

was little more than a formality, for who cared if the seats or the mudguards of these disguised racing cars were a little under size? Vive lo sport! In recognition of the importance of the occasion Mussolini had sent the Hon. Morigi Under-Secretary of the Fascist Party to represent him, while the Duke of Spoleto the President of the R.A.C.I. was also present.

The first car was due to start at 4 o'clock in the morning, and long before that the crowds had taken their places along the brightly lit Viale Rebuffoni and were passing lively comments on the half-mile queue of small cars drawn up in readiness for the "Via." Zero hour approached, the Duke of Spoleto took his place, starting flag in hand and at the appointed time sent number 1, Lombardi on a Fiat, chasing off on his thousand-mile journey. A bewildering crowd of small cars, 45 in all, were despatched at half-minute intervals. Bianco and Strazza, the two Maserati drivers were high up the list, and Dusio whose super-charged Fiat saloon No. 42 was the noisiest of a snarling pack while towards the tail, came Bondy and Gazzabini on the M.G.

The 18 1½-litre cars followed on immediately at half-minute intervals. Opel

MILLE MIGLIA—continued.

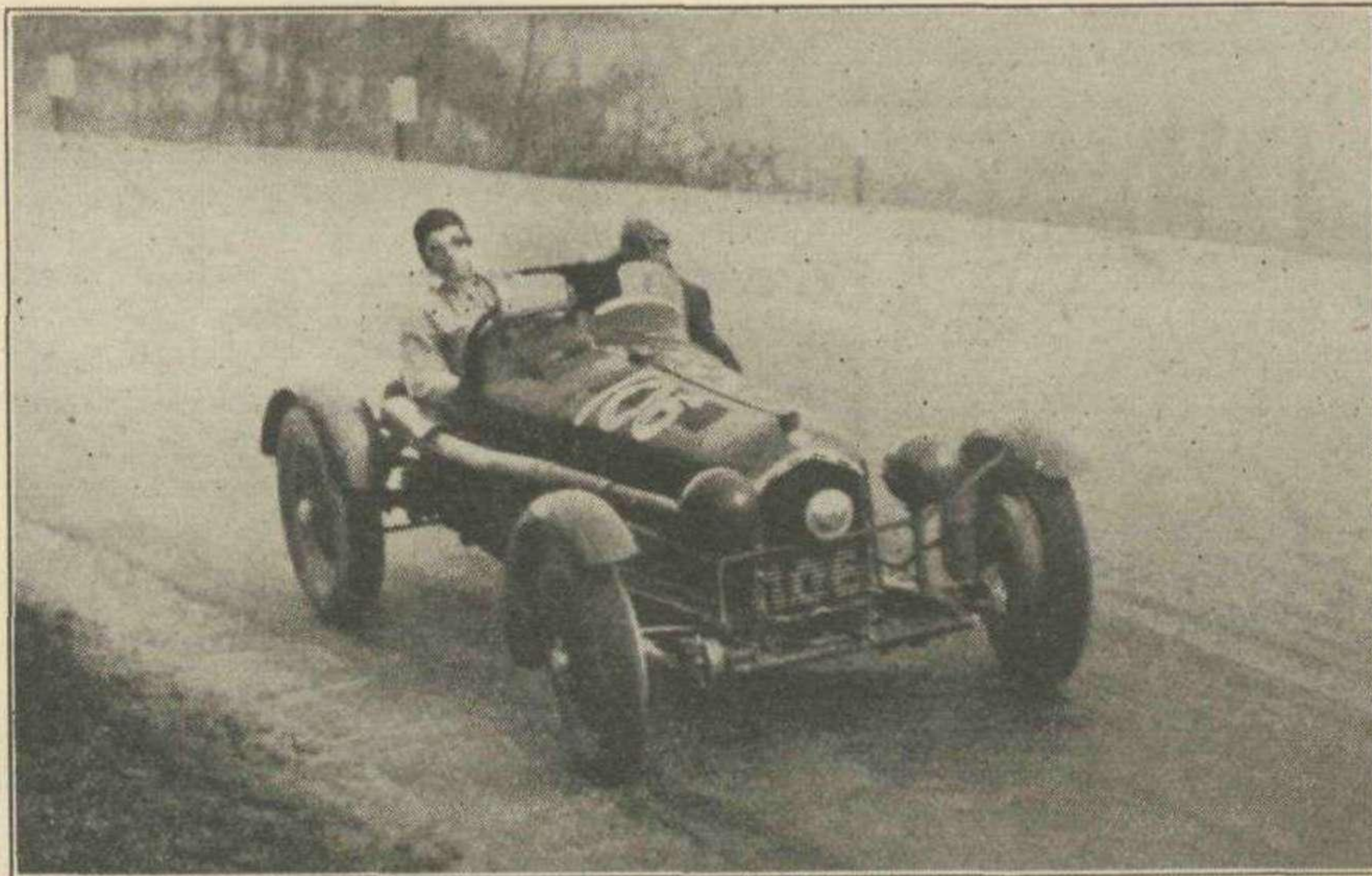
and closed Lancias, one or two Alfas, a Maserati, then Hall's Aston Martin, which was well received, Scarfiotti's Maserati, the favourite in the class and finally Clarke's Aston, shot away amid shouts of good luck from the little knot of English spectators.

An interval of half-an-hour, then the 2-litres, another and then with the dawn just breaking the first of the "bolidi," Santinelli's Alfa-Romeos roared off down the road. There was a special round of applause for the smiling Varzi on the red Maserati, which was given a push start by a mob of mechanics, more Alfas and then last of all Pintacuda on the converted Monoposto. Almost up to the last minute there were rumours that Nuvolari would be his fellow-driver, but the Ferrari stable were reserving the Mantovano for Monte Carlo and Pintacuda's companion was the Marquis Della Stufa. 17 cars started in the 3-litre class.

Good weather was reported from most parts of the course, and some fast times were to be expected on the straight level roads from Brescia to Bologna. The first piece of news which came in was that Dusio had given up at Parma with a broken piston after averaging 140 k.p.m. with his tiny saloon. Then Bologna reported that Gazzabini had reached there on the M.G., beating Lord Howe's time last year by over seven minutes, with Bianco and Strazza on Maseratis respectively two and six minutes behind. Scarfiotti was in the lead in the 1½-litre class, with an advantage over Hall of over eight minutes, and had beaten Comotti's record handsomely. Alfieri on an Alfa was lying third, with Clarke fourth, so British cars were well to the

behind, with Pintacuda another 18 secs. in the rear. It was learnt afterwards that he had stopped three times with tyre trouble.

begins the heavy climb to the Raticosa and Futa Passes three thousand feet above sea level. Tardini led comfortably on this section in last year's race, but



Some Sports Car! The winning Alfa-Romeo driven by Pintacuda was a 3-litre G.P. Chassis, fitted with a sketchy two-seater body.

TIMES AND SPEEDS AT THE BOLOGNA CONTROL, 145.4 MILES:

1,100 c.c. Class.

1, Gazzabini-Pelligrini, 1h. 46m. 01s., 84.8 m.p.h.; 2, Bianco-Bertocco, 1h. 46m. 42s.; 3, Strazza-Baldini, 1h. 50m. 17s.; 4, Ambrosini-Bertone (Fiat), 1h. 54m. 12s.

1,500 c.c. Class.

1, Scarfiotti-Penoti, 1h. 41m. 29s., 86.26 m.p.h.; 2, Hall-Marsden, 1h. 50m. 14s.; 3, Alfieri-Sciesa, 1h. 54m. 05s.; 4, Clarke-Falkner, 1h. 54m. 30s.

Pintacuda was getting well into his stride and knocked 5½ minutes off the record and made Florence, where rain was now falling, in three minutes less than his rival. Poor Varzi was only third. His dry-sump scavenge pump had given trouble before reaching Bologna, and the coachwork of his car, which was only completed the night before the race, was showing signs of disintegration. Soon after Florence he slowed right down and retired at his replenishment depot.

Pintacuda continued to forge ahead and had a lead of seven minutes at Siena. Santinelli was in third place with Battaglia on his heels, and Ruesch and Danese within striking distance. After Siena the leader was ordered to ease his pace a little, but even so arrived in Rome with a mounting advantage. His time to Rome was eight minutes slower than the record set up in 1932 by Borzacchini.

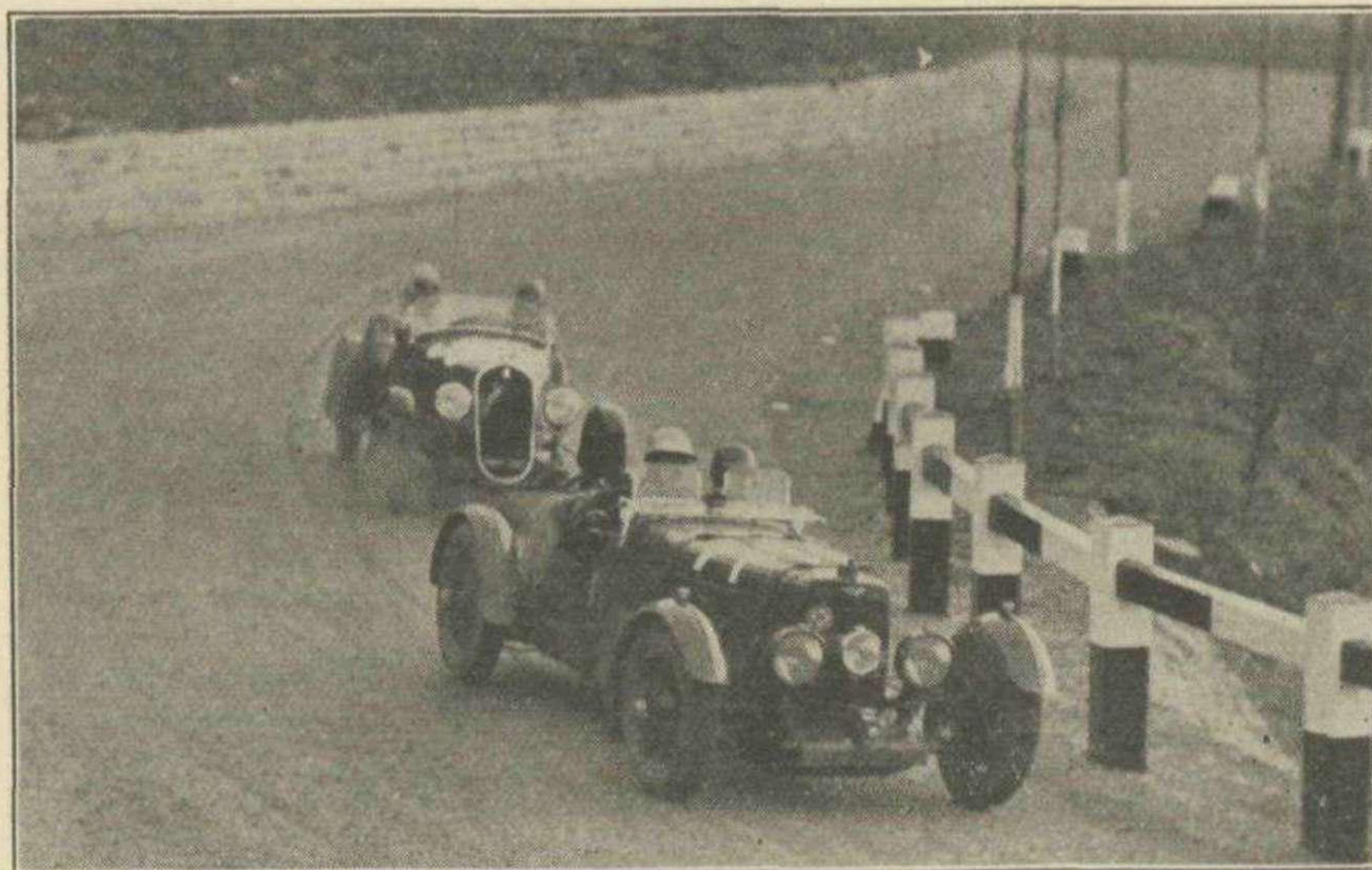
The fastest time in the Florence-Rome section was made by Danese, who thus passed into third place.

In the 1,100 c.c. class Gazzabini still led on the M.G., hotly pursued by the two Maseratis. Ambrosini had left the road without much damage and other spots of bother were reported. Hall had been gaining on Scarfiotti over the mountainous roads to Florence, a magnificent feat for an unsupercharged car, but was forced to retire soon after Siena with a blown gasket. Clarke thus stepped into second place, and at Rome his was also the leading car in the unsupercharged class. Gheresi led the 2-litre as far as Florence but soon afterwards had to retire with a broken distributor.

TIMES AND SPEEDS AT THE ROME CONTROL, 396.2 MILES.

1,100 c.c. Class.

1, Gazzabini, 6h. 07m. 40s., 64.62 m.p.h.; 2, Bianco, 6h. 11m. 40s.; 3, Strazza, 6h. 21m.



British prestige was amply upheld by Clark and Falkner with their Aston-Martin, in winning the 1,500 c.c. class. Here they are seen in close company with a Ballila Fiat.

Gheresi had dealt summarily with Pertile's record, in the 2-litre class, reducing it by eight minutes, so what would happen in the 3-litre category? To everyone's surprise Tardini was in the lead, and had improved his speed of last year by 3 m.p.h. Varzi was 54 secs.

2-litre Class.

1, Gheresi-McEvoy, 1h. 44m. 24s., 83.64 m.p.h.

3-litre Class.

1, Tardini-Chiari, 1h. 27m. 37s., 98.92 m.p.h.; 2, Varzi-Bignami, 1h. 28m. 31s.; 3, Pintacuda-Della Stufa, 1h. 28m. 49s.

Bologna stands at the edge of the Plain of Lombardy and almost from its gates

1st
1934
I.O.M.
MANNIN
BEG RACE



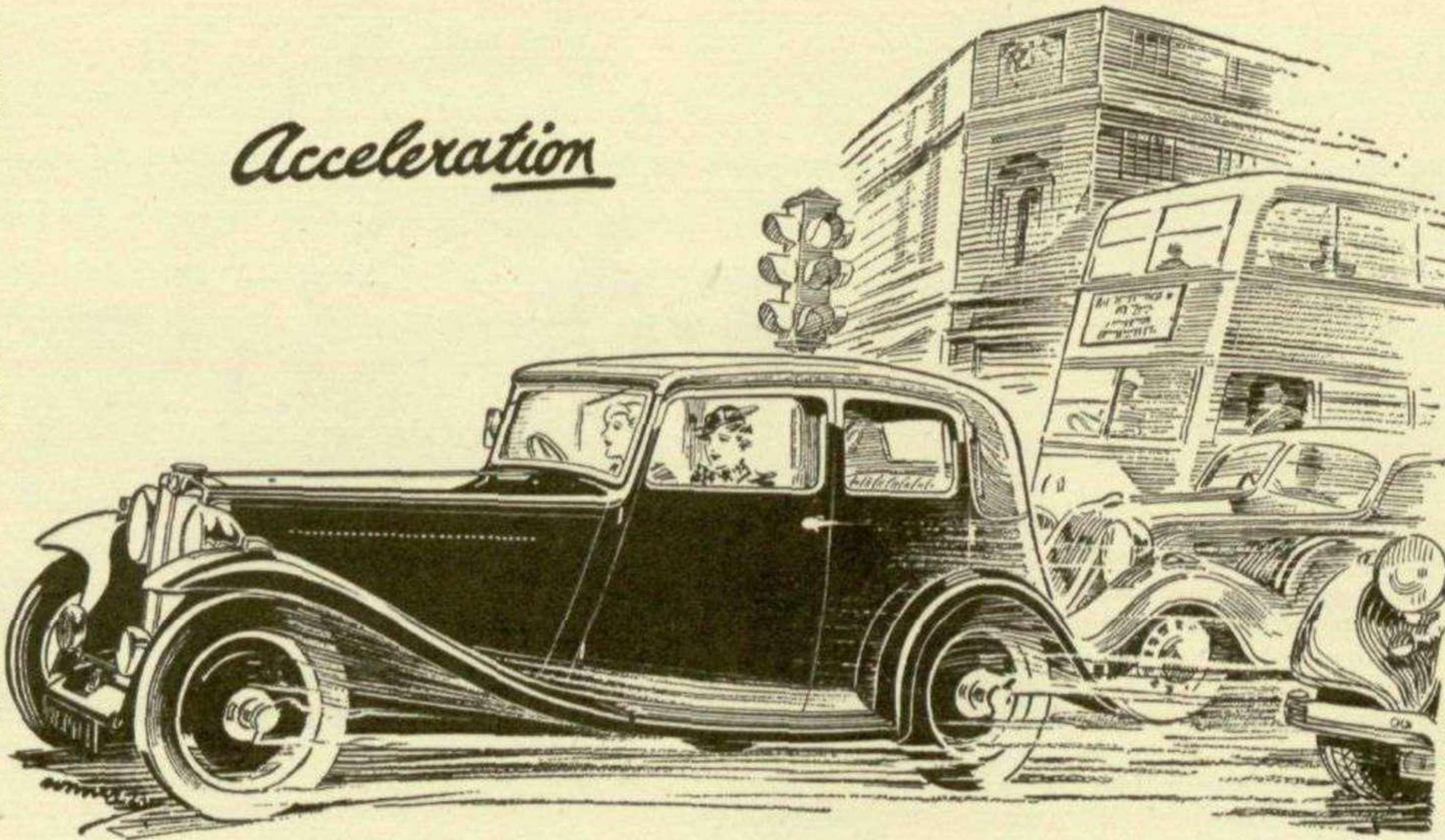
1st
1924
ULSTER T.T.
RACE

1st
JUNIOR
ACERBO CUP
(ITALY)
RACE

Acceleration

1st
JUNIOR
SWISS
GRAND
PRIX

1st
24 HOURS
BOL D'OR
RACE
(FRANCE)




1st
B.E.D.C.
EMPIRE
TROPHY
RACE

1st
A.R.C.A.
G.P. OF
AMERICA

1st
GERMAN
GRAND
PRIX HILL
CLIMB

1st
JUNIOR
CIRCUIT
MODENA
RACE

IN THE R.A.C. EASTBOURNE RALLY



cars won more premier awards than any other one make.

**13 Premiers
7 Second Class
1 Third Class**

(Subject to official confirmation)

In the T.T.—The Empire Trophy—The Mannin Beg, three of the most important races in Great Britain, where acceleration after the corners counted for so much, the M.G. won in every case—just imagine taking tricky bends at a modest 20-25 m.p.h., then accelerating up to 100 and even more.

One of the secrets of M.G. racing successes is "quicker than most at the get-away." Racing experience has developed the car for you, no matter which M.G. you buy, it has just the right gear ratios, the easiest of changes and that extra power which makes it streets ahead of everything else in its class.

Write for literature or better still ask your local dealer to arrange a trial run—

M.G. Midgets from £222
M.G. Magnettes from £305
Triplex glass. Dunlop tyres ex Works

IF YOU WANT SPEED BUY SAFE SPEED—M.G.

ISSUED BY THE M.G. CAR CO. LTD., ABINGDON-ON-THAMES, BERKSHIRE

1st
WINTER
"100"
AUSTRALIA

1st
JUNIOR
PHOENIX
PARK
RACE

1st
750 c.c.
RACE EIFFEL
MEETING

HOLDS
ALL
CLASS "H"
750 c.c.
RECORDS

1st
GRAND PRIX
OF
FRANCE
(1100 c.c.)

1st
1100 c.c.
CLASS
KLAUSEN
HILL CLIMB

1st
AUSTRALIAN
GRAND
PRIX



1st
12 hp. CAR
TO EXCEED
120 m.p.h.

THE MILLE MIGLIA—continued.

1,500 c.c. Class.

1, Scarfiotti, 6h. 06m. 35s., 64.8 m.p.h.; 2, Clarke, 6h. 43m. 49s.; 3, Cantoni (Lancia), 7h. 11m. 13s.

2-litre Class.

1, Azzali (Alfa), 6h. 15m. 05s., 63.12 m.p.h.

3-litre Class.

1, Pintacuda, 5h. 28m. 09s., 72.46 m.p.h.; 2, Tadini, 5h. 45m. 11s.; 3, Danese, 5h. 57m. 52s.; 4, Balestrero, 6h. 01m. 45s.; 5, Ruesch, 6h. 03m. 46s.; 6, Santinelli, 6h. 05m. 20s.

With seventeen minutes in hand, Pintacuda continued at a steady pace, if an average of 70 m.p.h. over unclosed roads can be called steady, but Danese had his foot hard down and at Perugia had moved into second place, three minutes ahead of Tadini. This and the Ancona section proved unfortunate for the smaller cars, for Gazzabini on the M.G. retired after Rome and Strazza was out with engine trouble on the coast.

Scarfiotti had an even less unpleasant experience. He drove magnificently on the mountainous roads and was actually third in the general category soon after Ancona. Then he filled up with petrol and handed over to his spare driver and before they had gone three miles the latter skidded and charged into a crowd of children, killing two. The only consolation to us at Brescia was that the Aston took the lead in the 1½-litre class.

On gaining the coast Tadini made a great effort to recover the ground he had

lost, and succeeded in catching Danese, further attempts at chasing the flying Pintacuda being checked by wet roads in the Bologna district. The headlights of Danese's car fell off and had to be replaced at Padua, while Balestrero broke a valve, ran out of fuel near Rome and had tyre trouble but struggled gamely on.

All Brescia by this time had gathered again at the Vaile Rebuffoni, and round about 7 in the evening, the loud speakers proclaimed the first car near at hand. It was Bianco and Bertocchi on the 1,100 c.c. Maserati, who had comfortably beaten Taruffi's record in 1934, running, of course, under much better weather conditions. Frantic cheers from the crowds, and a continued excitement as everyone waited, watch in hand, to see whether Pintacuda would beat the record of the course set up the first year by Varzi. At last he was sighted, with only two minutes to spare, and was welcomed amid the usual scenes of enthusiasm. There was an exciting moment when Ruesch and Danese roared over the line wheel to wheel and then an endless procession of finishers of all classes. Amongst them those stout fellows Clarke and Faulkner, who had brought their Aston-Martin over the thousand miles of hardship into first place in the 1½-litre class. A splendid performance and a fine car.

THE RESULTS

GENERAL CLASSIFICATION.

1. **Pintacuda and Dellastuffa (3-litre Alfa-Romeo)**, 14 hrs. 4 mins. 47 secs. (71-72 m.p.h.).
2. **Tardini and Chiari (2.6-litre Alfa-Romeo)**, 14 hrs. 46 mins. 48 secs.
3. **Battaglia and Tuffanelli (2.6-litre Alfa-Romeo)**, 15 hrs. 4 mins. 8 secs.
4. **Reusch and Guatta (2.3-litre Alfa-Romeo)**, 15 hrs. 5 mins. 57 secs.
5. **Macchia and Danese (2.3-litre Alfa-Romeo)**, 15 hrs. 10 mins. 58 secs.
6. **Sanguinetti and Balestrero (2.3-litre Alfa-Romeo)**, 15 hrs. 12 mins. 47 secs.
7. **Bianco and Bertocchi (1,100 c.c. Maserati)**, 15 hrs. 12 mins. 56 secs.
8. **Costese and Severi (2.3-litre Alfa-Romeo)**, 15 hrs. 26 mins. 45 secs.
9. **Gurgo-Salice and Larego (2.3-litre Alfa-Romeo)**, 15 hrs. 39 mins. 1 sec.
10. **Rosa and Comotti (3-litre Alfa-Romeo)**, 15 hrs. 56 mins. 43 secs.
11. **Crivellari and Ferraro (2-litre Alfa-Romeo)**, 15 hrs. 59 mins. 23 secs.

CLASS WINNERS.

- 1,100 c.c.**—Bianco and Bertocchi (Maserati), 65.98 m.p.h.
1,500 c.c.—Clarke and Faulkner (Aston-Martin), 54.68 m.p.h. Winners also of the amateur class and a special prize for the first foreign car to finish.
2-litre.—Crivellari and Ferraro (Alfa-Romeo).
3-litre.—Pintacuda and Dellastuffa (Alfa-Romeo), 71.72 m.p.h.

FORTHCOMING EVENTS

MOTORING FIXTURES FOR 1935.

MAY.

- 4th. Tweed Valley M.C. Haystour Trophy Trial.
- 4th. M.G. Car Club. Abingdon-Abingdon Trial.
- 4th. Mid-Surrey A.C. Grand Cup Trial.
- 4th or 5th. Standard Car Owners' Club Reliability Trial.
- 5th. Grand Prix of Tunis.
- 6th. J.C.C. International Trophy Race.
- 11th. Kent and Sussex L.C.C. Speed Trials.
- 11th. Middlesex County A.C. Lady Driver's Competition.
- 11th. Derby and D.M.C. Donington Meeting.
- 11th. Southport M.R.C. Sand Races.
- 12th. Grand Prix of Tripoli.
- 12th. Grand Prix of Hungary.
- 12th. Liverpool M.C. Invitation Trial.
- 12th. Talbot Owner's Club. Talbot Twenty Trial.
- 18th. Irish M.R.C. Bray Circuit Race.
- 18th. M.A.C. Shelsley Walsh Hill Climb.
- 18th. Western Centre A.C.U. Cotswold Cup Trial.
- 19th. Coppa di Bergamo.
- 19th. Kentish Border C.C. "Best" Cup Trial.
- 25th. M.G. Car Club. Scottish Section Half-day Trial.
- 25th. Middlesex County A.C. Efficiency Trial.
- 25th. Bugatti Owners Club Hill Climb.
- 25th. N.W.L.M.C. Lawrence Cup Trial.
- 25th. Riley M.C. 24-Hour Trial.
- 26th. Avus Race (Germany).
- 26th. Rochester, Chatham and D.M.C. Night Trial.
- 26th. W. Hants L.C.C. Banfield Trial.
- 29th and 31st. R.A.C. Isle of Man Races.
- 30th. Indianapolis 500 Miles Race.

JUNE.

- 2nd. Alessandria Race (Italy).
- 2nd. Grand Prix of Peña-Rhin.
- 7th-8th. M.C.C. London-Edinburgh Trial.
- 9th. Vosges Circuit Race.
- 9th. Grand Prix des Frontières (Belgium).
- 9th. Royal Prix de Rome.
- 9th-10th. Austrian Alpine Trial.
- 10th. B.A.R.C. Whitsun Meeting.
- 10th-14th. R.S.A.C. Scottish Rally.
- 15th. Kent and Sussex L.C.C. Speed Trials.
- 15th. Mid-Surrey A.C. Holyhead Trial.
- 15th-16th. Le Mans Grand Prix d'Endurance and Rudge-Whitworth Cup Race.
- 15th-16th. Thousand Miles Trial, Czecho-Slovakia.
- 16th. Biella Circuit Race (Italy).
- 16th. Eifel Race (Germany).
- 16th. Sezanne Hill-climb (France).
- 21st-23rd. S.S. Car Club, Blackpool Rally.
- 22nd. Light C.C. Relay Race.
- 22nd. Standard C.O.C. Devon Rally and Gymkhana.
- 22nd. Middlesex County A.C. Oakes Competition.
- 22nd. Ulster A.C. County Down Trophy Race.
- 22nd-23rd. Brighton and Hove M.C. Brighton-Beer Trial.
- 23rd. French Grand Prix.
- 29th. Scottish Sporting C.C. 24-Hour Trial.
- 29th. J.C.C. Members' Day.
- 29th. Sutton Coldfield and N.B.A.C. Vesey Cup Trial.
- 29th-30th. W. Hants L.C.C. Concours d'Elegance and Gymkhana.
- 30th. Liverpool M.C. Closed Trial.
- 30th. Kesselberg Hill-climb (Germany).
- 30th. Lorraine Race.

Continental Notes and News

By

HAROLD NOCKOLDS.

The "Hush-Hush" Bugatti.

WHAT is Bugatti doing? That is the burning question of the present moment. We all know that a very special car is being built at Molsheim, but that is about the limit of our knowledge. Someone is supposed to have been allowed to look at the chassis, but the look does not seem to have been very informative. As for the engine, well, that is really hush-hush.

I am now able to give you the first real news about the new car, all hot from Molsheim. The great Ettore himself has gone so far as to say that the new machine will be ready in three or four months; that it is costing him eight times as much as a 3.3-litre job to construct; that he is going to attack the Auto-Union and Mercédès-Benz records; and finally, that this record attempt will be made, not on a track or an *autostrada*, but on a perfectly normal French *route nationale*, in order to demonstrate the extreme stability of the car at 200 m.p.h.

Now you know as much as I do.

Rumour has it that all is not as it should be at Molsheim. One hears tales of differences of opinion between Bugatti and Taruffi and Wimille. It certainly is a little mysterious that there should be no Bugatti's at Monaco, and only one entered for the French G.P. (perhaps that will be the new one!) At the moment the only official activity is in small French hill-climbs with the old four-wheel drive.

Maybe the rail-cars are to blame.

German News.

Meanwhile the German manufacturers, thanks to a national motor sport policy, are able to carry on perfecting their cars. The Monza trials of the Mercédès-Benz were thoroughly satisfactory, the most noticeable alteration being a deeper exhaust-note, possibly due to increased cubic capacity. Caracciola was like an oyster about the subject.

I am writing this before the Monaco G.P., in the report of which you will find the latest news about the cars.

Dr. Porsche has announced his intention of going to Montlhéry for trials with the Auto-Unions. So far they have not arrived, but meanwhile Varzi has made several runs at Avus with the enclosed cockpit record car, and also with a racing machine. Prince von Leiningen was also on the scene, and the trials were made for road-holding and braking experiments. The rumour that Auto-Union was building a car to attack "Blue Bird's" records is said to be all boloney.

Stuck has been taking a holiday at Cannes. The annual *Concours d'elegance* gave him the opportunity to show his magnificent Horch cabriolet, with coachwork by Seegers, and he won his class. Great interest was aroused by his entry being described as an Auto-Union, which in fact it was—but not a G.P. car! Frau Stuck was a regular spectator of the Tennis Championships which were being decided at that time. She herself used to

have a great lawn tennis reputation as Fraulein de Reznicek, and also has several books to her credit.

Chez Ferrari.

I have dealt with the *bimotore* Alfa-Romeo in a separate article in this issue. It certainly has great potentialities, but the tyre problem is going to cause not a little anxiety. They didn't look too good after the runs on the Brescia-Bergamo road. A second car is being built for Chiron, and the two *bolides* will be formidable rivals at Tripoli and Avus.

The Scuderia is using the Monaco G.P. as a testing ground for three types of suspension. Read the account of the race in this issue for details of their behaviour. I should have thought that a better testing ground could have been found, including a straight for maximum speed. Monaco is much too slow, but the corners will no doubt bring out some weak spots.

Incidentally the new cars made their first trials on April 4th, and apparently satisfied Ferrari and Bazzi. They will probably appear for the first time at Tunis.

An Ambitious Effort.

In Italy a driver named Biondetti, who used to handle Maseratis, is hard at work building a special car, in appearance not unlike an Auto-Union. Plans show it to have a 5,900 c.c. 12-cylinder engine placed towards the rear of a tubular chassis. The engine is said to develop 400 h.p., and weigh only 265 kilos. The engine will be air-cooled, by means of a centrifugal fan. Other details are a four speed gearbox, made in unit with the differential, a fuel tank just behind the driver; a track of 1m. 39 and a wheelbase of 2m.55.

Biondetti hopes to get the car ready in time for Tripoli.

Breaking Records on "Open" Roads.

Believe it or not, this is actually true. I think the feat of Herren Schweder, Hasse, and von Guillaume in breaking records up to 10,000 kilometers while normal traffic was using the road must be unique in motoring history.

Avus was the scene of the achievement, and the authorities quite naturally could not see their way to closing the two "legs" of the road to normal traffic while the Adler ran round for five days! But this did not daunt the two enthusiasts, Schweder and Hasse. They had spent a lot of time fitting their Trumpf-Junior with a sleek single-seater body with enclosed cockpit. An unusual point of the body was its extremely thin doors of some composition. The car itself was the same 1,000 c.c. car with which they gained a premier award in the Alpine Trial last summer.

For eight hours at a stretch Schweder and Hasse took it in turns to endure the

stuffiness of the closed cockpit. The weather was often appalling, rain and even snow making flat-out driving a real test of road-holding and weight-distribution, through which the Adler came with flying colours. The other traffic on the road did not greatly hinder their 70 m.p.h. gait during the day, but at night they both complained that drivers of oncoming cars refused to dim their headlights.

It was not until the very last stages of the record-run that the two hardy drivers called in relief, and Von Guillaume took a spell at the wheel. The Adler did not give the slightest signs of trouble throughout the test, and finished up its last laps of the 10,000 miles at a level 70 m.p.h.

Here is the full list of records:—

4,000 km., 68.39 m.p.h. (Riley, 64.85 m.p.h.).
 3,000 miles, 68.35 m.p.h. (Riley, 64.44 m.p.h.).
 5,000 km., 68.37 m.p.h. (Riley, 64.37 m.p.h.).
 2 days, 68.40 m.p.h. (Renault, 50.80 m.p.h.).
 4,000 miles, 68.23 m.p.h. (Renault, 50.80 m.p.h.).
 3 days, 67.56 m.p.h. (new record).
 5,000 miles, 67.57 m.p.h. (Renault, 50.78 m.p.h.).
 10,000 km., 66.63 m.p.h. (Renault, 51.20 m.p.h.).
 4 days, 66.64 m.p.h. (new record).
 5 days, 65.95 m.p.h. (new record).
 15,000 km., 65.99 m.p.h. (Renault, 48.97 m.p.h.).
 10,000 miles, 66.09 m.p.h. (Renault, 49.18 m.p.h.).
 6 days, 66.02 m.p.h. (new record).

Nuvolari—by Dreyfus.

All of us admire Nuvolari for his outstanding skill as a driver. Listen, O ye fans, to the eulogistic terms in which René Dreyfus writes of the Italian ace:—"This dry little man, of energetic mien, with a profile like a Roman coin, and piercing eyes, cannot fail to attract attention wherever he goes. During a race, no matter what his position may be, he is distinguished from all other drivers by his continual agitation. He seems to want to infuse the car with his energy. It would not be too much to say that Tazio emanates so much vigour that one can hardly imagine him being defeated. His perfect driving is, of course, legendary, and as my team-chief I can personally appreciate another quality in him, that of comradeship. Above all he is modest, and does not draw any vanity from his triumphs—because they are really triumphs and not just victories—and he much prefers to share his pleasure in winning with his fellow-drivers, mechanics and the rest.

"Journalists often write that Nuvolari is a phenomenon. Nothing could be farther from the truth. Tazio himself smiles at this appreciation. He is an artist to the very finger-tips, because he constantly maintains his physical and mental strength to the highest degree. For example, you have only to see him at practice, in which no one takes greater pains than he does. Nuvolari will tell you that there are no secrets in the conquest of fame, but that it is essential, above all else, to find your proper calling and to stick to it conscientiously—if you want to get the greatest satisfaction from it, both morally and financially. In private life—he is reserved and modest.

"Tazio is not the phenomenon one imagines, but the greatest racing driver of our day."

CONTINENTAL NOTES AND NEWS—continued.

Chicanes at Montlhéry.

For some time there has been a strong feeling in certain French quarters that one of the best methods of reducing the speed of racing cars is to make the circuits more difficult. This view has now become a reality, for it has been decided to place three artificial "chicanes," or kinks in the Montlhéry circuit for the G.P. de l'A. C.F.

This decision was taken as a result of a visit to the track of a delegation from the French Sporting Commission, composed of MM. Pérouse, Moreau, de Peyerimhoff, and de Rothschild. M. Bugatti placed a 2.3-litre Bugatti, driven by Robert Benoist, at the disposal of the delegation, and after a good deal of experiments the following chicanes were settled: (1) A simple S bend composed of two barriers set at a distance of 12 metres, to be placed about 600 metres from the starting line, and 80 metres before the junction called Deux Ponts. (2) A second bend, the same as the first, to be placed 9 kilometres from the start at the entrance to the curve at that point (Quatre Bornes). (3) A third bend, but a double one this time, with three barriers 15 metres apart, to be placed on the track itself, opposite the stands, 11 km. 500 from the start, and 800 metres after the Fay hairpin. Scale drawings of the position of the barriers are to be prepared and will be sent to all the drivers.

It all seems rather a pity, I think.

A European Championship.

Following on my note last month anent the suggestion of the R.A.C.I. that the European Championship for drivers should be revived, I now hear that the German Sporting Commission has put up the idea of holding the championship for cars once more, based on the results of the national G.P. races. Before submitting it to the A.I.A.C.R., the German people asked the opinion of the R.A.C.I., and the latter having approved, it may presumably be taken for granted that the idea will be accepted, at the Meeting of the International Sporting Commission in Paris on May 8th.

And Now for the Formula.

At that meeting of the C.S.I. on May 8th will come up that hotly debated question of the new formula for G.P. cars. There has been some little difficulty about the meeting already, for it was scheduled to take place in Berlin. The President, Baron de Knyff, a Duchman residing in Paris, did not care to make the long journey, however, and the mountain is therefore coming to Mahomet.

I am afraid it is going to be almost impossible to devise a formula to please everyone. There are two directly opposite schools of thought, which boil down to the position one often finds nowadays of Germany *v.* the Rest. The former want a continuance of the present formula, a maximum weight limit and no limit on engine size save the ingenuity of the designer. The French, German, Italian, British and American views are in favour of a small engine size or alternatively fuel limitation.

I understand that there is a possibility

of the discussion being confined to representatives of those nations which actually build G.P. formula cars to-day. In which case our heated protestations on the matter are reduced to so much hot air.

What a position for the great British Empire! No Grand Prix cars and no British Grand Prix!

Thou shalt not exceed 30 m.p.h.!

That Race in Paris.

Although the idea of running a race through the streets of Paris has been definitely abandoned for this summer, it still remains as a tantalising possibility in the minds of many Parisiens. The latest move has been made by a candidate in the municipal elections, who has included a proposed race called the G.P. de Paris in his programme.

Honouring a Famous Driver.

On Sunday, March 31st, a most impressive ceremony took place at Terni, in Italy. The occasion was the unveiling of a memorial to the late Baconi Borzacchini, the great Italian driver who met his end during the tragic Monza race in 1933.

The memorial took the form of a magnificent torso of the lamented champion, set in a stone background at the end of an avenue of trees. Many famous drivers and motoring personalities were present.

Racing in Norway.

An interesting race meeting took place last month near Konigsmiger, on the Norway-Sweden frontier. The circuit, on ice, measured 4 kilometres in length, and the following results were obtained:—

Touring Cars (3 laps).

1. Trygve Kolberg (Terraplane), 8m. 5.2s.
2. Reidar Hoff (Terraplane), 8m. 6.3s.
3. Birgar Mathison (Chevrolet), 8m. 42.2s.

Sports Cars (6 laps).

1. Arvid Johansen (Winfield Special), 13m. 3.8s.
2. Conrad Bryde (Singer), 14m. 3.2s.
3. C. F. Lichr (Bugatti), 14m. 7.6s.

Touring Cars (1 kilo.).

1. E. Ingelrichsten (Delage), 32.8s.
2. Knut Solberg (Plymouth), 33.2s.
3. Max Lindkjolon (Plymouth), 33.8s.
4. Paul H. Poulsson (Ford), 34s.

All About Dieppe.

I have just received a copy of the regulations for the Circuit of Dieppe, and very interesting reading they make, too.

From the English point of view, the greatest importance probably attaches to the *voiturette* race on Saturday, July 20th, for cars in International Classes F and G, *i.e.*, from 751 c.c. to 1,500 c.c. This will be a duration event of two hours, starting in the afternoon. The prize money for this race is good, being roughly £200 for the winner, £140 for second, and £90 for third. Entries can be made at 1,000 francs per car, including insurance, until July 13th. Owners of E.R.A., M.G. Magnettes, Riley's, Bugattis and Alta's all stand a chance, and will in any case gain valuable experience.

On the next day the Grand Prix for cars in Classes A, B, C, D, and E, will take place. The system of heats and a final used last year has been abandoned in favour of the previous 3 hours race. The race is down on the fixture list of the

Scuderia Ferrari, and I expect every effort will be made to induce at least one team of German cars to participate.

As you probably know, the Dieppe Circuit is a sporting course, with adequate access for spectators. The races present a wonderful opportunity to see a real Continental road race, at the minimum cost.

Don't miss Dieppe!

The German Championships.

The rules for the German Championships remain more or less the same. There are two categories, one for speed and the other for hill-climbing. The former will be decided upon the following events: Avus Race, Eifel Race, and G.P. of Germany. In order to qualify drivers must take part in all three events, and in the event of a tie the placings in the G.P. will be the deciding factor. The *Bergmeisterschaft* will include the Kesselberg, Feldburg, Fribourg and Brigau hill-climbs. Entrants must compete in at least two events, and if a driver takes part in three, then the two best performances count. Ties will be fought out at the Fribourg hill-climb.

There is to be a general tightening of the rules with regard to German drivers competing in foreign events. Permission must be applied for and received from the O.N.S. before an entry is filed, presumably to ensure German representatives in foreign races being of a high standard.

No Swiss Championships.

It has been decided, in view of the few events on the national calendar, to abandon the Swiss Championships. It is thought that the popularity of G.P. racing has been the death-knell of hill-climbing, and grave doubts are entertained as to the Klausen hill-climb ever being held again.

Here is the calendar for the coming season:

- June 16th.—Rheineck-Walzenhausen Hill-Climb.
- June 16th.—Jungfraustafette.
- August 1st-9th.—Coupe Internationale des Alps.
- August 24th.—Circuit du Bremgarten.
- August 25th.—2nd G.P. de Suisse.
- September 22nd.—Ceneri Hill-Climb.

It will be noticed that the first two events clash, so Rheinick-Walzenhausen will probably be held on another date. The Monte Ceneri hill-climb is a welcome revival.

Why the Montreux G.P. was Cancelled.

An absentee from the above list is the Montreux G.P., held for the first time last year. There were several reasons for its cancellation. First of all, times are hard in the Montreux district, and people are sceptical of the benefit to be derived from a G.P. in the present circumstances. The result has been that the fund failed to reach its specified limit of 25,000 francs, the figure being actually 20,000 after months of urgent collection. Lastly, the public elections are due to take place on the same day as the race, which would have complicated matters considerably.

Fine Bugatti Records.

A very fine performance was put up last month by a 1,500 c.c. 8-cylinder Bugatti at Montlhéry. This car, driven

CONTINENTAL NOTES AND NEWS—Continued.

in turns by Louis Villeneuve, Pierre Veyron and Roger Labric, beat the Class C record for 24 hours, as well as the records for 3,000 kilometres and 2,000 miles, all at a speed of 92/3 m.p.h. A pair of headlamps was mounted on the front cross-bar for the night-hours, and the whole run was absolutely trouble-free.

Here are the new records, with the previous figures in parenthesis:—

3,000 kms., 93.227 m.p.h. (Riley, 82.54 m.p.h.).
2,000 miles, 92.12 m.p.h. (Delage, 69.00 m.p.h.).
24 hours, 92.735 m.p.h. (Riley, 82.41 m.p.h.).

Louis Villeneuve, by the way, is an ardent gymnast, and has just been awarded *la médaille de l'Education physique*.

Athletic.

Another French driver of considerable physical prowess is Raymond Sommer, who is very keen on running and cycle-racing. He took part in a great sporting fête at the Palais des Sports in Paris recently, and can sometimes be seen at the Velodrome d'Hiver cycle-track, pedalling round the saucer at great speed.

He is not going to give up motor-racing, however, and has just purchased a 3-litre *monoposto* Alfa-Romeo from the Scuderia Ferrari.

Bugattis at Bouzerea.

Fastest time of the day at the Bouzerea hill-climb, just outside Algiers, was made by Sagnier, on a Bugatti.

Here are the class winners:—

Sports—3,000 c.c.—Sagnier (Bugatti), 2m. 23s.
Unlimited.—Soulier (Ford), 2m. 30s.
Racing—1,500 c.c.—Vanoni (Amilcar), 2m. 31.8s.
Unlimited.—1, Sagnier (Bugatti), 2m. 21s.; 2, Rencurel (Bugatti), 2m. 28.4s.; 3, Dardenne (Bugatti), 2m. 31.8s.

New Record at Chavigny.

The kilometre hill-climb at Chavigny, near Nancy, organised by the A.C. Lorrain, resulted in a victory for Robert Benoist on a 4-wheel drive Bugatti, who won a special cup presented by the Commission Sportive for breaking the record. The previous figure, incidentally, was 45 secs., and stood to the joint credit of Leoz and Bayard, both on Bugattis.

RESULTS.**Racing.**

750 c.c.—1, Jahan (Salmson), 51.4s.; 2, Le Paige (Ratier), 1m. 23s.
1,100 c.c.—1, Anon (de Rovin), 52.2s.; 2, Escalle (Amilcar), 52.8s.; 3, Georges (A.C.L.), 1m. 1s.
2,000 c.c.—1, Arnould (Bugatti), 53.8s.
3,000 c.c.—1, Cazaux (Bugatti), 41.8s.*; 2, Delorme (Bugatti), 45s.
5,000 c.c.—1, R. Benoist (Bugatti), 40.4s.*; 2, Girod (Maserati), 43s.

Sports.

750 c.c.—1, Bogacki (Senechal), 1m. 5.2s.*; 2, Delor (Peugeot), 1m. 10.4s.
1,100 c.c.—1, Lagrolière (Salmson), 49.4s.
1,500 c.c.—1, Riès (Salmson), 49s.*; 2, Tocca (Citroën), 1m. 8.2s.
2,000 c.c.—1, Weisweiler (Alfa-Romeo), 58.4s.*
5,000 c.c.—1, Benoist (Bugatti), 50s.; 2, Pégullu (X.), 59.4s.

* Record.

The Château-Thierry Tragedy.

The 1935 Château-Thierry hill-climb will go down in motor racing history as a major tragedy. Before the event everything pointed to a great success; careful

organisation and a fine entry. But disaster fell with appalling suddenness.

It is a curious custom at Château-Thierry that cars have to pull up at the finishing line, and therein lay the cause of the accident. A big crowd lined the historic Soissons road, which has seen the passage of so many famous drivers, but they were separated from the road by barriers and fences.

The whole programme had been got through once, and the second runs were being made when the catastrophe happened. It was about 4 o'clock when Cattaneo, driving a 1,500 c.c. Bugatti with which he has raced at Dieppe and elsewhere, braked hard about 100 yards before the finishing line. The car promptly turned right round in a terrific skid, dashed into the crowd on the left-hand side of the road, shot across to the other side, and finished its work of massacre among the tightly packed spectators on the right. Six people were killed outright, two died later, and many had to submit to amputation of their limbs in hospital. Cattaneo himself was unhurt, but was completely grief-stricken at the appalling result of his unfortunate skid.

Earlier in the afternoon Lagrolière had wrapped his Salmson round a tree, and a fierce fire ensued. He left the car in time to escape injury. As for the racing itself, fastest time of the day was made by Robert Benoist on the 4.9-litre 4-wheel drive Bugatti, beating the previous record by a motor cycle by two seconds. Cazaux also beat this figure.

RESULTS.**Touring.**

1,100 c.c.—1, Mme Roux (Fiat), 57.2s.*
5,000 c.c.—Cattaneo (Stutz), 50.6s.

Sports.

1,100 c.c.—1, Hup (Peugeot), 57.4s.
1,500 c.c.—1, Riès (Salmson), 41s.
2,000 c.c.—1, Testu (Bugatti), 44.8s.
3,000 c.c.—1, Roumani (Bugatti), 48.8s.
5,000 c.c.—1, Battu (Hudson), 45s.

Racing.

500 c.c.—1, Marie Paul (Sima-Violet), 1m. 16.4s.
750 c.c.—1, Jahan (Salmson), 42.8s.*
1,100 c.c.—1, Druck (Salmson), 36.8s.*; 2, Mestivier (Amilcar), 39s.; 3, Brillet (Rally-Salmson), 55.8s.
1,500 c.c.—1, Cattaneo (Bugatti), 36.8s.; 2, Césure (Bugatti), 38.8s.; 3, Girod (Salmson), 39s.
3,000 c.c.—1, Cazaux (Bugatti), 32.2s.*
5,000 c.c.—1, Benoist (Bugatti), 30.4s.*; 2, Girod (Maserati), 35.2s.

* Record.

At a meeting of the Commission Sportive a few days later it was decided in view of the fact that all the competitors had not made their second runs, to cancel the results in classes, and issue individual certificates of performance on the above times.

This accident has made a profound impression in France. A vast inquiry is being held into the whole business of organising motor-racing events, and it is likely that some fairly drastic regulations will be introduced by M. Regnier, Minister of the Interior.

The Young Idea.

The Georges Boillot Club in Paris has quickly got into its stride. A reception was held at Monthéry last month on the occasion of the first training period of the young members. After much champagne

had been drunk at the luncheon, the company moved to the *circuit routier*, where the members of the Club had their first motor-racing lessons under the able tuition of those famous veterans, Albert Guyot, Louis Wagner, Arthur Duray and Antony.

A Maserati Changes Hands.

Philippe Etancelin has sold his 3-litre Maserati to the Ecurie Girod. The car will be driven by Armand Girod, and in fact has already appeared at several hill climbs.

M.G. Success.

Maillard-Brune, who has made several fine performances on the Continent with his M.G. Midget, again did well last month, this time at the Boulevard Michelet Speed Trials, Marseilles. He won the 750 c.c. racing class, equalling the record. An M.G. Magna came in third in the 1,100 c.c. sports class, driven by Roch.

Permanent-Circuit Plans.

A statement has appeared in the Continental Press that an English group is endeavouring to form a company in Vienna for the purpose of constructing an autodrome near the Austrian capital. The sum called for is a quarter of a million pounds.

In Holland a scheme for a permanent road-circuit has long been mooted. The town of Assen and Arnheim have both considered the proposition, but rejected it after due consideration. Finally, the city of Haarlem agreed to construct the track, and a date was booked on the International Calendar for the G.P. of Holland to be held thereon on September 15th. Unfortunately the R.A.C.H. has decided that 8 metres is not sufficiently wide for modern racing-cars, 12 metres being their figure for an adequate road width. The result has been a great increase in the capital required, and this has proved too much for the sponsors of the track.

A G.P. at Geneva?

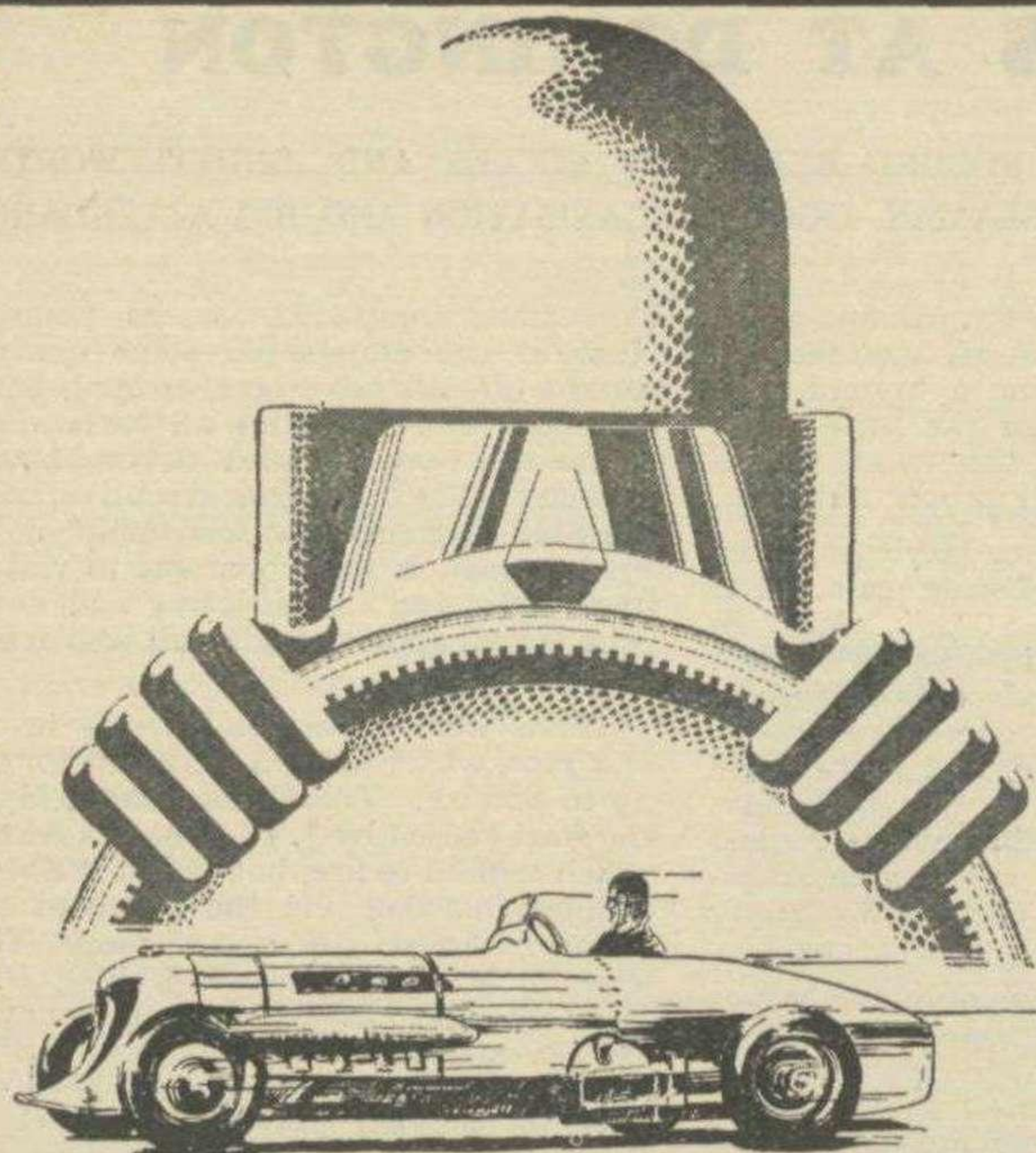
The fact that the Montreux G.P. has been abandoned and the cancellation of the Dutch G.P. has left September 15th an open date on the International Calendar has prompted the Swiss A.C. to toy with the idea of holding a Grand Prix at Geneva.

An Insurance Fund for Italian Drivers.

The association of Italian racing drivers has come to an agreement with the R.A.C.I. whereby an insurance fund has been started for the benefit of Italian drivers injured in racing accidents. The fund will be contributed in the following way: one third by the drivers, one third by the organisers of races, and one third by the R.A.C.I.

Another Cancellation.

I hear from the A.I.A.C.R. that the G.P. d'Algérie will not take place on its scheduled date, May 18th and 19th.



MOTOR RACES

(Under R.A.C. Rules)

SATURDAY, MAY 11th, 1935

1st Race—2 p.m.

Programme Comprises
7 EVENTS

6th Event for lady drivers only

ADMISSION

2/6

INCLUDING TAX
PARKING EXTRA

DONINGTON PARK MOTOR RACES

Massed starts to be held on the
Donington Park Road Circuit

CASTLE DONINGTON

Nr. Derby.

For further particulars apply—F. G. Craner, Hon. Sec.,
938, London Road, Derby. — Telephone: 1898.

DERBY & DISTRICT MOTOR CLUB

DUNKLEY & BURDEN Ltd.

FOR ALL



REPAIRS AND MAINTENANCE.

28, HUNTSWORTH MEWS, DORSET SQUARE,

N.W.1

PADDINGTON 4821.

1910

1935

ACHESON COLLOIDAL GRAPHITE

The experience of a quarter of a century lies behind Acheson Colloidal Graphite. It is used to-day in Special Lubricants by motorists all over the world, is approved by motor manufacturers and is a product of the highest purity, consistency and quality.



E. G. ACHESON LTD.,
THAMES HOUSE, MILLBANK, LONDON.
Works: PLYMOUTH, DEVON.

GRAND PRIX CARS AT DONINGTON

MAGNIFICENT RACING AT THE OPENING MEETING—LAP RECORD BEATEN BY ECCLES AND SHUTTLEWORTH—FINE DRIVING BY DOBBS, MARTIN, RAYSON, EVANS AND SEAMAN—GOOD ORGANISATION AND BIG ATTENDANCE

THE Donington season has started with a bang! If the organisers can maintain the standard of the Opening Meeting on April 13th—and there is no reason why they shouldn't—no one need complain that we cannot see real road racing in England. With Grand Prix cars like the 3-litre Monoposto Alfa-Romeo and the 3.3-litre Bugatti, hurtling along the winding "straight" at 130 m.p.h. or so, there are thrills a plenty for the most hardened race-goer to see at the Derbyshire track.

A wise precaution at Donington is that all entrants have to cover five laps of the course in practice under observation, and accordingly there was plenty to see on the Friday. There was some excitement, too. G. S. Griffiths had entered the old 2-litre G.P. Sunbeam, of 1922 vintage, which the Hon. Jock Leith renovated last season. He came up to Hairpin Corner with Kenneth Evans, on the single-seater Midget, right on his tail. Griffiths cut the corner a shade too fine, and the off-side front wheel just chipped the grass. The car swung right round and rolled down the slope inside the corner, coming up on to its four wheels again. Griffiths was still in the driving seat, and Evans who had pulled up quickly and came running back, expected to find him badly injured, instead, his crash-hat had taken a nasty dent from striking the road, and was rammed rather firmly on to his head. His only other injury was a deep cut on his hand. Lucky man!

The second excitement occurred to "Tim Davies," who made a good impression at the recent inter-Varsity Speed Trials at Syston Park, with a very fast Q type M.G. Midget. Passing another competitor at the beginning of the Starkey Straight, he lost control of his car through a tyre blowing out. He mowed down the hedge on the left-hand side for some distance and then took to the fields, eventually coming up against a gate, and a ditch. As the car rolled over "Tim" ducked into the cockpit and clutched the nearest support—which turned

out to be the extremely hot exhaust-pipe! The consequent burn on his hand was his only real injury, barring a bruised side. Another lucky man, for the little "Q" was badly battered, the front wheels losing all sense of their proper direction.

As it happened, "Tim Davies's" misfortune was Kenneth Evans' gain. The latter's single-seater "Q" was in wonderful form, and did a lap in 2 mins. 16 secs.—only 3 seconds outside record. Jubilation was quickly damped, however, by a sheared back-axle, and it was here that the wrecked "Q" came in handy. Wilkinson and his Bellevue men worked until 3 a.m. the next morning in transferring the axles, and the car was ready once more.

"Wilky" was not the only one to put in a spot of heated last-minute work. Flt.-Lt. J. D. Greaves had just fitted his Aston-Martin with a new Zoller blower mounted on top of the head. On the morning of the day, a piston decided to crack up, so work was promptly begun to fit a new one, the job being completed in time for the second 25-mile handicap. In the Bugatti camp, too, there was feverish activity. There were four "2.3's" entered, by the Hon. Jock Leith, A. Dobson, C. E. C. Martin and C. Brackenbury, respectively. In practice Dobson's car (which turned out to be Earl Howe's green veteran) and Brackenbury's broke their axle shafts, and Martin's (acquired from Rose-Richards) developed trouble in the clutch-withdrawal mechanism. It was decided to repair Martin's car with parts from Dobson's, while a telephone call was put through to Brooklands for spares, as a precaution. The work was repaid by getting the car ready in time for the last race, which it won from scratch.

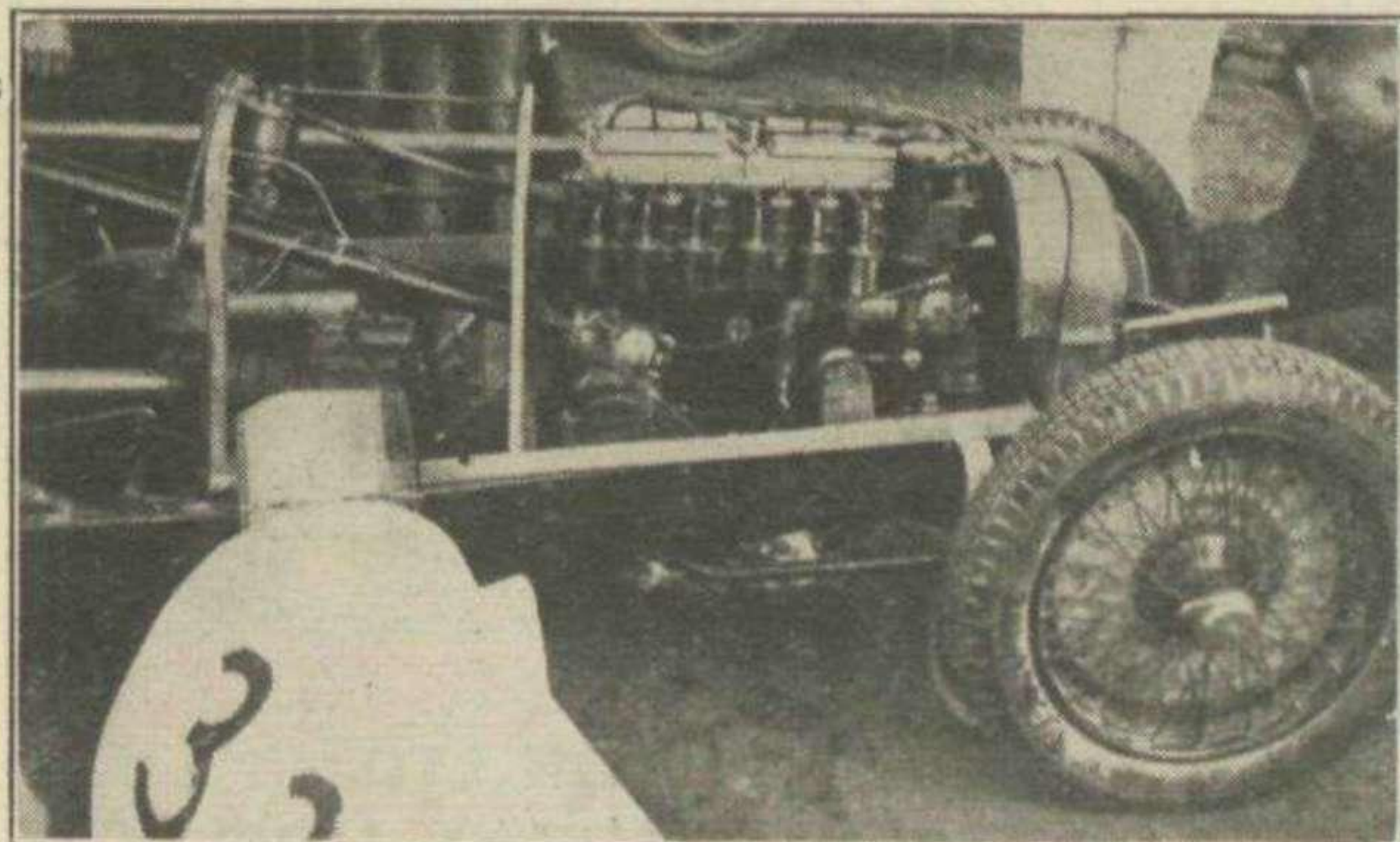
The weather was cheerful and bright on Saturday morning, and an encouraging crowd had collected before the first race was due to begin. The starting line has been shifted to Starkey, in between the pits and the fine grandstand. The Paddock, however, remains in its original place, until the necessary arrangements

have been completed for its removal. Next to the grandstand some quarters for the officials have been erected, and a telephone system linking all parts of the course has been installed at considerable expense. The Donington executive, under the able and energetic leadership of Mr. Fred Craner, is never content to rest on its laurels, and its initiative and enterprise is well appreciated by all who attend the track.

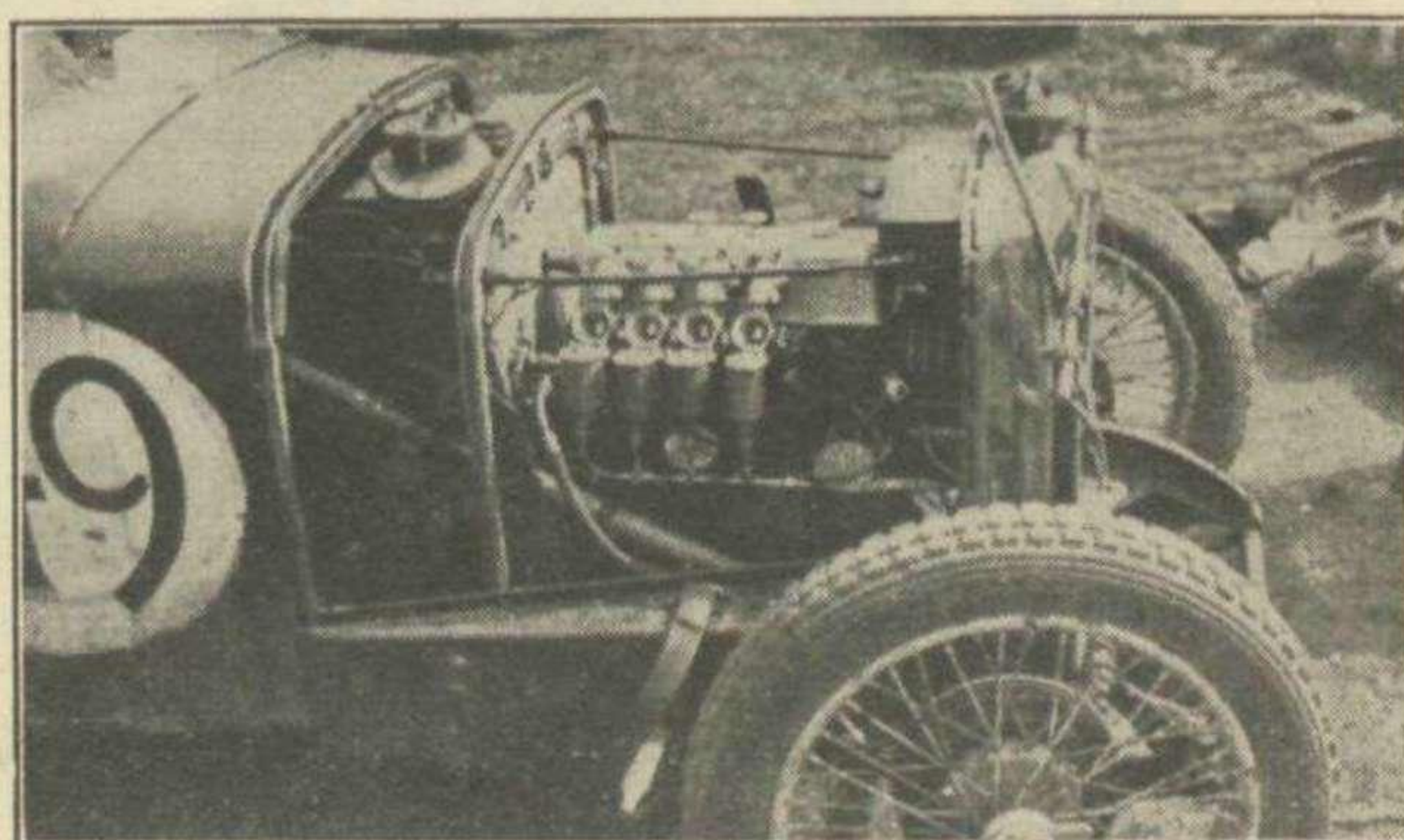
There were three-non-starters in the first race, which was a 5-lap event for cars up to 850 c.c. There was some delay at the start caused by J. P. Almack's Austin, which refused to fire, but at last "Ebby" dropped his flag and the group of four unsupercharged cars roared away. They were all M.G. Midgets, N. J. Else, D. S. Handley and L. Klementaski having 746 c.c. engines and D. Phillips an "850." A minute and a half later the blown cars were dispatched, J. P. Almack, C. H. Fish and R. F. Turner on Austins, and K. D. Evans with his single-seater "Q" type Midget.

Evans made a wonderful getaway, and was clear of the rest by the time he reached the hill past the Paddock. Turner slid on to the loose stuff on the outside, raising a huge cloud of dust, and trying hard to keep up with his faster adversary. The race obviously lay between these two, with the Midget a strong favourite. Evans was driving well, being fast on the corners and reaching something like 120 m.p.h. on the Starkey Straight. He caught the unsupercharged cars on the third lap, with Turner not so very far behind, sliding his car in the inimitable Turner technique. The effort was too much for the gallant little Austin, however, and there was a most unpleasant noise in the engine when he revved up to change gear just before Hairpin Bend. "Broken crank," said Turner as we strolled over to offer our sympathy. "More hard work!" he added with a grin.

Evans went on to win at 63.58 m.p.h. with Else second and Handley third.



Six little carburetters all in a row! This system worked remarkably well on H. G. Dobbs's 1½-litre Riley, which was one of the star turns of the day.



N. J. Else was another multi-carburetter exponent at Donington. His M.G. Midget seemed to like the treatment and took second place in Event 1.

GRAND PRIX CARS AT DONINGTON—continued.

Result of Event 1.

5-Lap Handicap Race for Cars up to 850 c.c.

1. K. D. Evans (M.G. 746 c.c. S.), scratch, 63.58 m.p.h.
2. N. J. Else (M.G. 746 c.c.), 90s.
3. D. S. Handley (M.G. 746 c.c.), 90s.

Also Ran—L. Klementaski (M.G. 746 c.c.), 90s.; D. Phillips (M.G. 847 c.c.), 90s.; J. P. Almack (Austin 747 c.c. S.), scr.; C. H. Fish (Austin, 747 c.c. S.), scr.; R. F. Turner (Austin 747 c.c. S.), scr.

The second race was eagerly awaited, for two *pukka* Grand Prix cars in Shuttleworth's 3-litre Alfa-Romeo and Eccles 3.3-litre Bugatti were entered. Eccles had clocked 2 mins. 10 secs. on his second lap in practice, as compared with Staniland's record of 2 mins. 13 secs.—so the sparks were going to fly!

There were 13 starters, Dobson, Martin, Degenhardt, Jucker, Davies and Griffiths, being absentees. Four Riley "Nines" got away first with 80 seconds start, driven by J. R. Grice, H. Hodgson, S. C. Holbrow and C. A. Richardson. Then H. G. Dobbs took off with an offset single-seater 1,500 c.c. Riley, equipped with six Amal Carburetters. His start was 60 secs., and he was accompanied by K. D. Evans (M.G. Midget "Q"). Then came four more, from the 30 secs. mark, namely: A. C. Lace (Alfa), R. E. Tongue (M.G. Magnette), E. K. Rayson (Bugatti 1½), and Raymond Mays (2-litre E.R.A.). Finally R. O. Shuttleworth (Alfa-Romeo), A. H. L. Eccles (Bugatti) and the Hon. Jock Leith (2.3 Bugatti), roared off in pursuit from the scratch mark.

The race was a toss-up between Shuttleworth, Eccles, Mays and Evans, with a certain amount of doubt as to whether the scratch men would be able to work their way through the big field. Evans only lasted a lap, having to pull up on Starkey Hill with trouble which he diagnosed as a broken piston.

Mays got into fourth place on the second lap and was leading on the third time round, but his car seemed rather jumpy on the Straight. Then from McLean's corner came the prolonged shriek of locked wheels, as the E.R.A. shot off the road among the trees. Mays attributed the trouble to a momentarily seized brake.

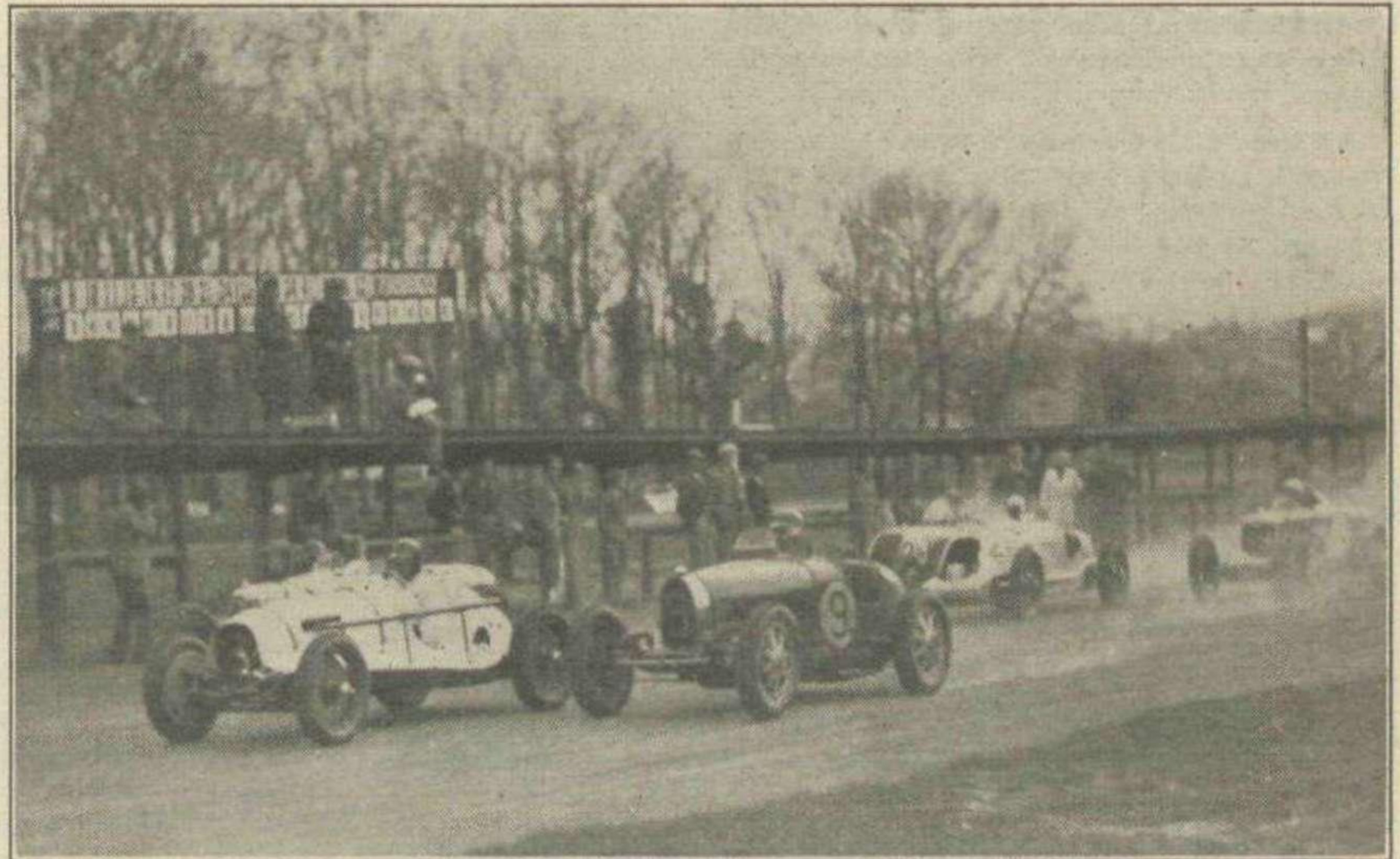
It now remained to see whether Shuttleworth and Eccles could catch Dobbs on the fast single-seater Riley. Shuttleworth had made the neatest

getaway, and led from the start, appearing rather more accustomed to his mount. The Alfa driver looked round as they flashed past—our vantage point at the beginning of Starkey Straight, disappearing in a cloud of dust on the winding undulations of the "Straight." Eccles was right on his heels.

The *monoposto* sounded healthy enough, its deep roar being not unlike that of the old 1½-litre Delage. The "three-three," on the other hand, did not seem too healthy, although its acceleration was

Shuttleworth in his turn was able to nip through on the inside as they came out of the corner, and was away up the short stretch to Red Gate Corner before Eccles could get straight again.

Eccles next effort was not so successful. Once more he roared down the slope to the Starkey Corner, making up hand over fist on the leisurely-braking Shuttleworth. This time Eccles misjudged the distance, and ran clean on to the grass in a wide sweep. Shuttleworth carried on quite unperturbed, and held his lead to the

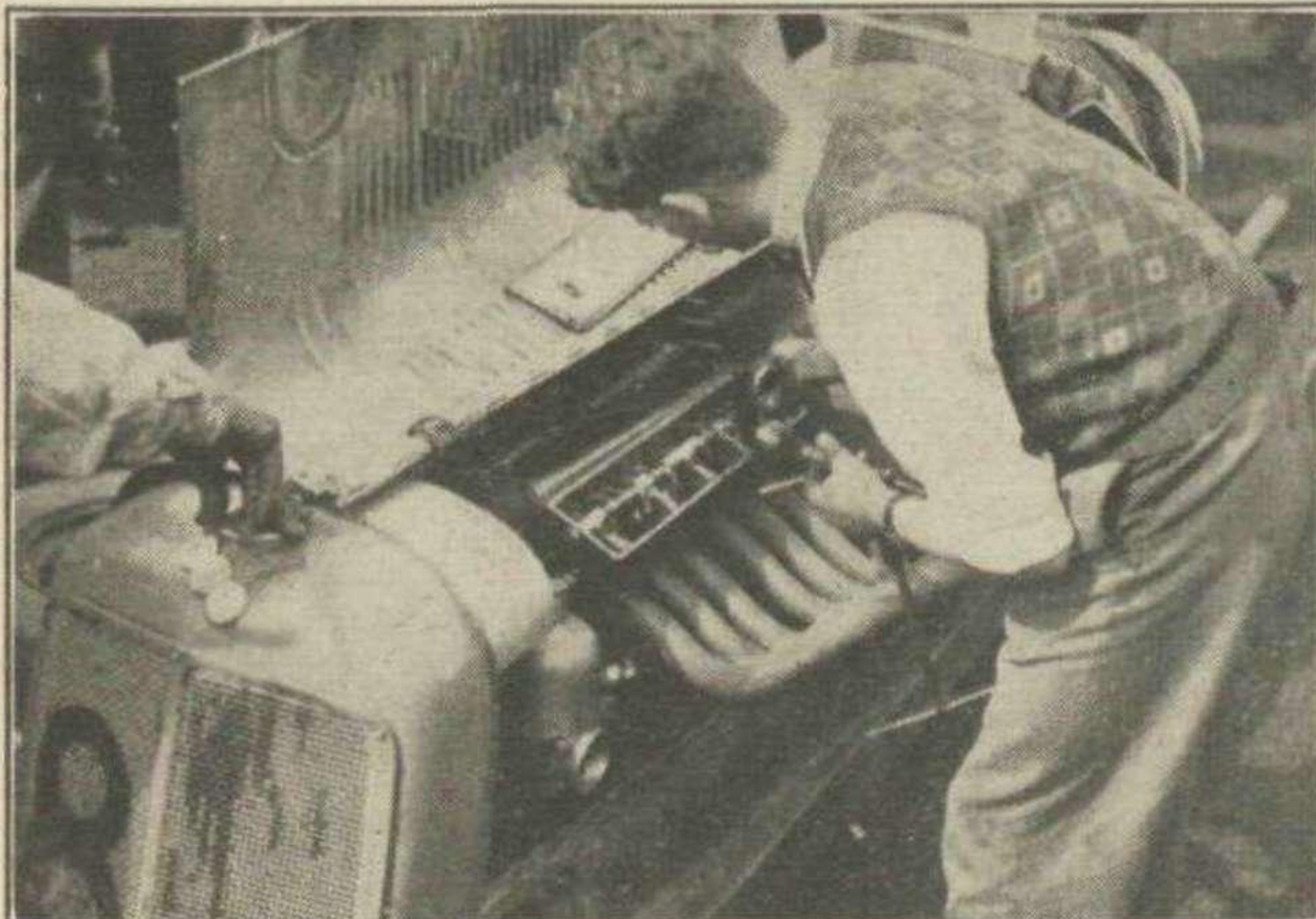


The start of the 5th Race—The winner was No. 9, E. K. Rayson (Bugatti), who drove consistently throughout the afternoon.

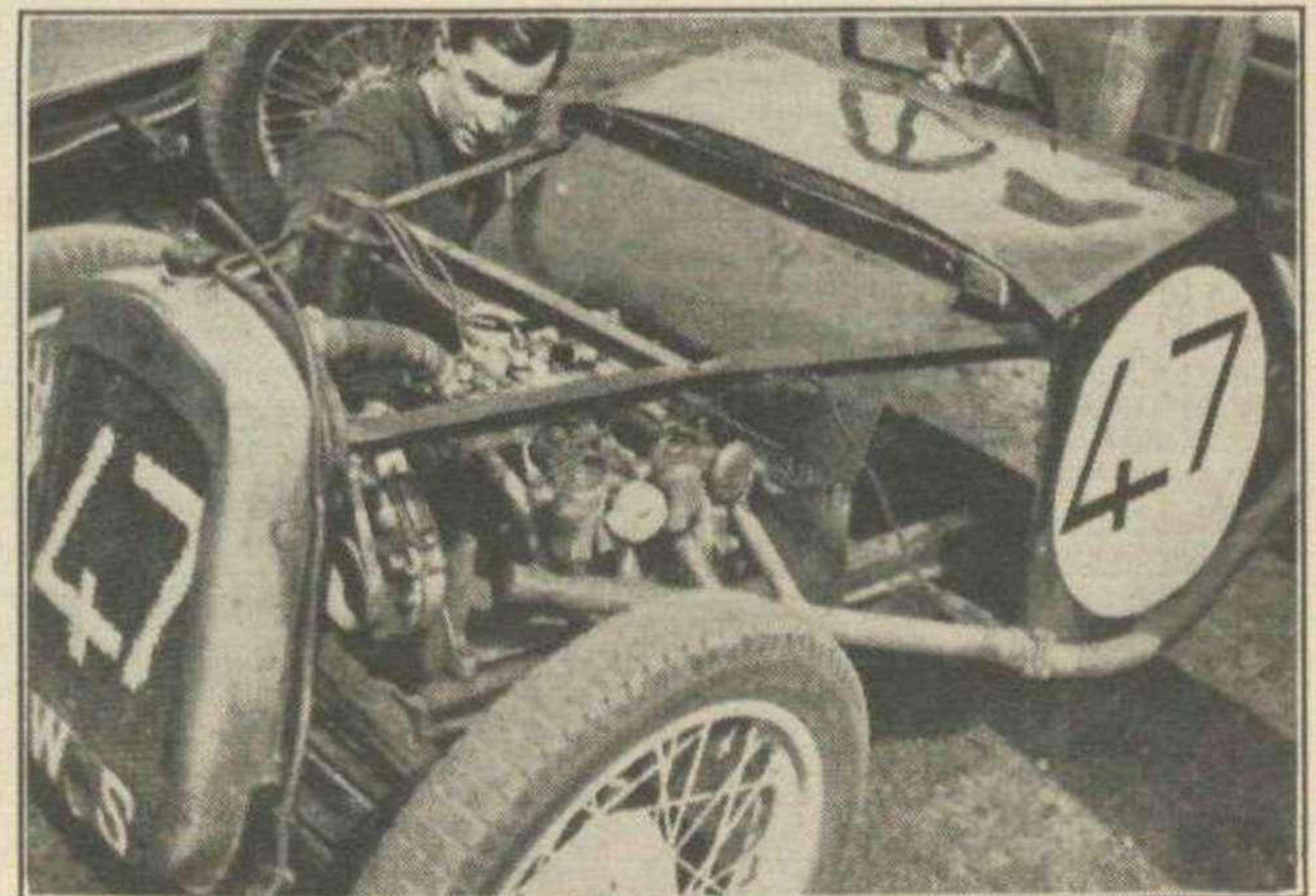
certainly terrific. On the seventh lap both passed Dobbs on the Starkey Straight, the latter keeping well to the right and giving the faster cars plenty of room—an example which might be studied by one or two people.

The next time round Eccles left his braking for Starkey Corner until the last possible moment, and actually passed Shuttleworth on the inside. This manoeuvre was only accomplished at the expense of losing his correct position, and

end, at an average speed for the 25 miles of 67.49 m.p.h., with Eccles second and E. K. Rayson (Bugatti), third. The latter drove an excellent race, making use of his lengthy experience of Donington, where he has probably driven more than any other driver. His 8-cylinder Bugatti is the 2-litre job previously owned by Mathieson, reduced to 1,500 c.c. by means of Fotheringham's 1½-litre crankshaft. Dobbs was a good fourth, with Reggie Tongue fifth, and Jock Leith sixth.



The 2-litre E.R.A. receives a spot of valve adjustment before the second race, in which Raymond Mays crashed at McLean's.



This is the Wharton Special, developed largely from Austin Seven components, and handled at Donington by F. C. Wharton.

GRAND PRIX CARS AT DONINGTON—continued.

Afterwards it was found that both Shuttleworth's and Eccles' had broken the lap record by clocking 70.25 m.p.h.

Result of Event 2.

25-Mile Handicap Race for Cars up to 3,500 c.c.

1. R. O. Shuttleworth (Alfa-Romeo 2,904 c.c. S.), scr., 67.49 m.p.h.
2. A. H. L. Eccles (Bugatti, 3,255 c.c. S.), scr.
3. E. K. Rayson (Bugatti, 1,494 c.c. S.), 30s.

There was only one man in it in the third race, Dobbs with his special Riley. He started level with a bunch of Frazer-Nashes, Riley Nines and M.G.'s, and led from the word "Go." Half a minute later the scratch cars got going, and none of them looked like getting near to the Riley except Rayson, who was handicapped by having a crowded passage.

An interesting *debutante* was the supercharged 1½-litre Vale Special, driven by I. F. Connell. A broken pushrod was repaired at the last moment, and the car sounded over-g geared for the circuit. It cornered well, however, and will no

shot into view over the crest of Starkey Hill, with Rayson and Dobbs well ahead of the rest. The Riley driver slipped by on Starkey Corner, and they accelerated up to Red Gate with Dobbs in front. In the rear, P. D. Walker, driving P.N. Whitehead's Alta, was leading Richardson (Riley), Grice (Riley), R. R. Jackson (M.G. Magnette), R. V. C. Bolster (1,100 c.c. Special) and Lace (Alta).

Result of Event 5.

5-Lap Scratch Race for Cars up to 1,500 c.c.

1. E. K. Rayson (Bugatti, 1,494 c.c. S.), 64.79 m.p.h.
2. H. G. Dobbs (Riley, 1,485 c.c.).
3. P. D. Walker (Alta, 1,074 c.c. S.).

The last event on the programme was split into two heats, the final placings being judged by time. 13 cars lined up for the first heat, with the following handicaps: Grice (Riley), Miss Evans (M.G.) and Goodson (Austin) 150 seconds; Hughes (Frazer-Nash) 140 seconds; MacClure (Riley) 130 seconds; Whitehead (Alta) and Briault (Alta) 120 seconds;

once more, doing a lap in 2m. 9.4 seconds or 71.446 m.p.h. a figure which stood until the end of the meeting. Miss Evans fell out with back-axle trouble, and Greaves had a broken valve spring.

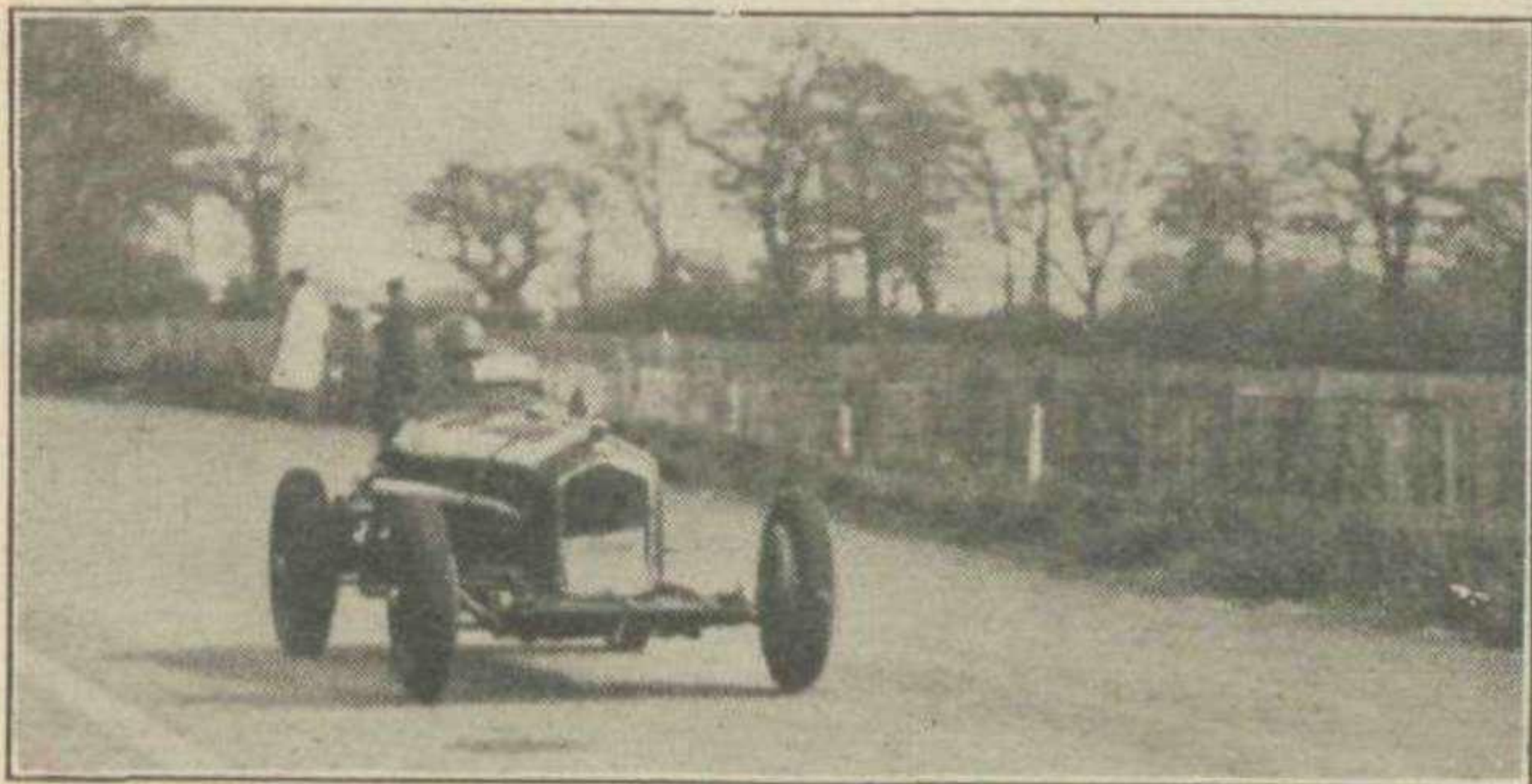
Result of Event 6 (Heat 1).

25-Mile Handicap Race for Cars up to 3,500 c.c.

1. A. H. L. Eccles (Bugatti, 3,255 c.c. S.), scr. 67.45 m.p.h.
2. J. R. Grice (Riley, 1,087 c.c.), 150s.
3. E. K. Rayson (Bugatti, 1,494 c.c. S.), 40s.

For some reason or other many people thought that this was the last race of the day, and went home without more ado.

Martin was giving Seaman 15 seconds start, and it was all he could do to wipe out this handicap. Seaman handled the E.R.A. in a refreshingly confident manner, being particularly good on the tricky downhill stretch past the Paddock. By this time the rain, which had been threatening for several hours, began to fall, and the corners soon became greasy. Nearer and nearer crept Martin, driving in his usual masterly fashion, always



R. O. Shuttleworth (Monoposto Alfa-Romeo) accelerates away from the Farm. He won the first 25 miles handicap, but retired in the second.



C. H. Fish (Austin), F. D. Gilson (M.G.) and Another Competitor along the Starkey straight in the third race.

doubt be a formidable competitor when its teething troubles are over.

Result of Event 3.

5-Lap Handicap Race for Cars up to 1,500 c.c.

1. H. G. Dobbs (Riley, 1,485 c.c.), 30s., 63.33 m.p.h.
2. J. R. Grice (Riley, 1,087 c.c.), 30s.
3. E. K. Rayson (Bugatti, 1,494 c.c. S.), scr.

Jock Leith was the solitary scratch man conceding 30 seconds start to Casswell and Dobbs. He was handling his new Bugatti (the single camshaft 2.3-litre raced by Martin last year, and now painted red) with plenty of confidence, and impressed everyone as a coming driver. His first road race was not marred by any "incident," and altogether his was a good show. He caught Casswell on the third lap, but Dobbs was too far ahead and came home first for the second race in succession.

Result of Event 4.

5-Lap Handicap Race for Cars up to 3,500 c.c.

1. H. G. Dobbs (Riley, 1,485 c.c.), 30s., 63.68 m.p.h.
2. Hon. J. Leith (Bugatti, 2,263 c.c. S.), scr.
3. G. Casswell (Frazer-Nash, 1,496 c.c.), 30s.

Eight non-starters reduced the field of the fifth race to eight. The issue obviously lay between Dobbs and Rayson, who were in the front row at the start. When the flag fell they both made perfect getaways, Rayson having a good deal more wheel-spin than his rival. As far as one could see from the pits, Dobbs reached Red Gate Corner first, followed by Rayson, three Riley Nines, a couple of Altas and a Magnette.

A minute or two later and the leaders

Jackson (M.G.) 110 seconds; Greaves (Aston Martin) and Connell (Vale) 105 seconds; Rayson (Bugatti) 40 seconds; Leith (Bugatti) 35 seconds; Shuttleworth (Alfa-Romeo) 5 seconds and Eccles (Bugatti) on scratch.

Grice and MacClure were having a good battle in the lead, the former getting clear when MacClure drove his car into the Dead Car Park on lap six. By this time Shuttleworth had worked his way through the field and was lying second. Eccles was in danger of being hemmed in by some of the slower cars, but fierce acceleration past the pits enabled him to hang on to Shuttleworth's tail. On the eighth lap Shuttleworth passed Grice on the outside of Red Gate Corner, with Eccles only a few yards astern. The prospect of a really close finish was in sight when Eccles appeared over the brow of Starkey Hill alone, finishing as he liked in first place, with Grice second, Rayson third, and Leith fourth.

When all was over Shuttleworth toured in, complaining of a slight humming in the rear axle, which was later traced to a cracked ball-race. Being under the impression that he had several more cars to overhaul, and several more laps to cover, he had pulled in at Coppice Corner and let the field go by. If he had only known!

In this race Eccles beat the lap record

under perfect control and getting the absolute maximum out of his car. On the last lap the two cars approached Hairpin Bend tail to head, with Lace's Alta holding them both up. One of the E.R.A. brakes locked momentarily, but Seaman was well up to the situation and checked an incipient broadside. All round the course they scrapped, past McLean's and Coppice Corner and out on to the Straight.

The E.R.A. was still ahead when they reached the corner, when Seaman appeared to relax his efforts, apparently under the impression that he was an easy winner. Martin needed no further encouragement and slipped past to win by 15 yards from the astonished Seaman.

The final handicap placings showed Martin a deserving winner from Eccles and Seaman, who were only 1 second slower.

Assisted by the greatly enlarged exits the big crowd got away smoothly, all thoroughly satisfied with a really fine day's sport.

Result of Event 6 (Heat 2).

1. C. E. C. Martin (Bugatti, 2,263 c.c. S.), 20s., 67.45 m.p.h.
2. R. J. B. Seaman (E.R.A., 1,488 c.c. S.), 35s.
3. H. H. P. Hargreaves (Frazer-Nash, 1,496 c.c.), 140s.

Final Placings of Event 6.

25-Mile Handicap Race for Cars up to 3,500 c.c.

1. C. E. C. Martin (Bugatti, 2,263 c.c. S.), 20s., 67.45 m.p.h.
2. R. J. B. Seaman (E.R.A., 1,488 c.c. S.), 35s., and
3. A. H. L. Eccles (Bugatti, 3,255 c.c. S.), scratch.

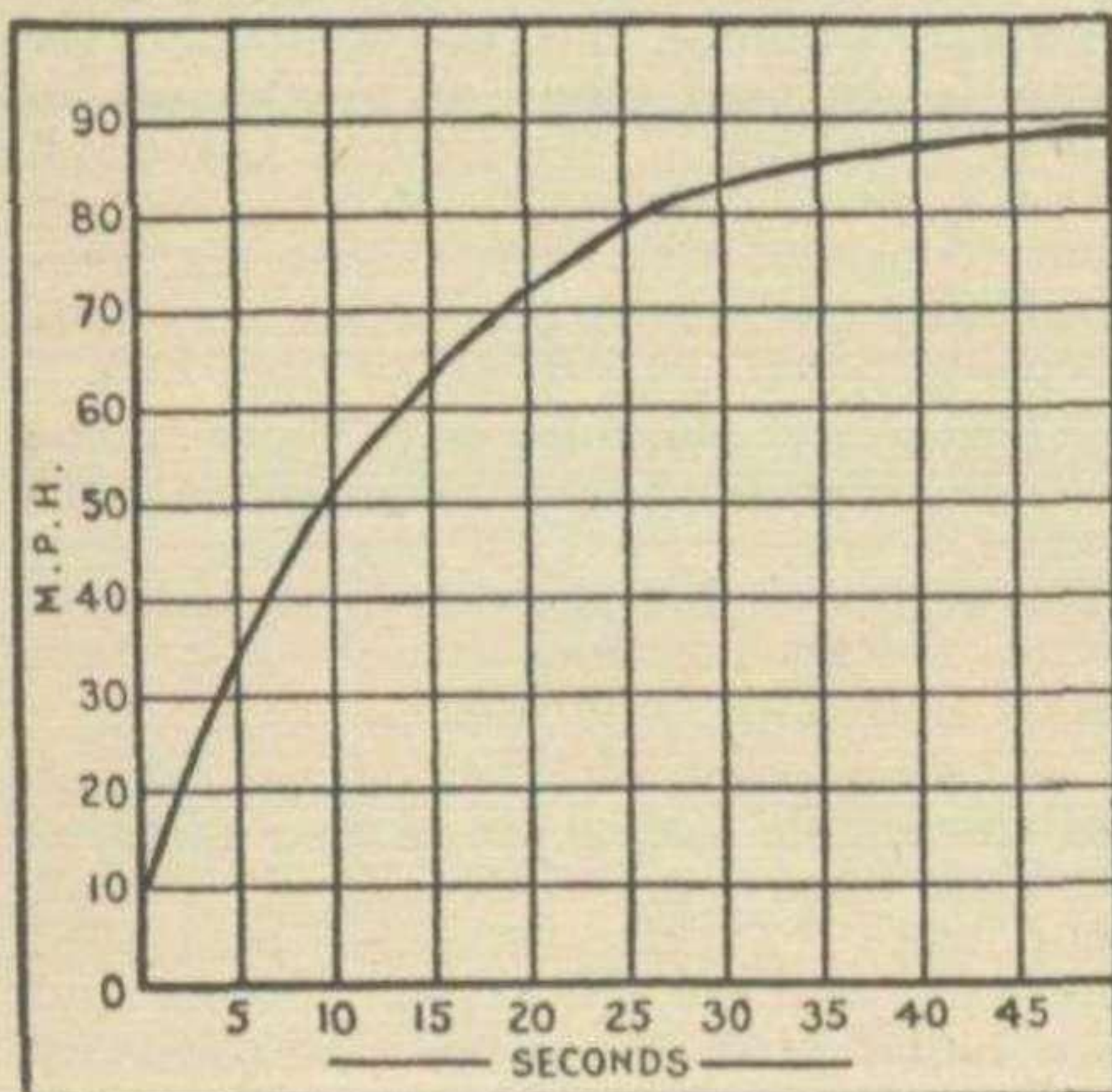
THE LAGONDA RAPIDE

VIVID ACCELERATION, HIGH CRUISING SPEEDS AND SILENT COMFORTABLE TRAVEL ARE FEATURES OF THIS STRIKING 4½-LITRE CAR.

THE announcement of a 4½-litre Lagonda at the end of 1933 was an event which brought real satisfaction to the large-car enthusiasts and the new Rapide, which made its bow to the public in such striking fashion at the 1934 T.T., when three of these cars finished fourth, fifth and eighth, and carried off the Team Prize, marks a further step in safe high-speed travel. The Rapide differs from the earlier model, which is still retained, in having a high-compression engine modified to withstand the extra power developed, a specially strengthened chassis six inches shorter than its prototype, and Girling mechanical brakes. These alterations have still further improved handling and performance, making the Rapide the equal of any unsupercharged sports car, British or Continental on the road to-day.

We tested one of these cars for a distance of 500 miles over a variety of conditions varying from the densest London traffic to wide and deserted roads in the West Country, and found that its high all-out speed and acceleration has not been obtained at the expense of flexibility and smooth running. Only on the open road, of course, can it come to its own, and then sweep in along at 70 to 80 m.p.h., behind the shapely bonnet with the wind rushing past and the ghost of a low-pitched exhaust note in one's ears, the driver really feels the full satisfaction of driving a car that is a thoroughbred. At 85 m.p.h. the engine speed is under 3,000 r.p.m., and if roads permit the car can be kept at this speed indefinitely, without giving the impression of being forced, while an effortless 70 can be maintained on half throttle or less.

Where the roads are winding or hilly,



The acceleration chart of the Lagonda Rapide.

the natural instinct is to drop into third gear, which permits a maximum of 80 m.p.h. With third engaged the car can be hurled along in difficult country in the most satisfying way, and only by glancing at the speedometer can one realise how fast the bends and corners are being taken. Unlike a previous generation of fast cars the Lagonda shows no tendency to "hop" when put fast into a corner, and makes no bones about road-holding on adverse cambers, while the adoption of a wheel-base six inches shorter than that of the



The Lagonda Rapide presents an imposing front view. The car in this picture was finished in duce silver, with pale blue leather upholstery.

Long Chassis makes one forget that the car one is handling is one of the largest on the English market.

While on the subject of cornering, some mention must be made of the type of steering fitted. It was particularly high geared, requiring only 1½ turns to swing the front wheels from lock to lock. There is a strong caster action too, and the car holds its course perfectly on straight roads with the minimum of effort on the part of the driver, and only a slight movement is needed when taking fast bends. On the other hand a good deal of effort is needed when taking sharp corners, and especially when manoeuvring at low speeds.

With this type of steering we should have preferred a larger steering wheel and more cut-away at the side of the body, though there is also the question of weather protection to be considered. Alternatively the lower-geared steering fitted to the long-chassis model may be substituted, and this would probably be preferred by those who used their car in town and country as well, leaving the high-geared type for owners who prefer the quick movement undoubtedly welcome when the car is to be used for competition purposes.

With the institution of 30 m.p.h. limits in all parts of Great Britain, smooth running at low speeds is a matter of considerable importance. The Lagonda showed itself excellent in this respect and sailed along without a murmur through the built-up areas, giving foot passengers and cyclists a much better chance of admiring the lines of the car than they would have had in the days when one could use one's discretion when passing through such places. 30 m.p.h. by no means represents the minimum on top, 15 and even 12 m.p.h. being possible, though naturally a change of gear was called for when getting way from the latter speed.

It goes without saying that these built-up areas when they form a large proportion of the route to be negotiated made a great difference to the average speed obtainable on the normal car as compared with those one found possible before the limit came into operation, but this latest product of the Staines factory does much to restore the status quo. Every time a de-restricting sign comes into sight, the driver only need drop into third and wait until he has crossed the invisible "starting line," and then tread on the accelerator. The car gets away in a really striking manner and the driver finds his speed restored to 75 m.p.h. with the minimum of fuss and within a quarter of a mile of the black and white disc.

It must be a very heavily restricted route on which the Lagonda will not average 40 m.p.h., 50 m.p.h. is normal on good main roads, while on open, deserted, but by no means straight roads we attained the very unusual "moyenne" of sixty miles an hour.

Brief Specification.

Engine : 6-cylinders, bore 88.5 mm., stroke 120.64 mm., capacity 4,467 c.c. R.A.C. Rating 29.13 h.p. Push rod operated overhead valves. Two S.U. carburettors. Dual ignition coil and magneto.

Gearbox : 4 speeds and reverse, with free wheel. Constant mesh, third gear. Ratios 3.3, 4.2, 6.6, and 10.3 to 1.

Brakes : Girling mechanical.

Suspension : Half-elliptic springs.

Dimensions : Wheelbase 10 ft. 3 ins.

Track : 4 ft. 10 ins.

Dimensions : Wheelbase, 10 ft. 3 in., Track, 4 ft. 10 ins., Weight with four-seater sports body, 32 cwt.

Price : £1,000.

THE LAGONDA RAPIDE—continued.

One of the finest features of the car are the Girling brakes, which allow one to maintain the highest average speeds with confidence and perfect safety. Light enough in action for easy operation under normal conditions, a full pressure on the pedal brings terrific stopping power into play. One occasion which we remember vividly was when driving at considerable speed at night-time with heavy rain beating down and very considerably cutting down our range of vision. Suddenly we sighted a level-crossing gate, the only warning of which was a dim red lamp and that obscured until the Lagonda was almost upon it, by a stationary car. We had no hesitation in applying the brakes with full force, and found we pulled up safely and with an ample margin, without locking the wheels or deviating from the straight. From 40 m.p.h. the car can be brought to rest on dry roads in 52 feet, a figure which gives some idea of the efficiency of the brakes.

The maximum speed on the indirect gears is respectively 32, 55 and 85 m.p.h., with an engine speed of 4,000 r.p.m., while on top, the engine is only doing 3,200 r.p.m. at ninety, which should ensure a long life and an ample margin for those long and tempting 110 m.p.h. slopes one occasionally finds on the Continent.

The gearbox is light to handle, with a short lever under the right hand, but the change down into second needs to be accurately judged to avoid making a noise. First and second gears are closer than one usually finds, making it possible to get away promptly from low speeds, second to third is slower, with third to top close again, and the changes can be speeded up still further by using the clutch stop. Third is completely silent and the other two gears hardly audible. The clutch is light in action, and a free-wheel is fitted.

The engine is dead smooth up to 3,500 r.p.m., and only slightly less so up to its maximum, though thanks to the fine torque low down one seldom needs to take it to the limit. A small amount of tappet noise can be heard when ticking over or running below 20 m.p.h. on top, but disappears at higher speeds. The engine is flexible, picks up smoothly without flat-spots and in fact shows none of the faults one associates with smaller engines tuned to give high power-output, while it revs up with commendable speed when a rapid change-down is required.

As will be seen from the chart, the car displays really striking acceleration, but unfortunately we were unable to determine the all-out speed, as the sparking plugs fitted would not withstand full throttle for long periods. On Brooklands we achieved a timed speed of 94 m.p.h., before pre-ignition set in and we are informed by the makers that this particular car has previously been timed at 98 under unfavourable weather conditions, and the elusive hundred should be possible with everything functioning correctly.

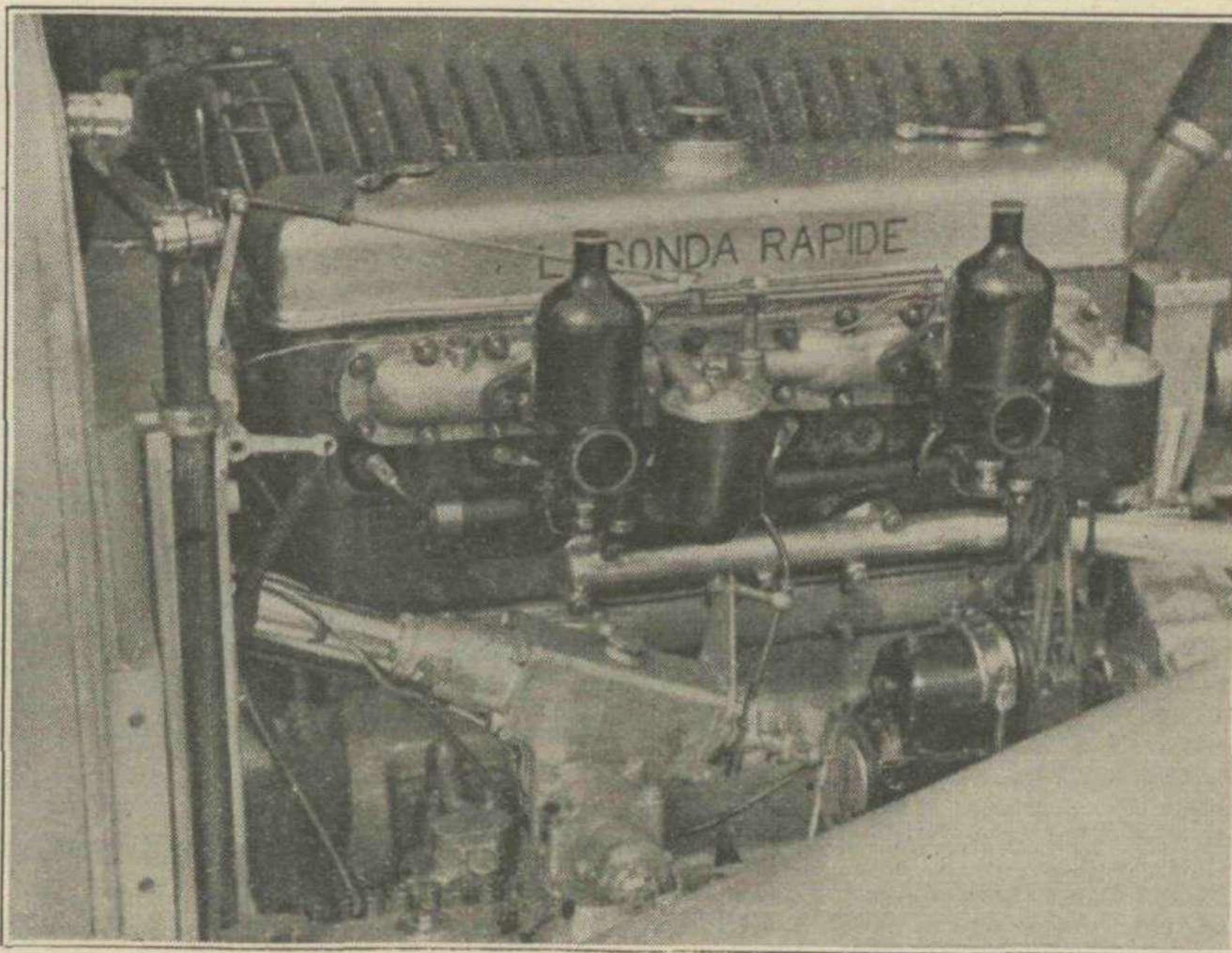
These figures were established with the windscreen folded down, which allowed us to try out the detachable aero screens supplied with the car; these proved extremely effective. With the windscreen raised the car will still do over

90 on the level, no small achievement in view of the fairly high radiator and the very ample mudguarding. A good point is that the whole of the off-side and the top of the near-side mudguard can be seen from the driver's seat.

The body fitted to the Rapide is as handsome as it is practical, and a high standard of finish is reached both in the paintwork, and the upholstery. The car we tested was finished with silver-grey, a special cellulose paint with a metallic lustre being used and contrasted effectively with the light blue of the hood. The hood stows neatly and without complication into a well at the rear of the

luggage platform. On another type of body design the wheel is attached to the outside of the rear panel which then swings to reveal a locker capable of taking two or three suitcases.

Turning now to the chassis specification, the engine is a special 4½-litre, 6-cylinder engine made by Meadows for the Lagonda Company, and has a chromium cylinder block and head and an aluminium crankcase. Push-rod overhead valves are used with the usual set-screws and lock-nuts for adjusting the clearances, while the oil filler is fitted to the top of the cover and provided with a filter. Two S.U. carburettors are used, with a double



The offside view of the beautifully finished Lagonda Rapide engine.

body, where it is secured by a close fitting cover, and the tonneau cover is held stiff and free from wrinkles by elastic bands sewn to the underside. The side curtains are secured against rattle and chafing in large pockets in the front doors and are quickly reached by undoing two clips and a pair of zipp fasteners. The all-weather equipment is really efficient and gives complete protection against rain and drafts.

The front seats have pneumatic cushions and squabs and give the comfort and support one expects from a car costing £1,000. Those at the back seem more limited as regards space, but actually there is ample room for two six-foot passengers owing to the cunningly designed foot wells.

There is at least six inches of head room with the hood erected and all those who occupied the back seats during the course of our test were agreeably surprised by the steadiness and easy riding in this position.

The spare wheel on the car we tested was stowed in a special locker under the petrol tank, while the top part of the sloping rear panel swings down to form a

electric petrol pump, and a two-way tap which allows the last 4 gallons to be drawn from the 20 gallon rear tank.

The petrol consumption over the whole of our strenuous test was about 12½ miles per gallon. Esso Ethyl may be used for ordinary running but the ignition lever has to be used freely at low speeds to avoid pinking. We found Cleveland Discol very satisfactory in this respect but consider that for maximum performance a small proportion of neat benzol should be added to the fuel.

Two sets of plugs are used, those on the offside being fired by a Scintilla magneto while a coil is used on the other side. This system of dual ignition in conjunction with a Kigass primer ensures a certain start under all conditions.

A water pump is fitted on the off-side of the engine and a fan is also supplied though this was disconnected during our test. Thermostatically controlled radiator shutters are a good feature and we found that the engine warmed up within two or three minutes of starting.

The crank-shaft is carried in four main bearings, and this, the tappets, and all

THE LAGONDA RAPIDE—continued.

other engine parts are force-fed. Three gallons of oil are carried in the ribbed sump, and an edge-type oil filter is used.

The clutch is of the single-disc dry type, and the four-speed gearbox embodies helical pinions for the constant mesh and silent-third gears, and all gears are ground.

Behind the gearbox comes the free-wheel, which is locked at will by a lever between the two front seats, then an open propellor shaft with two universal joints, driving the back axle with its spiral bevel gears.

The chassis is a sturdy structure with channel section side-members and swept over the back axle. It is braced by tubular cross-members, two particularly stout ones being placed in the centre part of the chassis. The underslung springs are half-elliptics with shackles at the rear

ends, and hydraulic and telecontrol adjustable friction shock-absorbers are fitted to the two axles. The spring shackles and other chassis parts are lubricated from a set of grouped nipples on either side of the engine.

The massive 16-inch brake drums are heavily ribbed and cadmium plated and this same finish is used for the springs. The brake mechanism is of the Girling type, in which the whole system of operating rods is under tension. The shoes are expanded by wedges, giving the minimum of friction, the hand brake is fitted with a racing ratchet which flies off when the lever is pulled.

The 12-volt lighting system has compensated voltage control, and P. 100 headlamps are fitted as standard, on the car we tried, the more streamlined Long Distance type were fitted, and gave a

fine driving light which showed five to six telegraph poles on the main road. The dip and switch mechanism is controlled by a foot-switch placed within easy reach of the driver's left foot.

To the long-distance motorist who expects his car to stand up to prolonged spells of hard driving without losing its tune or calling for constant adjustments the Lagonda Rapide undoubtedly will make a strong appeal.

A high-g geared car of this type would be a special joy on the Continent, where the long straight roads call for a steady "75" without fuss, while the body lines could scarcely fail to excite admiration even amongst the critical inhabitants of the Côte d'Azur. Definitely a worthy member of the exclusive circle of luxury sports cars and a car one would be proud to own.

What Do You Know About Cars?

TEST YOUR MEMORY OF THE RACING AND SPORTS CARS OF YESTERDAY AND TO-DAY.

YOU MAY WIN A GUINEA.

Report on Problem No. 13.

At first glance the car in the picture last month certainly looked like an Alta. Unfortunately first glances are not enough for guessing our Competition, and a second glance revealed the car to be one of the 8 cylinder 1,500 c.c. Talbots which were the last G.P. representatives of the S.T.D. concern.

The first correct coupon to be opened on the 15th of April was that submitted by:

Mr. F. L. Vergara,
Ledcoma 22, Bilbao, Spain.

to whom we have sent our cheque for one guinea.

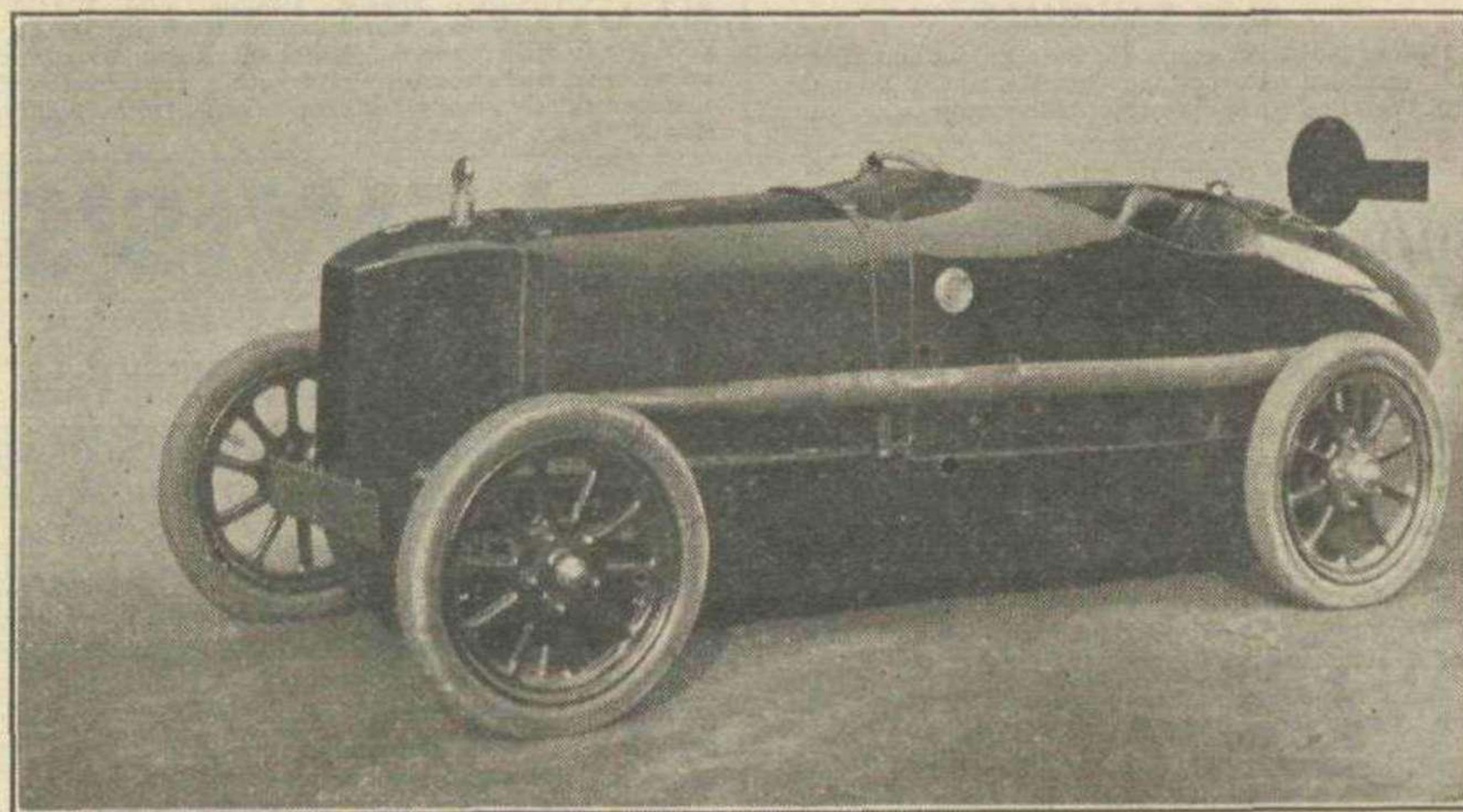
Correct solutions polled 56 per cent. of the total entry, which shows that our readers are well up to the racing history of the last ten years. A hint was given as to the car's Continental origin by the single-seater Maserati parked in the background.

The Alta entries comprised 25 per cent. of the total, but the alternatives were by no means exhausted with this make. In smaller numbers various people put forward the following suggestions: Alfa-Romeo, Alvis, Austin, B.N.C., Delage, Felix Scrivin, Fiat, Maserati, M.G., Napier, Squire, Sunbeam, Thomas, and Voisin. Well, better luck next time. Have a shot at the one on this page. This is quite an easy one, though rather an older car.

Rules for Problem No. 14.

1. Cut out the coupon on the inside back cover; fill in your name and address and solution in block letters, and send it to MOTOR SPORT (1929) LTD., 39, Victoria Street, London, S.W. 1, in a sealed envelope, marked "Competition."

2. Entries must reach this office not later than the first post, May 15th, and a prize of one guinea will be awarded to



Problem 14.—What is the make of car in this illustration?

the sender of the first correct solution opened on that day.

3. More than one coupon may be included in one envelope.

4. No letter must be sent with the coupon.

5. Any alterations or defacements on the coupon will automatically disqualify the entrant.

6. The result will be published in our June issue.

7. Employees of MOTOR SPORT (1929) LTD., are not eligible to compete.

8. The Editor's decision is final.

Send Us Your Picture Puzzle.

A prize of half-a-guinea is offered every month for the photograph used in this Competition. The picture on this page was submitted by Mr. K. A. Hurst, The Farm, Wortley, Sheffield to whom we have sent a cheque for that amount.

If you have a photograph in your collection which you think would puzzle readers, let us have a look at it. It may be worth half-a-guinea! A modern sports car taken from an unusual angle, an old sports car, little known, or an old type of racing car—they all offer scope for different puzzles.

Incidentally, photographs submitted must be actual photographic prints, not cuttings from newspapers, from which it is impossible to make printing blocks.

Motor Sport Classified Advertisement Section

CLOSING DATE first post on the 23rd of the month, for publication on the 1st of the following month.

Rates prepaid - 1/- per line
(minimum 3 lines).

ASTON MARTIN

ASTON-MARTIN side-valve racing engine; not run since rebore. Needs assembling. Will do over 6,000 r.p.m. Also large quantity Frazer Nash spares, modern, for quick sale. Apply Box 58, c/o MOTOR SPORT.

FRAZER NASH

FRAZER NASH Cars, Falcon Works, London Road, Isleworth (Hounslow 3172) have for disposal a number of reconditioned cars.—Full particulars on application.

NECESSARY PARTS to convert 3-speed Frazer Nash to 4 speeds and reverse. Box A5, c/o MOTOR SPORT.

TALBOT

1932 TALBOT "90," licensed to end of June, recently rebored, tax £13 10s., 5 new tyres. Maintained exclusively by Messrs. C. Talbot, Ltd., and Fox & Nicholl. Fitted numerous extras, including Desimo auxiliary lamps, hydro-telecontrol shock absorbers, special windscreen and wipers, lowered front seats, pneumatic upholstery. Price £145. Box 10, c/o MOTOR SPORT.

39/98 VAUXHALL

SECOND-HAND spares for Side-Valves and O.H.V. models. Everything in stock. Warburton, 420, Walkden Road, Worsley, Manchester.

SPORTS SPARES

30/98 VAUXHALL Velox Side-Valve. Completely overhauled; 84 m.p.h. £50.

ASTON-MARTIN 1926 1,500 c.c. Le Mans 4-seater large ribbed F.W.B., cellulosed black. £90.

SAN SEBASTIAN 1,100 c.c. Salmson. Roller bearing track 2-seater. Overhauled throughout. Approximately 92 mp.h. £80.

BUGATTI Full Brescia short chassis; 1½-litre. Original 200 mile race car. Approximately 100 m.p.h. £85.

ELDRIDGE SPECIAL. Original record-breaking 1,500 c.c. supercharged track 2-seater. Overall height, 30 ins. Approximately 130 m.p.h. £200.

E.H.P. 1,100 c.c. supercharged 2-seater. Fitted attractive 2-seater Sports body. Approximately 90 m.p.h. £80.

VERNON SPECIAL 1,100 c.c. supercharged under-slung 2-seater; 4-speed. Excellent car for fast road work. £60.

LARGE Selection of other Racing and Sports Cars.

ALSO Secondhand Parts for all Sports Cars, 1920 to 1930. Sports Spares, Chilworth Street, Paddington, London, W. 1. Telephone, Paddington 2309.

DENMAN'S

AUSTRO-DAIMLER.—Genuine racing car 27 h.p.; late property of G. Newman; 90 on third 110/120 top; at present staggered seats. £90, worth double.

1931 AUSTIN 7.—Ulster 2-seater sports large supercharger; probably fastest on road; engine overhauled and tuned. £85.

INVICTA SPORTS.—4-seater, really fast, cut-away side fabric body; 4½ litre; superb condition. £105.

200 CARS IN STOCK.

132, LONG ACRE, W.C. 2

Telephone: Temple Bar 8135.

Certificates intact on Austro-Daimler.

Speed—Power—Efficiency

"MARTLETT" PISTONS

FOR

High Ratio and Supercharged Racing and Sports Engines.

Brooklands Engineering Co., Ltd.,
The Paddock, Brooklands Track.

'Phone: Weybridge 489

WANTED

WANTED—G.N. Chassis, with or without engine. Any condition. Suitable for conversion into sprint machines. Must be cheap. Apply Box H 11, c/o MOTOR SPORT.

CHASSIS

£15—SPECIAL Racing Chassis, less engine, 8 ft. 2 ins. wheelbase, 3 ft. 8 ins. track, F.W.B., 5 R.W. wheels, knock-on hubs, 12-gallon petrol tank, honeycomb radiator, etc.; repainted and overhauled. Originally built for records, 1927. Apply Box N 15, c/o MOTOR SPORT.

S. LEWIS'S

OF

Racing, Flying & Motor Clothing Fame
27, Carburton St., LONDON, W. 1.

MUSEUM NO CONNECTION WITH MUSEUM
4793 ANY OTHER FIRM. 4793

10% Discount to "Motor Sport" Readers.

Cathcart Jones and Waller the famous airmen were completely equipped by S. Lewis's.

RACING CLOTHING.

- White Racing Suits, best quality, Zip Front, button ankles and cuffs, 2 military patch pockets ... 27/6
- White Racing Suits, as above, but lighter weight material ... 25/-
- White Racing Suits, special line, Zip front ... 22/6
- White Racing Suits, Zip front, small stand collar, open legs and sleeves, 2 military pockets, epauletts on shoulders, Government pattern ... 27/6
- Green Racing Suits, best quality, Zip front, button ankles, Oxford or Cambridge blue. Do. ... 27/6
- Racing Suits, made from the wonderful Grenfell cloth, in 20 different shades, Zip front, Zip pockets, etc., rainproof, windproof, fast colours ... 65/-
- Helmets to match, made to measurements ... 10/-
- Racing Suits, unbleached material, Zip front, all round belt ... 18/6
- Button front. Do. ... 14/-
- Unbleached Mechanics' Suits, all round belt ... 12/-
- Blue or Brown "Motoralls," all round belt ... 11/-
- Boiler Suits in blue or brown ... 8/6, 10/6, 12/-
- Racing Trousers, white drill, Zip front, button ankles, all round belt ... 15/-
- Racing Trousers, in green, light or dark blue, Zip front, belts ... 16/6
- Racing Body Belts, best quality, gives wonderful support ... 10/-
- Racing Gloves, net back ... pair 8/6

(Continued next column.)

- Racing Gloves, net back chamois palms ... 4/6
- Racing Visors, own design and make (slotted for peak) ... 7/6
- ... smaller pattern ... 6/6
- Face Screens for fast touring ... 7/6, 8/6

CRASH HELMETS.

- Crash Helmets, super quality leather, in white green, red, brown, Bugatti Blue, black, all sizes ... 42/-
- Crash Helmets, our standard pattern, painted any colour ... 32/6, 34/-
- Crash Helmets, special line in drill covered, various colours ... 24/-
- Racing Helmets, perfect fitting, in white drill, for ladies or gents. All sizes ... 6/6, 7/6
- Racing Helmets in waterproof Grenfell, blue, grey, black, white, red, green, Bugatti blue. Perfect fitting ... 10/-

GOGGLES. GOGGLES.

- Rubber Cup, High Speed, Racing Goggles, curved safety lenses ... 29/6
- Rubber Cup Goggles, flat Triplex lenses, adjustable nose ... 18/6, 21/-
- Super Quality Racing Goggles, large cups, adjustable nose piece, two ventilators, fitted Triplex lenses ... 30/-
- ALL BRITISH Rubber Cup Goggles, adjustable nose piece, fitted Triplex lenses ... 22/6
- Thousands of these already sold.
- Special Rubber Cup Goggles, fit over spectacles ... 10/-
- Pear Shape Goggles, fitted Triplex lenses ... 7/6
- Large Oval ... 6/6 Small Oval ... 5/6
- Mask Goggles, fitted Triplex lenses 12/6
- Ditto in cheaper make ... 7/6
- Luxor Goggles, curved safety lenses ... 77/6
- Luxor Goggles, in flat Triplex lenses ... 50/-
- Ditto in No. 4 pattern, fitted Triplex lenses ... 40/-
- Ditto in large safety lenses ... 25/-
- Sponge Rubber, 1 inch thick ... sq. ft. 3/4

LEATHER COATS.

- Leather Coats, R.A.F. pattern, large wrap over, high storm collar, lined wool fleece, ideal for sports cars (Black or Tan) ... 85/-, 95/-, 105/-
- Leather Coats, bucklefast style ... 75/-, 85/-, 105/-
- Leather Coats Raglan ... 55/-, 65/-, 75/-
- Double Breasted ... 85/-, 105/-
- Ladies' Leather Coats in all colours from stock or made to own requirements 55/-, 65/-, 75/-, 85/-
- Camotex Coats for ladies or gents lined silk, super quality ... £5 0s. 0d.
- Special Camel fleece Coats, made to measure. from 85/-, 110/-

LEATHER HELMETS FOR SPORTS CARS

- Leather Helmets, perfect fitting, in black, brown, green, red, blue or white ... 8/6

WATERPROOF SLEEVES.

- Black Rubber ... 4/-
- Ditto, zip fasteners ... 5/-
- All our goods are of the finest Quality. The Firm with a big reputation.

GRENFELL WATERPROOF HELMETS in all colours.

- Grenfell Helmets, perfect fitting, double material 10/-
- White Drill Helmets, perfect fitting ... 7/6
- Cheaper pattern ... 6/6

LEATHER JACKETS.

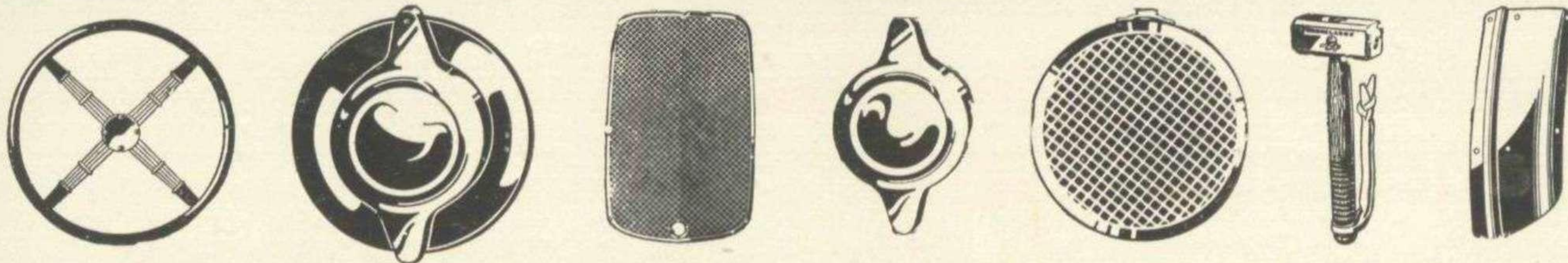
- Ladies' or Gents' Short Zip Jackets, zip pockets, knitted wool collar and cuffs, in various colours 35/-, 40/-, 45/-
- Ditto, in Chrome Leather ... 25/- to 35/-
- Grenfell Jackets, Waterproof, zip fronts, wool collars and cuffs, in dark fawn or any other colour ... Single 30/- Double 37/6

All our goods are of the HIGHEST QUALITY, known throughout the world.

ACTUAL MANUFACTURERS. Come and inspect our large stocks.

S. LEWIS, 27, CARBURTON STREET, LONDON, W. 1.
FLYING EQUIPMENT OF EVERY DESCRIPTION

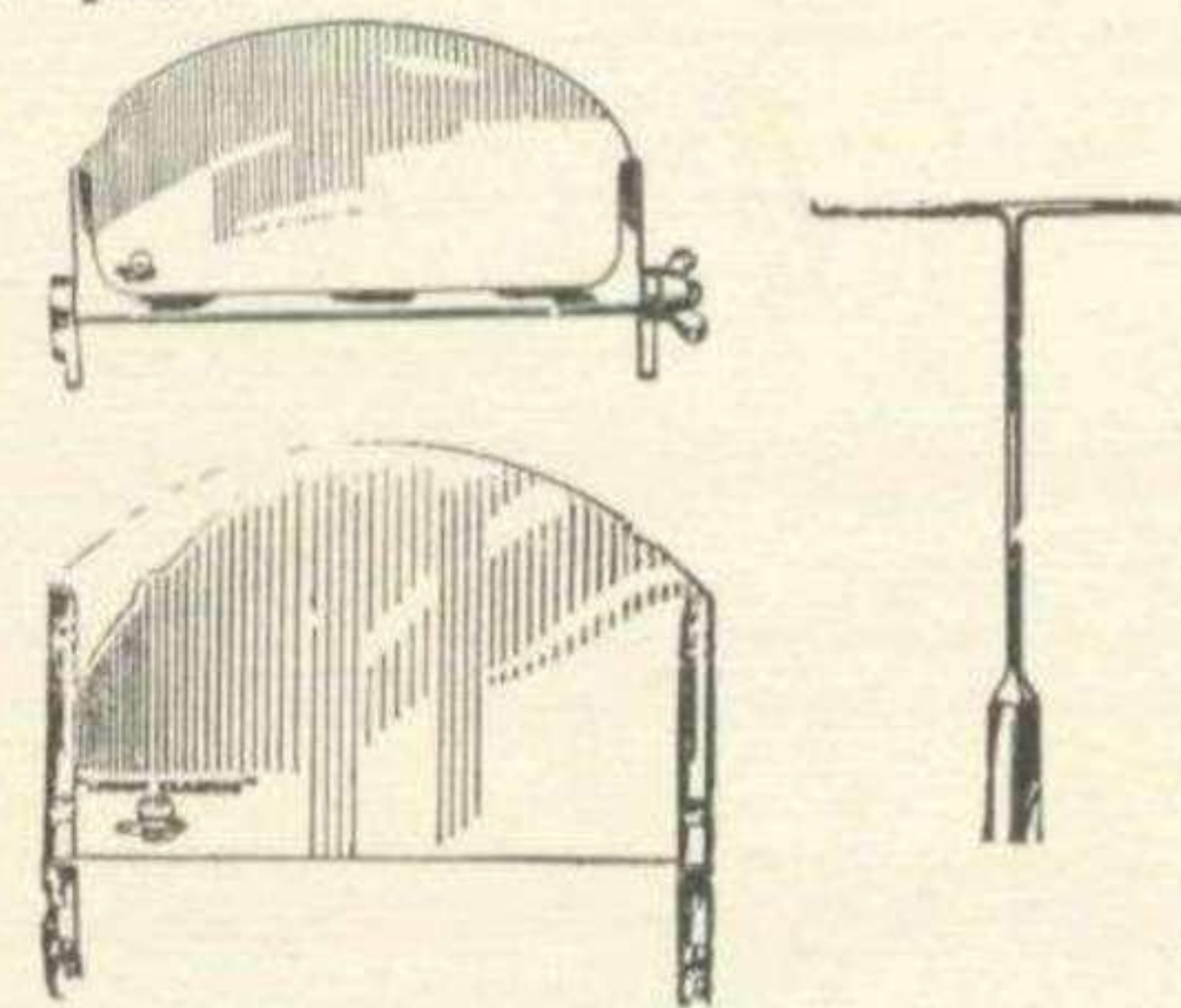
“BROOKLANDS” SPORT EQUIPMENT



● “Brooklands” Fully Flexible Steering Wheels are available in three sizes, 16”, 17” and 18” in a range of over 200 stock models, from 36/- complete ready to fit. ● Eared Hub Caps are supplied for Magna type Wheels, making easier wheel removal and enhanced appearance, in sets of 5, Chromium Plated, 22/- . ● Radiator Stoneguards are available in over 300 stock models, made from solid Brass throughout, finished in Chromium Plate. Prices from 30/- each complete. ● Eared Hub Caps for small hub bolt-on wire wheels are available in two sizes and finished in Chromium Plate for small cars at 21/- set of 5, for larger cars 22/6 set of 5.

● Headlamp Grilles are constructed from solid brass throughout and fitted with diamond pattern mesh. Available in either Fixed pattern or Hinged pattern in all sizes, Chromium Plated. Fixed pattern from 19/- pair, Hinged pattern from 22/- pair. ● “Brooklands” Copper Clouters enable Rudge Whitworth Wheels to be removed quickly and without damage. 100 per cent. pure Copper Head, Ash Haft and Safety Strap 12/6 each. ● Protectors for rear Mudguards in Aluminium and Chromium from 16/6 and 26/- pair.

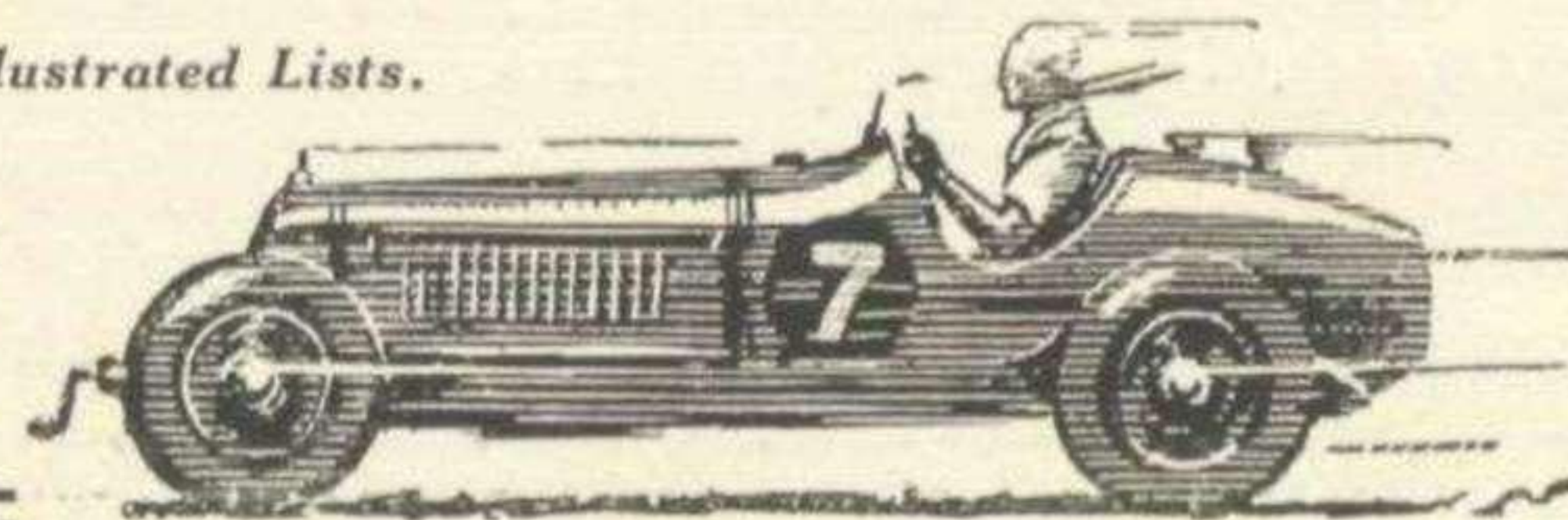
● “Brooklands” Brake Drums enhance the appearance of the car, prevent the ingress of water into the Brake drums and assist in dissipating heat from braking. Size 13” x 1 1/4”. Heavily ribbed flange with face polished or matte for painting. Available for Midgets, Magnas, Hornets, Morris Eights, Singers, etc. Set of 5 ready to fit 19/6. ● “Brooklands” Aero Screens are available in an entirely new pattern with frictional control. Polished Aluminium fittings and fitted with Guaranteed Safety Glass. Special detachable pattern for Singer Le Mans, Midgets, Magnas, Hornets, etc. Fixed type 17/6, With Oak Board 18/-, Detachable 24/- . ● Flarescreens are supplied in celluloid, complete with two spring loaded sockets, permanently attached to the dashboard. Can be stored away when not in use. 12/6. ● “Brooklands” Plug Spanner enables full leverage to be exerted clear of all obstruction. Supplied in Long or Short Reach as required. The Universal joint model will tackle the removal of plugs on any engine and is essential for latest type Hornets, Midgets and Magnettes. State size of Plugs. Fixed type 8/6. Universal joint 12/6.



Write for complete Illustrated Lists.

Send—

3d. in Stamps for a copy of the “Brooklands” 1935 International Fixture List, giving all Club and International Fixtures for 1935, full results of all races and speeds for 1934, with space for inserting 1935 results. Lap Speed tables, Data, Illustrated, 28 pages.



FRANK ASHBY & SONS, LTD., STIRCHLEY, BIRMINGHAM.

INDEX TO ADVERTISERS

	PAGE		PAGE
Acheson, E. G., Ltd.	317	Dunkley & Birden, Ltd.	317
Anglo-American Oil Co., Ltd.	239	Dunlop Rubber Co., Ltd.	278
Ashby, F., & Sons, Ltd.	inside back cover	Ferodo, Ltd.	front cover
Aston-Martin, Ltd.	293	M.G. Car Co., Ltd.	312
Bellevue Garage & Service Station	309	Nobel Chemical Finishes, Ltd.	299
Bentley Motors (1931), Ltd.	284	Robinson & Co., Ltd.	307
Cleveland Discol	277	Rolls-Royce, Ltd.	297
Cresta Motor Co.	291	Wakefield, C. C. & Co., Ltd.	back cover
Donington Park Motor Races	317	Watney, G., Ltd.	305

FILL IN THIS COUPON.

Free Entry Coupon No. 13.

Name

Address

Solution :

NAME and ADDRESS in Block Letters.

MOTOR RACING PICTURES.

Name

Address

MAY, 1935.

NAME AND ADDRESS IN BLOCK LETTERS.

A year's motoring in a fortnight

UNDER R.A.C.
OFFICIAL OBSERVATION



"no sludge or deposit"

"little carbon deposit"

"consumption of
6118 miles per gallon"

"all working parts
in good condition"

"piston rings free
in their grooves"

Yet **PATENT** Castrol
COSTS NO MORE

WAKEFIELD **PATENT**
Castrol
MOTOR OIL

10,017 miles on the road by an Austin—without stopping the engine

EXTRACT FROM REPORT OF
ROYAL AUTOMOBILE CLUB TRIAL No. 771.
WAKEFIELD PATENT CASTROL "XL" OIL.

ENTRY.—Messrs. C. C. Wakefield & Company, Limited, of Wakefield House, 30/32 Cheapside, London, E.C.2, submitted for trial a sample of Wakefield Patent Castrol "XL" Engine Oil.

OBJECT OF TRIAL.—The object of the trial, as declared by the entrants, was to demonstrate the performance of the oil in the engine of a car, running over a distance of 10,000 miles, without stopping the engine.

DESCRIPTION OF TRIAL.—The car used for the trial was supplied by the entrants and was a 1935 18 h.p. Austin car, fitted with saloon body.

The trial run was in three eight-hour shifts per 24 hours, intentional stops, with the engine running, being made for traffic, refreshments, and changing crew. The total distance covered was 10,017½ miles at an average speed (settled by the entrants) of 32.2 miles per hour excluding all stops.

RECORD OF TRIAL.—The engine ran continuously throughout the trial for a total time of 341 hours 52 mins. The car was stationary, with the engine running, for a total time of 40 hours 12 mins., the longest stops being of 44 mins., 43 mins. and 43 mins. duration respectively.

The engine sump was drained and refilled before the start of the trial, but not again during the trial. The total amount of oil used was 1.64 gallons, equivalent to a consumption of 6,118 miles per gallon. Throughout the trial the oil level in the crankcase was maintained between the "maximum" oil level, as shown on the dipstick, and two-thirds full.

At the end of the trial the engine was completely dismantled. All working parts were found to be covered with a film of oil and were in good condition. The carbon deposit on the piston heads and cylinder heads was thin. There was little carbon deposit on the metal parts of the sparking plugs and the insulators were clean. The piston rings were free in their grooves.

The appearance of the parts was very consistent throughout. The wearing parts, being in uniformly good condition, were not photographed.

On dismantling, the engine sump was found to contain no sludge or deposit.

**THIS ADVERTISEMENT IS AUTHENTICATED
BY THE ROYAL AUTOMOBILE CLUB**