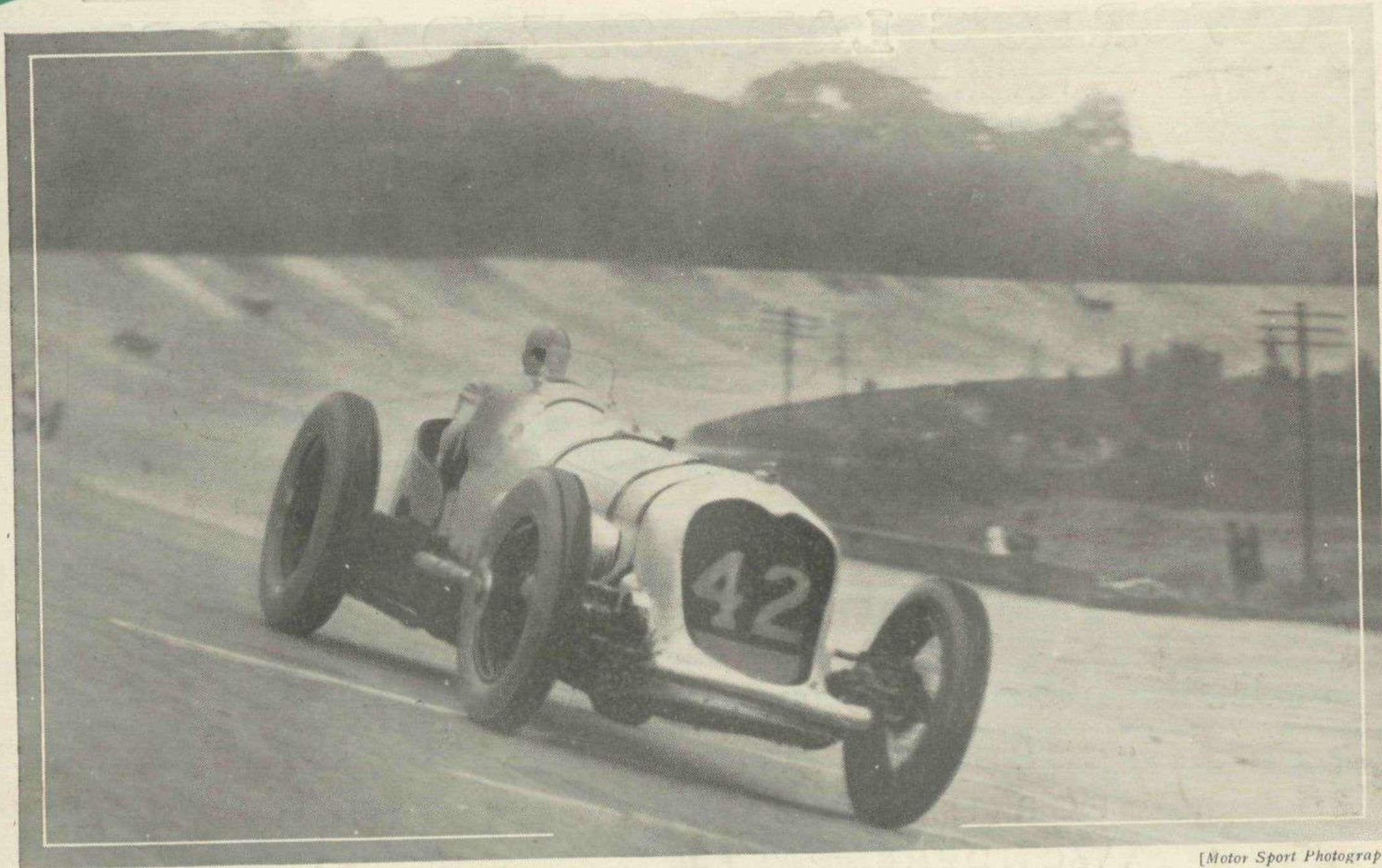


MOTOR SPORT

LAND - AIR - WATER

SIXPENCE MONTHLY



[Motor Sport Photograph

WINNING THE 500 MILE RACE.—John Cobb holds a steady course on the Napier-Railton.

Sir Malcolm Campbell's hazardous bid succeeds

BLUEBIRD'S BRAKES & CLUTCH were fitted with FERODO LININGS

301
MILES PER HOUR

YET AGAIN has Sir Malcolm Campbell smashed the world's land speed record. Note that *YET AGAIN* Sir Malcolm made sure that . . .

The safest in the world

FERODO

LIMITED

CHAPEL - EN - LE - FRITH

REGD. TRADE MARK
FERODO
BRAKE LININGS

301.1292 m.p.h.

WORLD'S LAND SPEED RECORD

This amazing speed was
attained on

**DUNLOP
TYRES**

Sir Malcolm Campbell says:—

“CONGRATULATIONS AND THANKS
FOR HAVING PRODUCED SUCH
WONDERFUL TYRES AND WHEELS
..... NO FIRM IN THE WORLD COULD
PRODUCE BETTER TYRES”

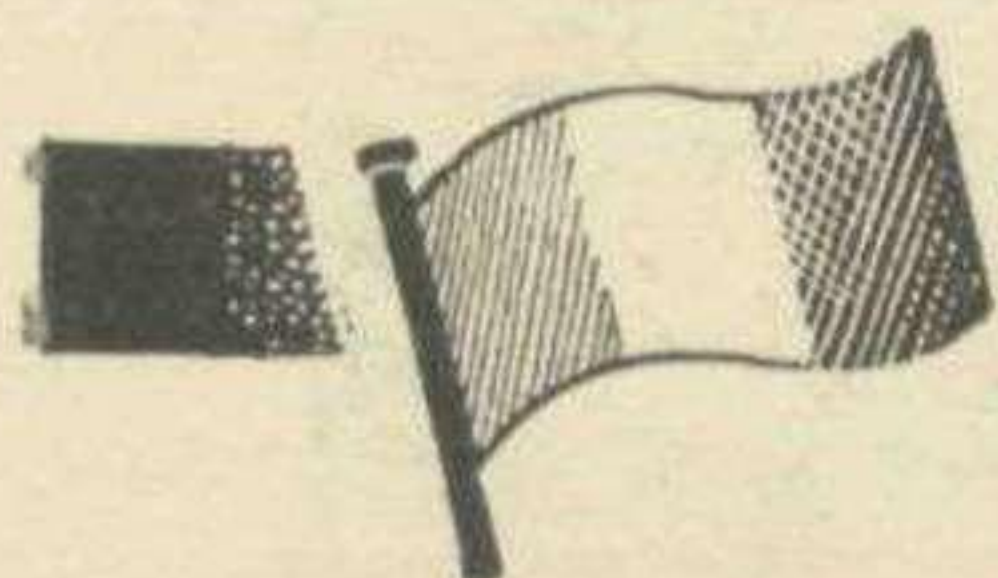


DUNLOP—The First and Fastest Tyre in the World

DUNLOP RUBBER COMPANY LIMITED, FORT DUNLOP, BIRMINGHAM.
Branches throughout the World.

"THE AMAZING ASTON MARTIN" 'The Motor'

It's good to know that the duplicate of the Aston Martin you can drive has won against racing cars of twice the size . . . has conquered the Alps against the cream of European competition. Before you buy any car—see 'the amazing Aston Martin'!



LE MANS

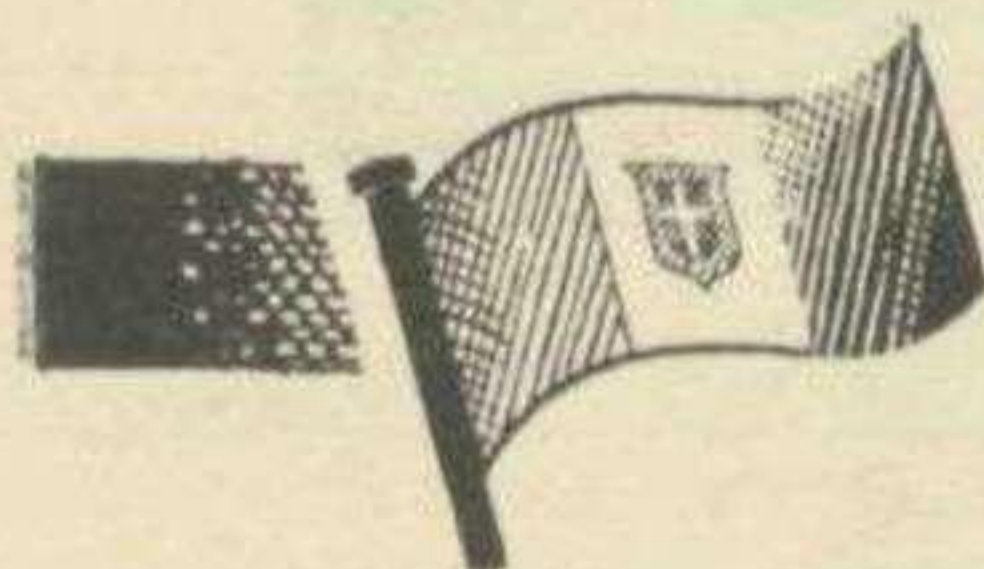
WINNERS Rudge-Whitworth Cup, 1932. First British light car to win.

WINNERS Rudge-Whitworth Cup, 1935. 3rd against cars of three times the capacity in Grand Prix d'Endurance 1935.

1933 Record Lap (1500 c.c.) 73.3 m.p.h.

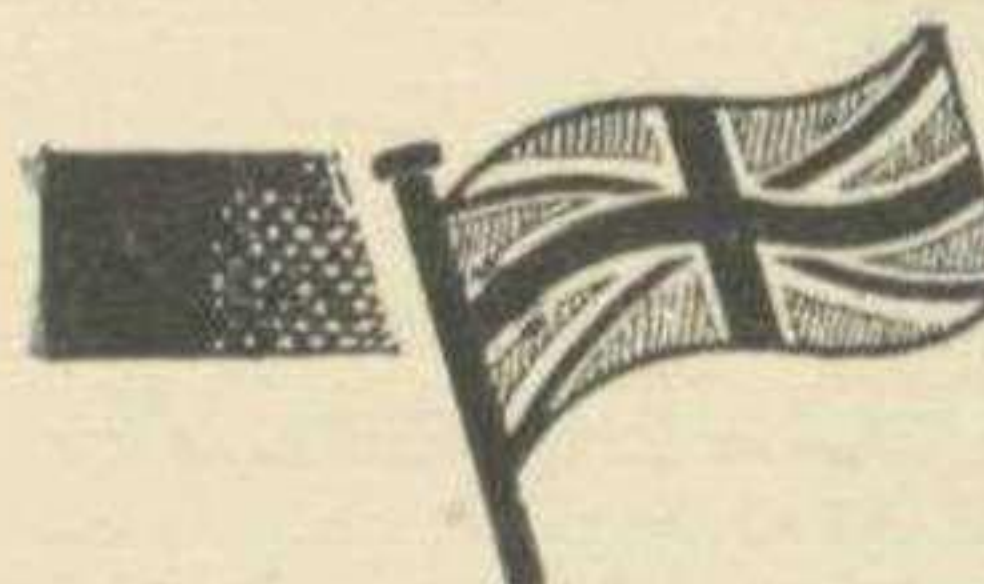
1934 Record Lap (1500 c.c.) 79.4 m.p.h.

1935 Record Lap (1500 c.c.) 81 m.p.h.



TARGA ABRUZZO

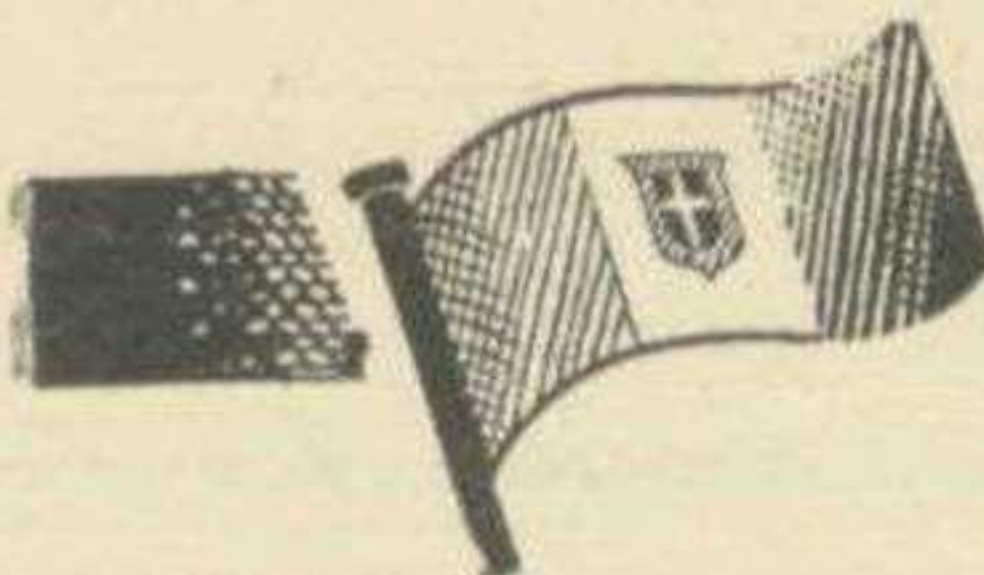
WINNERS in up to 2000 c.c. class—also 3rd.
3rd in unlimited class.



ULSTER T.T.

WINNERS Team Prize, 1934. First team to win prize for three years.
Record Lap (class F.3) 77.4 m.p.h.

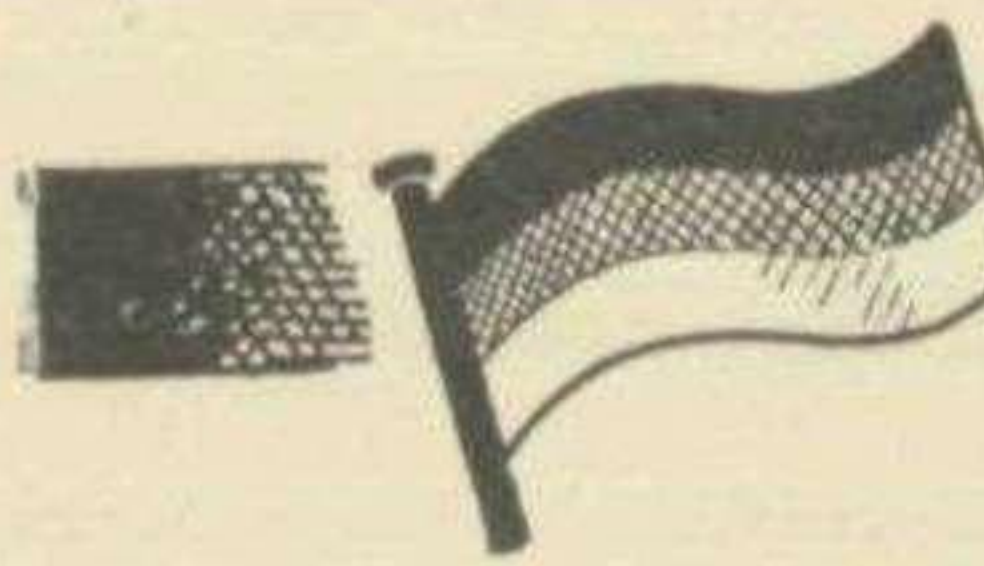
WINNERS Team Prize, 1935. Only Team to finish—only team to win prize two years in succession.



MILLE MIGLIA

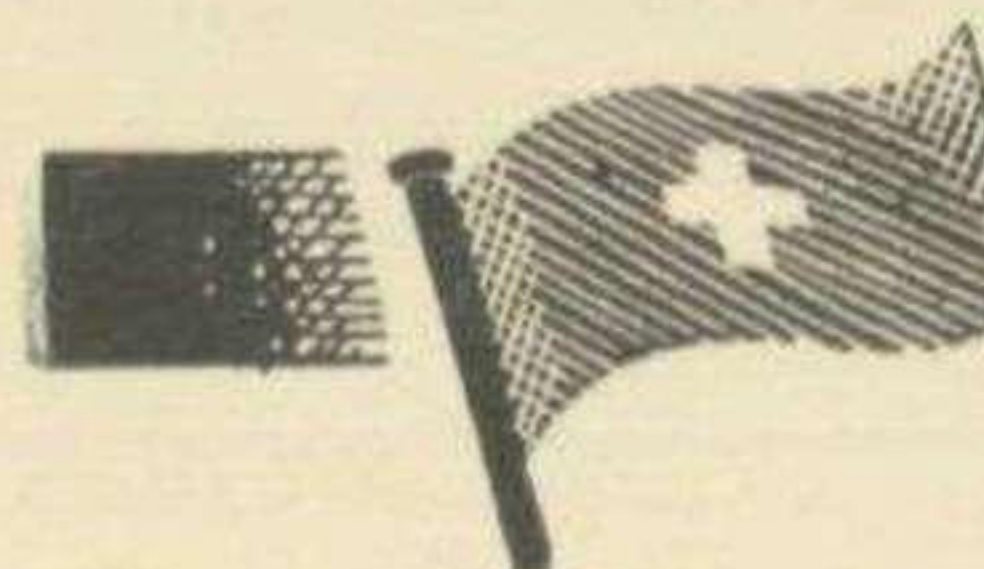
WINNERS 1500 c.c. class 1935.

First time of entry—amateur driver—car nearly year old.



NURBURG RING

WINNERS 1500 c.c. sports class, Eifel Race 1935.



ALPINE TRIAL

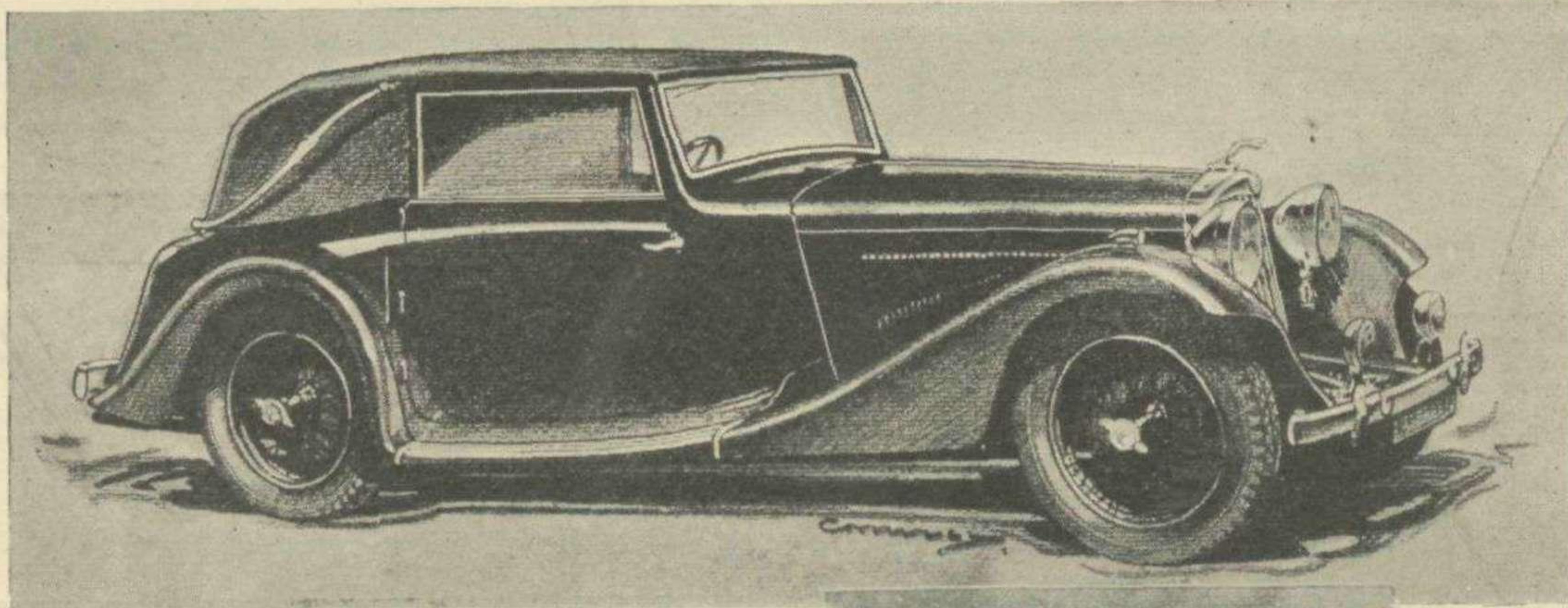
WINNERS of two Glacier Cups, 1934.

Only British private entrants to achieve 100% success.



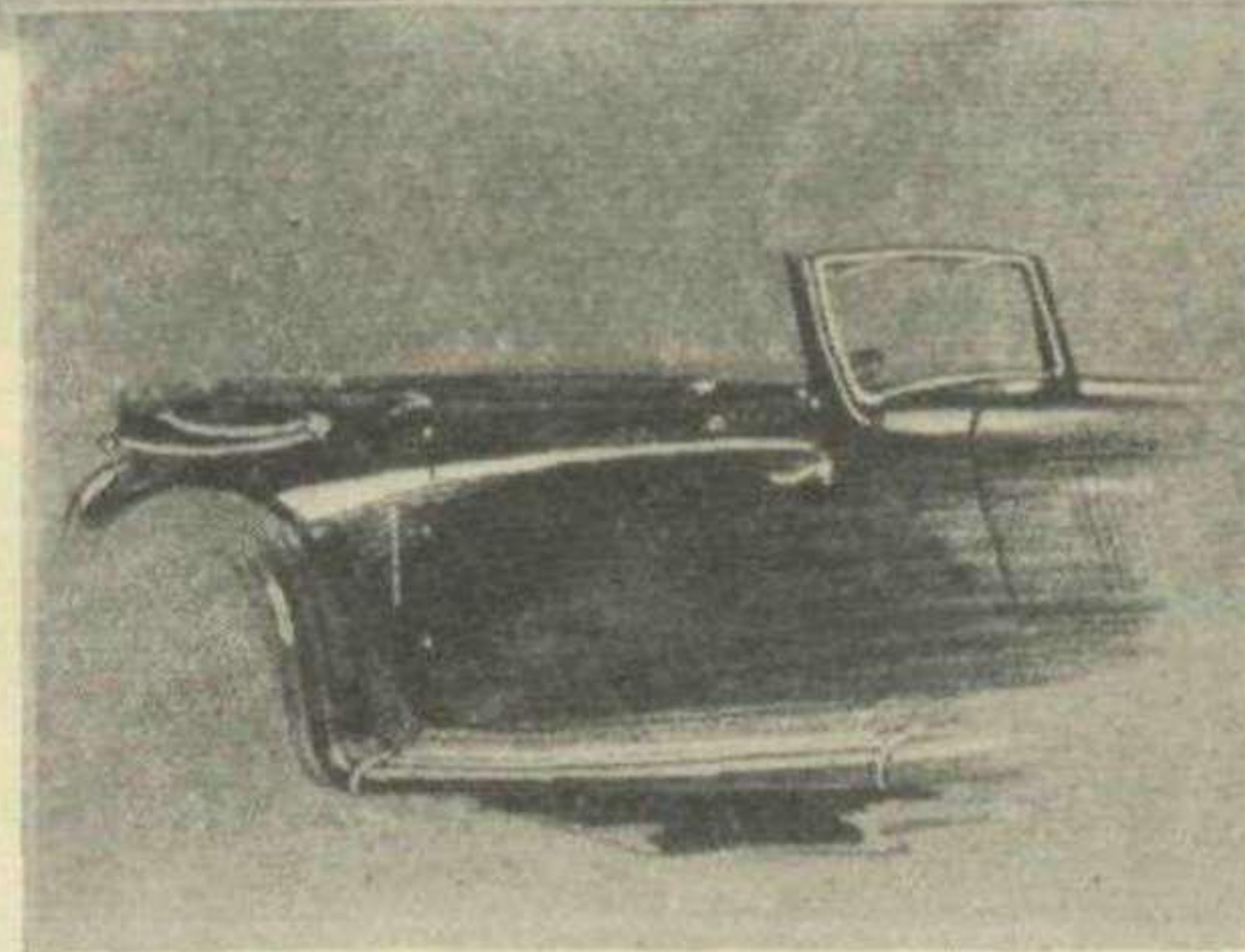
The 16-56 h.p. A.C. "ACE"

A TWO-LITRE SIX-CYLINDER
WITH
OUTSTANDING QUALITIES



A.C. 4-Seater DROP-HEAD COUPE

Price £475



When the Hood is lowered and Side Curtains dropped, the Car is completely open. When raised and Side Windows up, completely closed car comfort is afforded.

The A.C. has broken 9 International Class Records. The One Hour Record for the 1,500 c.c. class at 104.19 m.p.h. ! In the 1933 R.A.C. Rally every A.C. "ACE" entered won an award.

PRICES OF THE A.C. RANGE

2-Seater drop-head Coupe £470. 4-Seater drop-head Coupe £475. Greyhound Saloon £470. Aero Saloon £500. 4-Seater Open Sports £485. Family Saloon £510. Chassis 16/56 £325. Chassis 16/66 £355.

A.C. (ACEDES) CARS LIMITED
THAMES DITTON . SURREY . ENGLAND

Telephone : Emberbrook 2340

London Showrooms :
107, PARK LANE, W.1.

Telephone : Mayfair 3638

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.

CIRCUITS AND CHICANES

The present season of motor-racing has seen the growth of a custom which is almost universally disliked by drivers and spectators alike. We refer to the use of artificial corners, or *chicanes*, on road circuits.

The situation has been brought to a head by the Italian Grand Prix at Monza, where five *chicanes* were erected on various parts of the autodrome, and were so placed that they completely wore out the brakes of the competing cars.

From the drivers' point of view these *chicanes* are cordially disliked on the grounds that they are totally unlike any corner encountered on an ordinary road. They are difficult to judge, owing to the two "hurdles" presenting the appearance of a solid wall when approached at high speed, and altogether present an obstruction which they feel might very well be dispersed with.

To the spectator, a *chicane* is uninteresting. The cars are slowed to a very low speed, and the result is merely the spectacle of braking and acceleration. A hairpin bend has the same effect, but it at least gives scope for masterly negotiation.

The only people who benefit by *chicanes* are the organisers. They have the comforting thought that the cars are being held back to a speed at which accidents are unlikely to happen. In France, particularly, this reason has great force, while the Monza authorities will do anything to avoid a repetition of the calamitous 1933 race.

Justification for the use of *chicanes* has been asserted in some quarters in the fact that, at Monza, they tested the brakes so severely that designers were made to realise the shortcomings of their present systems.

The point immediately arises: are the brakes of the modern car as efficient as they might be, both in power and endurance? M. Charles Faroux says they are not, especially in regard to the dissipation of the intense heat generated in the process of retarding a car. In one department, that of brake linings, we are as well equipped as we can ever hope to be.

The issue raised by the Monza race is not so much a doubt of the efficiency of brakes, as whether the circuit itself was not unnecessarily severe. Modern Grand Prix cars have no difficulty in covering 500 kilometres on a give-and-take road circuit such as Spa, and we, personally, believe that brakes are as well developed as any other feature of automobile design.

A more serious criticism of *chicanes* was summed up by Chiron, while watching the Italian Grand Prix, in the words: "If the authorities are decided that racing-cars are too fast and they are determined to keep speed down, why not limit the engine size to 1,500 c.c. and leave the circuits alone?"

That starts the argument all over again! This journal has been of the opinion throughout the long discussions as to the ideal Grand Prix formula that the lessons learnt by the present cars have justified the inherent dangers of racing on normal roads at speeds up to 190 m.p.h. The argument that the cars can only be handled by a small number of men who have graduated over a period of years is dispelled by the sudden rise of Rosemeyer.

It is only necessary to run over in one's mind the list of races this season which have been contested by the fastest cars, without a fatality, to realise that the use of *chicanes* has very little to recommend it.

CONTENTS

	PAGE
Shelsley Walsh Hill Climb	516
Rumblings	520
Campbell's and Eyston's Records.. .. .	524
Ulster Aston-Martin, The	526
Cave Brake Control	529
500 Miles Race, The	530
Manx G.P. Races, The	537
Brighton Speed Trials	539
Continental Notes and News	545
Ulster T.T., The	546
Club News	553
Italian Grand Prix, The	555
Nuvolari Wins Modena Race	559
Alvis Announce a New 3½-litre Car	560
Spanish Grand Prix, The	561
A Guide to 1936 High Performance Sports Cars	564

RAYMOND MAYS ONCE AGAIN MAKES FASTEST TIME AT SHELSLEY

MRS. PETRE LOWERS LADIES' RECORD TO 43½ SECONDS. SENSATIONAL CLIMBS BY BOBBY KOHLRAUSCH ON THE MAGIC MIDGET

If the Autumn hill-climb at Shelsley Walsh was less exciting than some of those in the past, it is only because of the high standard of entries and organisation achieved by Mr. Wilson and the Midland Automobile Club on previous occasions. There was less of the "big stuff," not a single Maserati or Alfa-Romeo, the course was in places still damp after the heavy rain of the day before and there were certain delays in proceedings, though the most tedious of them was unavoidable. On the other hand the runs of Raymond Mays on the 1½-litre and 2-litre E.R.A.s, C. E. C. Martin on his 2.3-litre Bugatti and the German driver Kohlrausch, not to speak of Mrs. Petre on the supercharged Riley, were worth coming a long way to see.

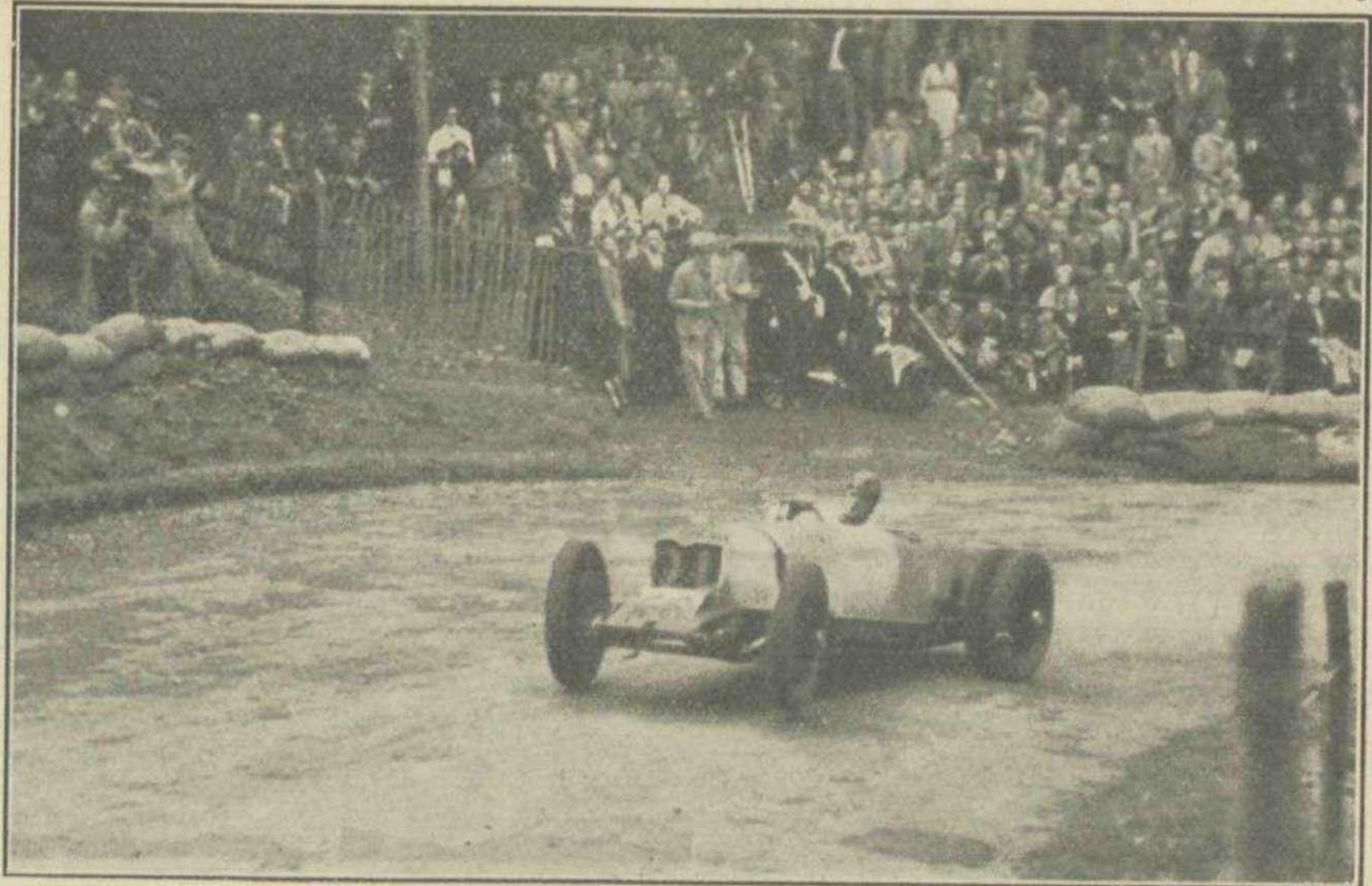
At former meetings sports, as distinct from racing, cars used to occupy a considerable proportion of the Shelsley programme, and a good deal of dissatisfaction was caused by thinly disguised racing cars furnished with hood and wings and lamps running against obvious sports-cars in full touring trip. On this occasion the M.A.C. got over the difficulty by insisting that sports-cars should comply with Tourist Trophy regulations. Unfortunately under these rules supercharged cars are barred, and as a consequence the sports-car climbs were almost all rather lacking in interest.

The Autumn Meeting seems to bring forth a prolific crop of "Specials" mostly with a basis, if not a large proportion of the good old G.N. The Davenport Special, for three years Shelsley record-holder

between its longerons, while in a more professional category was Lemon-Burton's Grand Prix Bugatti, which had a bored out 3-litre engine in a G.P. chassis.

As has been said, there was rather a

Heavy clouds had been in evidence all morning, but the true Shelsley enthusiast is undeterred by this sort of thing and takes his favourite vantage point on the hill protected with waterproof and heavy



Freddy Dixon tries a new side of the sport. A smooth corner at the Esses on his 2-litre Riley.

lack of 2.3 and 3-litre racing cars. One of the cars entered but not arrived was the 3-litre Pescara with Zanelli as driver, and the only foreign "ace" who had come over was Bobby Kohlrausch, now

boots, with the knowledge that he has a complete change of clothing down below in the car. Conditions seemed better as zero hour drew near, and when No. 1, A. N. L. Maclachlan (supercharged Austin) took his place on the line, there was nothing worse to contend with than the somewhat tricky surface at the line and some dampness at the Kennel Bend. Col. Loughborough's traffic signal starting-device lit up, changed to "go" and the little Austin, now stripped to a skeleton chassis rushed up the slope and rounded the Kennel Bend in an inspired broadside. Taking the S-bends in equally masterful fashion he rushed to the finishing line to record 46.8 seconds, which was an encouraging start.

Pat Driscoll was next, on the little white single-seater Austin on which he has several times won this class

Unfortunately over-revving during practising had cracked a cylinder block, and with a new one fitted the night before his prospects seemed less rosy. He made a good start in spite of a fair amount of wheelspin and screaming up the hill with rather less than his usual pep completed the climb in 46 seconds. On a second run he clocked exactly the same figure. His team-mate Goodacre followed with a supercharged Ulster model, and after a fine get-away made a competent climb in 48.4 seconds.

Next came a bunch of M.G.s headed by Kenneth Evans on his blue-painted "R" type. The independent suspension seemed to help his wheel grip on the Kennel Bend and he roared up the slopes in fine style, his time being an even 47 seconds. D. G. Evans on a similar car lost at

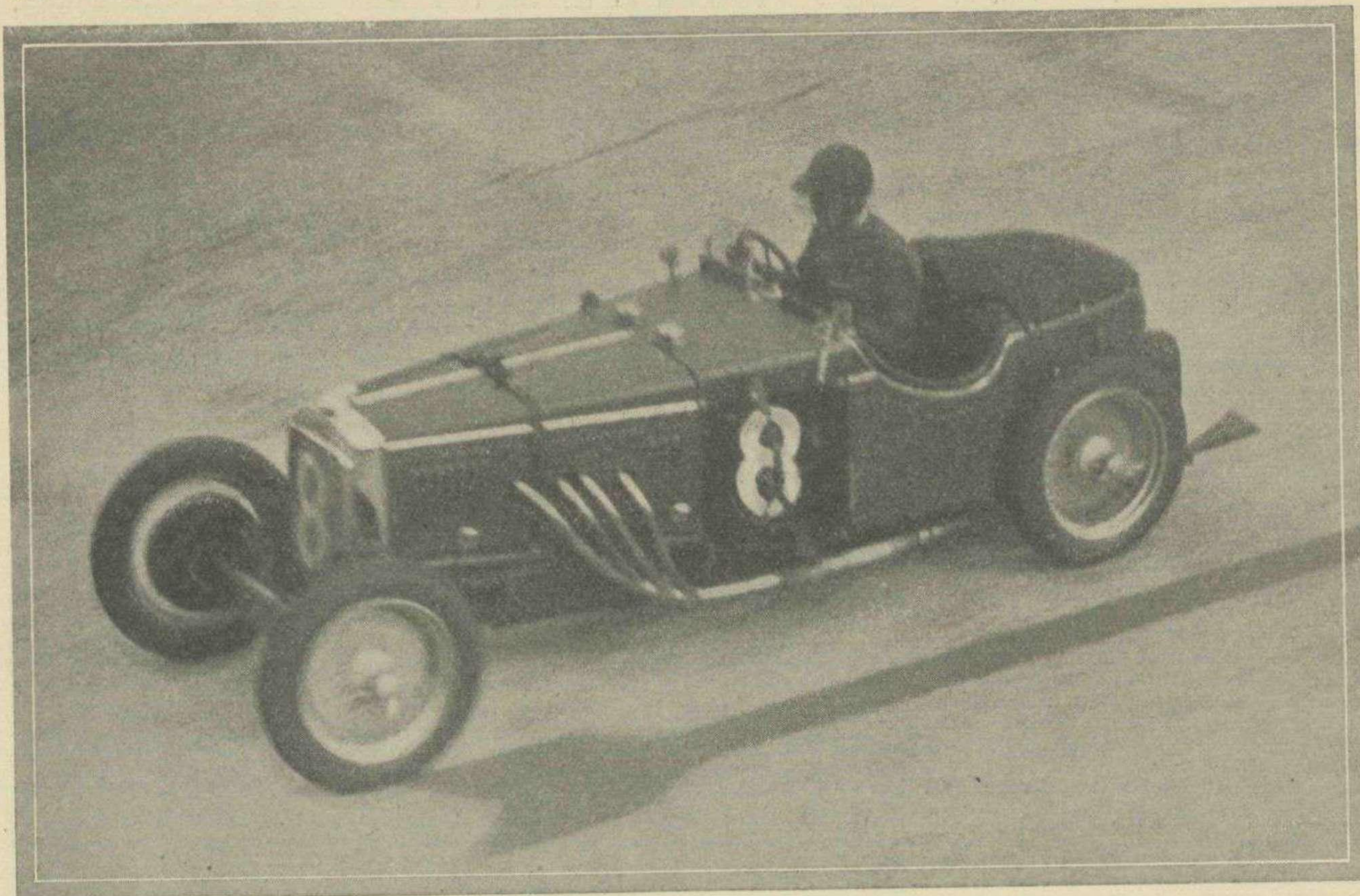


A. F. P. Fane (Supercharged Frazer-Nash) who made second fastest climb in the 1,500 c.c. class.

and the fastest of them all, was there. The Grasshopper, the Wasp, Breyer's ingenious Morgan-G.N., not to speak of the Martyr and the Shelsley Special, all added their clamour to the sounds from the paddock. The most extreme example of the G.N. cult was the Shipton Special which carried a 1928 6-cylinder O.M.

the owner of the Magic Midget, on which he had fitted a neat little racing body not unlike those used on the "R" type cars. His comment on the hill was just what one expected. "I like it very much, but it is too short, too easy. In Germany our hill-climbs are ten kilometres long, if not more."

PERFORMANCE!



BROOKLANDS (August meeting)

The August Short Handicap was won by Miss Margaret Allen (supercharged 1½-litre Frazer-Nash) with the Frazer-Nashes of Mr. Jucker and Mr. Percival occupying Second and Third places.

AVERAGE SPEED 110.84 M.P.H. STANDING LAP 101.85 M.P.H. FLYING LAP 119.15 M.P.H.

SHELSLEY WALSH (September)

Mr. A. F. P. Fane, driving a supercharged single-seater 1½-litre Frazer-Nash (not fitted with twin rear wheels), climbed Shelsley in

43¹/₅ SECS. AND 42²/₅ SECS.

Under the new regulations supercharged sports cars were barred from the sports classes, but a standard "Shelsley" model (fully equipped) earlier this year climbed the hill in

45³/₅ SECS. (FIRST RUN) AND 45³/₅ (SECOND RUN)

putting up the best aggregate time on two runs by a sports car, winning the 1,500 c.c. Sports class, the M.A.C. T.T. Cup and the M.A.C. British Championship Cup.

The "Shelsley" Frazer-Nash is a production model and perfectly suitable in every respect for normal road-work. It possesses the finest acceleration of any sports car on the market—we guarantee

28¹/₅ SECS. (63.83 M.P.H.) FOR THE STANDING HALF-MILE (fully equipped)

SHELSLEY WALSH (May 1935)

Mr. Gordon Casswell driving his 4-cyl. O.H.C. Frazer-Nash clocked 49 seconds winning the C.P. Type Challenge Cup for the fastest un-supercharged 1,500 c.c. sports car. Mr. R. H. Eccles (May 1934) driving an un-supercharged Frazer-Nash clocked

47 SECS. WINNING THE 1,500 C.C. SPORTS CLASS

N.B. The 6-cylinder Frazer-Nashes which have previously competed so successfully at Shelsley were barred at the September climb by reason of their two-seater bodies not conforming to T.T. regulations which require cars of over 1,500 c.c. to be fitted with four-seater bodies.

See the NEW Frazer-Nash on our stand at Olympia—price £425. Fully equipped.

FRAZER NASH CARS

Falcon Works, London Road, Isleworth
(HOUNSLOW 0011-2-3)

32, Grosvenor Street, Mayfair, W.1
(MAYFAIR 5330)

SHELSLEY WALSH—continued.

least a second at the start and recorded 49.4 seconds and Connell, also on an "R," 49.8 seconds.

Miss Skinner was next on a supercharged Monthéry. Full of determination to win back the Ladies' Record, she let in the clutch at 5,000 r.p.m. and lost some time with wheel-spin, and did well to climb in 48 seconds. Then came a brief interval as the first cars were sent down the hill, making use of a bye-pass which made it unnecessary to return over the starting line. Meanwhile Kohlrausch's white M.G. had been pushed to the starting line, and if the crackle from the short exhaust stubs was anything to go by, the car was in remarkably good fettle.

Not losing an instant when the starting signal changed, he shot up the slope, 5 seconds to the time-keeper's box we made it, and rounding the Kennel Bend without any signs of easing up, roared up past the crossing to the S-bend. Here he had to brake heavily, but the car picked up without a falter and he battered round the top bend and up the finishing line in 45.8 seconds, beating Driscoll's time by 1.5 second.

He was followed by Miss Doreen Evans, holder of the Ladies' Record, who like her brothers was driving a Monoposto Midget. She lost a little time after the start but made a fast and steady climb in 46.4 seconds, 4.5 seconds outside her record. Elwes (Monthéry Midget) was rather slow as a result of leaving the line at 7,000 r.p.m. climbing in 51.8 seconds, while Tongue was almost too fierce half-way up the hill but got his car under control to finish in 47.6 seconds.

Roy Eccles led off the 1,100 c.c. cars with his Eccles Special, which is a supercharged Lagonda Rapier. It seemed to find the gradient rather steep (time 52 seconds) while Breyer on the Joy-stick Special crackled up in 57 seconds. Richard Bolster brought up his Special in an even 49 seconds, particularly good after an initial skid. Spikins on a supercharged Singer Nine with a light-weight aluminium body knocked 4.5 seconds off that, though the little car flexed visibly going up to the S-bend. Then the clamour of Dorcas H Glegg's front-wheel (now four-wheel) drive V-twin filled the loud speakers. Glegg made an excellent start but nearly came to grief on the first corner through missing his gear. He made an erratic course to the top of the hill in 57.2 seconds.

Next came two Le Mans Singers. The one driven by Barnes which was the only sports-car in the 1,100 c.c. class; Barnes made a slow start and toured up to the tune of 65 seconds, while S. C. H. Davis, none the worse for his accident at Ulster, made a polished get-away and taking the Esses with a look of grim determination ran home in 52.8 seconds. Miss Skinner, less dashing than usual, took her supercharged Morris Minor, which bounced rather unsteadily through the bends, to the top in 50 seconds, while Mrs. Eccles (Eccles Special) clocked 54.4 seconds.

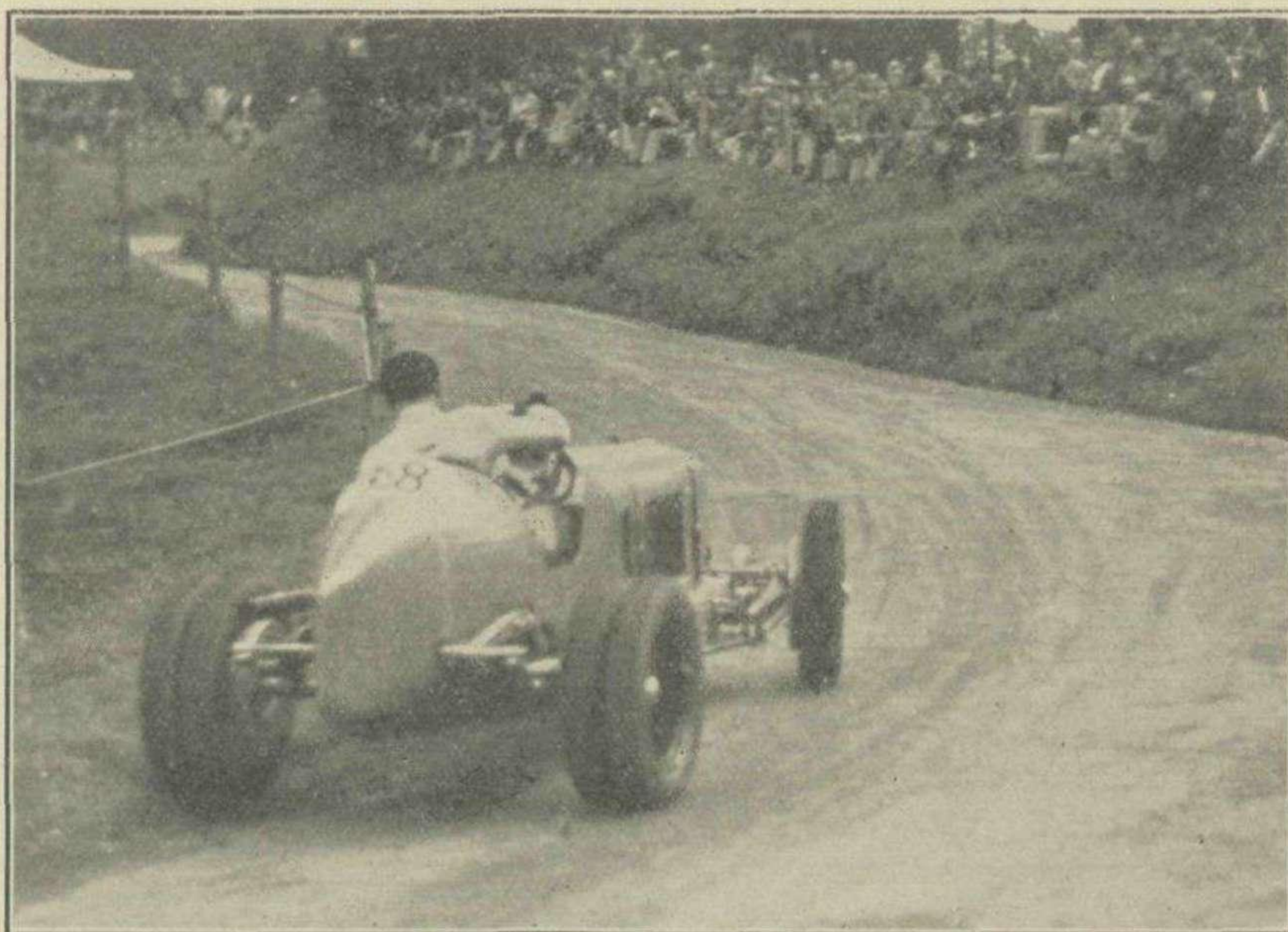
Now for something a little brisker, Ashton Rigby on his bright red M.G. Magnette, complete with twin wheels. A goodish start, really fast round the Kennel Bend and steady through the S-bends he put up one of the better times

so far, 47.2 seconds. Pat Maclure was trying a new sensation on the V-twin Martyr, which he brought up in 52.6 seconds, while Carlmark's Special did not live up to its name of Skol, suffering from ill-health half way up.

There were two fast cars to conclude the 1,100 c.c. class, Appleton's Special, which consists of a Riley Nine engine, now fitted with a Zoller compressor, in a Maserati chassis, and Hall's Magnette. Appleton got away in splendid style but the engine cut right out for a second at the Kennel Bend. Then back it came with a will and Appleton went on to make a polished climb in 46.6 seconds. Eddie Hall is too old a hand to make a mistake on Shelsley. From a perfect start he roared up the hill on a steady course, eased up and swung round the lower part of the S-bend, turned on the power and shot to the finishing straight, a performance which was greeted with applause. His time

time, and with a touch of throttle was round the top bend and shooting up to the finishing line at a rare speed. His time of 41.2 seconds was easily the fastest yet, and the crowd showed their appreciation.

Newsome, who is the present owner of the Becke Special, is another Shelsley veteran. He made a quick climb with some crabbing on the bend, making a time of 46.8 seconds. Miss Richmond made an excellent start on her supercharged. 1,232 c.c. Triumph and was applauded for her cornering—time 54.4 seconds. Then came another lady on a very different type of car, Mrs. Petre on the ex-Mays supercharged Riley. The car just leapt away from the start and its throaty roar could be heard at the S-bends by the time it was at the Crossing. It looked rather a handful on the first of the bends, but as soon as Mrs. Petre got it straight she put her foot firmly down



In spite of an injured arm, Raymond Mays made the four fastest climbs of the day. He is here seen in the 1½-litre E.R.A. cutting the lower corner of the S bend.

was 46.4 seconds, which was the fastest in the class but nearly a second slower than Kohlrausch.

Profiting possibly from his previous Shelsley experience at the wheel of the Becke Special, von der Becke speedily got his T.T. Riley unstuck and handled his car firmly through the bends, to secure the time of 49.4 seconds, stout work on an unsupercharged car. Fane on an unblown Nash did 52.2 while Jucker on a supercharged model clocked 49.2.

There was a hush of expectancy as the E.R.A. was pushed to the line and burst into strident life. Could Mays do his stuff with an injured arm on a not-too-dry surface? His start was perfect, no wheelspin, yet he was a fifth of a second faster than Kohlrausch over the first thirty yards. Up the 1 in 7 slope he rushed, still doing 80 m.p.h. at what had been the braking point for all the preceding drivers. However he knew what he was about, and braked hard just in

and shot off to the finish to the tune of 45.2 seconds, beating Miss Evans' record by .2 seconds.

Cormack scored a neat 47 on his Alta, then came a brace of supercharged Bugattis. Whatcoats was unaccountably slow, but Day-Dewdney made an excellent start and came shooting up to the bends with supercharger wailing, quite a rare sound nowadays. He had an awkward moment through the bends but held it and went on to record 48.4 seconds. He was followed by an expert of long standing, R. J. G. Nash on the Union Special, the latest of his semi-Frazer-Nash creations. Evidently fearing wheel-spin, Nash had let his double rear tyres right down and had some difficulty in taking the first S-bend, but such was the acceleration of the car that he finished his climb in 45 seconds.

The Davenport Special was a shade of its former self and came up in 53 seconds. Following this was Jucker's Frazer-Nash

SHELSLEY WALSH—continued.

driven by Mrs. Millington, formerly Miss May Cunliffe. She was fast on the Kennel Bend and took the first of the Esses so fast that she almost hit the bank. Keeping her foot hard down however she straightened out and made a first-class climb in 48.8 seconds. Then another lady with a Nash, Miss Allen with "Tim Davies'" black single seater, which was fitted with twin rear wheels. First she stalled the car and then made a false start but finally got up in 51.4 seconds.

Once again there were two fast cars to conclude a class, Fane's single-seater blown Nash and Hall's blown "N" Magnette. Fane's car sounded magnificent through the speakers and was obviously going very quickly by the time it reached the corners. Fane slung it round in fine style though he seemed uncertain about his gear and charged up the slope and round the final bend. Hall who ran later was off the line like a rocket but swung wide half way up the hill. He hit the bank with a resounding crack, but his impetus carried him on and he recovered in time to take the bends. His

erated up to the second bend, but he had the situation well under control, shaving the second corner to cross the line in 41 seconds, just a fifth faster than with the smaller car. Esson-Scott followed. His all-black 2-litre Bugatti was in good tune and climbed to a time of 44.8 seconds. Marendaz, pipe in mouth, clocked 57 seconds.

There were only three racing-cars in the 3-litre class, all 2.3-litre Bugattis. Charlie Martin was the first to go and the healthy sound from the loud-speakers was soon followed by the car itself. He braked just at the right moment for the first bend, slashed in a lower gear and tore away round the second bend without a trace of wheelspin or unsteadiness.

His time of 42.8 seconds had been bettered only by Mays on the E.R.A.s and the spectators were not slow to show their appreciation of the run.

A. G. Bainton, the driver who crashed in a sensational way last year, seemed to have got the feel of the hill this time and piloted his car, which was fitted with twin rear wheels, to the top in 44 seconds.

made a straight-forward ascent in 53.2 seconds.

Fords and Railtons now dominated the class. Hillcoat on the low and smart-looking Jenson clocked 52.4 seconds, Whalley with his supercharged car 54 seconds, Platt with a saloon put up 60 seconds, while Allard on one of last year's T.T. cars was excellent in 50.2 seconds. Marker who was driving a new type of Railton with a tiny four-seater body raised the time by a whole second, and it remained to see what Hall could do on his T.T. Bentley. He came up to the corners at a speed so fast that it seemed impossible to get round, but the car responded magnificently as he swung over the steering wheel and roared away to the finish in 46.4 seconds. Very nice too.

There was a spot of sunshine during the tea interval, and after Freddy Dixon had shown off his T.T. Riley, all was ready for the second half of the programme.

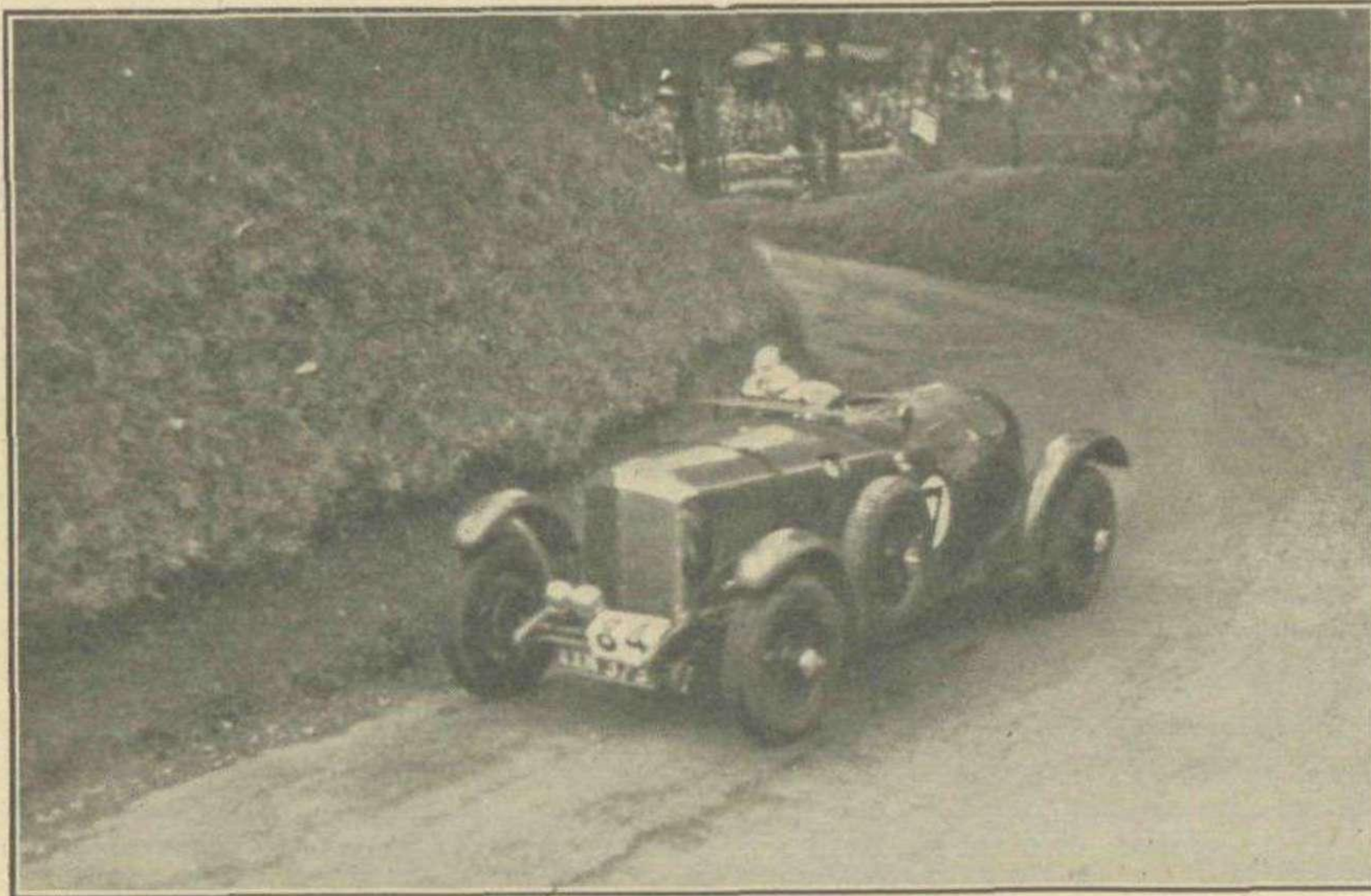
Maclachlan more dashing than ever lowered his time to 45.8 seconds, actually beating Driscoll, and Goodacre improved to 46.6 seconds. Kenneth Evans on a fine run clocked 46.4 and brother Denis 47.6. Hoping for further excitements one of the spectators opposite the bends started to climb a tall tree and was rewarded by seeing Connell turn clean round at the corner without touching anything. Kohlrusch made a possibly false start but was away without anyone being able to stop him. He touched the bank on the way up but kept his foot hard down, and rounding the top corner crossed the line in 43.6 seconds. Was that a run or was it? Just to make sure he was given a third run, on which he was equally fierce, his time being 44 seconds. Miss Evans who was on her mettle to recapture the Ladies' Record from Mrs. Petre fairly "trod on it" up through the bends and snaked away up the finishing straight touching a bank on the way. Time 44.8 seconds. Other improvements in this class were:—Mrs. Wisdom on Driscoll's Austin 48 seconds, and Tongue 47.4 seconds.

In the 1,100 c.c. class most of the second runs also showed an improvement. Eccles did 48.8 seconds, Breyer on Joystick 55 seconds and Davis (Singer) 51.6 seconds. Spikins on the supercharged Singer danced about on the bends but actually got down to 47.6, a creditable effort. Glegg provided plenty of excitement on Dorcas, especially when one of the driving chains came off and she reverted to become three-wheel drive.

On the first runs Appleton was a fifth of a second behind Hall, but great things were expected of him. He made a perfect start, gathered speed all the way up the hill and took the bends carefully, his full power showing as he raced up the last stretch to the finish. His time was 44 seconds. Hall was lurid on the Kennel Bend and as fast as Appleton up to the Esses. Here he seemed to oil a plug, which was reflected in his time of 45.4 seconds.

Raymond Mays was once again the star-turn of the 1½-litres. First came the sound of the exhaust on the loud-speaker,

Continued on page 569.



E. R. Hall was faster than ever in the T.T. Bentley. This time he got down to 46½ seconds.

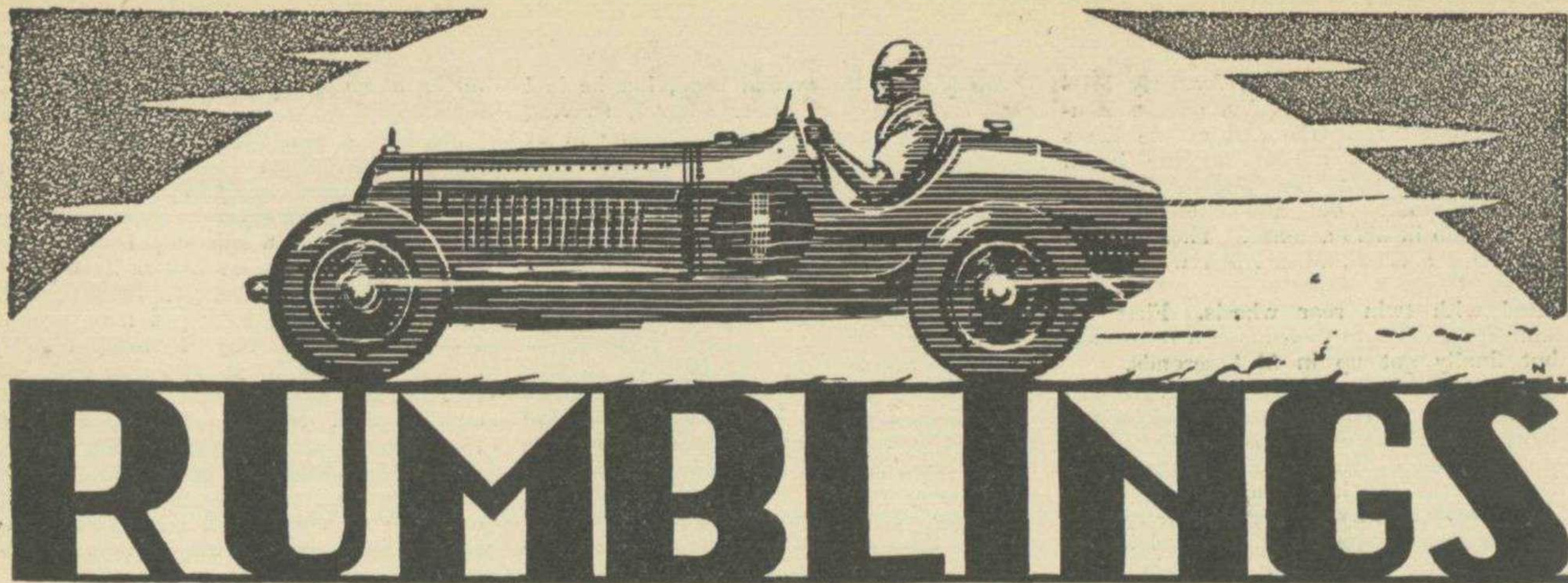
time was 46.2 seconds which was 1.5 better than Fane's attempt.

"Freddy Dixon is on the line with his two-litre Riley" and with this announcement those standing near the S-bend involuntarily moved back from the sandbags. He made a perfect start, was outstandingly fast at the Kennel Bend and took the S-bends without the trace of a skid. His time was 45.6 seconds. Von der Becke followed on the 500 Miles Race Riley and took precisely the same time as Freddy. John Bolster was 1.5 second faster than Mays as far as the announcer's box and with the car well under control completed his climb in 46 seconds.

Now for the 2-litre E.R.A. A fine get-away, the usual roar up to the S-bend, but this time Mays braked early and was steadier on the first of them. Even so the car hopped in the air as he accel-

erated without any incidents, while A. C. Dobson, on Lord Howe's old car clocked 47.8 seconds. Of the sports-cars Charles Follett handled his lengthy Alvis Speed Twenty, which was fully equipped, with great skill, making good use of the synchro-mesh gear-box. He climbed in 54 seconds, but was beaten by Powys-Lybbe on the T.T. Silver Eagle which got down to 51.8.

Eccles made a good start on his 3.3-litre G.P. Bugatti and was steady on the top corners. His time was 44.6 seconds. Lemon-Burton who followed him was less skilful. He braked heavily for the first of the corners, and the car swung round, hit the sandbags and faced the direction it had come from, all before one had realised what had happened. The only Vauxhall entered was the two-seater driven by Ronnie Hughes, who



Time-keeping Extraordinary

Sir Malcolm's record breaking attempt on "Bluebird" took place during T.T. week, and we all followed with considerable bewilderment the various figures which came through from America, first the disappointing 299 and then the much hoped-for 300 m.p.h. As more evidence came to be available, it became painfully obvious that the American time-keepers employed on the job just did not know how to subtract.

The two sets of figures obtained on one run were 49 minutes 50.92 seconds and 50 minutes 3.00 seconds and the officials made the difference 12.18 seconds instead of 12.08 seconds. Not content with that, to obtain the average speed of the two runs they took the mean of the two speeds instead of the two times. I can imagine "Ebbey" blushing with shame for the incompetence of his opposite numbers. However, it all came right in the end.

The Perfect Record-breaking Venue

Charlie Dodson, who was, of course, one of the crew of Cobb's car in the record-breaking run on the Salt Lake, was back from Salt Lake in time to drive in the Ulster race, and told me something of the conditions. The air is tremendously hot, and the drivers

had to protect their faces from the sun and the glare from the salt just as one has to do when out skiing.

The white surface has one advantage which is that it reflects the rays of the sun instead of absorbing them, and the ground temperature is never more than 65 degrees.

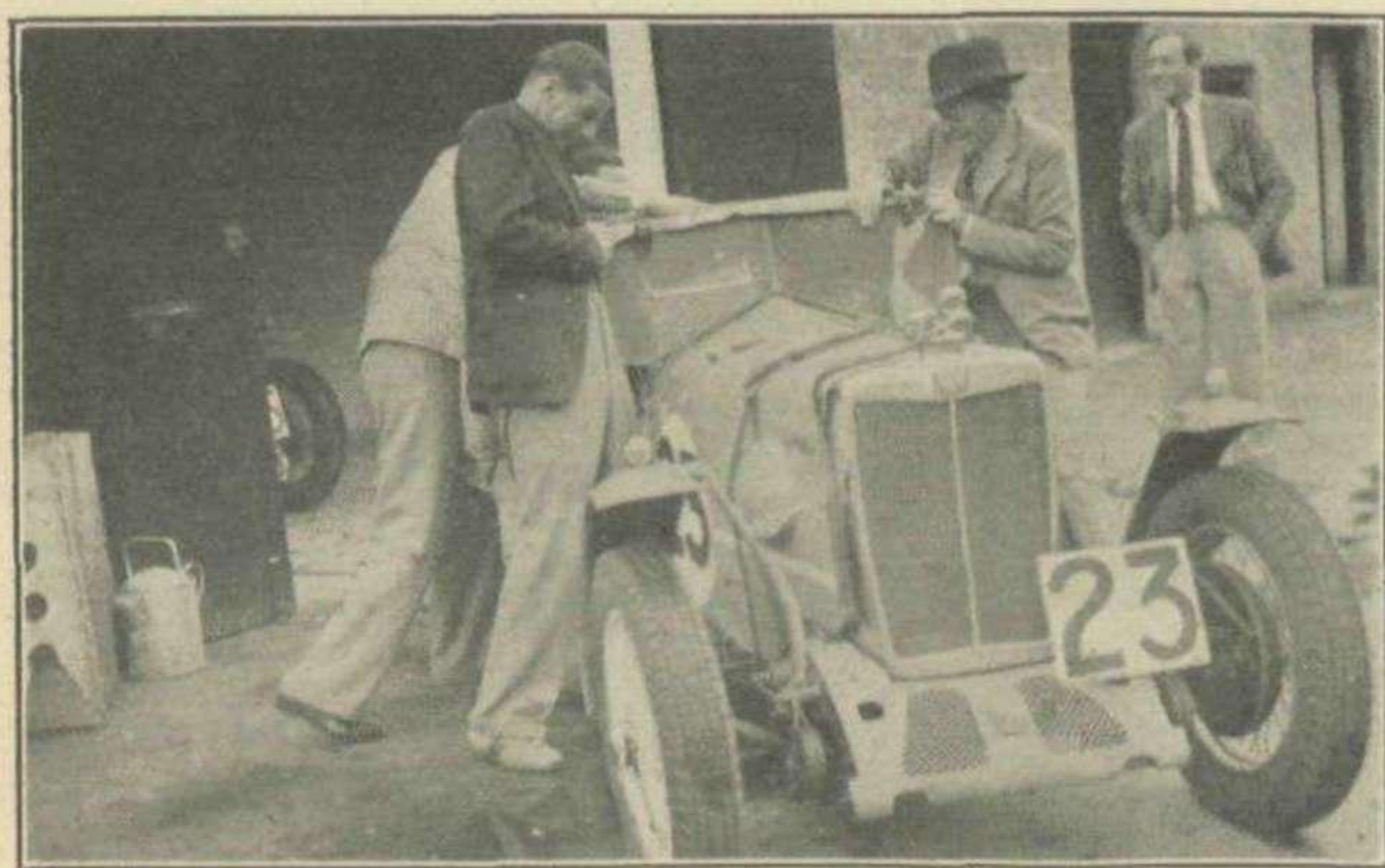
The course remained perfect until almost the end of the run, when a large hole developed at one end. Running round a circle of three miles radius, the curve was so slight as hardly to be noticeable, but if the drivers relaxed for a moment they could easily find themselves fifty yards outside the flag-marked circuit. Even with such an easy curve there is a constant strain on the outside front hub, and Jenkins was forced to abandon one of his earlier attempts on the 24-hour record through the collapse of a ball-race. The fact that Eyston got through without trouble on his front-drive car says a great deal for the skill with which it was constructed.

That Number Plate

Do you ever study the number-plates of the cars you see on the road? Not so much the happy chances such as the "G.B. 1935" which I saw the other day on a Brough Superior car, or even the coveted "A.I." which I believe is still retained by some West-of-England motorist, but the "I"s and the "S"s. Cars bearing the former all belong to Ireland, and "Z" is I think also reserved for Ulster. Scotland uses the "S" numbers, but no definite plan of allotting numbers is used in England.

There is one instance of a number being confined to the customers of one particular firm: The firm is University Motors, and their "sign manual" is of course "M.G." which is particularly appropriate just now, as the new 2-litre M.G. is being displayed in their showrooms.

I always like the Swiss number-plates with the shields and the initial letters of the canton to which the car belongs and the same system without the badges prevails in Italy. For superstition in number-plates however you must go to Germany. Caracciola's number is, I.A. 5555 and he firmly believes his luck would desert him if he no longer used his old favourite. Burgaller goes a step further and has I.A. 77777.



Five minutes is allowed to raise and lower the hood at the T.T. Scrutineering. Here are Richard Seaman, Denis Evans and A. N. Other getting into training on K. D. Evans' Magnette.

Why motorists should insist on Esso Ethyl

- 1 Sir Malcolm Campbell's sensational world's record of 301 miles an hour was on special Esso Ethyl petrol.
- 2 Esso Ethyl is the only petrol in which the powerful anti-knock Ethyl fluid is blended with the world's most advanced petrol—Esso.
- 3 It is marketed by the Anglo-American Oil Company, the firm with the longest experience in distributing high-grade petroleum products in the British Isles. *Established 1888.*



THE PROOF OF SUPERIORITY

which means most to YOU is actual performance in your own car. Decide for yourself—Try Esso Ethyl today

Stand No. 42

OLYMPIA
MOTOR SHOW

Oct. 17 to Oct. 26

FOR LUBRICATION USE **Essolube** THE 5-STAR MOTOR OIL

RUMBLINGS—continued.

Ulster Spectacle

Once more the U.K.'s only road-race has been run off with success, and as far as I could see there were as many spectators as ever (no, I did not count them) while the enthusiasm of the people in authority and the small-boy autograph hunters, who belong to a specially virile sub-species only found in Northern Ireland, shows no signs of diminishing. The only cloud in the future of the race is that there may come a time when the R.A.C. can no longer rely on the generosity of private persons to provide the prize fund, but there is little doubt, that the Ulster Government will come forward to provide a subsidy, as their neighbours in the Isle of Man already do for the Motor Cycle T.T.

A Fine Touring Ground

I've always wanted to bring my own car over for the Belfast race, as there are fine straight roads and pleasant scenery within a few miles of the city, and the 30 m.p.h. limit is unknown in those parts. Ever since I saw the photographs of Miss England II booming across the waters of Lough Neagh with a bank of heavy cloud behind, I'd felt a sort of nightmare-urge to see the place itself. The day I chose to visit it was just such another as the one on which the trials were held, and coming down to the water's edge under low thunderclouds, with a low black island outlined against the grey waters, I felt that Don must have been really courageous to make his initial trials on its breast.

How To Test a Car

The course of that very fast motor-cycle race the Ulster Grand Prix, with its five-mile-long Clady Straight, was only a few miles away. It is often used by drivers who want to check over final adjustments before the car race, and this year Lord Howe utilised it to try out the springing of the Bugatti after a tentative adjustment of the De Rams.

All the side roads were guarded by volunteers, and the car reached 120 m.p.h., which was encouraging for the Saturday's race. "I don't know how those motor-cycle men can do it" said his lordship, "the surface was as wavy as a rough sea."

Two things in Ulster which were new to me. One was being allowed to leave my car all night without lights in the main street. The other was to encounter in the bedroom of one of the principal hotels a small tin of a well-known health-salt "with the compliments of the management." An impending apology, as Mr. Punch would say, or possibly "Commercial Candour?"

Voiture De Serie

One of the complaints about the earlier T.T. races was that many of the sports-cars which took part were in reality quite as experimental and non-standard as any racing-car specifically so called, but the regulations in force during the past two years are supposed to have overcome that. It is laid down that only models produced in sufficient numbers to be considered as part of the standard range shall be eligible, but

a loophole has been left. If a firm can show that it proposes to build cars of the model entered in the T.T. some time in the future, the R.A.C. will accept the entry. Messrs. X are then at liberty to construct a team of special cars, without any of their prototypes having been available to the public.

The remainder of the "Serie" have to be produced at a later date of course, but in the event of the racing-cars proving a flop and there being no demand for the remainder of the "specials," a large firm can afford to write them off as a "Publicity Campaign" and money well spent.

This has happened in more than one case and no one can blame the firms concerned for making the most of the regulations. But as the general public thinks of the T.T. race as a race for standard production cars, isn't it time for an event for out-of-the-showroom stock-cars?

An Optical Delusion

A reader takes me to task for saying that Williams won the 1930 French Grand Prix in which Sir Henry Birkin finished second in the four-seater Bentley, and that in any case the cars were stripped and not sports-cars. He is perfectly right of course. Instead of looking back to the bound volume of MOTOR SPORT for 1930 which stands in front of me, I glanced through some old lists I had made myself. What I actually saw was "1928—Williams—2-litre Bugatti—sports-car race—Commings," but unfortunately linked

6

E R A's

FOR DISPOSAL

(Subject to being unsold)

FULL INFORMATION FROM

L.B.B. MOTORS LTD.

EXPERIMENTAL AND RACING DEPT.,
BROOKLANDS TRACK. Weybridge 1415

RUMBLINGS—continued.

this instead with the next entry but two "1930—Etancelin—2-litre Bugatti—racing cars—any capacity—Pau."

I must have my office spectacles re-bored.

A Run of Mercs

I'm always on the look-out for interesting not-so-young sports-cars, but for weeks at a time the most interesting antiques I come across are the taxies I take when in a hurry. Last week however there was a nice spate of Mercedes plus or minus Benzes to relieve the monotony.

The first was a 33-180 built in the 1927 era and which as you will remember was a lofty supercharged sports-car, the forerunner of the 36-220 and the 38-250. Nothing remarkable about that, you say, but the owner proposes to cut two or three feet out of the frame and make it into a sort of Shelsley Special. More of that later.

Another car which cheered me considerably was an old "90" Mercedes, date about 1913 and similar to the one written up some years ago in *MOTOR SPORT*. This one I saw down at Brooklands during the 500 Miles Race. The owner uses it daily and I watched it pass some small saloons on the Great West Road the other day in great style.

Shaft Drive Optional

The best of the bunch was a "Chitty" No. 3 of that line, which was also being prepared for the road. Purists will object that there were only two real ones which had 22-litre Maybach aero engines fitted into "90" Mercedes chassis. This one was only a

little less imposing and had a 10-litre aero engine, Maybach also I believe, in a 1910 45 h.p. Mercedes chassis. I was rather surprised to see that it was shaft-driven, but apparently the purchaser had the option in those days of specifying chain-drive or live axle.

The car was fitted with a typical Brooklands body, and had been raced there by Flt.-Lt. Noel, but had afterwards been fitted with front-wheel brakes on the old axle and was also used on the road. The tax was a formidable £79.

An Auto-Union Secret

So much has been talked in the past years of the virtues of independent springing in combating wheel-spin that most of us had come to think that this was the whole secret of the phenomenal acceleration of the German racing-cars when getting away from corners. There is more in it than that, the answer lies in the special type of differential fitted.

With the usual type of differential, as soon as one wheel starts to spin an increased proportion of power is transferred to it until one wheel is screaming round wildly while the one on firm ground makes no attempt to drive. The special type of differential fitted to the Auto-Unions and probably also to the Mercs locks itself solid when one wheel starts to rotate at more than 15 per cent. faster than the other, and so full power is applied to the road-wheels. As may be imagined, the mechanism is not the same as that of the conventional differential. Cams are employed instead of pinions.

140 M.P.H. FOR 24 HOURS!

NEW WORLD'S RECORD

LUCAS LIGHTING Equipment was used throughout the many hours of night driving and therefore was of vital importance at this terrific speed.



CAPT. G. E. T. EYSTON cables:—
"Grateful thanks. Equipment worked perfectly."

LUCAS

ELECTRICAL EQUIPMENT

JOSEPH LUCAS LIMITED, BIRMINGHAM, ENGLAND.

301.13 m.p.h. for One Mile. 159.30 m.p.h. for One Hour

HISTORIC RECORDS ESTABLISHED BY SIR MALCOLM CAMPBELL AND G. E. T. EYSTON

Undoubtedly the most outstanding records of the year are those made at Bonneville Salt Flats, by Sir Malcolm Campbell on September 3 and by Capt. Eyston on September 6-18.

Sir Malcolm drove "Bluebird" over the measured mile at 304.33 m.p.h. in one direction, and returned down the course at 298.01 m.p.h., thus setting the World's Flying Mile Record at 301.13 m.p.h. More than that, Sir Malcolm is the first man in the world to exceed 300 m.p.h. on land, having attained at last the speed which has been his ambition since he first attacked the Land Speed Record with the old "V12" Sunbeam in 1924. It is understood that Sir Malcolm has now promised Lady Campbell that he will retire from this class of record-breaking, unless another country should produce a car that betters "Bluebird's" figure.

It is a tremendous tribute to Sir Malcolm's skill and experience and to the abilities of Reid Railton who designed the car, that this historic record was established almost without a hitch. On the faster run a tyre burst at 280 m.p.h., but Sir Malcolm contrived to maintain a steady course. After all tyres had been changed the return run was safely completed, and at first an error in estimating the actual speed made it seem that an average of 300 m.p.h. had just been missed. The error was soon corrected and the historic news released to the world—that a motor-car had covered a mile in 12 seconds!

"Bluebird" is now so well known that a full description is quite unnecessary. Built at Brooklands by Messrs. Thompson and Taylor Ltd., the giant car has a Schneider Trophy type, supercharged 12-cylinder Rolls-Royce engine developing 2,300 h.p. and the complete machine weighs over 4 tons. That it established the record on its first runs at Utah is a great tribute to all concerned. "Bluebird" was actually built in 1927, when it had a Napier engine. Since then it has undergone very extensive modification on a number of different occasions, and each time it has set up a new Land Speed figure, with one exception only, when the car established 5 mile and 5 kilo records at Verneuk Pan. It is, perhaps, significant that the present design retains rear-wheel drive and an open cock-pit. This time ingenious air-brakes assisted Campbell to check speed after the 300 m.p.h. sprint, and, as before, the venture would have been quite impossible without the special tyres supplied by Dunlops.

Always, after a record of this nature, there is someone who suggests that far too much is made of the achievement, in view of the proportionately much greater speeds attained by small-engined racing cars. The same thing invariably crops up in air-racing; indeed, has occurred just recently when Howard Hughes did 352.46 m.p.h. in a 1,000 h.p. landplane, against M. Delmotte's 343.30 m.p.h. in a similar type of aeroplane of only 380 h.p. The matter was very nicely summed-up by "The Aeroplane," which said: "If we were arguing about comparative efficiencies

... that would be a justifiable point to raise. But in talking about absolute speeds, regardless of conditions, the argument is useless and stupid." Exactly the same applies to the "Motor-car Speed Record" (as the lay-press term it), what it feels like to drive at over 300 m.p.h. only Sir Malcolm can know, but those of us who have felt unusually daring and "he-manish" after driving at a mere 100 m.p.h. would do well to try and imagine how we would have felt had the car accelerated to three times that speed!

Summing up, it is significant that Sqd.-Ldr. Orlebar, himself experienced in ultra-high-speed-travel, said in his book "Schneider Trophy" at a time when Sir Malcolm had reached only 250 m.p.h., that he fully appreciated the colossal task of controlling a machine travelling at this rate on the ground, and suggested that "Bluebird" must have been very nearly air-borne at that speed.

Turning to Eyston's records, one's greatest admiration is for the manner in which the front-drive, Rolls-Royce engined "Speed-of-the-Wind" was taken straight out to Utah, and, an experimental car running far from its "base," functioned perfectly at phenomenal speeds. The World's Hour Record has always been one of the most coveted, calling as it does for sustained running at speeds which could scarcely be held for one-mile only, ten years ago. To average 159.3 m.p.h. for an hour on a vast, salt lake course calls for immense fitness of both car and driver, and such an achievement deserves the highest admiration. Coveted as the "Hour" has always been, it was only a few years ago that it was raised to a speed beyond the capabilities of normal racing cars, indeed, it seems only a short time ago that Thomas astonished the motoring world by covering just over 110 miles in an hour on a Leyland-

Thomas. Now we have Eyston's figure of over 159 miles.

As we close for press we learn that Eyston, and his co-drivers, A. Denby and Chris Staniland, have broken the World's 24-Hour Record at 140.19 m.p.h., collecting numerous other records during the run.

Distance.	New Record.	Old Record
Kiloms.	m.p.h.	m.p.h.
50	158.52	144.12
100	161.13	148.49
200	159.18	151.46
2,000	144.15	143.51
3,000	144.08	138.79
4,000	142.15	133.89
5,000	140.434	135.07
Miles	m.p.h.	m.p.h.
10	167.09	164.08
50	160.38	147.16
100	159.59	150.72
2,000	142.70	138.53
3,000	140.75	134.78
Hrs.	m.p.h.	m.p.h.
1	159.30	152.15
12	143.97	139.84
24	140.52	135.47

The following equipment was used for these records:—

"Bluebird."

Engine—Rolls-Royce; Tyres—Dunlop; Fuel—Esso Ethyl special; Oil—Patent Castrol; Clutch lining—Ferodo; Brake linings—Ferodo; Shock absorbers—T. B. Andre; Steering—Burman; Steering damper and wheel—T.T.N. & Bluemel; Instruments, etc.—S. Smith & Sons; Brake servo—Clayton-Dewandre; Sparking plugs—K.L.G.; Gears—David Brown; Frame members—John Thompson; Finish—Belco; Radiators—Sereck; Axles and shafts—Hadfields steels; Springs—Woodhead; Glass—Triplex; Wheel discs—Cornercrofts; Cushions—Moseley; Magnetos—B.T.H.; Axle-gears—E.N.V.; Accumulators—Young.

"Speed of the Wind."

Engine—Rolls-Royce; Tyres—Dunlop; Fuel—B.P. Ethyl; Oil—Patent Castrol; Brake linings—Ferodo; Shock absorbers—Andre-Hartford; Steering—Adamant; Wheel—Dover Wheel; Instruments—Jaeger; Brakes—Lockheed brakes; Plugs—G.M.S.; Gears—Armstrong, Siddeley pre-selector box; Frame members—L. T. Delaney Ltd.; Radiator—Gallay; Axles—Miller-type drive shafts; Springs—Herbert Terry; Wheel discs—Ewarts; Cushions—Moseley; Magnetos—B.T.H.; Axle gears—E.N.V.; Accumulators—Lucas.

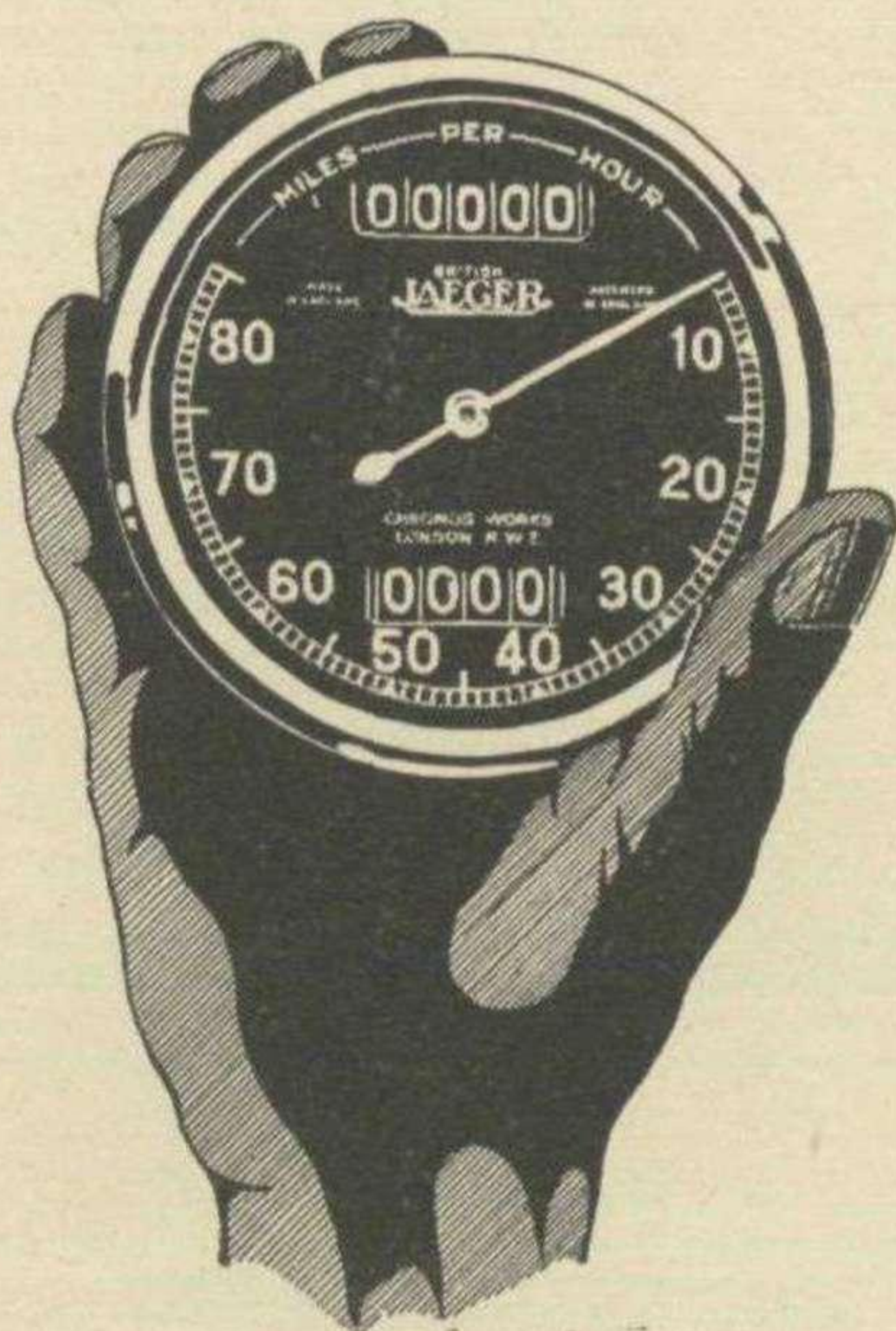


At Bonneville the timekeepers and their instruments occupy a lofty perch overlooking the course. Judging from the first announcements of the Campbell records, an adding machine was not included amongst their equipment.

BRITISH
JAEGER
INSTRUMENTS

STAND No. 252

NATIONAL HALL GALLERY



The 1st three cars in the 500 miles race were all fitted with Jaeger instruments

"Made like a Clock" in a works where tolerances of .0005 "are commonplace," there is never any doubt as to the Accuracy of a Jaeger Speedometer or Rev-Counter. Checked and tested with scrupulous care and correctly fitted, they are precision instruments in the real sense of the term. That is why the makers of the world's leading cars and the great racing motorists insist on Jaeger equipment.

Chronos Works, North Circular Road,
London, N.W.2

Tele. : Gladstone 1136.



WORLD RECORDS!
on

G.M.S PLUGS

' FIRING SURFACE '—NOT Firing Points

WORLD'S HOUR RECORD—

159.30 m.p.h. !!

ADDITIONAL WORLD'S RECORDS—

	m.p.h.
50 Kilometres	158.52
50 Miles... ..	160.38
100 Kilometres	161.13
100 Miles... ..	159.59
200 Kilometres	159.18

(Subject to official confirmation)

MEANT MAXIMUM POWER AND EFFICIENCY—

THE GREATEST TEST OF ALL

Short speed records are the greatest test. No time for easing up or 'nursing' the engine! Full throttle all the time—at peak horsepower from start to finish—a far greater test of plugs than much longer runs at 10-15 m.p.h. less speed. Naturally Capt. Eyston chose G.M.S. for all 'full-throttle' runs! They guarantee sustained maximum performance—the greatest test of all! Capt. Eyston wires :—"Secured World's hour record your G.M.S. plugs excellent."

G.M.S PLUGS

OLYMPIA MOTOR SHOW **STAND No. 275**

CRERAR MORGAN & CO. LTD.,

172, Buckingham Palace Road, London, S.W.1.

Telephone : Sloane 9218.

Telegrams : Rarerc, S.West, London

TESTING A THOROUGHbred

We find an Ulster Aston-Martin "as good as new" after five hundred miles of racing on the Ards circuit

The Ulster-model Aston-Martin is almost a unique type of car. It is one of the very few built and equipped for road-racing, with an engine guaranteed to propel it at 100 miles an hour, a streamlined two-seater body conforming to A.I. regulations, racing mudguards moving with the wheels and stayed to withstand the buffeting of 24-hour races, and lastly a reputation for sustained speed which makes it one of the most respected of British cars in foreign racing circles.

It has long been our ambition to drive one of these intriguing little cars, but as may be imagined, not a great number of them are produced, and no sooner is one built and run in than it finds its way into the hands of some fortunate private owner who employs it forthwith for fast touring or racing. Just after the Le Mans race, in which an Ulster model distinguished itself by winning the Rudge Cup, our importunities were rewarded; we could try a team car after the conclusion of the T.T. The latter event saw the team prize once again with the Feltham firm, so we set off for the works in high anticipation.

Very sleek and workmanlike the three cars looked, with their gauze screens folded flat on the scuttle, their enormous brakes and their outside exhaust systems, now fitted with Brooklands silencers and fishtails. The car we were allotted was the one driven at Ulster by Rose-Richards. It had been slower than the other two by reason of a piston fitted a short time before the race, but the Aston-Martin people considered that it should be fairly well run in after the five hundred miles of practising and the race itself.

The first thing which strikes the driver of the Ulster model is the care which has been given to obtain a perfect driving position. The steering wheel is well into the lap, the elbows rest lightly against the padded side of the body and the seat, the remote-control gear-lever is there on dropping the left hand a few inches below the wheel. The driver sits well down inside the body but can see both the wings, and the seat-back is curved and padded so as to afford ample support for the back and to prevent any swaying even on the most hectic of corners. A car which gives confidence from the start.

With Brooklands so near we could not resist the chance of trying the car's acceleration and maximum speed. Thirty-mile limits abound on the way there, but the car made no bones about trickling along at 1,500 r.p.m. on top gear if required, using the standard racing plugs, but as the mixture was purposely made rather rich for maximum acceleration from low speeds, as might have been expected, they tended to soot with prolonged idling. The gear ratios are very close, but just flicking the gears in at 2,000 r.p.m. gives a surge forward which promises a really stirring performance when the throttle is wide open.

The shock-absorbers were set at racing tension, but the suspension was more comfortable than that of a good many sports-cars sports-tourers. Altogether the car was as pleasant to

BRIEF SPECIFICATION

Engine : Four cylinders. Bore 69 mm., stroke capacity 1,495 c.c. R.A.C. rating 11.9 h.p. 80 m.p.h. at 5,250 r.p.m. Single overhead camshaft chain driven. Two S.U. carburetters. Magneto ignition.

Gearbox : Four speeds and reverse. Centre remote-control change. Ratios Standard 4.11, 5.22, 7.15 and 11.5 to 1.
Ulster 4.44, 5.63, 7.1 and 8.95 to 1.

Suspension : Semi-elliptic front and rear.

Brakes : Cable operated.

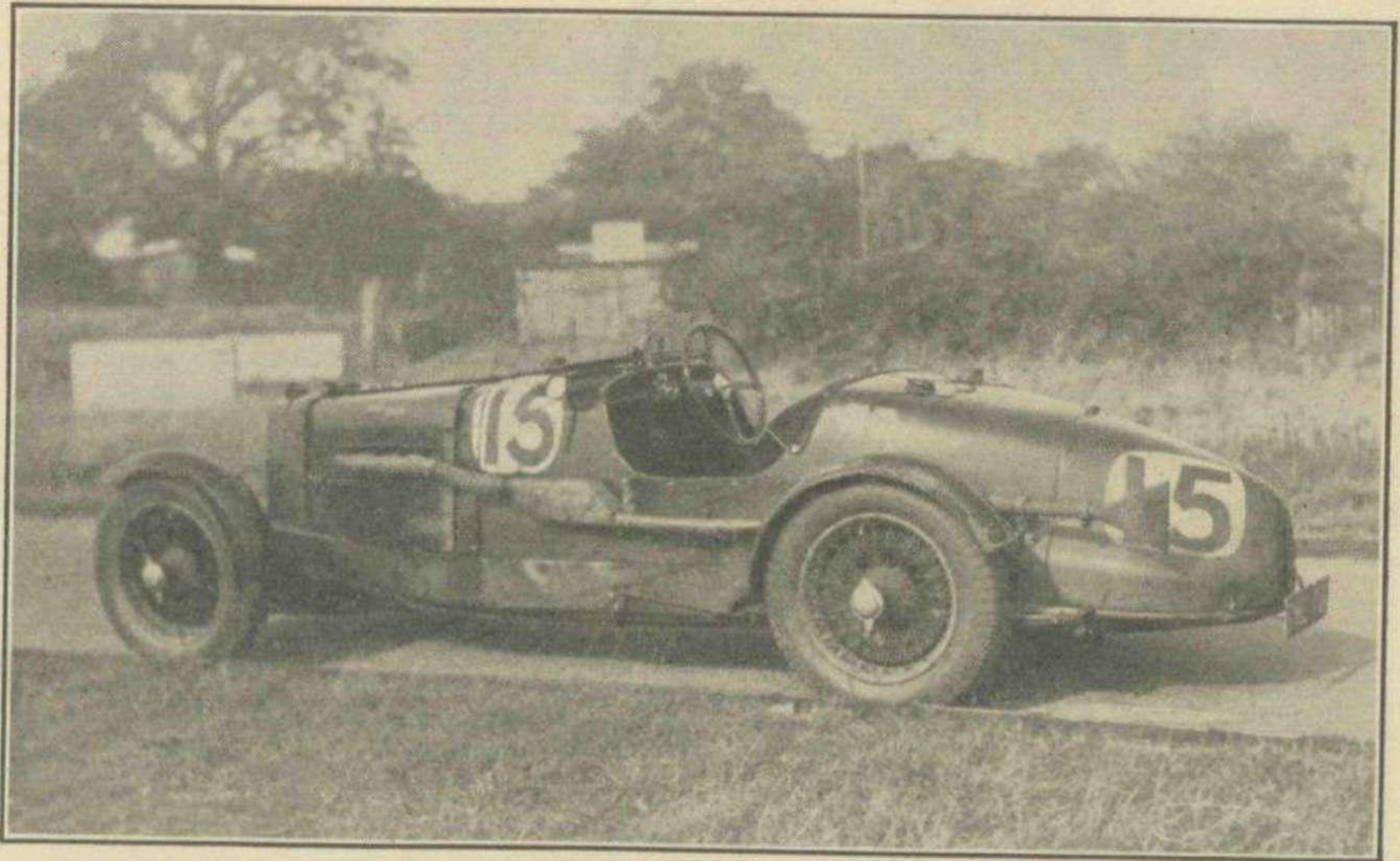
Dimensions : Wheelbase 8 ft. 7 ins.
Track 4 ft. 4 ins.
Weight 18 cwt.

Price : £750.

drive as the ordinary sports model, which goes to show that in one case at least the T.T. is developing the right type of car.

est speeds were actually attained was up the slope of the Home Banking, where the revs. rose to 5,300 r.p.m. and occasionally 5,500 or 105 m.p.h. Half a day at racing speeds had evidently not resulted in much loss of tune, and a subsequent test on a level bye-pass road showed a speed of 101 m.p.h., which is 5,300 r.p.m. on the back-axle ratio fitted.

The acceleration figures are interesting as a comparison, though they are obviously not quite so good as they would have been if the car had just been tuned, while the acceleration up to about 25 m.p.h. suffered owing to the high bottom gear fitted. On the other hand once on the move the car fairly rushes away, and the maxima on the indirects, 77, 61, and 49 m.p.h. at 5,000 r.p.m., are of the greatest value on winding roads. 5,500 can be



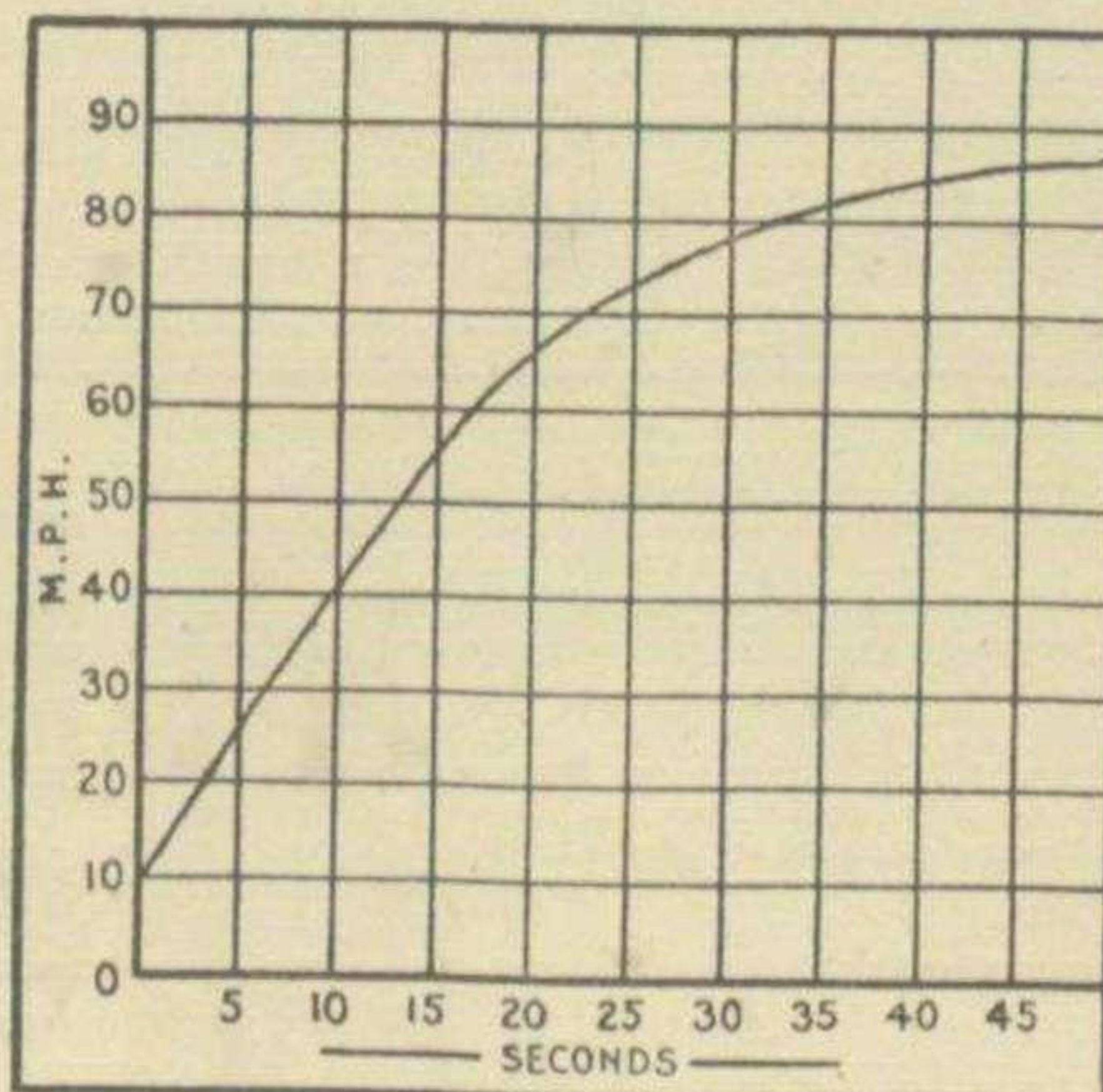
One of the team cars which ran in the T.T. The car road tested was similar in all respects.

Down at the track a strong wind was blowing on the Railway Straight, and prevented us from reaching speeds higher than 95 m.p.h., and the part where high-

used if required, but the power at low speeds makes it seldom necessary.

The brakes still worked perfectly though not adjusted since the beginning of the T.T. Using the long hand-lever in conjunction with the pedal, the car could be brought to rest in 59 ft. from 40 m.p.h. and with a little adjustment would probably have regained the exceptional figures of the standard car. Not too bad after 500 miles of road-racing.

Having settled these matters to our satisfaction, we set out to enjoy ourselves on the great open spaces of Salisbury Plain, and gaining the Basingstoke road, were soon humming over Hartford Bridge flats into the teeth of a strong southwest wind at a steady 80 m.p.h. The car runs surprisingly quietly in spite of only carrying Brooklands silencing equipment, and at 70 to 80 m.p.h., glides along like an aeroplane without the slightest effort on the driver's part, a snarl from the straight-bevel back axle being the only thing which reminds him that he is not driving a touring car in which comfort is the first consideration.



The acceleration chart of the Ulster Aston-Martin.

TESTING A THOROUGHBRED—continued.

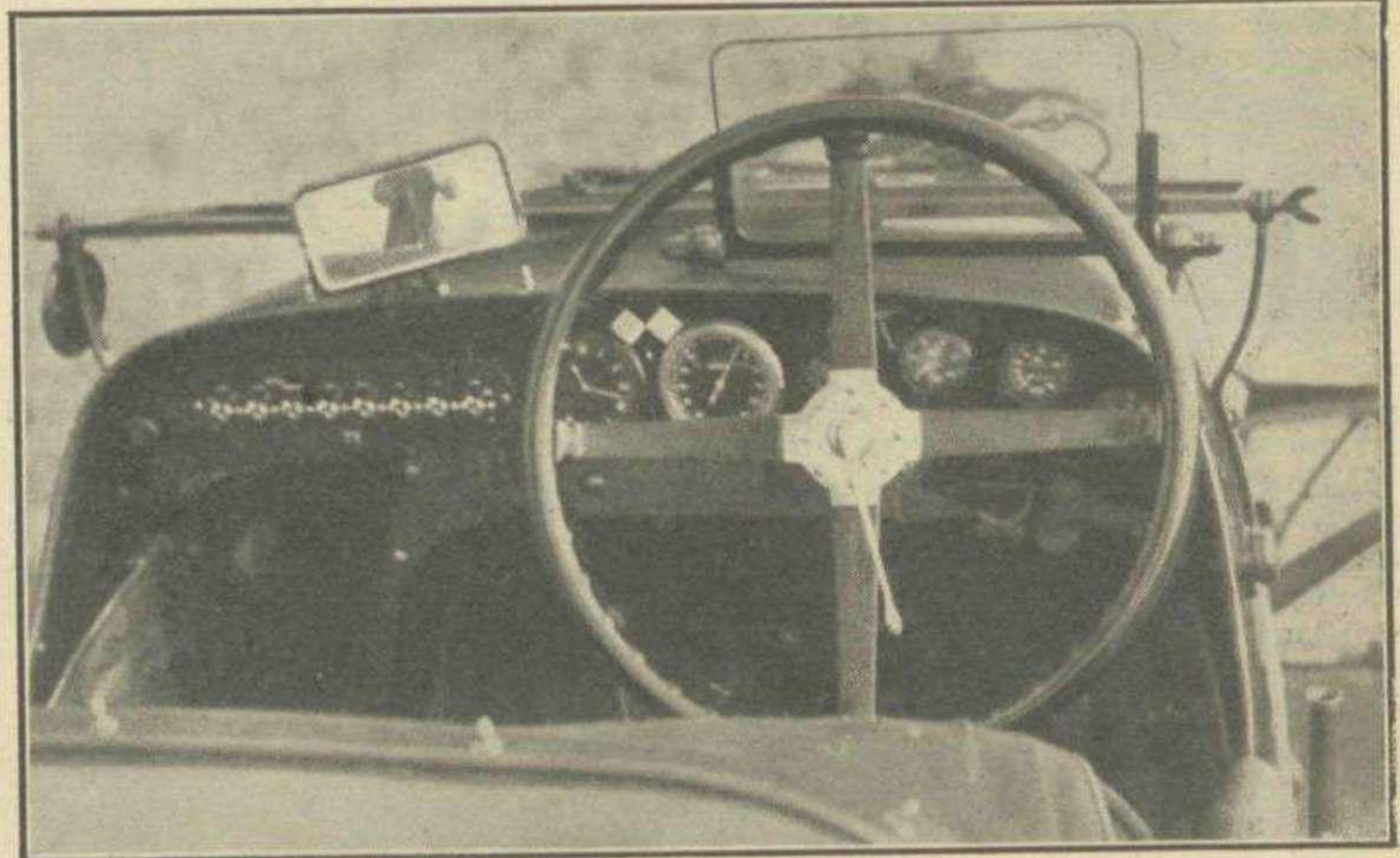
We had scarcely sampled the joys of the Aston when we had to slow down again, finding that on that day Hampshire as a county for fast motorists was definitely poor. First we found the roads were blocked with fallen trees, and then we encountered what must have been a large proportion of the mechanised units of the British Army, and after dropping rapidly down hill and nearly impinging on a five-ton tank answering to the name of Daisy, which was the forerunner of many others, we decided it would be wise to leave the neighbourhood.

A fast and satisfying cross-country run brought us to another test-route, 39 miles in length, which we covered without exceeding 80 m.p.h. in 39 minutes, and when one mentions that there are two small towns with 30 m.p.h. limits on the route, and that the Aston was painted red and still bore its racing numbers, which made it necessary to observe the law rather carefully, one obtains some idea of the capabilities of the car.

Returning over the same route next day after a rainstorm, and taking every precaution when the roads were wet and slippery 41 minutes was recorded, so little need be said about the Aston's capabilities on wet roads. The oil temperature never rose above 65 degrees, and had we not been bucking into a gale of wind which made it a little difficult to hold the car flat out, we should have had no hesitation in driving the car with foot on the floor-board for the entire distance. In spite of their small size the mudguards are quite effective, and the driver sits so well down in the car that a light rain-coat was ample protection from cold and wet. The sixteen-gallon petrol tank is carried in front of the rear axle, and so the balance of the car is not affected even with a full load of fuel.

As may be imagined, driving a car like "No. 18" is a really exhilarating

up to a corner, the foot caresses the brake pedal, a touch of the accelerator and the car is roaring away in third, picking up speed in an amazingly short time, or an equally swift drop into second can be made if the corner is a sharp one. The gear-change at low speeds is instantaneous and as fast as the lever can be moved when changing up at full revs. The short lever can be transferred from notch to notch with finger and thumb



A neat instrument board. On the left are the switches for the magneto, dynamo, lamps and electric pumps, then the clock and the rev counter. On the right are placed the oil and water thermometers and oil pressure gauge.

if one cares to do so, or gently dropped in with the hand round the large rubber knob.

Road-racing is the surest method of finding out weaknesses in steering-layout, and years of participation at home and abroad are reflected in the Aston-Martin's safety at speed.

The steering is light and perfectly smooth, yet there was no need to grip the wheel, and we actually ran for some

For all its high performance, the Ulster car still remains "sports" and not "racing"; the chassis is in fact identical with that of the Le Mans 2-4 seater model, and the engine differs only in respect of the higher compression, 9.5 to 1 in the case of the car under review, the special gear ratios fitted for use at Ulster and the fact that larger carburettors are fitted. On a mixture of 50 per cent. straight petrol and 50 per cent. benzol the engine runs without a tremor to over 5,000 r.p.m., while the ignition lever very seldom needs to be touched. Another good point, whether the car is intended for road use or racing, is that it starts readily whether hot or cold.

Five minutes of "running-up" at 1,500 r.p.m. suffices to get the oil running freely, while with the dry-sump system of lubrication there are none of those odd tanks, pipes and taps which make the cockpit of many competition cars look like the engine-room of a submarine. Separate switches are used for each of the lamps, the petrol pumps, one of which draws from a reserve supply of two gallons, the dynamo and the ignition, but these are neatly combined on a single panel. The oil pressure gauge and the water and oil thermometers are grouped under the driver's eye, and the latter instrument showed the lubricant as being normally at about 60 degrees, with only a slight rise in temperature however hard the car was driven.

The important side of the rev-counter showing the speeds from four to six thousand r.p.m. was obscured by one of the spokes of the steering wheel, but could have been brought into view by turning the instrument upside down.



How the spare wheel is carried on the Ulster models. In front of this are the accumulators with the 15 gallon tank behind the driver's seat.

experience. The surge of power as you run up in the gears to reach a cruising speed of 70 to 80 m.p.h. must be tried to be appreciated, and associated with this is the feeling of absolute control which the steering, the brakes and the low-slung chassis give to the driver. Coming

distance "hands off" on a smooth road at over 100 m.p.h. The car goes round corners without conscious effort, in the same way as a motor-cycle, and corners on which we previously thought ourselves fast at 70 m.p.h. could be negotiated safely at something like the ninety mark.

TESTING A THOROUGHBRED—continued.

The driving position as has been said could scarcely have been bettered. The pedals were well spaced and the accelerator was fitted with an organ-flap pedal which could be depressed with the heel while using the toe on the brake pedal.

The features of the engine and chassis are so well known that a brief resumé is all that is required here.

The 4-cylinder engine has the crankcase and the cylinder-block cast in one, and a detachable cylinder head with hemispherical combustion chambers. The valves are actuated by rockers from a single overhead camshaft chain driven from the front end of the engine. Each valve has three concentric springs and the rocker clearance is adjusted by rotating the fulcrums, which are eccentric.

Magneto ignition is used, and the two enormous S.U. carburetters are supplied by means of electric pumps from the 16-gallon tank. The petrol consumption works out at about 20 m.p.g., so the car is eminently suitable for long-distance touring or racing.

The dynamo is driven off the front end of the crankshaft. Headlamps are fitted as standard equipment, but had been removed for the Ulster race.

Dry-sump lubrication system is one of the great features of the Aston-Martin. Nearly three gallons of oil are contained in a tank fitted between the front dumb-irons and an external pressure pump forces a supply through an edge-type pressure to all moving parts, and another pump 50 per cent. bigger scavenges the oil from the base chamber and returns it to the tank.

The fully balanced Nitralloy crankshaft runs in three white metal main bearings, and plain bearings are also used for the big ends. The connecting rods are machined from duralumin die-stampings.

The power is transmitted from the engine through a single-plate clutch. The gear-box is mounted in unit with the engine, and as in the case of the Le Mans Mark II, straight pinions are used throughout. The open propeller shaft has two universal joints, and a spiral bevel back-axle is standard, but when special racing ratios are fitted, straight-tooth

pinions are usually used since they are cheaper to manufacture.

The chassis is unswept in front and underslung at the rear. The road springs are half-elliptic, with solid eyes and the front ones are stiffened by special clips and rebound leaves.

The front axle is particularly sturdy, with circular section ends where the breaking torque has to be resisted. Friction shock-absorbers are used on both axles and those in front are mounted transversely in order to increase the leverage.

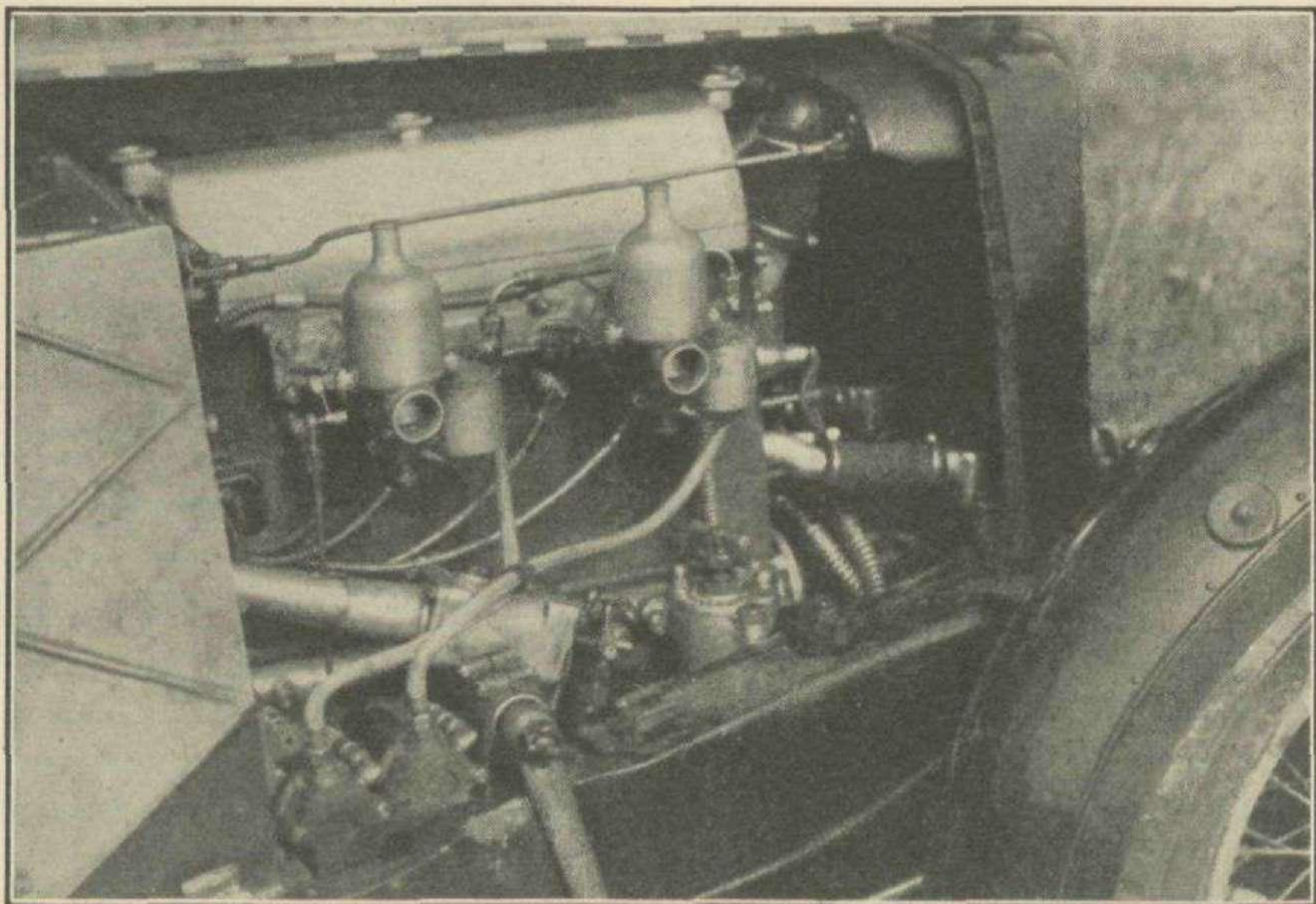
The brakes are of orthodox type, working in ribbed steel drums as large as that of the road wheels, and are actuated by means of enclosed cables. The simple wing-nut adjustment allows them to be taken up in a few seconds.

The streamlined two-seater racing body is panelled in aluminium and conforms with the International Regulations in respect of body width, mudguard size and

so forth. The mechanic's seat is set slightly behind that of the driver, so as to afford the latter full elbow room.

As may be imagined, on a car of this type luggage is not catered for. Behind the seats the 15-gallon petrol tank with its two large fillers is carried, and behind that again a hinged casing which encloses the batteries and the spare wheel, which is carried in a flat position. The paneling is extremely well carried out and the "Ulster" is as handsome in appearance as it is striking on the road.

It was with the greatest regret that we returned "No. 18" to Feltham. After going about the country in a variety of cars in which sporting performance is more or less subordinated to weather protection and other mundane considerations it is a great joy to take the wheel once again of a car which exists only to satisfy the owner's desire for speed and hard driving. Long may such cars continue to be built.



Except for larger carburetters and a higher compression the engine of the Ulster Aston-Martin is identical with the ordinary Le Mans 2-4 seater.

THE AUSTIN MOTOR CLUB

The "Cavendish Cup" Trial will be held on Oct. 5th, starting and finishing at the Burford Bridge Hotel, and covering a 25-mile course involving time checks, observed hills, an acceleration test, and a brake-test. Driving tests will be arranged between tea and supper, to be taken at The Burford Bridge Hotel. Details from the Hon. Sec., H. E. Cavendish, 72, Park Hill, London, S.W.4.

B.A.R.C.

The last Brooklands Meeting of 1935 will start at 2 p.m. on Oct. 19th. Mountain races will figure prominently, but a few outer-circuit handicaps will also be contested. The big race of the afternoon will be The Mountain Championship, which in 1934 was won by Whitney Straight's Maserati. Admission will be 3s. 6d., children 2s., and cars may be parked from 2s. 6d. Several new cars are expected to make an initial appearance, including Capt. Shipwright's 130 m.p.h. Ballot-Shipwright Special; J.

Lemon-Burton's 3.1 litre supercharged Grand Prix Bugatti, and R. J. Munday's 2.7-litre Diesel-engined Thomas Special. Visitors to The Motor Show will find this meeting a pleasant change from Olympian crowds.

THE ZOLLER-BLOWN TROSSI

Count Trossi's astounding new racing car, which has a radial engine at the front of the chassis, has been most carefully designed, and is expected to give a good account of itself when properly tuned-up. The unusual form of engine is supercharged with two M.160-type Zoller compressors, which give a swept-volume of 25,000 litres per minute when running at maximum speed. On this basis the engine may be expected to develop considerably more than 300 b.h.p. The compressors were supplied by Messrs. M. A. McEvoy, Ltd., of Derby.

INTERNATIONAL CALENDAR

The Royal Automobile Club announces that the following dates have been allot-

ted by the International Sporting Commission to the various countries concerned for the principal International Races in 1936:—

Monaco.	Grand Prix de Monaco	April 13.
United States of America.	Indianapolis	500 miles May 30.
France.	French Grand Prix,	June 28.
Belgium.	Belgian Grand Prix,	July 12.
Germany.	German Grand Prix,	July 26.
Switzerland.	Swiss Grand Prix,	Aug. 23.
Gt. Britain.	Tourist Trophy Race,	Sept. 5.
Italy.	Italian Grand Prix,	September 13.
Spain.	Spanish Grand Prix,	September 27.

In addition the following priority International dates were agreed for 1936:—

South Africa.	South African Grand Prix,	January 1.
Sweden.	Winter Grand Prix,	Feb. 23.
Hungary.	Hungarian Grand Prix,	May 10.
Brazil.	Rio Grand Prix,	June 7.
Irish Free State.	To be nominated	Aug. 3.
Czecho-Slovakia.	Grand Prix Masaryk,	May 17 or October 4.
Rumania.	Feleac Speed Event,	October 4.

THE CAVE BRAKE CONTROL

Someone once suggested that if the steam engine had been invented after the i.c. engine, we should all be driving steam cars to-day. Be that as it may, one certainly feels that, if the Cave brake control had been available when makers of motor-cars first thought of standardising controls, we might well find something very humorous now about a car with three control-pedals.

Most of us, when we have given the matter any thought, have agreed that to have to remove one's foot from accelerator to brake-pedal before being able to stop the car, is a decidedly crude method of operation. And most motorists know that the car travels many feet in the minute space of time needed to change over from the "loud" to the "soft" pedal. It was primarily to obviate this crudity of control that Mr. E. H. Cavendish, of Lee and Cavendish, Ltd., experimented with a combined brake and accelerator-pedal. Having evolved a satisfactory system, Mr. Cavendish tested his ideas over a very big mileage, and the control proved so efficient and foolproof that it has been placed on the market under the name of the Cave Control. Briefly, it comprises a large brake-pedal in the normal position, through a slot in which protrudes a short rod. The throttle is controlled by resting one's foot lightly on the brake-

pedal, then swinging it sideways to move the projecting-rod over to the left-hand-side of the slot.

Thus the foot remains in a most restful position and very sensitive throttle-control is available, while the brakes can be instantly brought into operation without displacing one's foot. Furthermore, if a sudden stop is necessary, one has merely to stand on the pedal, and, even if there is no time to allow the throttle-rod to return to the slow-speed position in the slot, the engine is brought to idling speed automatically as the brakes go on. To proceed, the foot is lifted from the brake, whereupon the engine returns to the former speed (or runs at any throttle-opening allowed by the position of the foot) and instantly everything is ready for re-engagement of the clutch.

The mechanism is simple and robust, and the cost varies from £3 to £5 according to the type of car. Those drivers who somehow manage to change down as they enter a corner, by working the accelerator with the right-heel, while stamping on the brake-pedal with the toe, will be interested to learn that for an additional £2 a special "competition" control is available, which allows such an action to be made in a very much more simple manner. The sole manufacturers of his useful control are Lee and Caven-

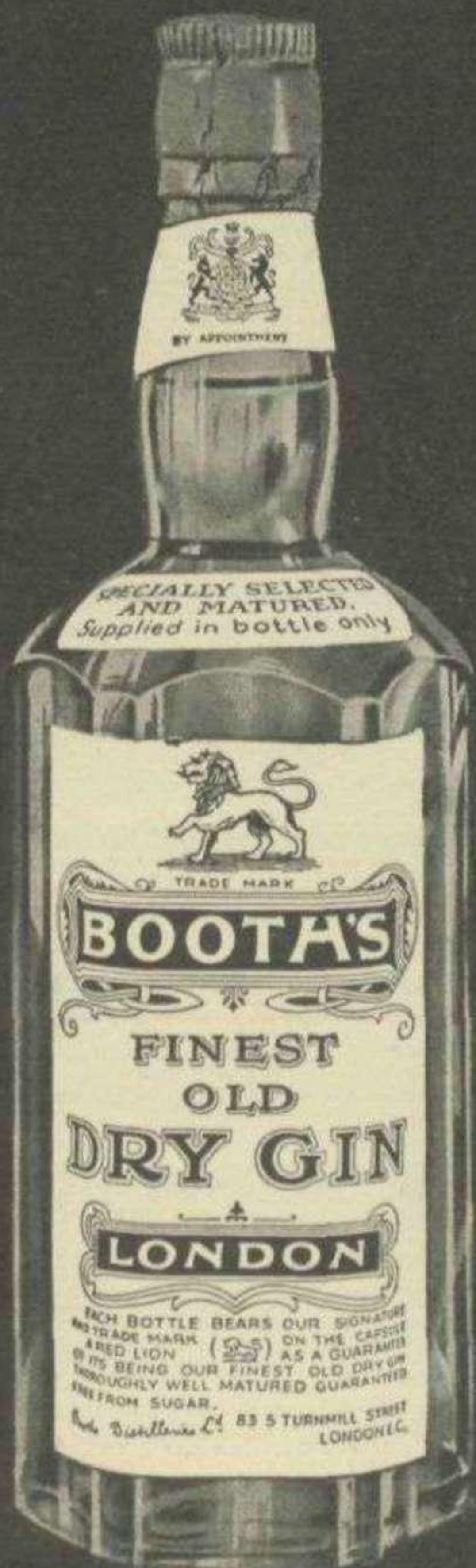
dish, Ltd., 72, Park Hill, London, S.W.4. Mr. Cavendish demonstrated his invention on an Austin Sixteen sports saloon, this being the original set, which has stood up perfectly to thousands of miles of fast main-road work, and which has been used in numerous trials and rallies, etc. It was very noticeable how much more use could be made of the car's performance than would have been possible with normal, triple-pedal control. Corners could be taken fast in perfect safety, by "blipping" the brake-pedal to obtain exact control of the speed, and our clean traffic-driving must have astonished many experienced motorists.

A considerable reduction in fatigue on long runs and a saving of fuel by reason of steady throttle-action are additional advantages of the Cave Control. Even the passengers are happy in the knowledge that the driver cannot cause an accident through "pressing the wrong-pedal at the wrong time"!

**HAVE YOU A USED SPORTS
CAR FOR SALE?**

If so let **MOTOR SPORT** sell
it for you at the small rate of
1/- PER LINE.

See page 569



BY APPOINTMENT

BOOTH'S

THE ONLY *Matured* DRY GIN

1740-1935

THROUGH THREE CENTURIES
HAS REIGNED SUPREME



DISTILLED BY BOOTH'S - MATURED BY TIME

SCRATCH CAR WINS THE 500 MILE RACE

JOHN COBB AND T. E. ROSE-RICHARDS BRING THROUGH THE NAPIER-RAILTON AT 121.28 M.P.H. LORD HOWE AND BRIAN LEWIS (3.3-LITRE BUGATTI) THIRD, ONLY 8 SECONDS BEHIND VON DER BECKE AND E. McCLURE (2-LITRE RILEY). INCESSANT TYRE TROUBLE CAUSED BY BAD SURFACE AND HIGH SPEEDS THE ORDER OF THE DAY

The Five Hundred Miles race always seems something of a gamble, with the dice usually loaded against the big cars. A shower of rain, for instance, or of late years the very speed that the limit runners have been expected to average has taken its toll of the Bentleys, Cobb's big cars and the other heavy metal which has taken part. This year an entirely new factor crept in, the unexpected tyre wear of the smaller cars caused by a damaged track and also, no doubt, by the drivers' endeavours to keep low on the banking so as to give a clear passage to the heavyweights, and for the first time in five years the biggest and fastest car in the race succeeded in running into first place.

Of the 41 entries seven came from abroad, but Hertzberger's M.G. Magnette, the Alfas of Chinetti and Raph, and Rovere on the Maserati failed to materialise. Mrs. Stewart had brought over her famous record-breaking Derby and also the road-racing 1½-litre car which was to have been driven by Mrs. Wisdom, but this one was scratched owing to damage to the timing gears. A famous car which did appear was the two-litre Hotchkiss with which Eyston and Denly recently took six long-distance records at Montlhéry, including 500 miles at 112.9 m.p.h., and which was fitted with a very cunning off-set single-seater body. It ran quite well in the race, but the veteran Divo, who had come over from France to drive it complained that he had not had sufficient time to prepare it properly.

Lord Howe was another driver of a foreign car who suffered in the same way; his Bugatti arrived at about six in the evening of the day before the race! The factory had had a sudden brainwave and instead of sending over the unsupercharged car which ran in the T.T., as had originally been arranged, they removed the blower and block from a Grand Prix "3.3" and put in its place a sports "3.3" block with a single carburetter.

The rest of the entry comprised cars well known at Brooklands, such as Cobb's Napier-Railton, fresh from its record-breaking in America, Wolff Barnato's Hassan Special with an eight-litre Bentley engine and Marker's 6½-litre. The Street and Duller Duesenburg had already been seen last year when Whitney Straight tried to beat the Brooklands lap record, and later attempted the Hour Record at Montlhéry.

No 500 Miles Race would have been complete without teams of Rileys entered by Freddy Dixon and the works, while Munday brought back an old-stager in the shape of the Thomas Special. Major Gardner's single-seater Magnette, formerly owned by Horton was the fastest amongst the 1,100 c.c. cars, while Denis Evans had entered a team of R-type M.G. Midgets just to challenge the big fellows.

The cars were sent off in groups according to capacity, the blown 750's and the unblown 1,100 c.c. cars being

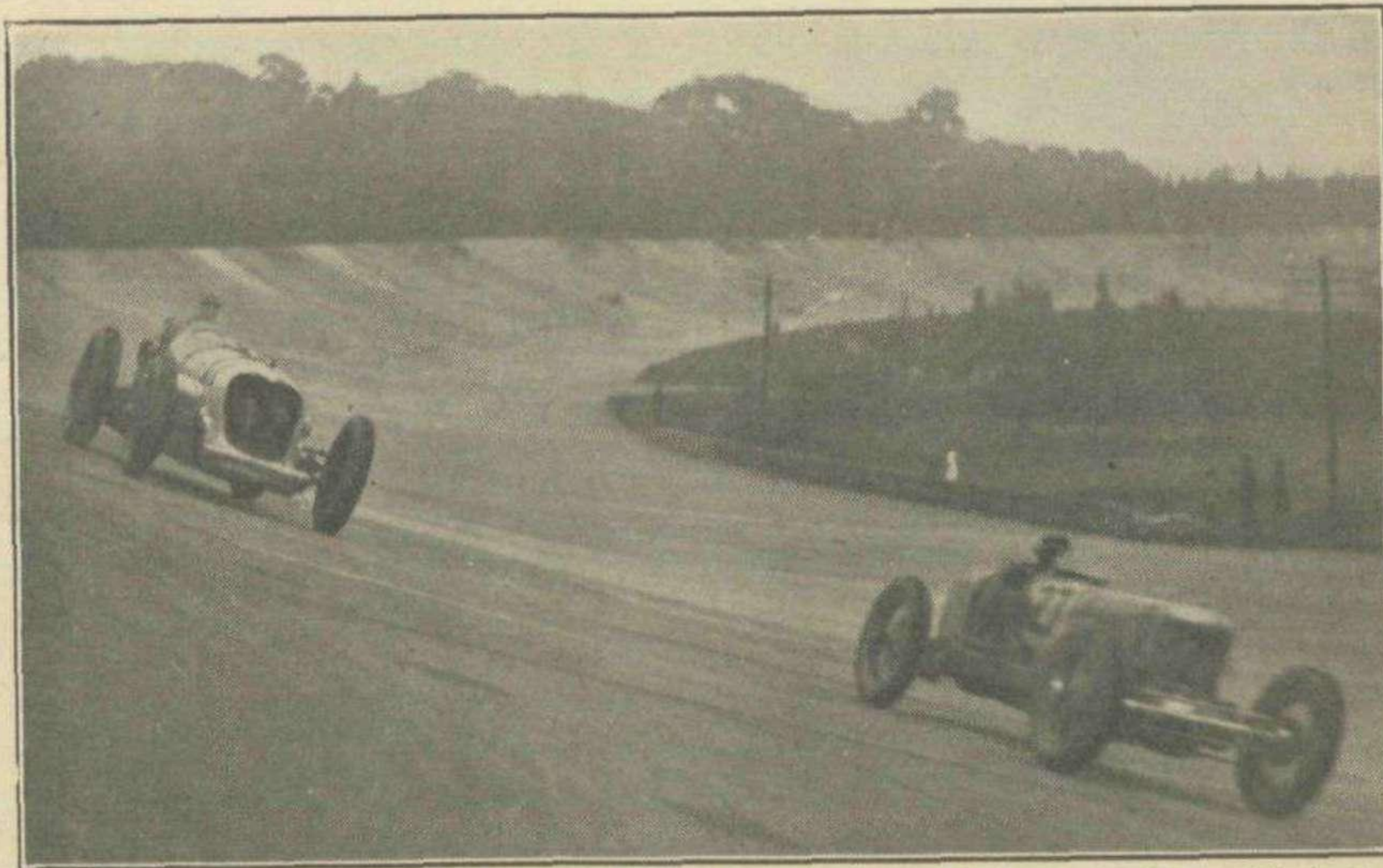
the first to toe the line, and it says something for the efficiency of the modern baby car that they were expected to average no less than 111.9 m.p.h. for the 500 miles, being given a start of 24 minutes from John Cobb's Napier-Railton on scratch. A shower of rain which fell just then gave some anxiety to the drivers of faster cars who would find their advantage lost on a flooded track, but the threat soon passed, and for the remainder of the day there was nothing worse than dull skies and an oppressive heat.

The small cars got away without incident led by Miss Doreen Evans, who started off lapping at 107 m.p.h. The

usual position near the top of the banking. The time-keepers then had the unenviable task of deciding who was leading on handicap, and at 12.30 the order was found to be:—

	Speed	Position on handicap
Bertram (7,963 c.c. Barnato-Hassan)	121.25	+7s.
Cobb (23,688 c.c. Napier-Railton)	122.22	+3s.
Everitt (1,087 M.G. Magnettes)	113.74	-9s.
Howe (3,255 c.c. Bugatti)	115.15	-25s.

Apart from these the leading cars in their classes were Gibson (2.3-litre Alfa-Romeo), Dixon (1986 c.c. Riley) "Tim Davies" (Frazer-Nash) and Miss Evans (M.G. Midget).



Mrs. Stewart on the Derby being overtaken by the Napier-Railton. Cobb usually kept well down on the Home Banking so as to avoid the worst of the "Bump."

first pit stop came three minutes later, when Billy Cotton, who as a dance band leader was given more advance publicity than Cobb, Bertram or Dixon, brought in his Riley firing on three cylinders. Mitchell-Thomson (Frazer-Nash) was in with a broken oil-filter joint and several cars were already calling at the pits for plugs. Eight minutes after he started Fairfield was in with one of the works two-litre Rileys to change a front tyre and within the first half-hour Paul Dixon and McClure had made calls for the same purpose. The Billy Cotton Riley, incidentally, played its last tune at 12.22 and was retired with a burst exhaust manifold.

McClure's tyre-burst happened on the home banking and was particularly disturbing to watch. First the tread pulled off and pieces a foot long shot into the air as high as the top of the banking, and then the inner tube disintegrated and sections rolled about like giant macaroni at the beginning of the Railway Straight. Quite evidently both the pits and the tyre people were going to have a busy day.

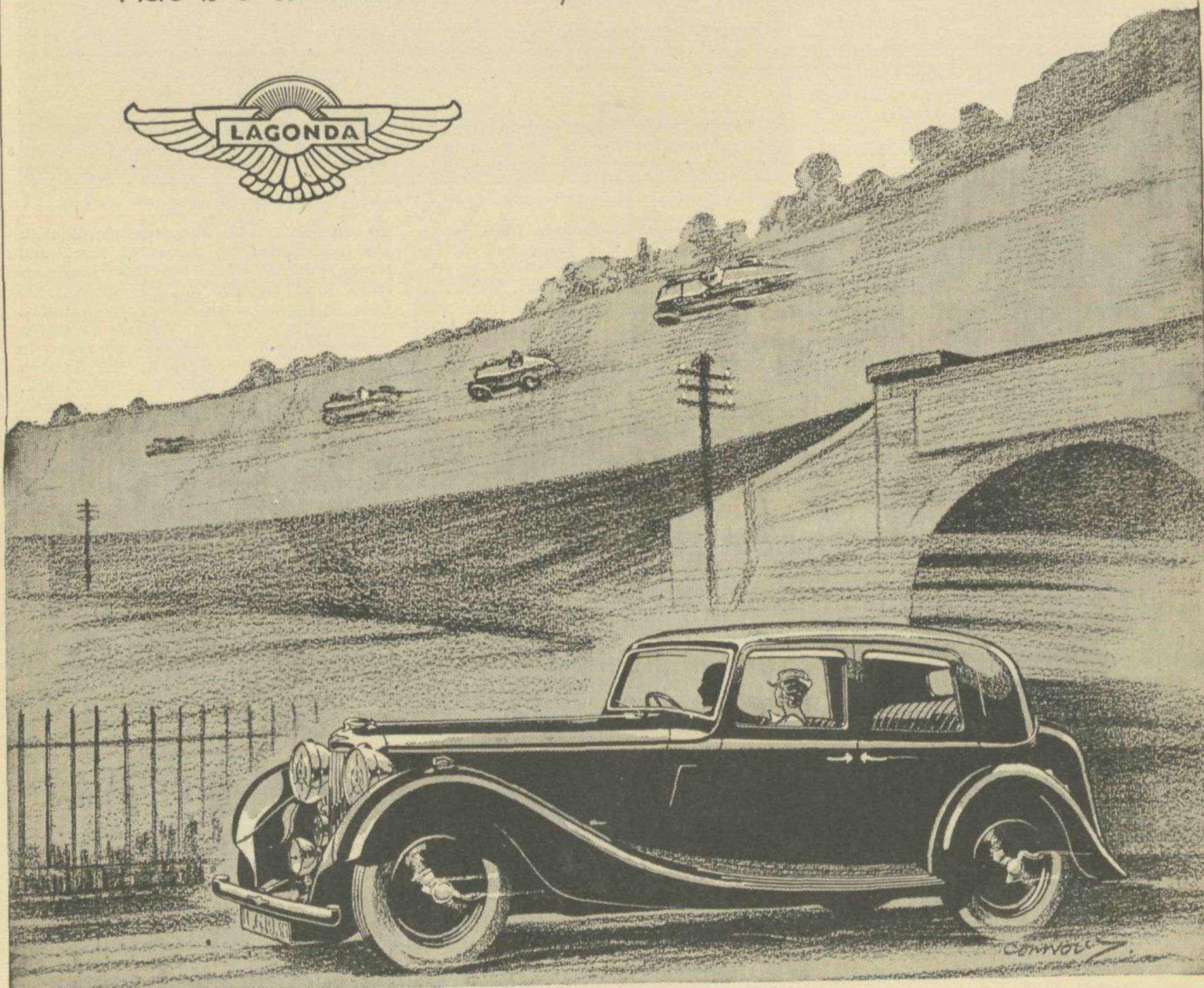
At 12.24 John Cobb rumbled off with the Napier-Railton and was soon in his

Bertram was handling the Hassan in fine style, and in response to signals from his pits was lapping at ever-increasing speed, his average an hour after the start working out at 126.57 m.p.h. The breaker strip was beginning to show on one of the tyres, however, and just after one o'clock he stopped and changed three of them. This brought Cobb, whose speed was 125.9 m.p.h., into the lead. Everitt lost two minutes with the usual tyre change, and Lord Howe moved into third place, and Mrs. Stewart whose lightly-built Derby seemed to escape the prevailing malady was fourth at 114.1 m.p.h.

Dixon's usually prolific supply of horses had again made him favourite for the race, but increasing his speed from 120 m.p.h. to close on 130 merely resulted in bringing him twice into the pits to change tyres in half an hour instead of once. His team mate Paul made one stop, likewise Fairfield and McClure on the works cars. So prevalent did this tyre changing become, in fact, that an official bulletin was issued on the subject and accounted for the numerous failures

MOTORISTS AND LAGONDA

A stronger organisation with Mr. W. O. Bentley as technical Director will introduce for 1936 a new 4½-litre Lagonda which will particularly appeal to knowledgeable motorists requiring a car possessing the rare and very attractive qualities peculiar to a high calibre British car. Here is a car which in recent years the market has so sadly lacked.



L. G. MOTORS [STAINES] LIMITED, MIDDLESEX, ENGLAND.

Telephone: Staines 1122 (4 lines)

THE 500 MILE RACE—continued.

by the fact that the tyres had been under-inflated in anticipation of a wet track. No doubt this was something to do with it, but another factor was that part of the Home Banking had started to crumble away with the pounding it received from the heavy cars, leaving deep sharp ruts whose effect on thin track tyres were plain to see.

The "Five Hundred" was living up to its reputation as a car-breaker. Dobbs was in at the pits with his single-seater Riley with the cylinder head off, counting the pistons, and was apparently dissatisfied with what he saw and retired. Briault was having continued trouble with his M.G. Midget, first changing plugs and then transferring his attention to the carburetter, and Miss Evans changed plugs for the seventh time. "Tim Davies" was another plug-changer and retired at 1.10 with a broken timing chain, while Parnell gave up with strange noises coming from his timing wheels. Connell withdrew the Vale in less than an hour with a cracked cylinder head, while the Thomas Special, driven by Munday, averaged 90 m.p.h. for half an hour and went out with engine trouble.

Amongst the bigger cars, Dudley Froy's 4.9 litre Bugatti was delayed with a broken petrol pipe, while Marker, whose Bentley had been lapping at just under 120 m.p.h., came in to have the oil pressure raised.

Then the Derby was seen to slow down and Mrs. Stewart pulled in. Work proceeded on the front end of the car for some time, then the trouble was traced to the gear-box. Twenty minutes was lost on this stop, which put the Derby definitely out of the first flight. Mrs. Petre, who was driving Dr. Benjafield's 2.6 litre Alfa-Romeo was at the pits with

From all this it might be thought that there were no fast cars still running, but this was far from being the case. At 1.30 Cobb was in the lead with a speed of 126.89 m.p.h., Bertram was just under two minutes behind on handicap with a speed of 122 m.p.h., and Lord Howe a

Hassan so that he was actually lapping at over 130 m.p.h., while Cobb maintained 127, a figure which was also put up by Seaman on the Duesenburg, though the latter did not look to be having a very comfortable ride.

Cobb was the first of the leading men



All hands to the pumps when Major Gardner's M.G. Magnette came into the pits.

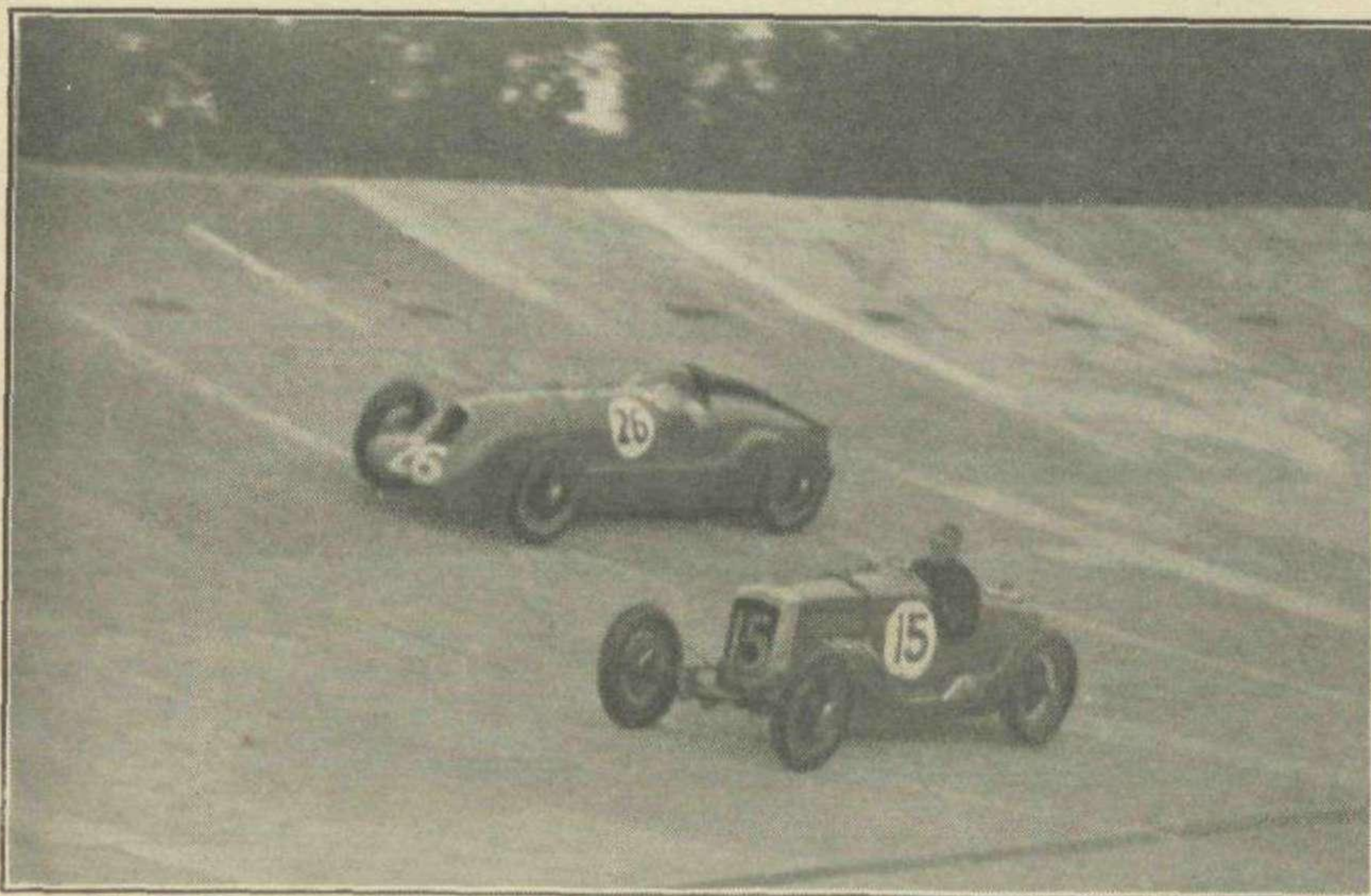
steady third at 118.6 m.p.h. Paul on a Dixon-tuned 1,808 c.c. Riley had so far triumphed over the tyre-problem by the sheer speed of the car and lay fourth.

The Hamilton-Gibson Alfa-Romeo still led the 3-litres, Fontes on the Squire was, according to the scoreboard, first in the 1,500 c.c. class, though by this time it had retired with a split petrol

to come in. The 50-gallon petrol tank was replenished by means of hoses and rotary pumps, while the four enormous tyres were changed at the same time. This operation took over ten minutes, and despite a stop by Bertram of eleven minutes, much of which was spent in inspecting the petrol tank, the Hassan led Cobb by ten seconds at 2 o'clock. No sooner were the figures announced, however, than the Hassan was back at the pits, to join the other unfortunates in the dead car park with a split petrol tank. Hard luck indeed.

Shortly before Bertram's misfortune Seaman had felt vibration from the tail-cum-petrol-tank of the Duesenburg and stopped to investigate. In this case it was a tank-stay which had snapped, bringing about the retirement of one of the fastest cars left in the race. Froy's 4.9-litre Bugatti, which had never got moving according to plan, was also retired at this stage with "lack of power," and yet another failure was the officially-entered Riley driven by Fairfield and Pat McClure, owing to lack of oil pressure. Except for the Napier-Railton, the only car over 5 litres still running was Marker's Bentley, which was now lapping at about 110 m.p.h.

One of the few cars which had so far given no trouble was the 3.3-litre Bugatti driven by Lord Howe and Brian Lewis, and which was now lying second behind Cobb, with a speed of 118.4 m.p.h. At 2.15 Howe swung into the pits for refuelling, and the car was at once pounced on by Thomas and other mechanics, swung up in a flash on to the racing jacks, four wheels changed and 20 gallons of fuel taken aboard. As the wheels touched the ground Lewis was in the driving seat and the car was away

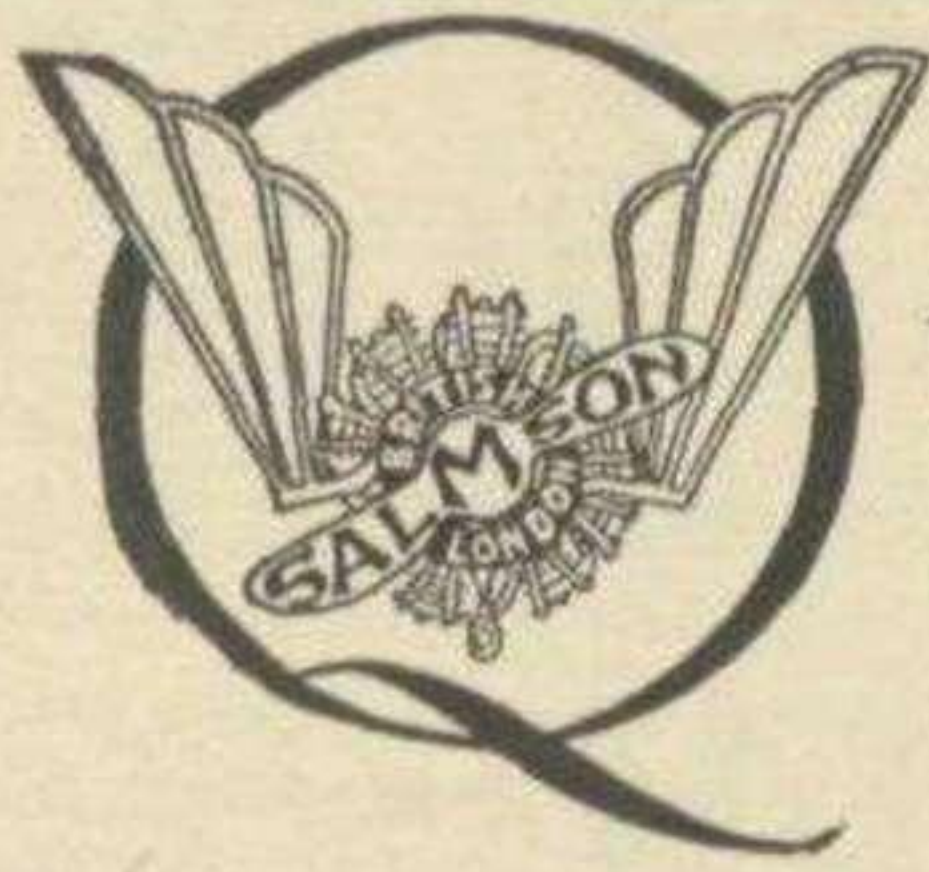


A French record-breaker at Brooklands. Divo (No. 26) in the streamlined Hotchkiss and the Hon. P. Mitchell-Thomson (Frazer-Nash).

plug trouble. The third of the ladies who was driving, Miss Evans, retired with valve trouble, while Denis Evans and T. H. Wisdom the other members of the Evans' team made constant and unsuccessful visits to their depot.

tank, Everitt was keeping the single-seater Magnette moving at about 112 m.p.h., while Wisdom and Alan Phipps were leading the enfeebled "750's."

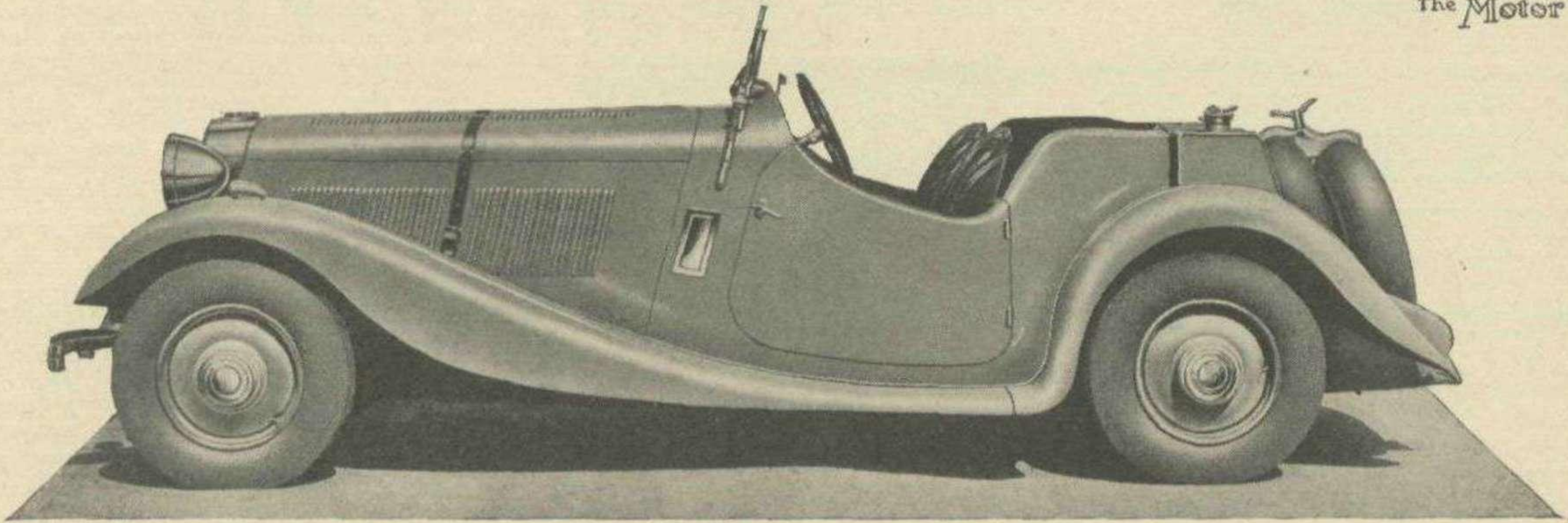
In anticipation of his pit-stop, Bertram whipped up the horses of the Barnato-



QUALITY

"A standard of quality unusual in the manufacture of Cars."

The Motor



A New BRITISH SALMSON

with the simplest and most effective
Independent Front Wheel Suspension

SPEED — 90 MILES PER HOUR

1936 SERIES	12 H.P. 4-CYL. CLOSE-COUPLED SALOON (70 miles per hour)	- - -	£395
	12 H.P. 4-CYL. FULL-LENGTH SALOON (70 miles per hour)	- - -	£395
	12 H.P. 4-CYL. FOUR-SEATER DROP-HEAD COUPE (70 miles per hour)	- - -	£395
	12 H.P. 4-CYL. FOUR-SEATER TOURER (70 miles per hour)	- - -	£365
	12 H.P. 4-CYL. TWO-SEATER TOURER (80 miles per hour)	- - -	£395
	20.8 H.P. 6-CYL. TWO-SEATER SPORTS (90 miles per hour)	- - -	£645

See Stand No. 76 at the Motor Show

DISTRIBUTORS—London: Shrimptons Motors Ltd., 47, Buckingham Palace Road, S.W.1. Sussex: Sussex Motors Ltd., Hove. Hampshire and Dorsetshire: Auto Service Garage, R. L. Stevenson Avenue, Bournemouth. Kent: Boundary Garage, Sevenoaks Road, Orpington. Warwickshire, Worcestershire and Staffordshire: Henry Garner Ltd., 25, Hill Street, Birmingham. Nottinghamshire: Brownlow Motors (Nottingham) Ltd., 145/9, Wollaton Street, Nottingham. Scotland: Pollok Motors Ltd., 38, Melville Street, Pollokshields, Glasgow, S.1.

BRITISH SALMSON AERO ENGINES LTD., RAYNES PK., LONDON, S.W.20

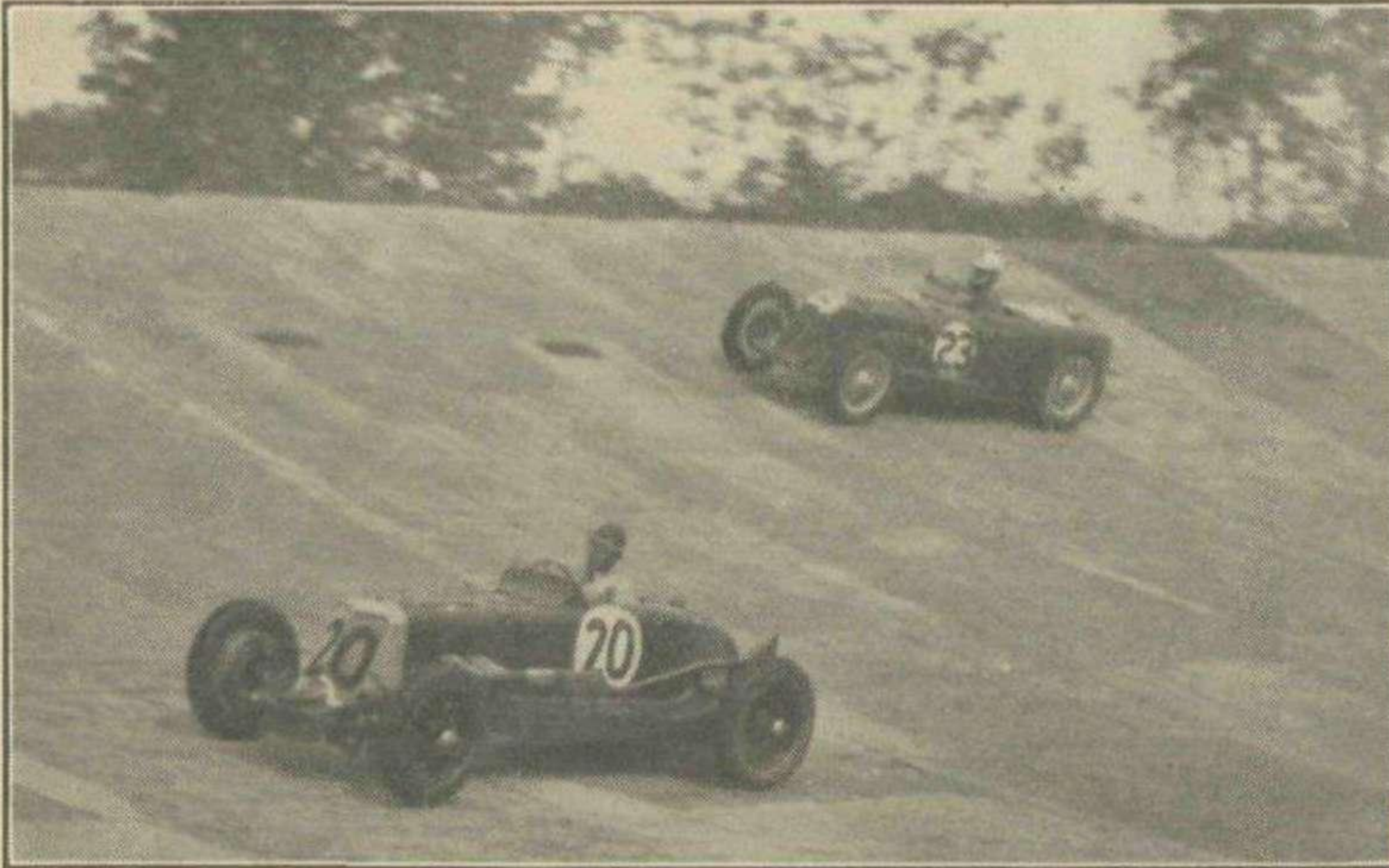
THE 500 MILE RACE—continued.

again in 1 min. 40 secs., one of the smartest performances in the race.

Rose-Richards had been at the wheel of the Napier-Railton since the last pit-stop, and had made such progress in spite of the damaged track that his position seemed unassailable.

Marker's Bentley came in misfiring and he lost seven minutes changing plugs, lubricating the water pump chain, and filling up with water. Dr. Benjafield spent a quarter of an hour pushing the 2.6 Alfa up and down in front of the pits and finally had to give up with a damaged

causing the carburetter to flood and soot the plugs. Lewis had only seen the car for the first time the night before, and had not had a chance to discover how to release the pressure, and the delay occasioned by changing the plugs caused them to drop back to a position two minutes behind McClure and von der Becke. Cyril Paul meanwhile had lost five minutes at the pits changing plugs and re-filling with oil, and another 1½ minutes later on, and a newcomer appeared on the board, the Alfa-Romeo driven by Hamilton and Gibson.



The Riley driven by Fairfield and P. Maclure was amazingly fast, but the drivers experienced constant tyre trouble. Here is Fairfield overtaking Fontes (Squire) who retired with a burst petrol tank.

The order at 2.30 was as follows:—

	Speed	Position on Handicap
Cobb-Rose-Richards (23,688 c.c. Napier-Railton)	124.51	+3m. 12s.
Howe-Lewis (3,255 c.c. Bugatti)	116.29	—4s.
Paul (1,808 c.c. Riley)	111.42	—5m. 27s.
E. McClure (1,986 c.c. Riley)	111.94	—5h. 32s.

Hamilton and Gibson still led the three litre class, Vickers (2.3-litre Bugatti) was still going, though much delayed when the undershield came adrift, and Dunham and Oats had averaged 104 m.p.h. on their Speed Twenty Alvis, which was fitted with a light two-seater body. Mitchell-Thomson was the sole survivor of the 1½-litre class, while Everitt and Major Gardner still led the 1,100 class.

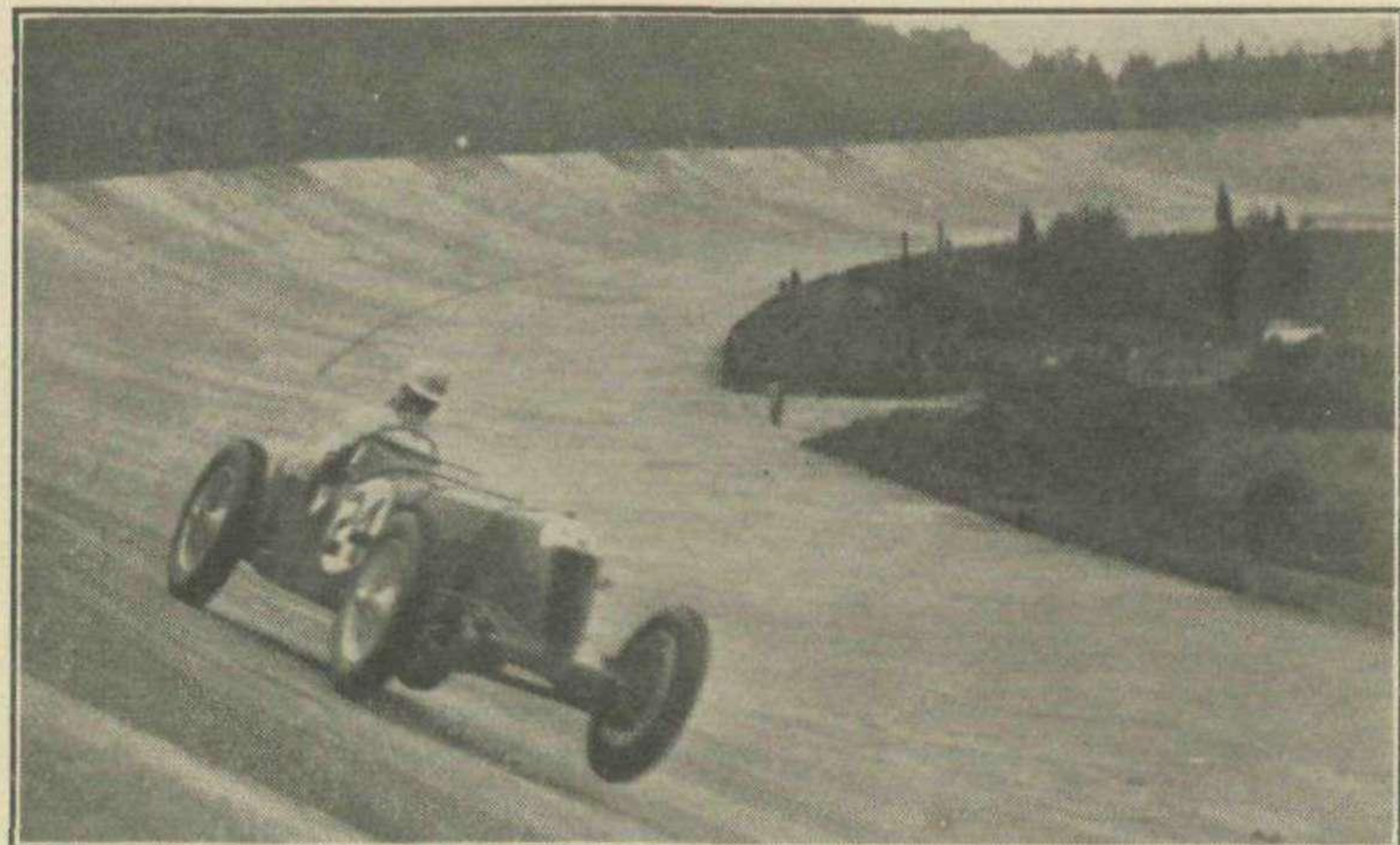
There was a mild sensation when Lewis made two brief stops at the pits, but the car got away again with quite a healthy sound. McClure had lost his place to Paul as a result of a pit-stop, when he handed over to von der Becke, and Rose-Richards brought in the scratch car once more and relinquished the wheel to John Cobb.

The exploits of the 2-litre Rileys had rather overshadowed the Hotchkiss which was in about the same time. Divo was at the wheel, and had been having what looked a comfortable run lapping steadily at 110 m.p.h. Now he stopped for petrol and water but did not have to change his tyres and was off again in one minute. For some reason the Rileys no longer destroyed their front tyres, but transferred their attentions to the back ones, Dixon and von der Becke coming in within the next half-hour.

Denis Evans and Briault withdrew their R-type Midgets almost simultaneously after three hours running, in one case with one cylinder not functioning, and in the other held up by fuel starva-

tion. Marker's Bentley came in misfiring and he lost seven minutes changing plugs, lubricating the water pump chain, and filling up with water. Dr. Benjafield spent a quarter of an hour pushing the 2.6 Alfa up and down in front of the pits and finally had to give up with a damaged

gasket, while Mrs. Stewart's Derby fell by the wayside with a broken piston. There were so many pit-stops among the first dozen cars that it was difficult to follow the order, but at three o'clock Cobb, who was averaging 122.75 m.p.h. was 4½ minutes ahead of Lewis on the Bugatti, Everitt had made a startling move into third place, though a badly organised pit-stop just after this must



Edgar McClure (2-litre Riley) hitting the Bump. He finished second, just 8 seconds ahead of Lord Howe on the Bugatti.

have lost him considerable ground. Paul on the Dixon-Riley dropped back to fourth place.

Then there was a renewal of the mysterious misfiring on the Bugatti, and four precious minutes were lost in changing the plugs and diagnosing the fault. What had happened was that the petrol pressure had started to mount,

Order at 3.30 p.m.

	Speed	Position on Handicap
Cobb-Rose-Richards (23,688 c.c. Napier-Railton)	121.49	+3s.
McClure-von der Becke (1,986 c.c. Riley)	111.94	—6m. 46s.
Howe-Lewis (3,255 c.c. Bugatti)	113.31	—8m. 39s.
Hamilton-Gibson (2,336 c.c. Alfa-Romeo S.)	112.17	—10m. 33s.

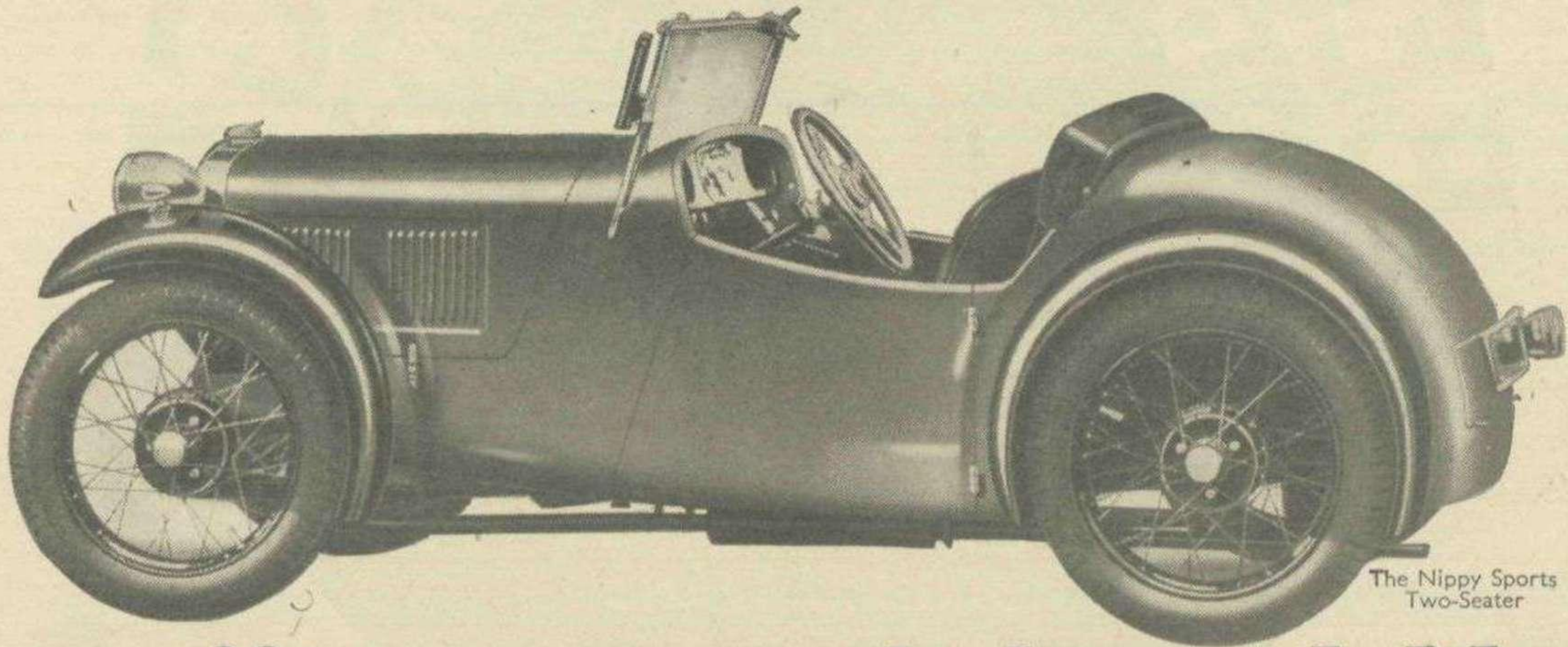
With another hour to go Cobb pulled in for a final tyre change. During the last few laps he had received a nasty cut on the cheek from a lump of concrete thrown up by a car he was overtaking and was glad to hand over to Rose-Richards. The stop only took 1½ minutes which was creditable considering the weight of the immense tyres, and Tim set off again keeping quite low on the banking to polish off the fifty-odd laps that remained. The car was nothing like extended now, and barring accidents it was a certain winner.

Most of the cars which were due to give trouble had long since been cleared away, but Oats began a spot of last-minute bother with the cooling system of the Alvis. Rayson, who had so far had a trouble-free run on Dixon's 1,100 c.c. Riley came in first for fuel and then for a plug and finally for a general investiga-

tion which lasted nearly twenty minutes the trouble being apparently a choked filter. Brackenbury who had taken Paul's place and was driving without goggles in an open-necked shirt, was still going strong, even more so Handley, who was relaying Dixon. Driving as is his wont with foot hard down, he succeeded in

(Continued on page 560)

THE SPORTSMAN'S INVESTMENT

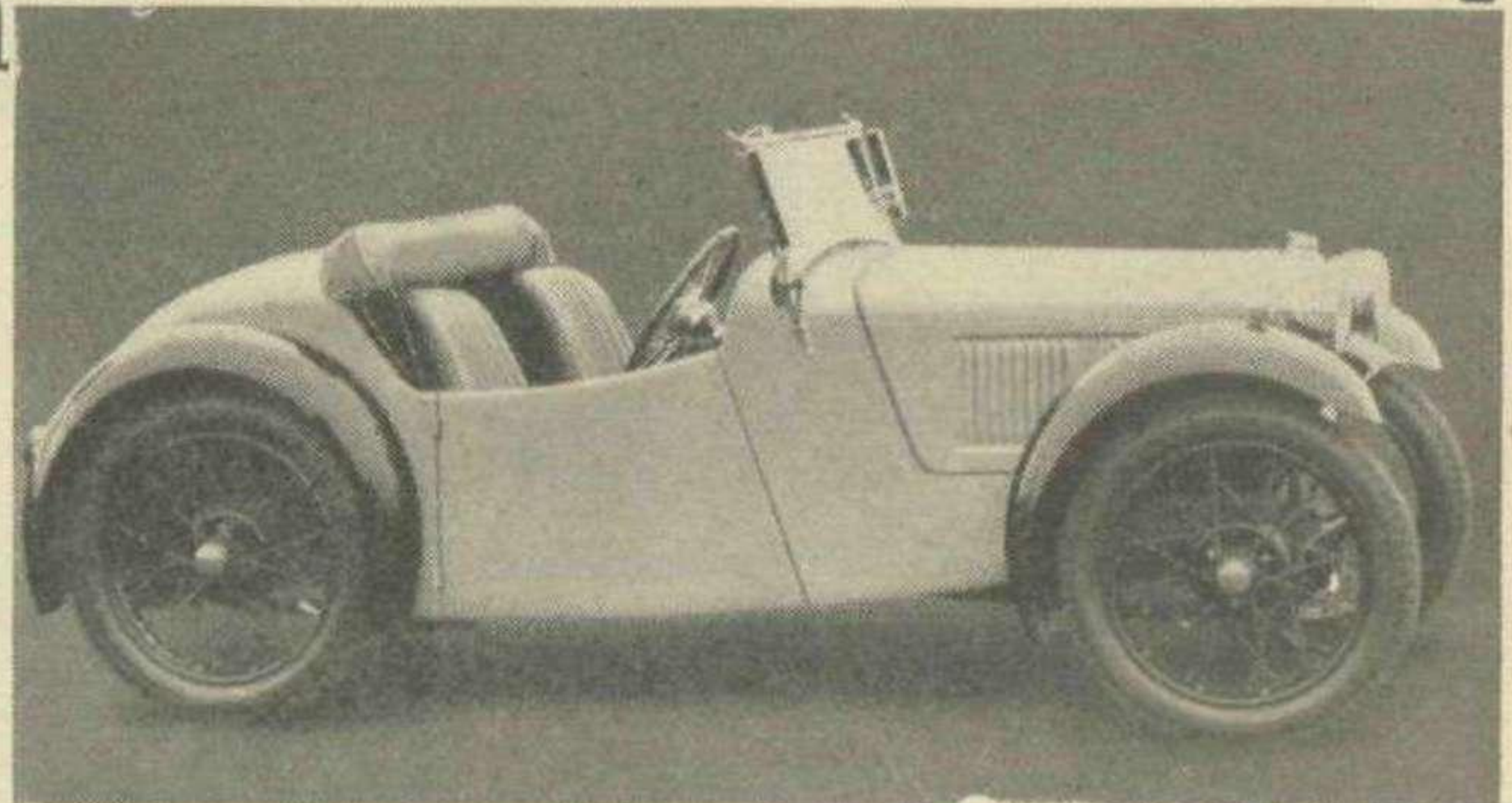


The Nippy Sports
Two-Seater

**swift as a record, dependable
as an Austin**

Austin Sports models have two great advantages. They have behind them all the experience which has won the Austin its successes on the race-track—and that other fund of experience which has made it 'Britain's Dependable Car' on the road. They are speedy and lively in acceleration and at the same time they possess great stability and road-holding properties. Note the first-grade materials and workmanship, also how thoroughly practical these Sports cars are in every detail. Your dealer will arrange a test without obligation.

NIPPY SPORTS TWO-SEATER: 7.8 h.p. developing 21 b.h.p. at 4,400 r.p.m. Special features include: high-compression engine with down-draught carburation: high-lift camshaft and special valves: bound road springs, spring arm steering wheel, sports front axle, etc. Gear ratios: 5.6, 8.38, 13.3 and 21.9 to 1. Price, at works, £142.



The Nippy Sports Two-Seater

RIPLEY SPORTS TOURER: A 10—4 four-seater developing 30 b.h.p. at 3,800 r.p.m. A smart and 'racy' car with all the special features of the Nippy and others besides. Price, at works, £215.

KEMPTON SPORTS SALOON: A striking and elegant car with a fine roomy interior and many refinements in equipment. Price, at works, 15.9 h.p., £305: 13.9 h.p., £295.

You buy a car —

but you invest in an

AUSTIN



TUNING

Every mechanic on our staff has had long experience in the tuning of cars for reliability trials, track and road racing. Our long list of racing successes fully endorses their abilities in this important phase of motoring activity.

SALES

Come to terms with us. You can buy any make of car through us and we will allow you an ample sum for your present car! You will be well satisfied with our service and delighted by the latest models which we can demonstrate. We guarantee the earliest delivery!

1936 RACING

Have you settled your plans for next season? Now is the time to make all arrangements. We have a number of racing cars for sale, including one or two of the latest M.G. independently sprung and Ulster T.T. models, and can no doubt suit your requirements.

Write us for full particulars.



agents

**18 & 19 BELLEVUE ROAD
WANDSWORTH COMMON, S.W.17.
TELEPHONE BATTERSEA 0479.**

Austin
agents

RECORDS GO HIGHER IN MANX GRAND PRIX RACES

FRITH (NORTON) WINS THE JUNIOR EVENT. THRILLING STRUGGLE BETWEEN FRITH AND SWANSTON IN THE SENIOR ENDS IN VICTORY FOR THE LATTER

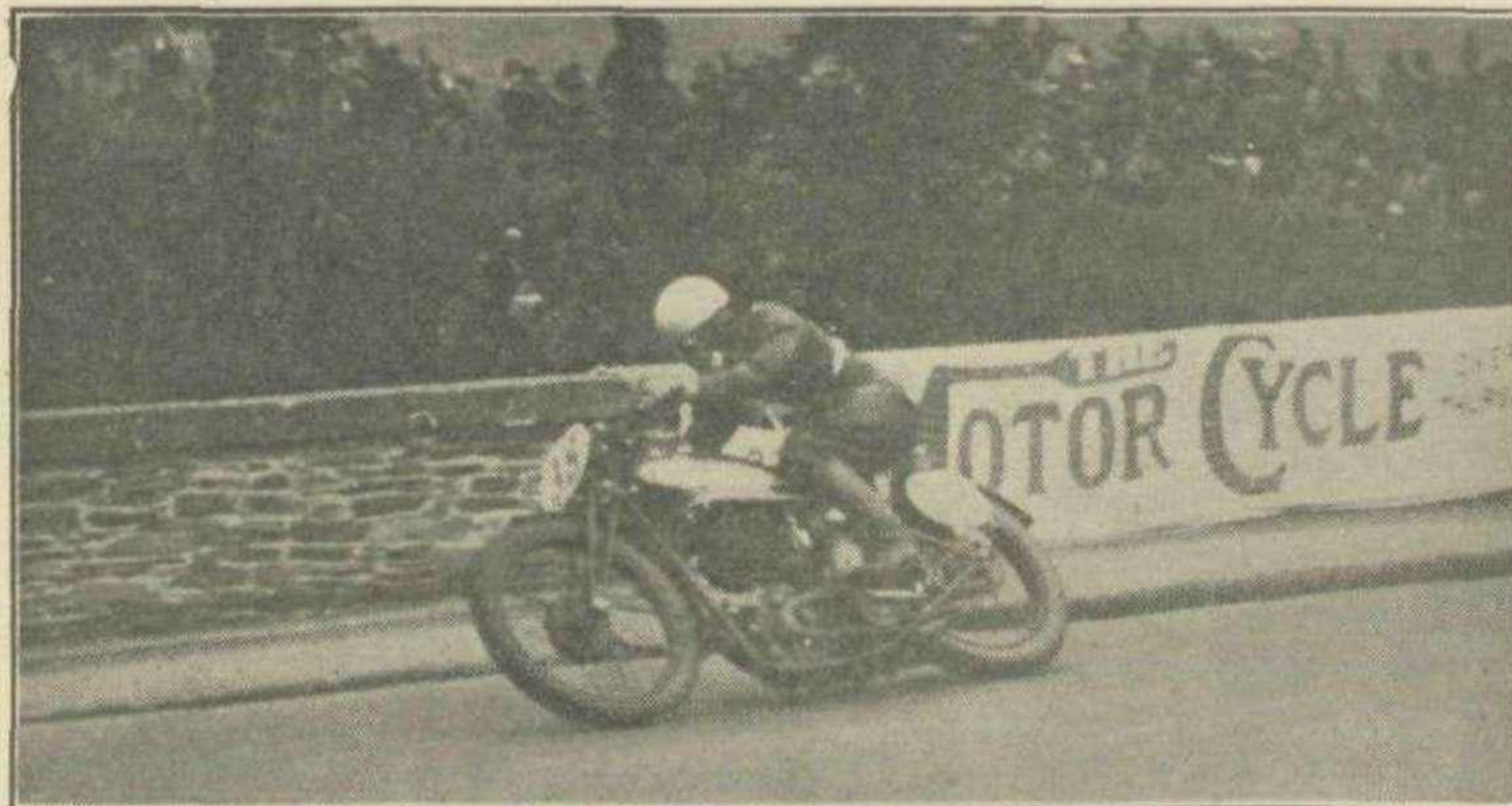
THE JUNIOR RACE

In spite of the fact that one third of the riders in this year's "Puzza T.T." were recruited from last year's Grand Prix races and were no longer eligible to compete in the "amateur," no less than fifty-four machines lined up on the starting grid for the Junior Grand Prix race. Actually twenty-four of them were competing in the light-weight section, which now has a trophy of its own, but the events are run simultaneously in each case over six laps of the 37½ mile course.

Nortons and Velocettes formed the bulk of the Junior entry, with a Rudge and a brace of A.J.S.'s, and the first-named make were confidently tipped as winners. The light-weights were the first to be sent off, and reports of showers from parts of the course made it necessary to keep a keen look-out for treacherous patches.

There is rarely much of interest on the first circuit, but retirements start early, the first one to drop out being Parkinson (Excelsior) with broken valve springs. The star performers, Frith, Swanston, Darbishire, and the Manx rider Rowell, of whom much was expected, were well on their way, but Munks, winner of the race in 1933, was less fortunate; he crashed at Greeba Bridge only 6 miles from the start and damaged his machine so severely that he was unable to continue.

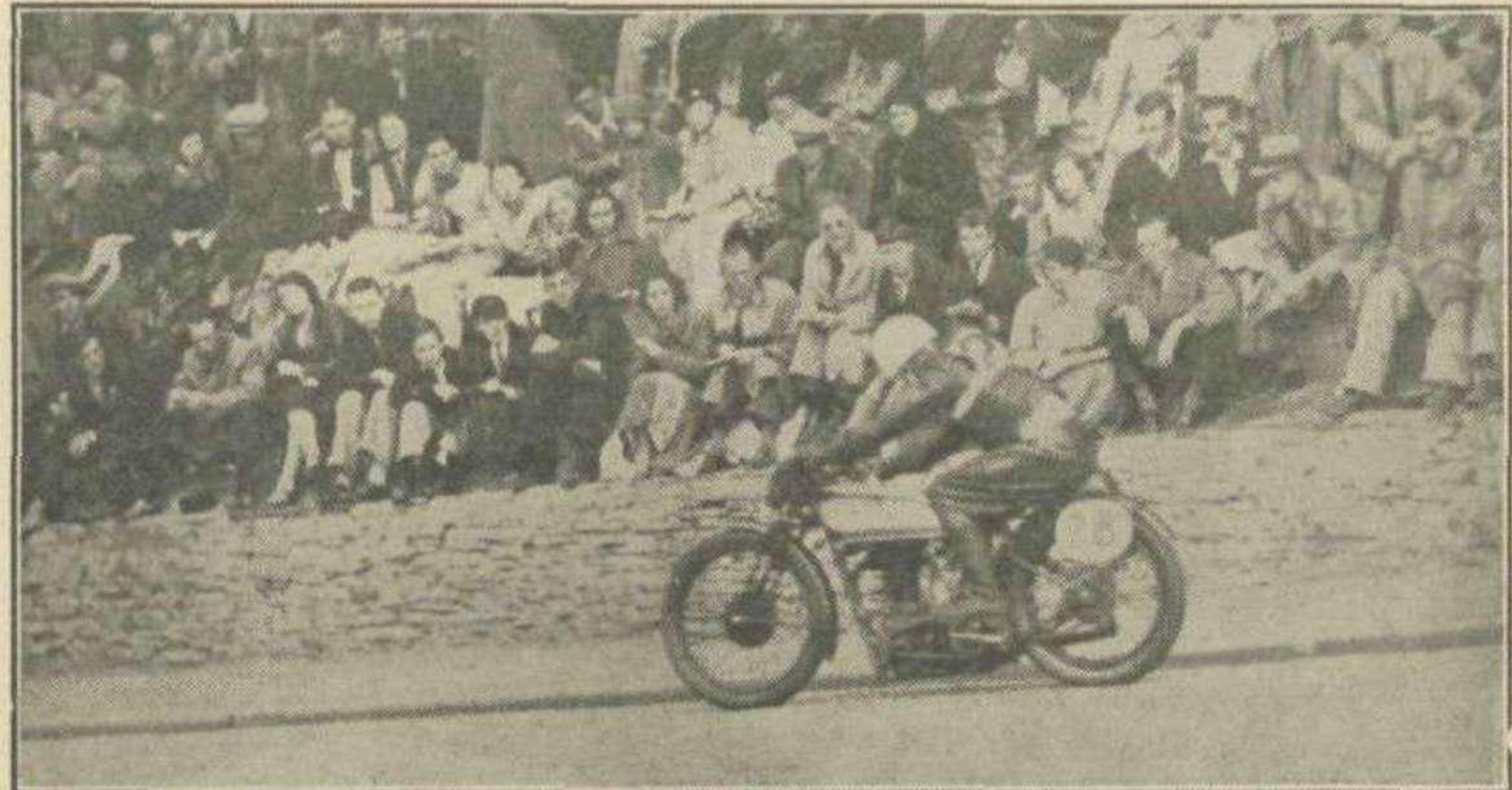
F. L. Frith, a Norton rider who has had less than his share of luck in the past, recorded a first lap of 30 minutes 11 seconds (75.02 m.p.h.) which sufficed to put him into first place, while Swanston and Blyth were half a minute slower. Darbishire, another Norton expert, was



F. L. Frith well banked over at Quarter Bridge. He won the Junior Race and was second in the Senior.

fourth, and then came Rowell (31.8) who was keeping the Velocette flag flying. R. Harris (New Imperial), winner of last year's light-weight event, headed the lists of the small machines with a speed of 66.87 m.p.h., and was followed by H. M. Rowell (Rudge), brother of the Velocette enthusiast in the Junior.

Dry roads were reported by the time the second lap had begun, and the riders were really getting down to it. Harris, who was No. 14, continued to show winning form, and flashed through the start flat on the tank to record 32 minutes 46 seconds (69.11 m.p.h.), which was a record. Good cornering was reported from all points, especially



All eyes on the winner of the Senior, J. K. Swanston, who has just negotiated Governor's hairpin.

from Creg-na-baa, where six riders arrived simultaneously on the right-angle but all got round without baulking.

Frith, whose bike was said to have figured in the T.T. not so long before, continued to lead the Juniors, but Swanston had been overhauled by both Darbishire, the only member of the Cambridge U.A.C. competing this year, and Blyth. McEwan, another Norton rider, had forced Rowell down to sixth, but

prising that a few spills should occur, Boardman (Norton) coming off at Sulby Bridge without damage to himself, while Chamberlain (Norton) had an awkward skid at Creg-na-baa and Taylor (Velocette) a near thing at the tricky Bungalow corner, but most of the indicator clocks still steadily moved from point to point. On the third lap Frith maintained his lead, building up his speed to 75.59 m.p.h., the order of the other five on the leader board also remaining unchanged. Darbishire made a short stop at his pit, but it was only to adjust a brake.

Except for a pair of minor tumbles, Bills (Velocette), who came off at Ramsey but proceeded, and Collison (A.J.S.), who wobbled off at the Bottom of Bray and decided not to go on, the loud-speakers had little to say. Harris, however, continued his record-breaking and knocked ten seconds off his previous time, reminding one that there were still machines other than Nortons competing in the race. Frith who was now a minute and a half ahead of Darbishire in the lead eased down a little, while Durno had moved up to second place in the light-weight category.

there was still only 1½ minutes between the first six.

Second Lap Times.

JUNIOR RACE.

1. Frith (Norton) 1h. 0m. 9s. 75.29 m.p.h.
2. Darbishire (Norton) 1h. 1m. 3s. 74.18 m.p.h.
3. Blyth (Norton) 1h. 1m. 6s. 74.13 m.p.h.
4. Swanston (Norton) 1h. 1m. 11s. 74.02 m.p.h.
5. McEwan (Norton) 1h. 1m. 37s. 73.49 m.p.h.
6. W. A. Rowell (Velo.) 1h. 1m. 43s. 73.37 m.p.h.

LIGHTWEIGHT RACE.

1. Harris (New Imperial) 1h. 6m. 8s. 68.48 m.p.h.
2. H. M. Rowell (Rudge) 1h. 8m. 25s. 66.2 m.p.h.
3. C. A. W. Durno (Cotton) 1h. 8m. 37s. 65.99 m.p.h.

The average speed of the leading riders was steadily mounting and Harris again raised the light-weight record, this time to 32 minutes 33 seconds or 69.57 m.p.h. Under the circumstances it was not sur-

On the fifth circuit Frith again opened the taps, and was actually first man past the stand, though he had started thirty-fourth. As one expected, this lap was a record one, completed in 29 minutes 11 seconds, at an average speed of 77.59 m.p.h. Hard riding began to tell its tale with some of the slower machines however, and Durno, who had been lying second in the light-weight, retired with a seized engine, and Ogden (Norton) dropped out for the same reason. All

THE MANX G.P. RACES—continued.

was now set for Frith's finish, and the telephones followed him round the course till he reached the last post at Governor's Bridge, and flashed over the line to win. His time was a record for the course, one minute one second better than White's performance last year. Darbishire, Swanston and Blyth retained their positions, but Rowell discovered some last-minute horses and finished in a well-earned fifth place.

There was a final sensation when H. M. Rowell, who had regained second position in the lightweight, was reported as having run out of petrol at Governor's Bridge. Undaunted by this, he started to push his machine, and though he was completely exhausted by the time he arrived at the start had the satisfaction of retaining his second place.

RESULTS.

1. F. L. Frith (Norton) 2h. 58m. 43s. 76.02 m.p.h.
2. S. B. Darbishire (Norton) 3h. 1m. 14s. 74.96 m.p.h.
3. J. K. Swanston (Norton) 3h. 1m. 36s. 74.81 m.p.h.
4. J. H. Blyth (Norton) 3h. 2m. 5s. 74.61 m.p.h.
5. W. A. Rowell (Velocette) 3h. 5m. 28s. 73.3 m.p.h.
6. T. McEwan (Norton) 3h. 5m. 40s. 73.25 m.p.h.

LIGHTWEIGHT RESULTS.

1. R. Harris (New Imperial) 3h. 18m. 6s. 68.58 m.p.h.
2. H. M. Rowell (Rudge) 3h. 29m. 30s. 67.5 m.p.h.

THE SENIOR RACE

Forty machines had been entered for the Senior event, but accidents and other reasons had reduced the number by nine when the riders came to face the starter on the Thursday. Fine weather was reported from all round the course, and there seemed a good prospect that the two records, "Crasher" White's lap in 27 minutes 42 seconds, and the course record set up last year by poor Pirie, who was killed in this year's June races as a result of crashing in the fog, would change hands.

There was a more varied entry in the Senior than in the other races, but the winner would undoubtedly come again from the Norton camp. As often happens in the Manx races, in which machines are dispatched at half-minute intervals, the fastest riders were near the bottom of the list, Harris, Blyth, McEwan, Swanston and Darbishire setting off in close company, with Frith last but one. Amongst the earlier riders Rowell, who was for the second time riding his Junior Velocette, seemed to be making good progress, while Swanston had picked up several fast riders by the time he reached Hillberry. Slowing down to take Governor's Bridge hair-pin he had the misfortune to oil a plug, and lost two minutes in changing it, but in spite of this lay sixth after the first lap. Frith, Tuesday's winner, and Darbishire, who was second, again occupied those positions, and Munks, Harris, and Blyth, the latter riding a Junior machine, were living up to their form, and were next in order.

On the second lap Darbishire was reported as being fast on all parts of the course, but nearly came to grief when he overshot Ballacraigne corner. Dr. Swanston meanwhile was intent in wiping off his first-lap delay and lapped in 27 minutes 47 seconds, only thirteen seconds under record time, a feat which brought him from sixth place to second. Frith contented himself with 28 mins. 17 secs. and remained comfortably in the lead.

Second Lap Leaders.

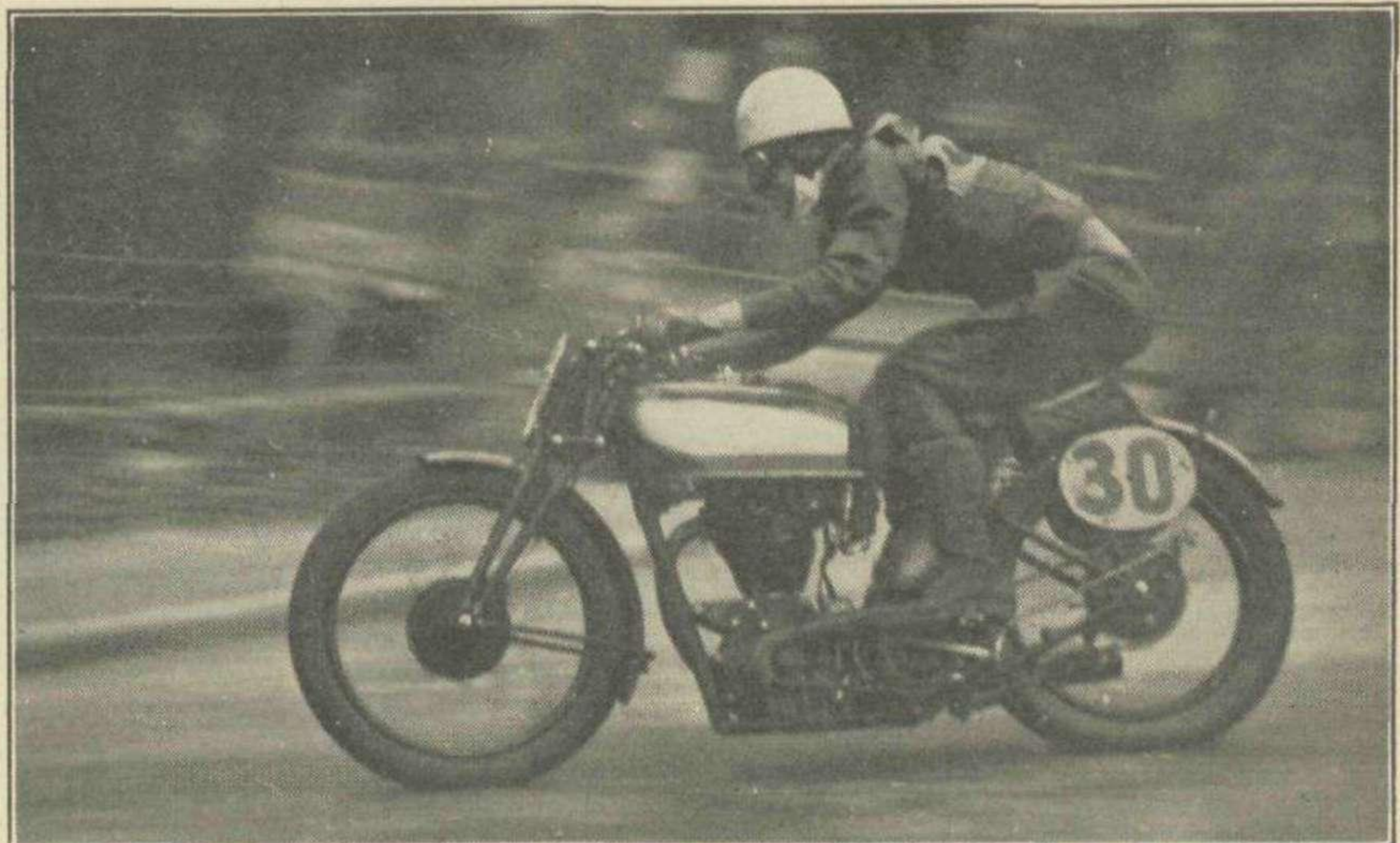
1. Frith (Norton) 56m. 43s. 79.85 m.p.h.
2. Swanston (Norton) 58m. 10s. 77.86 m.p.h.
3. Darbishire (Norton) 58m. 15s. 77.74 m.p.h.
4. Munks (Norton) 58m. 58s. 76.80 m.p.h.
5. Harris (Norton) 59m. 5s. 76.65 m.p.h.
6. Blyth (350 c.c. Norton) 1h. 0m. 11s. 75.25 m.p.h.

Reports of a few retirements came trickling in, such as Cooper (Sunbeam) with magneto trouble, Bills (Velocette) engine trouble and Doswell (Rudge) who retired at the pits with broken front forks. There was plenty of bustle in front of the stand as the pit attendants prepared for the riders to come in after the first three laps. Swanston had got clear away from the other fast riders around him, following a pretty piece of overtaking at Creg-na-baa, and completed his third lap in 27 minutes 55 seconds. This brought him within 66 seconds of the leader and a snappy pit-stop in 40 seconds further improved his prospects. Frith did not seem to have the speed to hold his lead,

Ewan, but their hopes of a second success were badly shaken when it was announced that the last-mentioned rider was only touring round, as his machine had hardly any compression. As a result it was considered that the local Peveril team, Craine, Rowell, and Cannell, who all figured in the first dozen, stood an excellent chance of gaining the trophy.

Starting five minutes apart it was by no means easy to follow Frith and Swanston on the last exciting lap, especially when one had to allow for the "time lag" from the different telephone stations along the course, but Frith was at Kirk-michael when Swanston was at Ballacraigne. Swanston knew that he was still lying second, and could be relied upon to drive all he knew.

28 was at Ramsey, 38 at Ballaugh, it might be a dead-heat yet. The announcer and the B.B.C. commentators found no



Control at 100 m.p.h. A striking action study of S. B. Darbishire at the bottom of Bray Hill.

being 25 seconds slower than the flying doctor.

The fourth lap opened with the report that Havercraft who had just previously failed to pull up until well past his pit, had crashed at Quarter Bridge, fortunately without personal injury. Our own observations suggested that many of the men were finding the Senior mounts rather difficult to hold, though Havercraft's accident was probably due to weakening brakes. One of the steadiest machines on Bray Hill was the H.R.D. ridden by Whitworth, which swooped down every time without a falter, but the modern Nortons driven by masters such as Swanston or Frith were none the less impressive.

The order was unchanged on the fourth lap, but Swanston had cut down Frith's lead to 31 seconds. Frith, we were told, had been told to go steadily, but his challenger showed no tendency to let up, and when he passed the stands the first man to start his final lap it seemed as though the lead had changed hands. When the lap times were announced, however, it was found that Swanston was still 3 seconds behind.

The team prize in the Junior Race had been won very handsomely by the Kirk-caldy team, Swanston, Blyth and Mc-

difficulty in being lyrical, then Swanston's indicator flicked to "Mountain." (Loud cheers from the Scottish contingent.) In turn the pointers flicked round the dial, then when Swanston's showed "Hillberry" it seemed he must have bested Frith. At last the orange light glowed showing that the Scot had reached Governor's Bridge, and then after a false alarm when McEwan limped through at touring speed, the chequered flag was hung out and Swanston finished the course to the accompaniment of terrific cheering. His last lap had been a record 27 minutes 40 seconds (81.84 m.p.h.), beating White's time by two seconds, while his time for the course showed an improvement of 56 seconds.

Frith finished a few minutes afterwards, a gallant second. His clutch lever had broken at the end of the third lap, a terrific handicap on a course which calls for continual gear-changing.

RESULTS.

1. J. K. Swanston (Norton) 2h. 50m. 38s. 79.62 m.p.h.
2. F. L. Frith (Norton) 2h. 51m. 21s. 79.29 m.p.h.
3. S. B. Darbishire (Norton) 2h. 53m. 29s. 78.31 m.p.h.
4. A. Munks (Norton) 2h. 57m. 18s. 76.63 m.p.h.
5. R. Harris (Norton) 2h. 58m. 33s. 76.09 m.p.h.
6. J. H. Blyth (350 c.c. Norton) 3h. 1m. 32s. 74.84 m.p.h.
7. J. Cannell (350 c.c. Velocette) 3h. 5m. 48s.
8. W. H. Craine (H.R.D.) 3h. 10m. 45s.

ALL RECORDS FALL AT BRIGHTON SPEED TRIALS

FASTEST CAR TIME MADE BY R. L. SHUTTLEWORTH (MONOPOSTO ALFA-ROMEO), ECCLES (3.3-LITRE BUGATTI) AND JOHN COBB ON HIS RECORD-BREAKING NAPIER-RAILTON, THE RUNNERS-UP

For the past four years Brighton has shown its appreciation of the thrill of racing motor-cycles and cars by allowing the enterprising Brighton and Hove Motor Club to hold speed-trials on the half-mile straight of the Madeira Drive. This year the meeting was a greater success than ever, with star performers and particularly rapid cars. Raymond Mays made first bid for fastest time with a speed of 78.26 m.p.h., then this was brought up to nearly 79 m.p.h. by A. H. L. Eccles on his 3.3-litre Bugatti. This figure seemed likely to stand to the end of the meeting, but in the last run for the six fastest cars John Cobb came near it with 78.44 m.p.h. on the 23-litre Napier-Railton and Shuttleworth set a seal on the proceedings with the astonishing speed of 79.41 m.p.h.

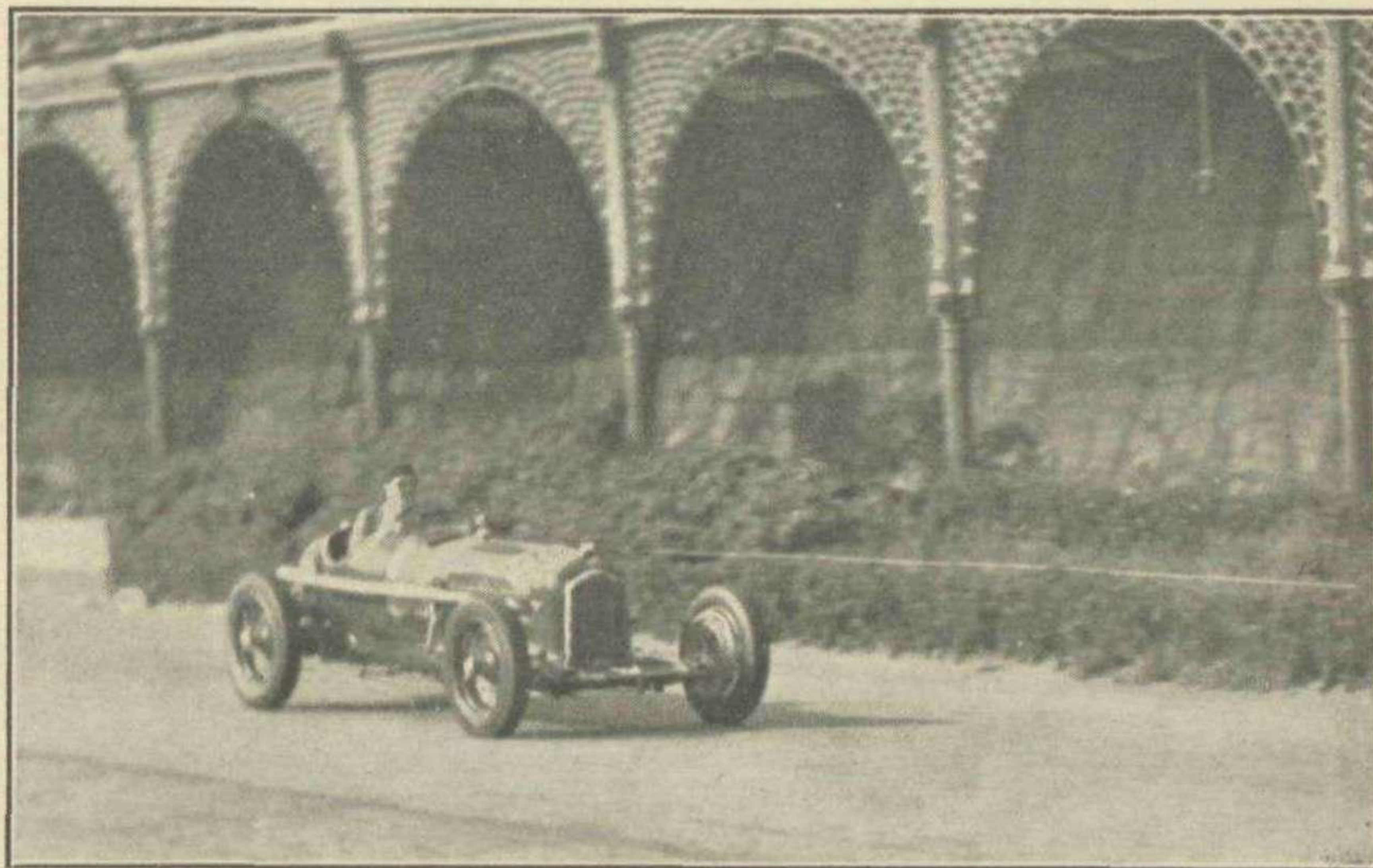
Fernihough's speed of 88.7 on a solo Brough-Superior motor-cycle will give further material for the bikes versus cars acceleration controversy, and only a Merc or an Auto-Union could have rivalled this performance.

Proceedings opened at 10.30 a.m., the sports-car classes being run off in the morning. There was a strong inshore wind blowing, and spray from the waves kept dashing over the far end of the course.

The Brighton and Hove class was won very easily by A. S. Whiddington (6-cylinder Frazer-Nash) with a speed of 55.56 m.p.h., Rodney Gardner on another Frazer-Nash being second. The 1,100 c.c. unsupercharged cars were unexciting on the broad stretch of the Drive, and it was not until the class for unlimited sports-

class was won by Allard, driving one of the Fords which ran in last year's T.T., and with which he beat up Strang's streamlined Hudson by a useful margin. Powys-Lybbe's veteran Alvis once more

In the next class, for which the limit of 1,650 c.c. was rather mysteriously chosen, there were two cars which had taken part in this year's Monte Carlo Rally, Ridley's blown Triumph, which



Shuttleworth made several rapid runs on his 2.9-litre Monoposto Alfa-Romeo, and ended with one at 79.41 m.p.h., the fastest time of the day.

played to advantage to gain a third place.

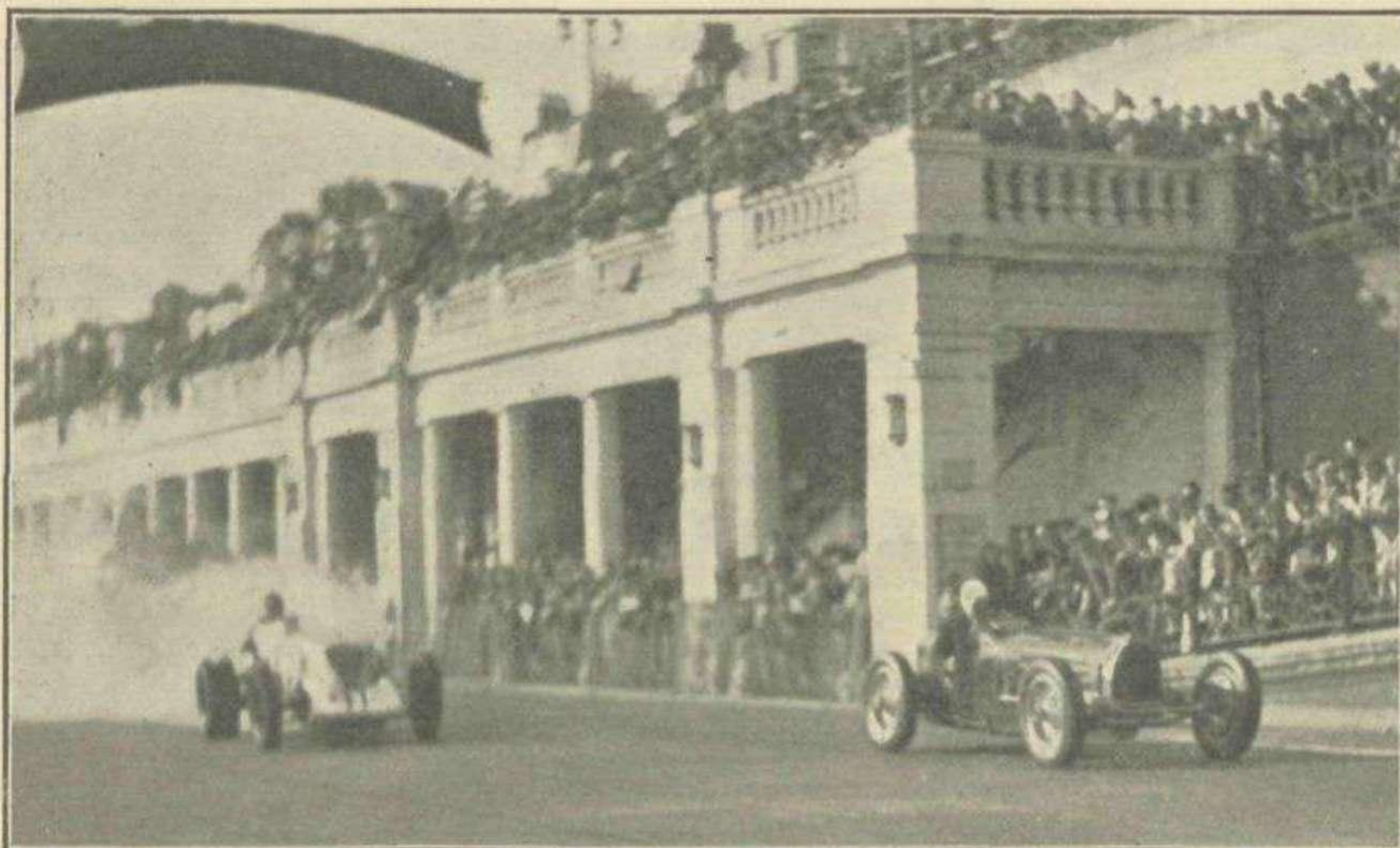
The ladies were given a class to themselves, and after that Miss Blathway celebrated her engagement to J. C. Elwes by beating him in the

was driven by Miss Joan Richmond, and Parkinson's blown 1,287 c.c. Magnette. Both of these ran quite well, but A. F. P. Fane carried off the honours without much difficulty on his Shelsley Frazer-Nash, which of course is fitted with two blowers; after gaining a second place in the unlimited class, he returned to Brooklands to take part in the High Speed Trial.

The unlimited class opened with L. G. Bachelier on the line in his smart biscuit-coloured 2.3 Bugatti, which naturally rushed away from Mrs. Hugh Jones's 1,750 Alfa coupé. Then came a pair which promised something of interest, Major Gardner in a very handsome S.S. Mercedes-Benz and Forrest Lycett on the 8-litre Bentley. The Mercedes for some reason refused to play, and Lycett shot down the course in a cloud of smoke to record the fastest time of the day so far, 65.69 m.p.h. Whalley's supercharged Ford was making its first appearance and disposed of Beadle's 4½-litre Delage, while Elwes pitted his Midget with some success against Miss Richmond's supercharged Auburn, and crossed the line with 200 yards to spare.

The luncheon interval never comes amiss even at the most interesting race meeting, and this time it was specially welcome as a chance of getting away from the Public Address announcer, whose advertising "puffs" were nearly as tiresome as those which issue from Radio Normandie or Radio Paris.

It was a pity too that cars of more evenly matched performance could not have been sent off together, but last-minute



A. H. L. Eccles (3.3-litre Bugatti) who made second fastest time, shooting away from Cummings on the Vauxhall-Villiers

cars was reached that things started to look up. From the entries one would have picked Forrest Lycett's Bentley which has an 8-litre engine in a 4-litre chassis, as a certain winner, but for some reason it did not run, and the

850 c.c. supercharged class. Elwes got going in a much better fashion in the 1,100 c.c. class, and on his J4 Midget actually held Geoffrey Taylor on his Alta, but the latter car got away after the first 50 yards and won easily.

THE BRIGHTON SPEED TRIALS—continued.

entries and cars which are temperamental about starting undoubtedly add to the difficulties of the organisers in an event of this sort.

Rain fell during the interval, but the sky was clear again by two o'clock. A racing-car class for ladies was the first event, and this was closely contested between Miss M. Dickson, driving Cormack's new 1½-litre Alta, and Mrs. Eccles driving the Eccles Special. Miss Dickson won by 1.5 second. The bravest person in this class was undoubtedly Miss Skinner, who made her début in John Bolster's "Mary," controlling the savage little vehicle with the greatest skill. Talking of bravery, however, the palm should be awarded to the unfortunate passengers in the sidecar event which followed; most of them made the trip lying stretched out like corpses in the slipper bodies, with their faces turned downwards.

There were only four runners in the 850 c.c. racing class. Mrs. D. G. Evans on a Montlhéry Midget easily disposed of an Ulster Austin (admittedly the latter was not blown), but Pat Driscoll adequately upheld the honour of Longbridge with a run at 66.67 m.p.h., which sufficed to gain him first place there and a third in the 1,100 c.c. class, getting well away from Clayton's Amilcar.

The Appleton Special, which consists of a Riley engine in a Maserati chassis has now been supercharged, and fitted with a smart single-seater body, and ran to such effect that it secured second place. Ashton Rigby tore off at a great pace from Carr on a Singer, but to his dismay the Magnette cut out 200 yards before the finish, but by this time he had gained such a lead that the Magnette was still first over the line, so Rigby came in first on "free-engine."

Andrew Leitch was one of the few exponents of the good old twin-cylinder, and clad in a bright red jumper piloted the ear-shattering Poppet II over the half mile at an average of 60.81 m.p.h.

Fastest of all was Hartwell on an M.G. Magnette, which raced down the course in perfect tune to accomplish the half-mile in 26.2 seconds. The Eccles Special oiled a plug, so there was no chance of comparison.

The 1½-litre class had quite a Shelsley flavour about it, opening with the 1,500 c.c. twin Davenport Special, now owned by G. H. Symonds, and the three Frazer-Nashes with which R. J. G. Nash has been associated, the Terror, the Spook, and the Union Special. The Spook, seemed oppressed with its nickname and refused to function properly, and the Terror was suffering from clutch slip judging by the smell. Dick Nash made a splendid run on his latest Special which is fitted with the new Frazer-Nash engine and two blowers. Cormack, on the new 1½-litre Alta was matched against Davies on the old 8-cylinder Delage, finishing a comfortable hundred yards ahead, his time of 25.6 seconds by an odd coincidence being identical with that of the Union Special. The best duel in this class was one between Driscoll on an Austin, and Hartwell on the Magnette. The cars raced down the course abreast for most of the way, the little white car picking up 20 yards in the final stretch,

resulting in a triple tie with Nash and Cormack.

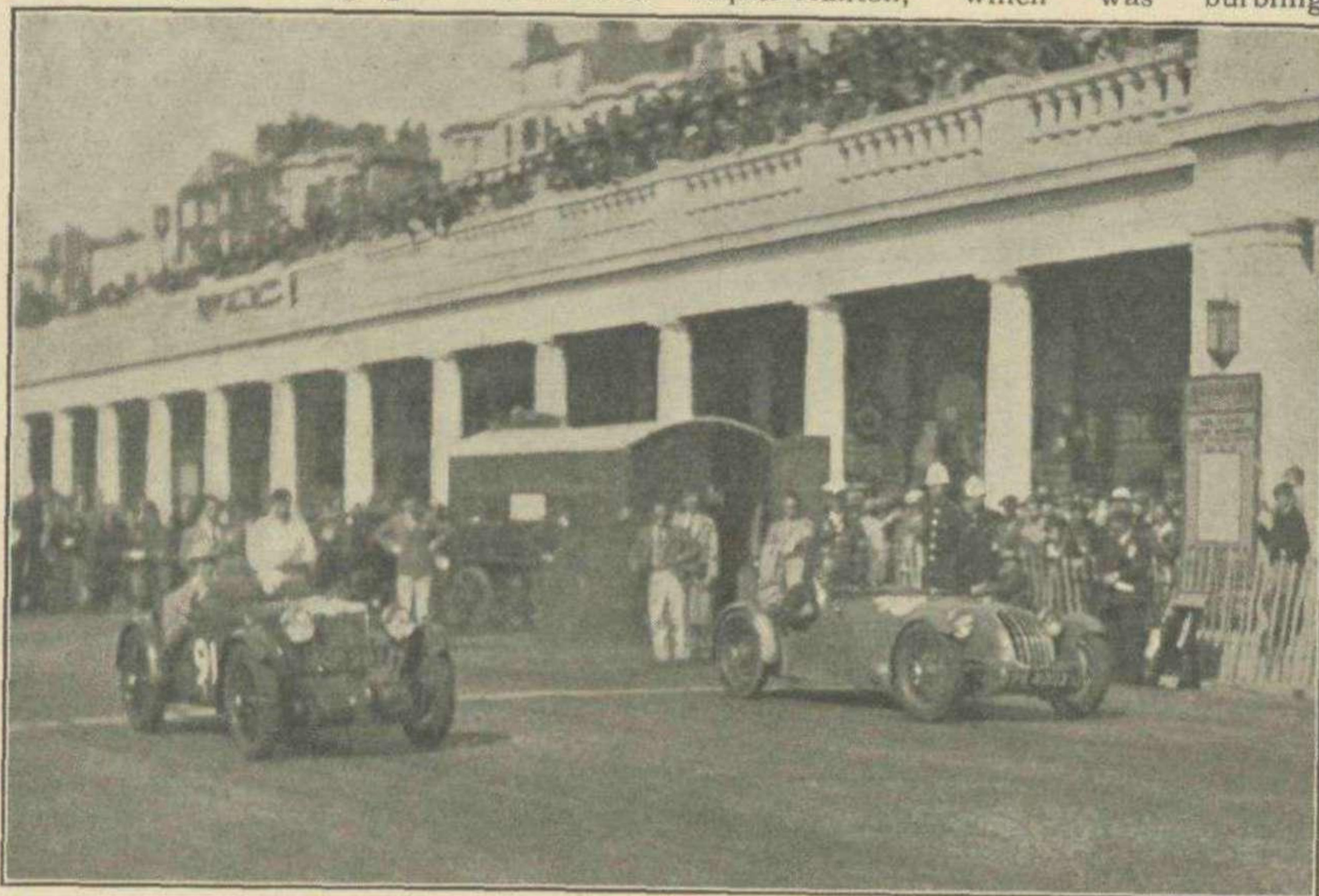
Harvey Noble, on a 2-litre Bugatti, and Bolster, on twin-engined Mary, opened the 3-litre class. At first Bolster held the supercharged car but then the front driving chain broke, and he finished six lengths behind. Gangster sounds from the starting line proclaimed that the old Villiers supercharger, with which Cummings annexed the Lewes record a week before, was on the line, with Shuttleworth on the 2.9 Monoposto Alfa as rival. The Villiers sulked at the critical moment, and Shuttleworth got away with deceptive smoothness to record 74.38 m.p.h., the fastest yet.

Other good performances in the 3-litre class were those of Capt. Taylor, driving a 2.3 Bugatti belonging to Embiricos,

but Eccles was lengths ahead in the first hundred yards. Once under way, however, the Villiers showed some of its Shelsley form, and leaving behind smoking wheel marks recorded 75 m.p.h., while Eccles, a hundred yards ahead had set up the fastest time of the day, 22.8 seconds (78.95 m.p.h.).

Forrest Lycett was again impressive on the 8-litre Bentley (67.16 m.p.h.) and Abecassis got away with some wheelspin on the ex-Bertram-J.R.D.C. Delage, and averaged 72 m.p.h. Other good figures were: Taylor (2.3-litre Bugatti) 70.87 m.p.h., Cormack (Alta) 71.43 m.p.h., and Esson Scott 72.58 m.p.h. and Harvey Noble 70.89 m.p.h. both on 2-litre Bugattis.

There was a hush as John Cobb's Napier-Railton, which was burbling



J. C. Elwes (blown M.G. Midget) and D. J. Briault on one of the new 1½-litre Altas getting away together.

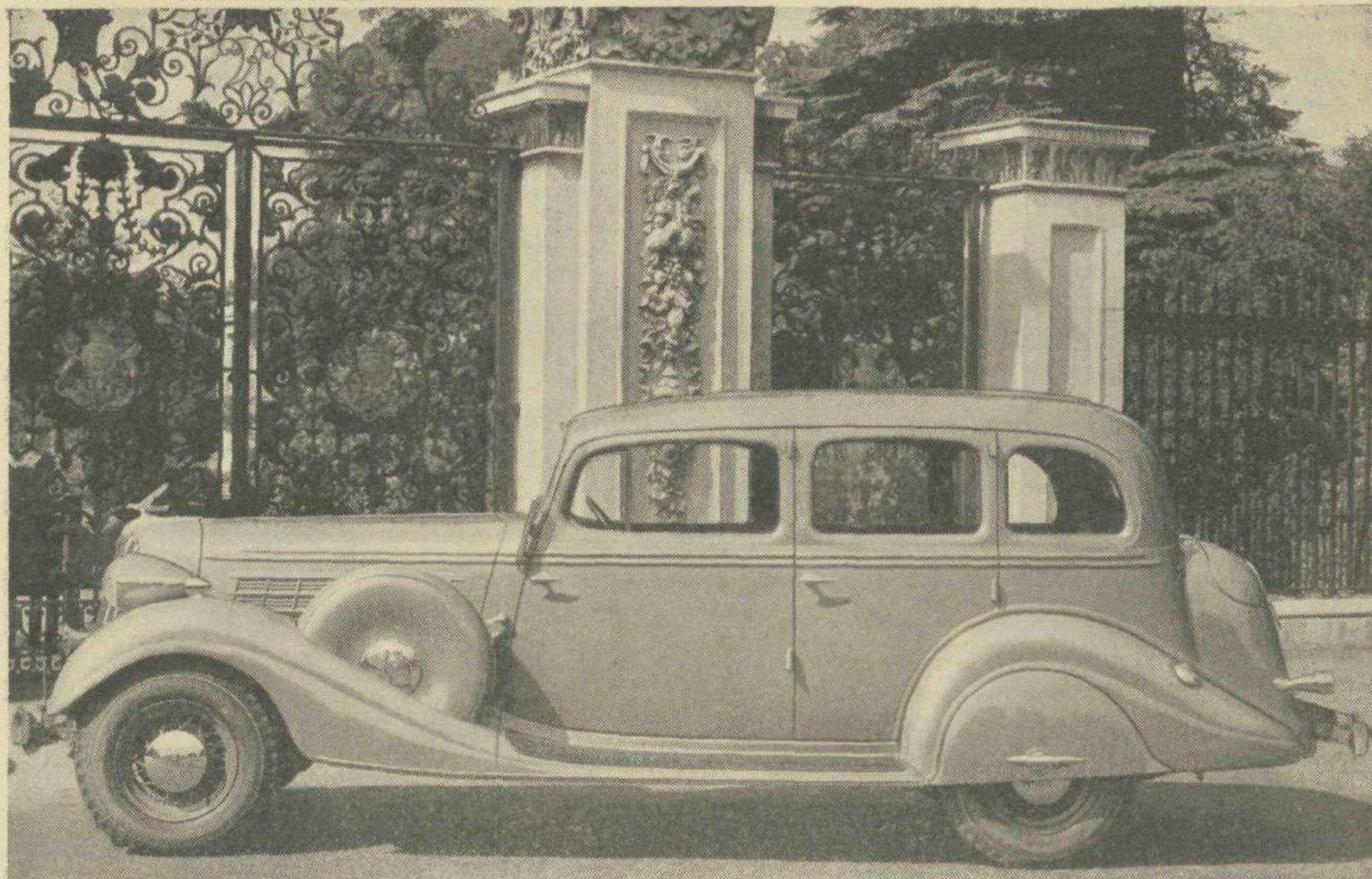
which clocked 72 m.p.h., Cormack (1½-litre Alta), who did 71.43 m.p.h. Esson Scott (2-litre Bugatti), who beat the starter in recording 72, not forgetting R. J. G. Nash, who improved his time on the Union Special to 71.43 m.p.h. The last runner in the 3-litre class was Raymond Mays on the 2-litre E.R.A. Getting away with his accustomed skill, and snaking as he changed gear far down the course, covered the half-mile in 23 seconds. This time, which was equivalent to 78.26 m.p.h., beat Campbell's record set up in 1932 by 2 m.p.h. and was easily the fastest time of the day so far. Unfortunately, he damaged his gear-box during the run, and after its first appearance the car was seen no more.

It remained then to see what the unlimited class could do. Charlie Martin opened proceedings with his 2.3-litre Bugatti to the tune of 73 m.p.h., a figure which was also attained by Shuttleworth on the Alfa-Romeo. The next pair on the line provided a striking contrast. One was Cumming's Villiers, massive and box-like and fitted with a new radiator cowl, and Lindsey Eccles' sleek black 3.3 litre Bugatti. The clamour of the Villiers completely drowned the Bugatti's boom,

gently through the short exhaust stubs, was pushed to the line. Would its 23-litres of engine prevail against Eccles' performance on the 3.3 Bugatti? Cobb was taking no chances with the tyres or the transmission, and getting away smoothly nevertheless put up the very useful speed of 76.27 m.p.h.

The motor-cycles then took over the arena, and Eric Fernihough cleaned up the 250 c.c. and 350 c.c. classes at increasing speed, leaving the 600 c.c. class to Bickell, whose supercharged Ariel had all the attributes of a scalded cat! Fernihough returned to the fray with his Brough-Superior, and raised the unlimited solo record by no less than 7 m.p.h., to 87.38 m.p.h.

The racing cars, or those of them which were still fit to function, then returned for second runs. The first few cars showed no improvement, and the Villiers stalled on the line amidst clouds of smoke. The next pair, Martin and Shuttleworth, seemed likely to provide some fireworks, and Martin in anticipation wheeled the Bugatti well over to the inside of the starting line so as to avoid the slippery patches already worn on the tarmac. Martin made a marvellous get-away, leaving long



"THE QUIETEST FAST CAR IN THE WORLD"

Characteristic of the wonderful value for money represented by Hudson and Terraplane cars this Hudson 8 Club Saloon at £495 is but one of a wide range of open and closed coachwork. From as little as £285 you can buy a combination of high power and uncanny silence of running that has earned high honours for Hudson built cars all over the world.

At the other end of the scale there are specially modified Hudsons in sports types capable of an easy 100 m.p.h.

Send now for details.

HUDSON & TERRAPLANE

HUDSON MOTORS LTD. Great West Road, London, W.4 (Chiswick 4777)

West End Showrooms: Shaw & Kilburn Ltd., 117 Gt. Portland St., W.1

The Power of a Plane - The Silence of a Glider

THE BRIGHTON SPEED TRIALS—continued.

streaks of rubber behind the car and actually led Shuttleworth by two lengths for most of the way. The Alfa drew abreast in the last 80 yards, and the two cars achieved a dead heat at 75 m.p.h.

Allard on the T.T. Ford improved his time to 63.87 m.p.h. beating Whalley on the supercharged machine, while Mrs. Petre on her newly acquired supercharged Riley (ex-Raymond Mays) managed only to attain 62.94 m.p.h.

The principal awards of the day were two cash prizes, £30 for the motor-cycles and £100 for the cars, and the fate of these was decided in the two final events, for the six fastest two and four-wheelers. Beam timing was employed, with a portable "shoe" contact at the start instead of a timing strip.

All the motor-cycles were impressive, but no one could touch Fernihough, who streaked away into the distance without a check or a wobble, and put up the amazing time of 20.27 seconds (88.7 m.p.h.).

The Napier-Railton was the first of the six chosen cars, and Cobb, now better aware of how his monster behaved with a standing start, got away more rapidly, snicking in second in the car's own length and rumbled off to the finish to clock 76.27 m.p.h. Eccles' speed of 78.44 m.p.h. still stood.

The next to challenge it was Shuttleworth, and this time he gave the car throttle right from the start. The wheels spun for the first fifty yards, then the lithe green car darted forward like an arrow. Hardly had it crossed the finishing line when the announcement came—79.32 m.p.h.—a wonderful run.

Charlie Martin and Cummings on the Villiers then took their turns. Martin was kept waiting rather a long time on the line, and in his excitement let in the clutch with a jerk. There was a scrunch and the car came to rest. "Stripped bottom cog," said the driver laconically and got out. Cummings had trouble with his clutch and was slower than before.

All eyes on Eccles then to see if he could win back Fastest Time. Bottom gear on the Bugatti was giving trouble and had to be held in mesh, but in spite of this made a fine get-away and shot down the course to the tune of 78.3 m.p.h.

The meeting thus ended with Fernihough and Shuttleworth "Victores Ludorum," and the cheques were duly handed over by the Mayor of Brighton from his dais on the course. It had been a splendid day's racing and a lucky one too.

On the Sunday torrential rain began to fall, and in the gale which followed the Drive and the buildings behind it suffered severely.

RESULTS.

Sports Cars.

Brighton and Hove M.C. Members only: 1. A. S. Whiddington (1,650 c.c. Frazer-Nash), 55.56 m.p.h.; 2. R. Gardner (Frazer-Nash), 50.28 m.p.h.; 3. Tie between R. W. Collins (M.G. Magnette) and E. R. Stafford (M.G. Magnette), 49.18 m.p.h.

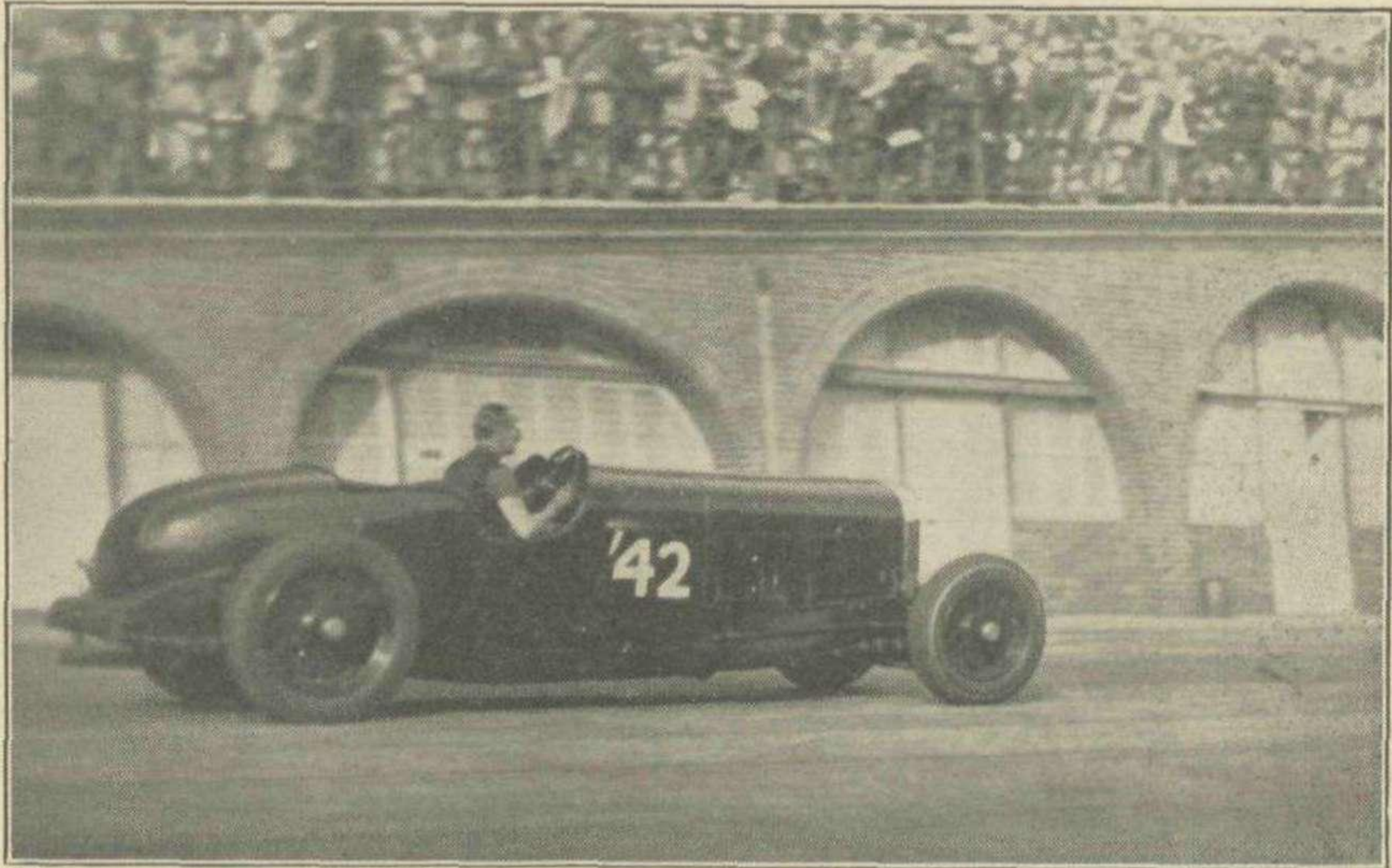
1,100 c.c. unsupercharged: 1. Miss J. Williams (M.G. Magna), 50.56 m.p.h.; 2. M. P. Tenbosch (Balilla Fiat), 50.00 m.p.h.; 3. G. E. Taylor (Alta), 47.12 m.p.h.

(1,084 c.c. Eccles Special S.), 66.67 m.p.h.; 3. Miss Peggy Blathwayt (M.G. Midget J4), 62.50 m.p.h.

850 c.c.: 1. L. P. Driscoll (Austin S.), 66.67 m.p.h.; 2. J. C. Elwes (M.G. Midget J4), 60.81 m.p.h.; 3. Mrs. D. G. Evans (Monthery M.G. Midget S.), 55.21 m.p.h.

1,100 c.c.: 1. G. Hartwell (M.G. Magnette K3 S.), 68.70 m.p.h.; 2. R. S. W. Appleton (Appleton Special), 68.12 m.p.h.; 3. L. P. Driscoll (Austin S.), 67.67 m.p.h.

1,500 c.c.: 1. triple tie between A. J. Cormack (1½-litre Alta S.), L. P. Driscoll (Austin S.) and R. G. J. Nash (1½-litre Frazer-Nash Union Special S.), 70.31 m.p.h.



Forrest Lycett on his 8-litre Bentley. He won the Unlimited Supercharged Sports Car Class, at 66.18 m.p.h., without the aid of a blower.

1,500 c.c. unsupercharged: 1. G. Bagratouni (M.G. Magnette), 53.25 m.p.h.; 2. N. J. Innes (Frazer-Nash), 52.33 m.p.h.; 3. Tie between G. Welson (Frazer-Nash) and J. Ogle (Bugatti), 52.02 m.p.h.

Unlimited unsupercharged: 1. S. H. Allard (Ford V-8), 61.64 m.p.h.; 2. R. M. Strang (Hudson Terraplane), 58.44 m.p.h.; 3. A. Powys-Lybbe (Alvis), 57.32 m.p.h.

Ladies' Class: 1. Miss J. Williams (M.G. Magna), 51.72 m.p.h.; 2. Miss M. D. Patten (Alvis), 49.72 m.p.h.; 3. Mrs. Ashton Rigby (M.G. Midget, P-type), 37.81 m.p.h.

850 c.c. supercharged: 1. Miss Peggy Blathwayt (M.G. Midget J4), 59.60 m.p.h.; 2. J. C. Elwes (M.G. Midget J4), 56.60 m.p.h.

1,100 c.c. supercharged: 1. G. Taylor (Alta), 61.64 m.p.h.; 2. J. C. Elwes (M.G. Midget J4), 60.81 m.p.h.; 3. Miss P. Blathwayt (M.G. Midget J4), 60.40 m.p.h.

1,650 c.c. supercharged: 1. A. F. P. Fane (Frazer-Nash), 63.38 m.p.h.; 2. G. Taylor (Alta), 61.64 m.p.h.; 3. J. C. Elwes (M.G. Midget J4), 60.40 m.p.h.

Unlimited supercharged: 1. Forrest Lycett (8-litre Bentley), 66.18 m.p.h.; 2. A. F. P. Fane (1½-litre Frazer-Nash), 63.83 m.p.h.; 3. Tie between J. C. Elwes (M.G. Midget J4) and L. G. Bachelier (2.3 Bugatti), 61.22 m.p.h.

RACING CARS.

Ladies' class (unlimited c.c.): 1. Miss M. Dickson (1½-litre Alta S.), 67.16 m.p.h.; 2. Mrs. Roy Eccles

3 litres: 1. Raymond Mays (2-litre E.R.A. S.), 78.26 m.p.h.; 2. R. O. Shuttleworth (2.9 monopo Alfa-Romeo S.), 74.38 m.p.h.; 3. C. E. C. Martin (2.3 Bugatti S.), 72.58 m.p.h.

Unlimited c.c. First run: 1. A. H. L. Eccles (3.3 Bugatti S.), 78.95 m.p.h.; 2. John Cobb (23-litre Napier-Railton), 76.27 m.p.h.; 3. S. E. Cummings (3-litre Vauxhall-Villiers S.), 75.00 m.p.h.

Unlimited c.c. Second run: 1. John Cobb (23-litre Napier-Railton), 76.27 m.p.h.; 2. tie between R. O. Shuttleworth (Alfa-Romeo) and C. E. C. Martin (Bugatti), 75.00 m.p.h.; 3. A. J. Cormack (1½-litre Alta S.), 71.43 m.p.h.

Run for the Fastest Time of the Day: 1. R. O. Shuttleworth (Alfa-Romeo), 79.41 m.p.h. (record); 2. John Cobb (Napier-Railton), 78.44 m.p.h. 3. A. H. L. Eccles (Bugatti), 78.30 m.p.h.

MOTOR CYCLES.

Solos up to 250 c.c.: 1. Eric Fernihough (246 c.c. Excelsior Jap) 65.22 m.p.h.

350 c.c.: 1. Eric Fernihough (344 c.c. Excelsior Jap), 68.7 m.p.h.

Solos up to 600 c.c.: 1. C. B. Bickell (499 c.c. Ariel S.), 76.92 m.p.h.

Unlimited Solo: Eric Fernihough (996 c.c. Brough Superior Jap), 87.38 m.p.h.

Unlimited Sidecar: Eric Fernihough (996 c.c. Brough Superior Jap), 75.00 m.p.h.

Special Class: Eric Fernihough (996 c.c. Brough Superior Jap), 88.7 m.p.h.

A few Copies of Back Numbers of
MOTOR SPORT and The Brooklands Gazette
 Are still available.

Volume I Nos. 1-12 ... 2/- each

„ II Nos. 1-12 ... 1/6 „

„ III Nos. 1-12 ... 1/- „

Volume IV Nos. 1-12 ... 1/- each

„ V No. 1 ... 1/- „

„ VI, VII, ... 1/- „

„ VIII, IX, X ... 6d. „

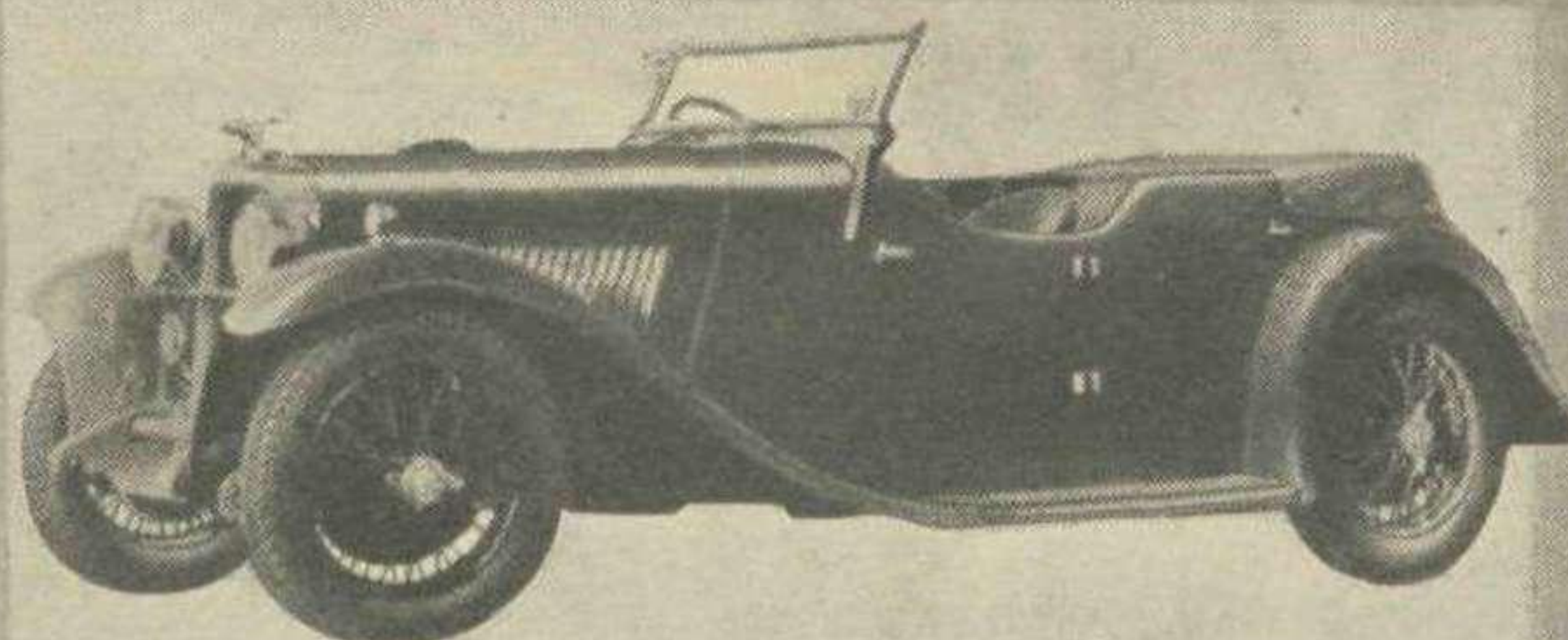
KINDLY SEND REMITTANCE WITH ORDER TO:—

MOTOR SPORT (1929) LTD., 39, VICTORIA STREET, LONDON, S.W. 1.

(POSTAGE ON EACH COPY 1½d.)

ALL ALVIS CARS

with Samuel Holbrook Ltd.
and "Crosslis" Coachwork
are finished in



'Belco'

TRADE MARK

THE BETTER CAR FINISH

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, etc.

Write us for our leaflet "Valeting your car"

NOBEL CHEMICAL FINISHES LIMITED

(Associated with Imperial Chemical Industries Ltd.)

NOBEL HOUSE, BUCKINGHAM GATE, LONDON, S.W.1

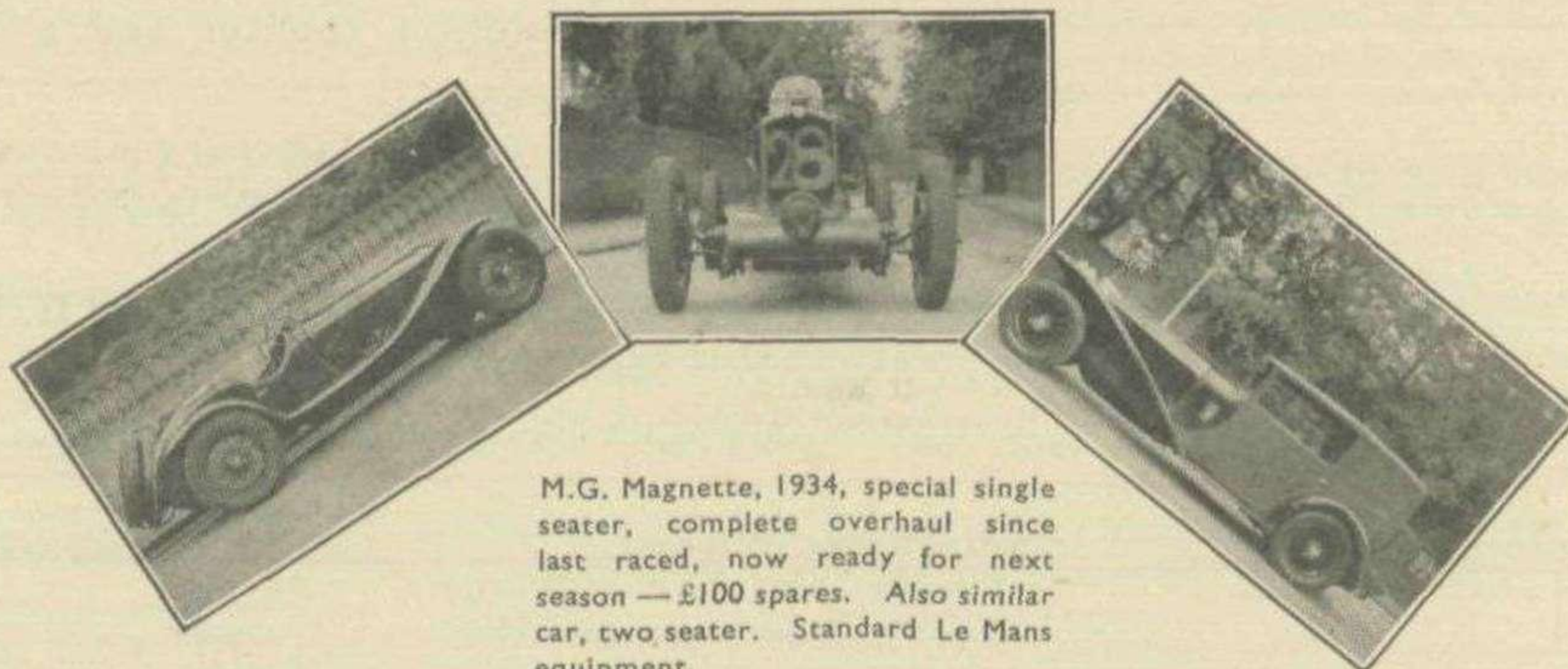
The following manufacturers also use 'Belco':

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

S.B.224

FOR SALE

120 — 130 — 110
MILES — PER — HOUR



M.G. Magnette, 1934, special single seater, complete overhaul since last raced, now ready for next season — £100 spares. Also similar car, two seater. Standard Le Mans equipment.

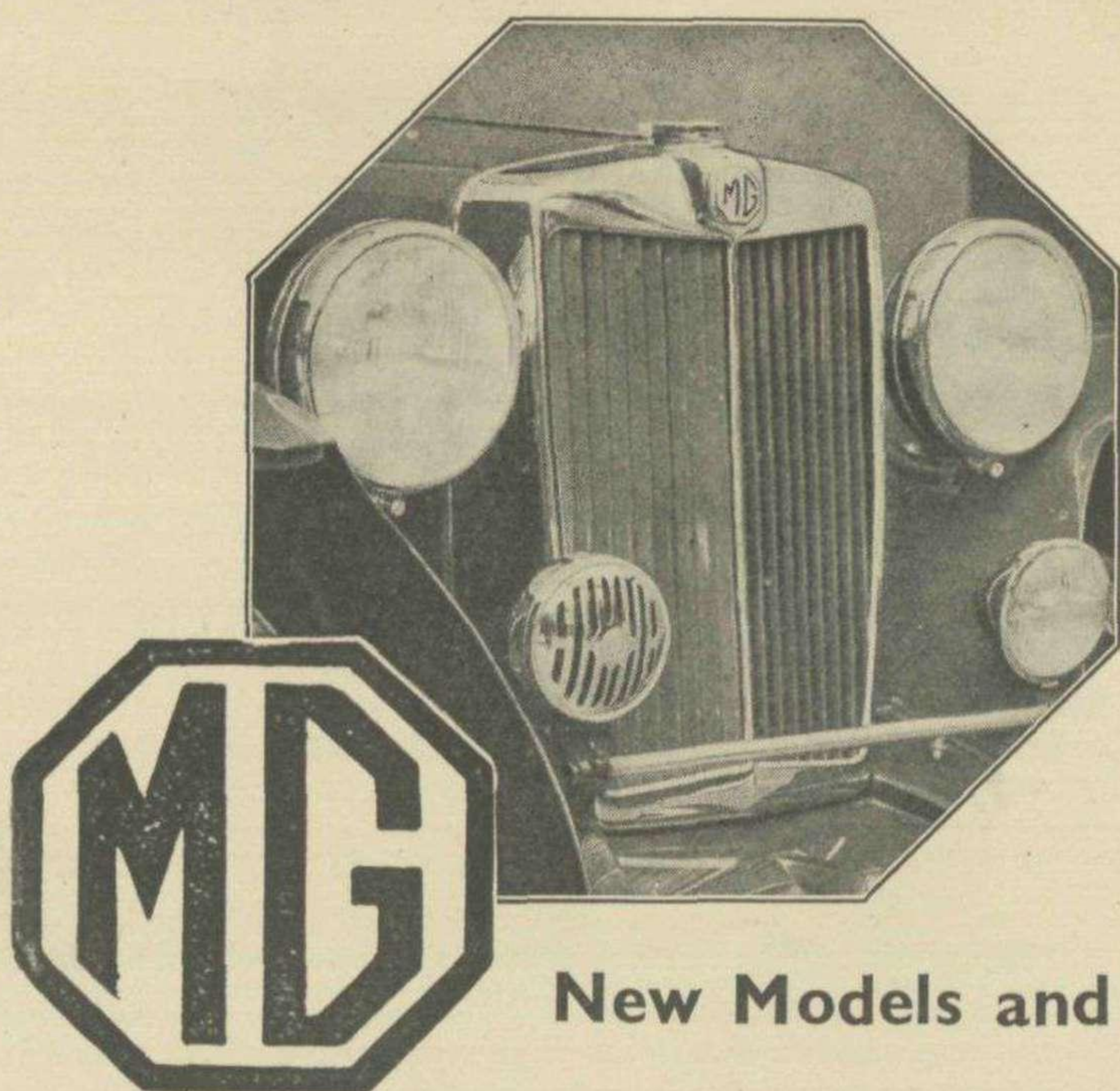
Alfa-Romeo, 1933, 2,600 c.c. Mille Miglia two seater, ex Scuderia Ferrari—new pistons last winter, very fast. Taxed. Imported August last, duty paid.

CAN BE SEEN AND TRIED BY APPOINTMENT
COWDEN SERVICE LTD.
DOVE MEWS, BINA GARDENS,
SOUTH KENSINGTON, S.W.5

Mercedes 36/220. Nov. 1928, five seater fabric Saloon — Complete overhaul, rebore, chassis re-riveted, etc. last winter—mechanically faultless, new tyres all round. Taxed.

KEN 3602

Please mention MOTOR SPORT when corresponding with advertisers



New Models and Improvements

(September 1935).

Considerable price reductions and improvements to the present models are effective as from September 1.

The M.G. Magnette 'KN' Saloon has been discontinued, but a new closed car to take its place will be announced shortly before the Motor Show.

The M.G. Midget 'P' type chassis layout remains unchanged, but engines either of 847 c.c. or 939 c.c. are available, and present 'P' models, except the four-seater, which is discontinued, are reduced in price.

The 939 c.c. ('PB') type M.G. Midget has a smart slatted stoneguard to the radiator, a new facia board with separate speedometer and revolution counter and a close ratio gearbox.

The 'N' type chassis remains unchanged, but both two and four-seater bodies have been greatly improved and the price reduced considerably.

Airline Coupe models are available on all M.G. Midget and Magnette chassis types.

Illustrated catalogue gladly sent on application.

M.G. Midget (P type).

2-seater £199.10.0
 Airline Coupe £267.10.0

M.G. Midget (PB type).

Chassis £175
 2-seater £222
 4-seater £240
 Airline Coupe £290

M.G. Magnette (N type).

Chassis £210
 2-seater £280
 4-seater £285
 2/4-seater £330
 Airline Coupe £355

Ex. Works

Triplex glass, Dunlop tyres.

Continental Notes and News

By

HAROLD NOCKOLDS

It's Quicker by Air

One of the greatest drawbacks of life as a motor-racing "star," I imagine, must be the interminable travelling about from race to race. Barcelona one week-end, Berlin the next, and that sort of thing.

Most drivers use fast cars. Stuck's 12-cylinder Horch is familiar to all continental racing fans, and so is Caracciola's Mercedes-Benz cabriolet. But Nuvolari has decided that it is quicker by air, and after the Nice Grand Prix he took delivery of a Potez 58, French machine. Why he does not use an Italian aeroplane is not quite clear.

Over here, of course, we all know Shuttleworth's little Comper Swift, with which he flies to the Isle of Man, Shelsley and Donington.

Tough

When Philippe Etancelin was picked up after his crash in the Italian Grand Prix, the doctors shook their heads. They feared internal complications, cracked ribs and other sundry unpleasantnesses. However, they deferred passing judgment until X-ray photographs had been taken.

The results showed that it takes more than a spill like that to hurt "Phi-Phi." Beyond a severe bruising and shaking he was O.K., and he has now left the Ansaldo Clinic in Milan and is back in Rouen.

But no more racing this season.

Lehoux Fills the Breach

His place in the Subalpina team has been taken by Marcel Lehoux, who is to handle a Maserati at San Sabastian and Masaryk.

Lehoux has not had a good season since his Bugatti days. With that twin-camshaft "two-three" he was a menace to anyone. But times have changed. He did not seem to get on with the Ferrari cars, and since then he has driven Maser-

atis on his own account and for Villapadierna.

As for Etancelin, he hankers after a fast car of his own, running as an independent. He is one of those men who *must* be up with the leaders. He is not content to race at his own speed. The sort of man to enliven any race.

I sometimes wonder what would happen if he were given a Merc

The Call of the Road

A friend of mine ran into Willy Williams the other day. Williams still wants to get back into the racing game, but the position in France is a gloomy one at the moment.

On his day, Williams used to be the match of anyone you care to name, Chiron included. But a bad season with Bugatti put him out of the running.

Another famous driver who would like to race again is Mme. Junek, who will be remembered for a classic performance in the Targa Florio one year.

Honourable Retirement

Before the war the name Lautenschlager summed up the essence of continental road-racing, who will ever forget his performances with a Mercedes in the 1914 French Grand Prix?

I have just heard that this famous driver has now retired from business in Germany and is settling down to a peaceful old age. Long may he live!

Auto-Union Recruit

Encouraged by the success of their experiment with Berndt Rosemeyer, the Auto-Union people have engaged another German motor-cyclist, Ernst Loof.

Loof has been racing for the Imperia concern for some years, and this will be his last season. He has done extremely well, and won four national champion-

ships in 1934, two for road-racing and two for hill-climbing.

The intention is to give him a D.K.W. motor-cycle at the beginning of next season, and then after a few races give him a trial on a racing car. If this proves satisfactory—and who can doubt otherwise?—Loof will become a regular member of the Auto-Union team.

So Varzi is leaving the German team!

French Hill-climb

An interesting little hill-climb took place last month at Lectourne. The hill was 1.8 kilometres in length, with an average gradient of 1 in 20 and including several corners. Fastest time of the day was made by Barowski (Bugatti).

RESULTS.

1,100 c.c.—1, Vilhet (Darmont), 1m. 22s.
1,500 c.c.—1, Felix (Salmson), 1m. 20.4s.
2,000 c.c.—1, Barowski (Bugatti), 1m. 6.4s.;
2, Durand (Bugatti), 1m. 11.2s.
3,000 c.c.—1, Delorme (Bugatti) 1m. 8.4s.; 2,
Mile. Helle-Nice (Alfa-Romeo), 1m. 8.6s.

New French Race

A new race is already promised on the French calendar for next season. This is an event for sports-cars, which will take place at Montlhéry road-circuit. The date chosen is the day before the Grand Prix de l'A.C.F.—if the latter is held after all.

The French have a strong public sense of their shortcomings in the racing field. The lack of French participation in the big continental road-races is to them a national disgrace. Over here no-one cares a hoot whether a British car runs or not.

It is presumably with the idea of fostering *some* sort of French motor-racing that they have planned this race. It would be interesting to see how British cars fared against the Delahayes and Hotchkiss which generally win in France.

Meanwhile there is no word from Bugatti as to his plans next year.

THE GERMAN HILL-CLIMBING GRAND PRIX

Fastest time by Stuck (Auto-Union), but Seaman (E.R.A.) is only one k.p.h. slower

The Freiburg hill-climb is regarded in Germany as a Grand Prix, being the premier mountain race on their national calendar. The hill itself is 12 kilometers in length and is actually situated at Schauinsland, near Freiburg-en-Brisgau.

The event was held on Sunday, September 1, which turned out to be a glorious day. The sun shone with terrific intensity from a cloudless sky, and the 40,000 spectators who lined the hill were hard put to it to find some shade.

Most of the corners had been re-laid specially for the event, but the binding agent used was not sufficient to prevent the surface from breaking up badly under the sliding wheels of the racing cars. This circumstance greatly favoured the smaller cars, with some surprising results.

Fastest time of the day was made according to expectations, by Hans Stuck, with an Auto-Union. His time was 8 minutes 24.1 seconds, an average speed of 85.6 k.p.h., some 3 k.p.h. slower than his record made last year. He narrowly averted being beaten by Richard Seaman, whose 1,500 c.c. E.R.A. was only one k.p.h. slower! His performance absolutely astonished the spectators, who could hardly believe their ears when the times were announced. Raymond Mays was 11 seconds slower than Seaman, due to a spectacular skid on one of the corners. Seaman's time was the second fastest of the day, and he had the satisfaction of beating such an experienced hill-climber as Renato Balestrero, driving a 3-litre Alfa-Romeo.

Equally astonishing was the performance of Bobby Kohlrausch, whose 750 c.c. M.G. was also faster than Balestrero's Alfa-Romeo! Another M.G., driven by Brudes, easily own the 1,100 c.c. sports class, so that altogether British cars won three classes out of eight.

RESULTS.

Racing.
1,100 c.c.—1, Kohlrausch (M.G.), 9m. 7.1s.
2, Baumer (Austin), 9m. 18.9s.
1,500 c.c.—1, Seaman (E.R.A.), 8m. 25.1s.; 2,
Mays (E.R.A.), 8m. 36.8s.; 3, Kessler (Maserati),
8m. 52.1s.
3,000 c.c.—1, Balestrero (Alfa-Romeo), 9m. 9.9s.;
2, Wimmer (Bugatti), 9m. 14.1s.
Over 3,000 c.c.—1, Stuck (Auto-Union) 8m. 24.1s.
Sports.
1,100 c.c.—1, Brudes (M.G.), 9m. 22.3s.; 2, Briem
(Amilcar), 9m. 54.5s.
1,500 c.c.—1, Sojka (Bugatti), 9m. 40.2s.
2,000 c.c.—1, Kautz (Alfa-Romeo), 9m. 41s.
Over 2,000 c.c.—1, Pohl (Bugatti), 9m. 1.9s.
2, Balestrero (Alfa-Romeo), 9m. 8.7s.



Dixon receives the chequered flag after a great race.

Freddy Dixon rarely fails to give a touch of interest to any race in which he is entered. In his first appearance in the Ulster race in 1932, he crashed at Quarry Corner in the most spectacular way when in the lead, while two years ago he was at one time second, driving with his familiar fireworks. Last year he was not recovered sufficiently from his crash at Donington to be able to take the wheel, but on this his third essay of the Ards circuit, he drove a perfect race, only once losing the leading position. His four-cylinder Riley proved unexpectedly fast, and a new touch of caution, partly induced perhaps by some of his narrow escapes, allowed him to complete those 478 miles with only a single anxious moment.

No less creditable was E. R. Hall's performance on the 3½-litre Bentley, which finished just over a minute behind the Riley, once again securing second place. He averaged 80.36 m.p.h., the fastest speed yet achieved on the Ards circuit by an unsupercharged car. Lord Howe on one of the much-fancied 3.3 litre Bugattis was third, then in close company Brackenbury and Penn Hughes on Aston-Martins; these two, with Rose-Richards, also secured the team prize. Cyril Paul, on a Riley similar to the one driven by the winner, occupied the last place on the leader-board, while the 4½-litre Lagondas, only seconds behind, would have finished higher but for their two tyre changes.

Not a single one of the thirteen cars with engines under 1,100 c.c. finished the course, a vast change from the state of affairs which prevailed at Ulster a few years ago. And who shall say that the larger cars are not more interesting to watch, at any rate to the average spectator?

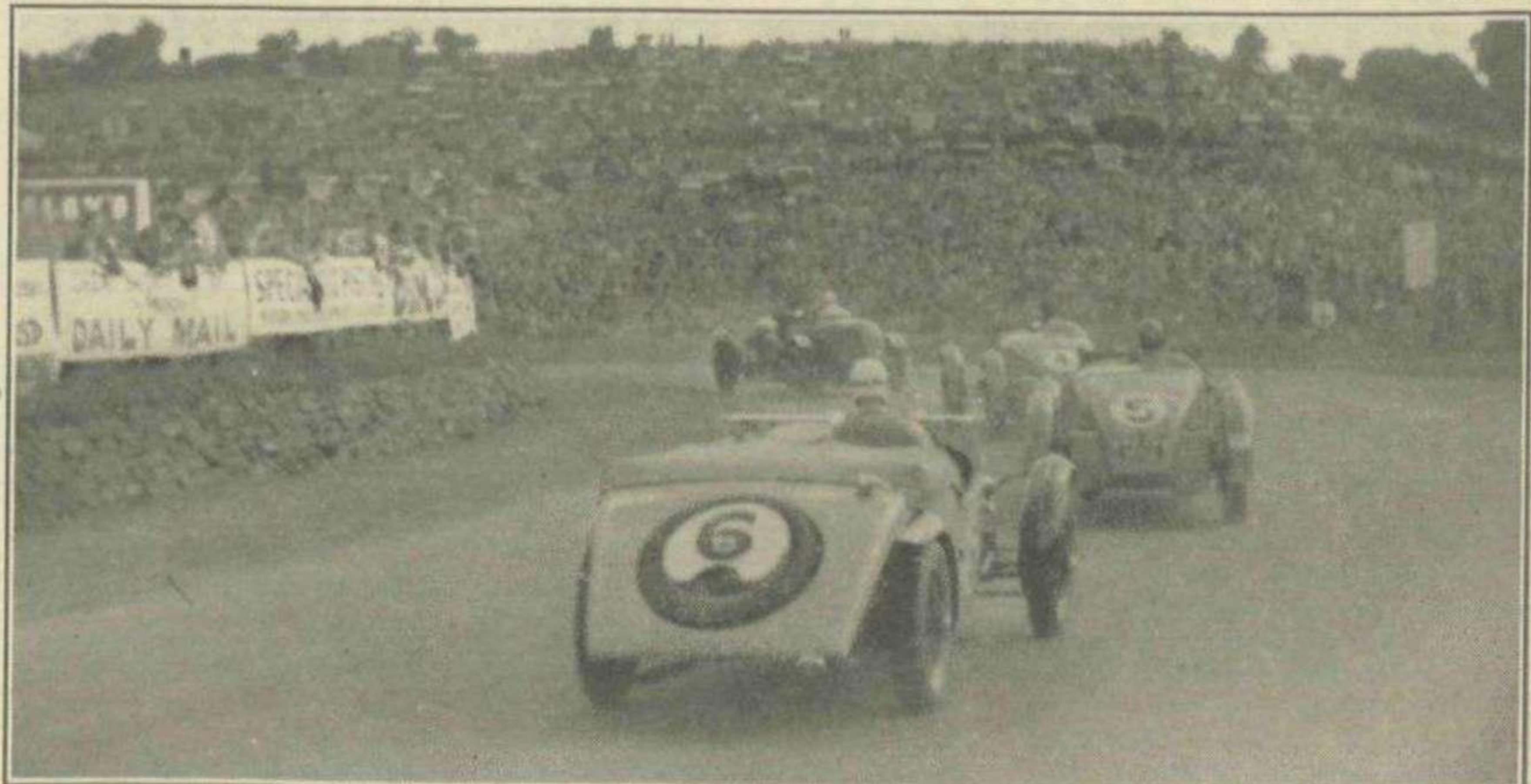
The number of entries was fewer than last year, but the 35 cars which figured on the list were representative of the

most advanced British and Continental design. For the second time and with equal success, the race was confined to non-supercharged cars. A last minute change of date, which was no fault of the R.A.C., brought the race within a day of the Italian Grand Prix. The T.T. therefore lost its place on the International calendar, and foreign drivers were not permitted to compete, but it is doubtful whether Continental entries would have materialised in any case.

The first cars in the list were the two 4½-litre Lagonda Rapides, two of the three which gained the team prize in last year's T.T., while Hindmarsh's victory at Le Mans is too recent to be forgotten. The cars were unaltered from last year, except that an outside exhaust system had now been fitted, and with a very light body weighing only 2 cwt., they turned the scales at about 28 cwt. The horse-power is about 120, and the all-out speed 108 m.p.h.

The Railton unfortunately was not finished in time for the race and had to be scratched. Weighing only 18½ cwt., it would have been ideal for the winding roads which form two sides of the course. The Bugattis driven by Lord Howe and the Hon. Brian Lewis were models of light construction with their duralumin shell bodies, and weighed only 26 cwt. with driver, fuel and water. De Ram shock absorbers were used and the engines were said to develop over 169 h.p. at 5,500 r.p.m., which sounds rather fantastic. At any rate the compression-ratio was well over 8 to 1 thanks to the efficient shape of the twin combustion chambers. Lord Howe's car did close on 120 m.p.h. while Lewis's car was somewhat slower.

Hall's Bentley was outwardly identical with the car he drove last year. The driver declined to disclose his weight, but it was probably about 23 cwt., and the all-out speed was some 110 m.p.h.



Quarry Corner is a favourite view-point, as this photograph shows. The cars are, Hindmarsh's Lagonda, the works 3.3-litre Bugattis of Lewis and Howe and Dwyer's privately entered car.

THE ULSTER T.T.—continued.

Powys-Lybbe's Alvis, an old Silver Eagle with the larger engine, ran in last year's T.T. The Marendaz Special was making its debut at Ards. The engine is a two-litre Coventry Climax with o.h. inlet valves and side by side exhausts, and the chassis is unusual in having cantilever rear springs.

The Aston-Martins were the same cars which distinguished themselves at Le Mans, solidly built and weighing 18½ cwt., while the engines now develop over 80 h.p. at 5,500 r.p.m. The Rileys had the new 1½-litre four-cylinder engines which are 1½-cwt. lighter than the old sixes, in the M.P.H. chassis. The four-cylinder engines give more power, and Dixon considered that his car scaled not more than 13½ cwt. No wonder it went so well.

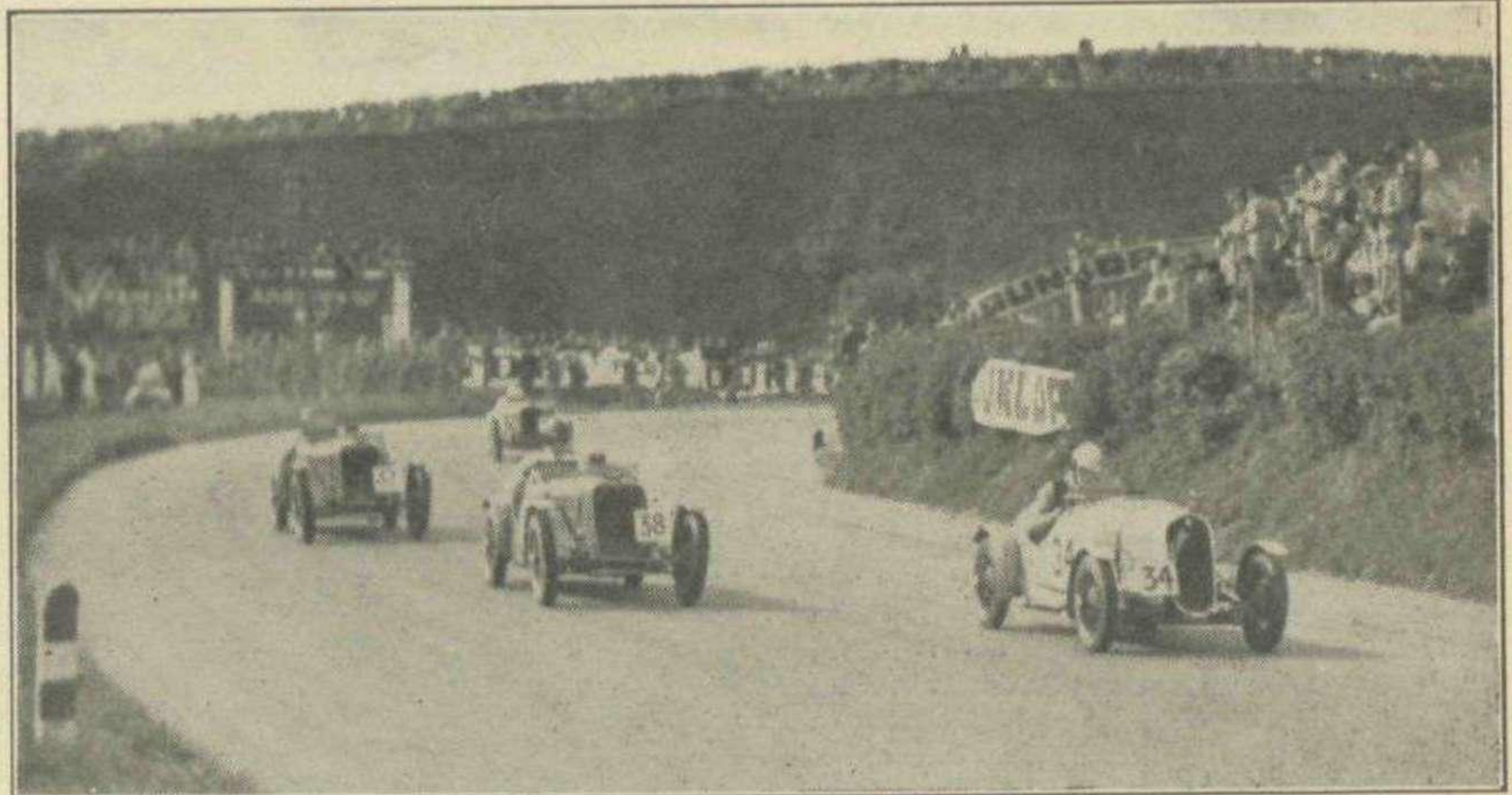
The three Magnettes entered by D. G. Evans were last year's team cars, and Baird's car was similar. The three former vehicles were fitted as an experiment with wireless receivers, but owing to interference from the ignition, signals could not be picked up when the cars were running. The last car of the 1½-litre group was the Lagonda Rapier entered by Davies Millar, a well-known Scottish competitions driver. It was fitted with an extremely neat and light body, improved gear control and other marks of good preparation.

The 1,100 c.c. class comprised three interesting teams of cars not previously seen on the Ards circuit, Adlers, Fiats and the new 9 h.p. Singers. The two former makes are now assembled in the Free State. The Adlers had one-litre engines with side-by-side valves, and also of

of the new four-cylinder by lapping in 10 minutes 20 seconds or 79.31 seconds, 32 seconds above handicap, while McClure and Cyril Paul on similar cars also recorded excellent times.

Donkin had a narrow escape from serious injury when his Aston-Martin overturned at Quarry Corner. Taking

marshals and ambulance men were at their posts all round the thirteen mile circuit and a solid mass of spectators flowed from Dundonald to the Grand Stand and Quarry Corner. At ten-thirty the police performed their annual miracle of clearing the course, and a quarter of an hour later the arrival of the Governor-



For lap after lap the small fry ran in close company. French-Davis on his Fiat is closely pursued by Norman Black and S. C. H. Davis (Singer).

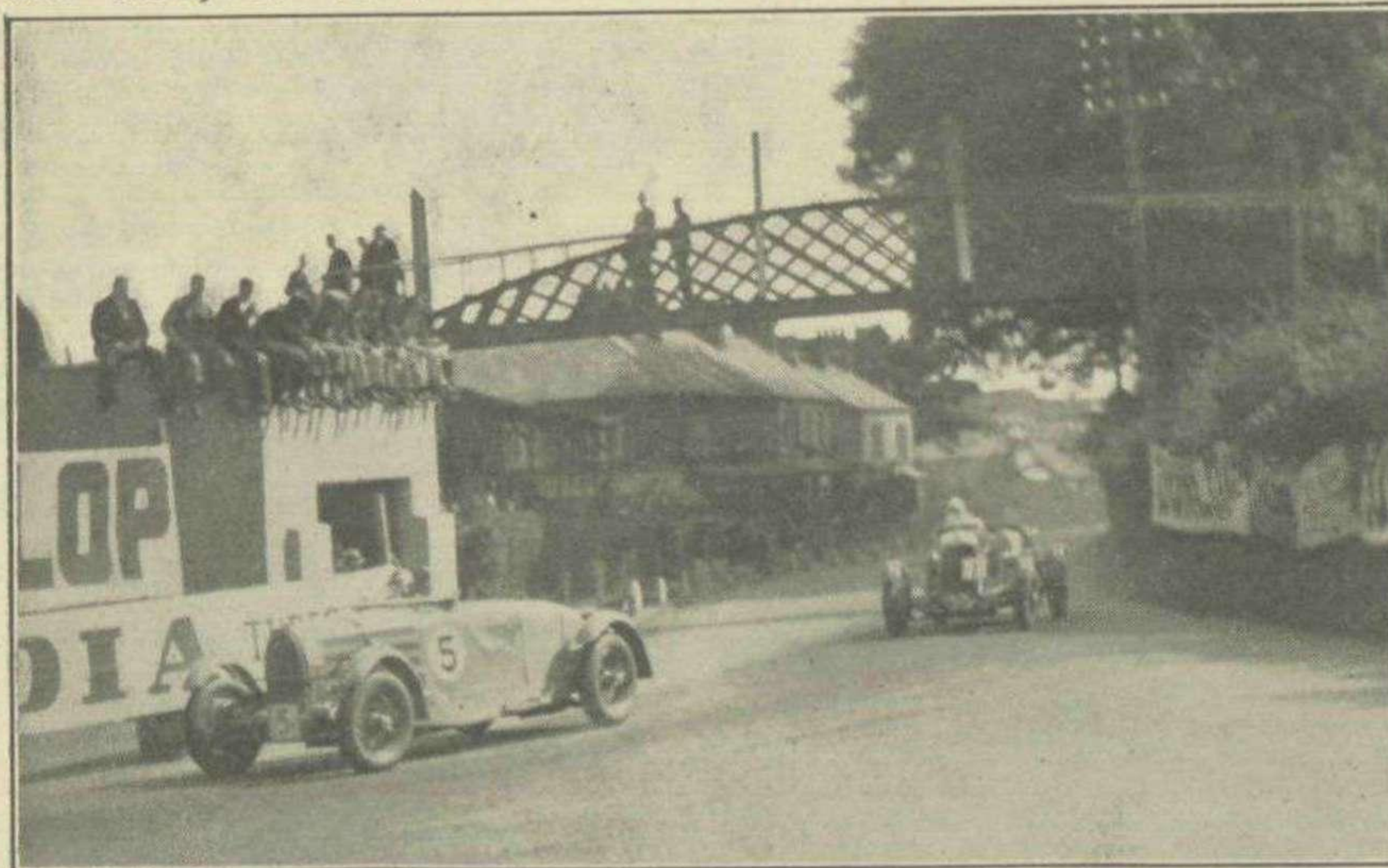
the corner, which was decidedly slippery after a light shower, at rather high speed, the tail swung round and the car charged up the bank, turned over and fell back on the driver, who was fortunate to escape with nothing worse than a face cut by fragments of glass from the mirror and a scratched hand. A new front

General of Northern Ireland, who made a short inspection of the cars and chatted with the drivers, showed that zero hour was close at hand.

The cars were drawn up in front of the pits, arranged in groups according to their starting times, with drivers in their seats. The first group to be dispatched were the four N type Magnettes entered by Denis Evans and Baird. All four cars got away well, with K. D. Evans and Seaman leading. A minute afterwards the main bunch of the 1½-litre cars were due to start and there was great excitement when Dixon started his engine prematurely and pulled over in front of McCalla on the Marendaz. When the flag did drop the twelve cars were really thrilling as they roared off in a jostling pack, with Dixon and Paul in the lead and Martin and Brackenbury at their heels. What a spectacle the field of 33 would have made!

The road was once more filled with cars as the ten one-litre machines got under way, or rather nine of the ten, for Stanley Woods, all-conquering on two-wheelers, found his Adler slow in responding to the call. The start was fittingly concluded with the six cars of the five-litre class, the higher pitched exhaust note of the Bugattis of Lewis and Howe contrasting with the powerful boom of the Lagondas and the Bentley.

With all the cars away there was the usual babble of conversation on the stand, then quiet again as the first-comers roared into sight, these being the Magnettes of Kenneth Evans and Seaman, which passed the stand almost abreast. Dixon and Paul were obviously making inroads into the 68 seconds start of the 1,300 c.c. cars, which had been fitted with new and rather unsuccessful camshafts. Martin and Brackenbury were the nearest rivals of the flying Rileys. When the big cars flashed through, it was seen that Lewis



Lord Howe drove his Bugatti fast and consistently to finish in third place. He is seen here at Dundonald Hairpin, with Hindmarsh on the Lagonda behind him.

course front-wheel drive, the Fiats were the usual sprightly two-seaters, while the Singers were all examples of the new Le Mans car with streamlined bodywork.

On the first day of practising Lord Howe made the fastest time on his Bugatti, lapping in 10 minutes 16 seconds or six seconds better than handicap time, while Dixon was equally successful on his Riley. Next day Handley, Dixon's spare driver, further revealed the quality

axle taken from a standard touring car was fitted the same afternoon, and the driver was sufficiently recovered to run on Saturday.

There was a light mist on the day of the race, but the early sun soon dispersed it. At least a dozen cross-channel steamers were berthed in Belfast harbour, and these added their complement of race-fans to the crowd of 200,000 from the Emerald Isle itself. Police, flag-

THE ULSTER T.T.—continued.

(Bugatti) and Hall on the Bentley had forced their way past Hindmarsh on Lagonda No. 1, which was followed by Howe (Bugatti), Dodson (Lagonda) and McFerran, who was taking the first spell on Dwyer's privately owned Bugatti.

The second lap saw Dixon and Paul gaining steadily on the Magnettes, and von der Becke on another Riley was close behind Martin and Brackenbury, the leading Aston drivers. Then came "Bira," the Siamese prince, very smart in his pale-blue car, Penn Hughes, Clarke who was driving in place of Falkner, Rose-Richards, rather handicapped by a piston fitted at the last minute and a rev-counter which ceased to function after one lap, and last of the Aston-Martin gang, Donkin, bareheaded and with his face swathed in bandages.

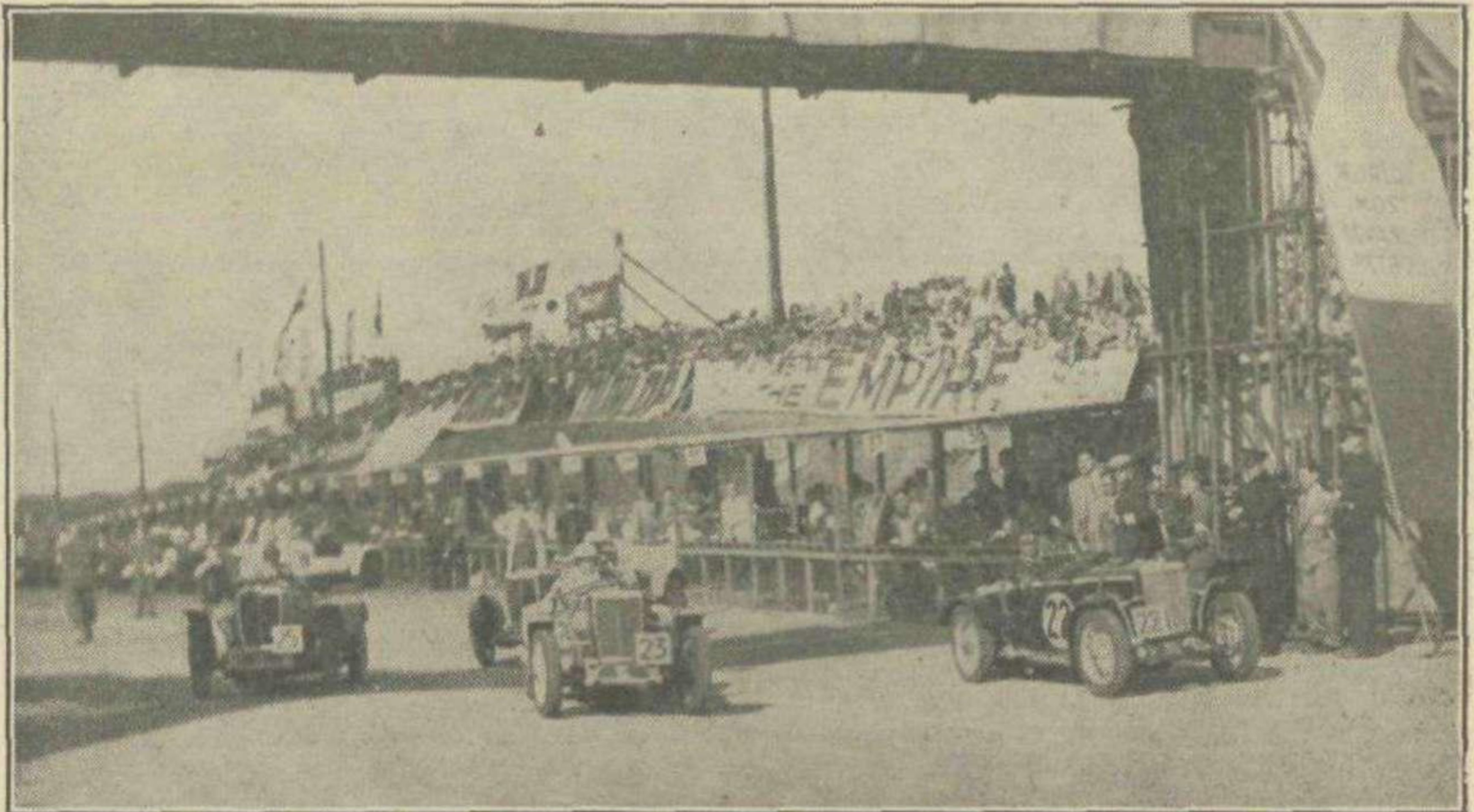
Brian Lewis had by now gained a lead of a hundred yards from Hall, though the effortless way in which he took Quarry Corner made one feel he was not yet really hurrying. Almost all the drivers took this famous right-angle in good style, the only exceptions being McCalla (Marendaz Special), who was trying to make up for a four-minute stop to adjust his gear-box, Millar on the Lagonda Rapier who was reported as being wild at several points, and McFerran whose 3.3 Bugatti seemed to call for drastic adjustment of shock absorbers.

The small cars were still closely grouped together with French Davis on a Fiat closely pressed by S. C. H. Davis and Norman Black on Singers. By virtue of their four-lap start, of course, the small cars were due to lead the race for a considerable period.

81.82 m.p.h. he passed Lewis. Hindmarsh and Hall were having a stern fight for third place in the class. Even after six laps not eighty yards covered the two Bugattis, the Bentley and the

Order after one hour:—

	m.p.h.	Time behind Leader
1. Dixon (1,496 c.c. Riley)	77.66	
2. Lewis (3.3-litre Bugatti)	80.79	27s.
3. Earl Howe (3.3-litre Bugatti)	80.75	29s.



The M.G. Magnettes move off. Baird, the North of Ireland driver, is on the right, while K. D. Evans is in the centre and R. J. B. Seaman is on the left.

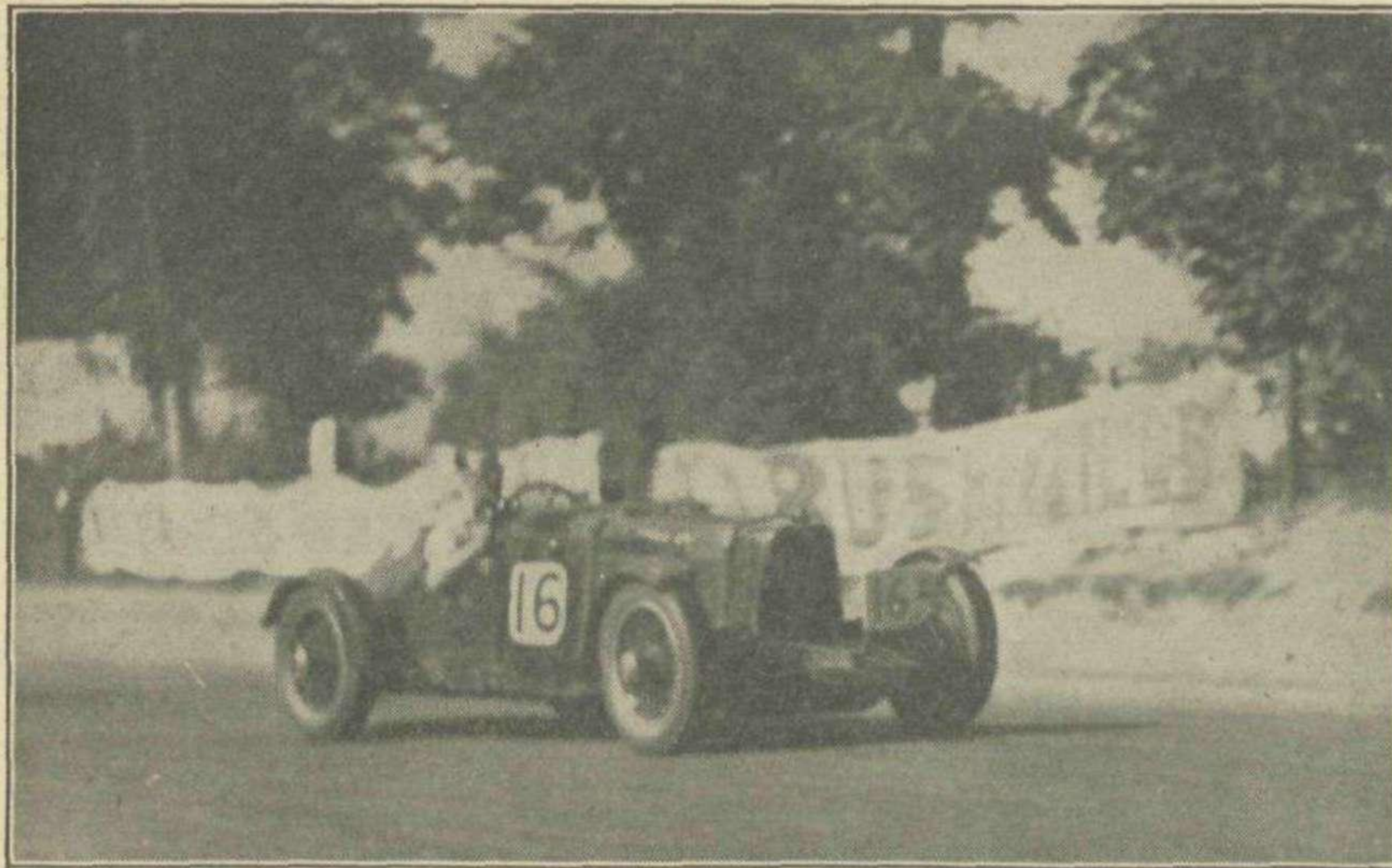
two Lagondas, and Hindmarsh showed what the Lagonda could do with a lap in 9 minutes 57 seconds (82.37 m.p.h.) only 6 seconds slower than the late Sir Henry Birkin's record on the blown 2.3-litre Alfa. Then Brian Lewis opened up again on his ninth lap, and with a magnificent time of 9 minutes 56 seconds (82.51 m.p.h.) passed Lord Howe and

4. Hindmarsh (4½-litre Lagonda)	80.61	34s.
5. Dodson (4½-litre Lagonda)	80.52	37s.
6. Hall (3½-litre Bentley)	80.38	46s.

The leaders were lapping at speeds quite outstanding for unsupercharged cars, but for other less fortunate drivers troubles set in at an early stage. One of the first to suffer was "B. Bira" the Siamese driver. He pulled into the pits with the bonnet of his car smothered in oil, and it was found that a flexible oil pipe had burst. This was replaced, but the same thing happened again, and after a series of pit-stops which grew longer and longer, the car was finally withdrawn. Falkner came in with low oil pressure, which was traced to the same cause, and Charlie Martin, who had been leading the Aston-Martin team, later experienced the same trouble, but was able to proceed after the oil pipe had been replaced, a job which took 15 minutes.

Denis Evans was another victim of low oil pressure, retiring on the seventh lap, while Stanley Woods paid an early call on his Adler to take on oil, foreshadowing his retirement on the tenth lap.

The tenth lap also saw a dramatic change in the order of the big cars. Instead of Lewis's blue Bugatti in the lead, Lord Howe was the first to appear, surprising everyone by pulling into the pits to change his rear wheels. Then came the two Lagondas, with Hall 200 yards behind, and last of all Lewis, now travelling slowly a quarter of a mile behind the others. He pulled into the pits and announced that the clutch was slipping owing to oil leaking from the gear-box. A recumbent mechanic applied the usual remedy, fire extinguisher fluid, and tightened up the adjustment. This meant a loss of five minutes, and a further three on a subsequent stop. As though to complete the tale of oil in the wrong



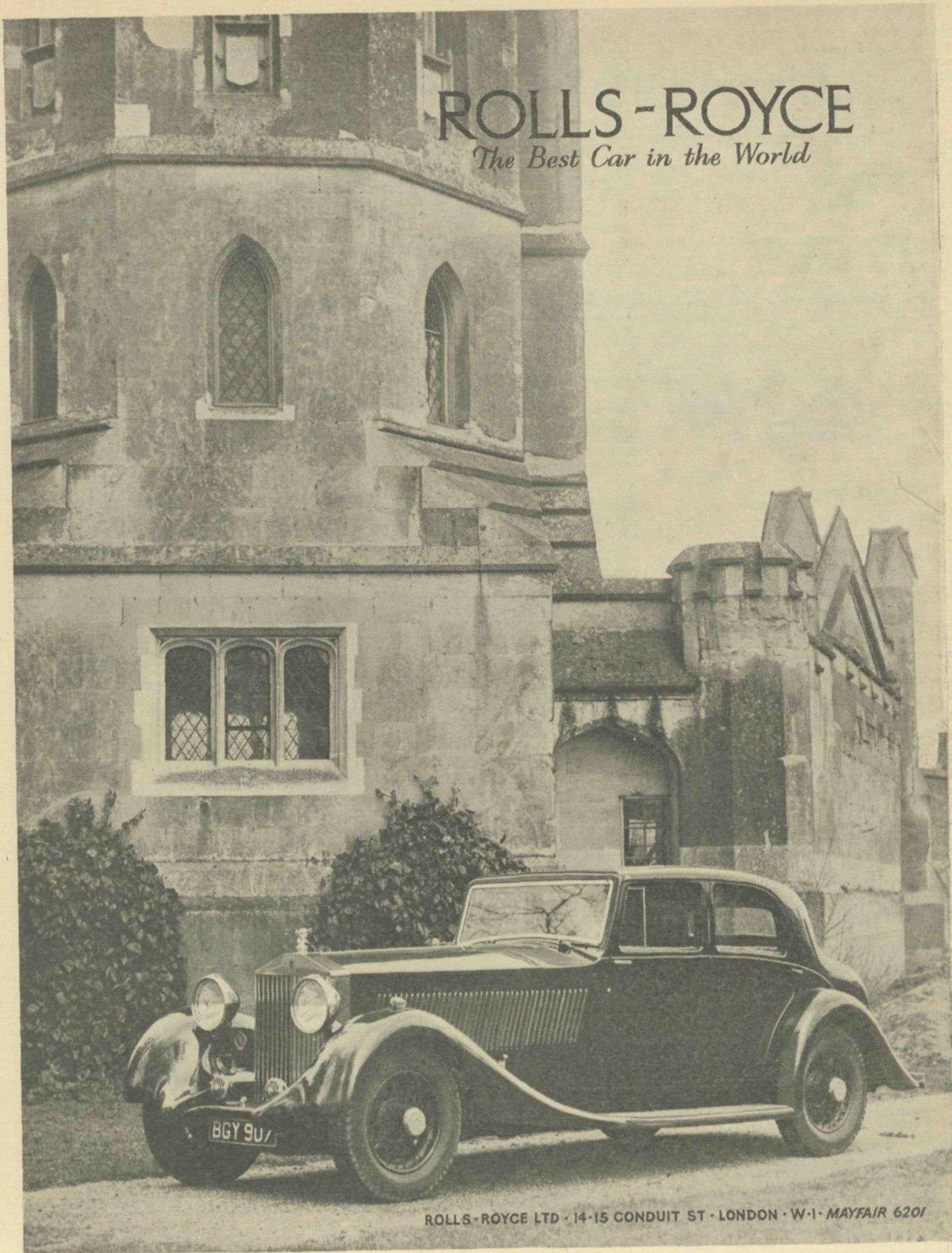
Charles Brackenbury (Aston-Martin) who finished fourth, accelerating away from Dundonald Hairpin.

Dixon's Riley was the first car round on the third lap, with Lord Howe second behind Lewis in the "circus" of big cars, and on the fourth Paul too had overhauled the Magnettes. Howe's second lap in 10 minutes 3 seconds had broken the record for an unsupercharged car, but his third was even better and with a time of 10 minutes 1 second or

again headed the big cars. Dixon too had been creating records, in class F, with laps in 10 minutes 32 seconds and 10 minutes 26 seconds, but E. McClure, finding himself getting left behind as it were, maintained his position with one at 10 minutes 25 seconds and then 10 minutes 21 seconds, the latter giving a speed of 79.18 m.p.h.

ROLLS-ROYCE

The Best Car in the World



ROLLS-ROYCE LTD · 14-15 CONDUIT ST · LONDON · W-1 · MAYFAIR 6201

THE ULSTER T.T.—continued.

place, Davies Millar (Lagonda Rapier) was reported retired at Dundonald with no oil pressure and a run big-end, and McClure's Riley suffered the same fate.

The stops made by the two Bugattis naturally favoured Hindmarsh, and at one o'clock he was actually beating Dixon on handicap. However, in view of the rate at which the tyres had worn in last year's race Arthur Fox had decided to change them twice in this race whatever happened, so at 1.4 p.m. the big red car was flagged in, all four wheels changed, and 22 gallons taken on board, in the creditable time of two minutes. Dodson's stop, a few minutes later, took 2 mins. 9 secs. and he shot off with one of the jacks jammed under the rear axle; luckily it dropped clear immediately. Hall reckoned he could get the Bentley through with a single tyre change, a most valuable saving in a closely fought race such as this. Dixon was lapping at about 78 m.p.h. evidently with plenty in hand. Cyril Paul was going well too, and was only half a minute behind Dixon on the road.

Order after two hours:—

	m.p.h.	Time behind Leader
1. Hindmarsh (4½-litre Lagonda)	81.31	
2. Dixon (1,496 c.c. Riley)	77.28	17s.
3. Hall (3½-litre Bentley)	80.94	30s.
4. Dodson (4½-litre Lagonda)	80.76	45s.
5. Paul (1,496 c.c. Riley)	76.72	48s.
6. Brackenbury (1,495 c.c. Aston-Martin)	75.42	2m. 57s.

So far, except for some moments when cars raced abreast across Newtownards Square, there had been no alarming incidents, but at 1.3 p.m. McFerran (Bugatti) was reported as having skidded sideways into the sandbank protecting the Town Hall. The car, which was damaged too much to continue, tipped over at an alarming angle but the driver managed to stay in the car. Le Fanu charged the barrier at Dundonald but was able to back out, and Penn Hughes had a skid but recovered. McCalla had a skid too, this time at Quarry Corner, but his Marendaz Special was making an excellent showing and broke the two-litre class record with a lap of 11 minutes 13 seconds (73.07 m.p.h.). A more disquieting report was that Langley's Singer had overturned on Bradshaw's Brae. The driver escaped with a shaking.

At 1.30, just before the majority of cars were due in at the pits, the order was the following:—Dixon (Riley), Hall (Bentley), Paul (Riley), Hindmarsh (Lagonda), Brackenbury (Aston-Martin) and Penn Hughes (Aston-Martin) who had advanced steadily to support his team mate.

K. D. Evans was one of the first to stop for fuel, and took on petrol, oil and water in one minute. French Davis, who had at last been passed by S. C. H. (no relation!) and Norman Black on their Singers, took 3½ minutes for his Fiat, changing plugs and rear wheels as well as refuelling. Then Seaman came in in a great hurry and overshot his pit, but so well were things organised that in spite of this he took on petrol and changed all four wheels all in 1 minute 45 seconds, a feat which was loudly clapped.

A few minutes later quite a dozen cars had pulled in at their depots and mechanics were hammering wheels with a sound like riveters in a shipyard.

The Aston-Martin team cars came in at short intervals, but the organisation was equal to the task, and all the cars got away with a stop of less than two minutes each. Not so Brian Lewis, who came in with the clutch again slipping and after a talk with the pit staff lit a cigarette and helped to push his car to the dead-car park.

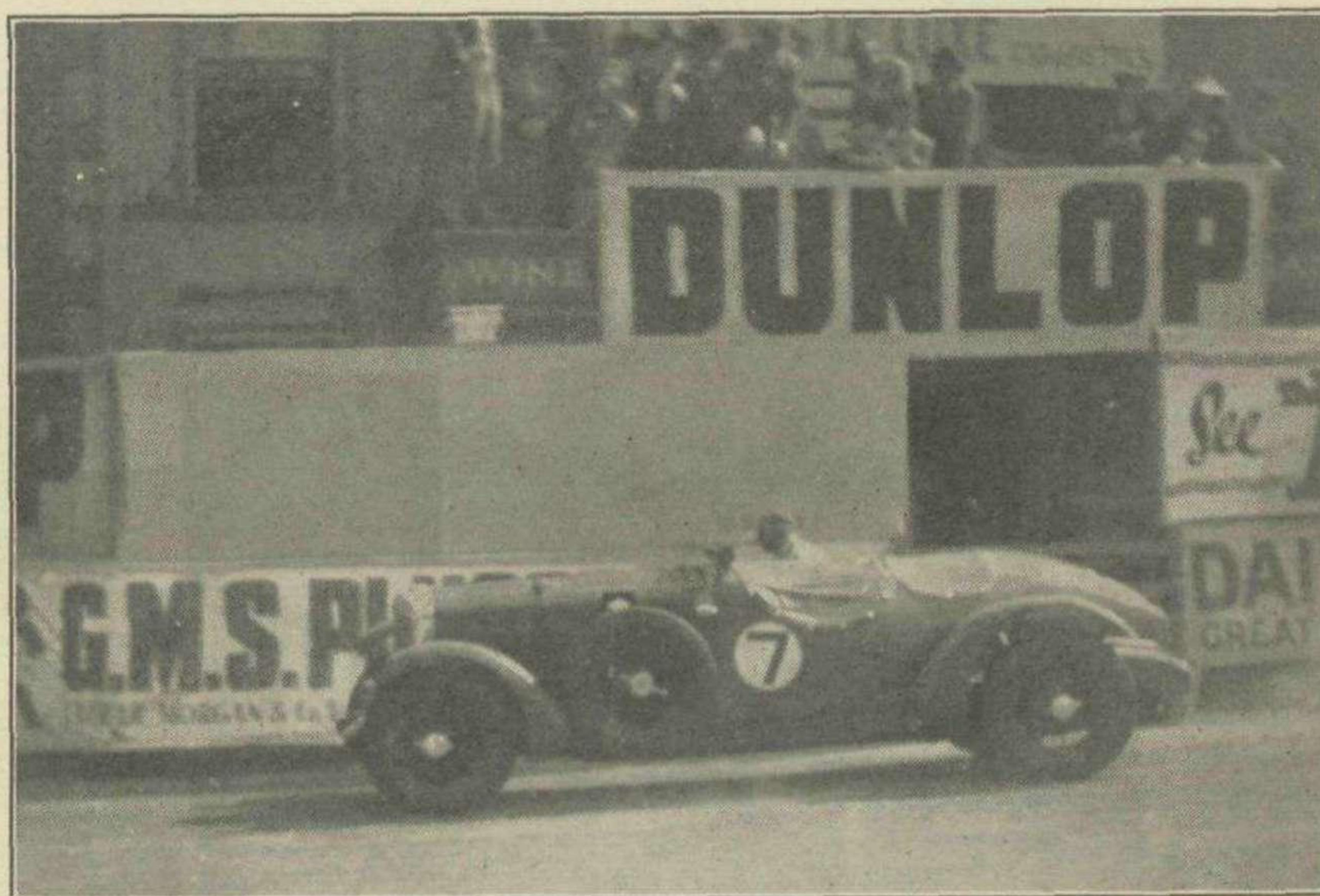
At two o'clock the order was as follows:

	m.p.h.	Time behind Leader
1. Dixon (1,496 c.c. Riley)	77.49	
2. Hall (3½-litre Bentley)	81.13	28s.
3. Paul (1,496 c.c. Riley)	77.08	59s.
4. Hindmarsh (4½-litre Lagonda)	79.73	3m. 33s.
5. Brackenbury (1,495 c.c. Aston-Martin)	75.68	4m. 21s.
6. Penn-Hughes (1,495 c.c. Aston-Martin)	75.65	4m. 24s.

tured float, and got away with some difficulty afterwards, as though bottom gear had gone.

On the twenty-third lap, after refuelling, Dixon was still the leader on handicap. Four other cars were on the same lap, Hindmarsh who was 6 minutes 57 seconds behind, in actual time on the road, Hall 7 minutes 25 seconds, Paul 7 minutes 40 seconds, and Dodson 9 minutes 45 seconds, with Lord Howe and Brackenbury and Penn Hughes on their Aston-Martins just over a lap in the rear. S. C. H. Davis who was leading the small cars on his Singer was just ahead of Dixon owing to his start of four laps, but Dixon caught him at Dundonald next time round.

The question was, could Hall pick up some 20 seconds per lap till the end of the race. A report that he had broadsided at the Moate suggested that at any rate he had his foot well down. He was 6



Hall close in at Dundonald, hot in pursuit of Freddy Dixon.

Neither Hall nor Dixon had stopped yet, but while we were waiting the news came through that Norman Black, who was the fastest of the small cars and still ahead of Dixon, had crashed at the second bend of Bradshaw's Brae, the car running half-way up the bank at the side of the road. Driver again O.K. At two o'clock precisely Hall pulled in, leapt from his seat and filled up with water, oil, and twenty-five gallons of petrol, hurling the empty churns back into the pit, while the two mechanics each with a jack had dealt with the back and front wheels in turn. The Bentley got away again in 2 minutes 18 seconds, quite fast considering what had to be done. Hardly had he gone when Freddy shot in, topped up with oil and water and took 14 gallons of petrol, changing only the rear wheels. His time was 30 seconds better than that of Hall, so the latter driver would have to "put on his skates" as the motor-cyclists say if he wanted to catch the Riley. Paul also favoured a midway stop, changed a punc-

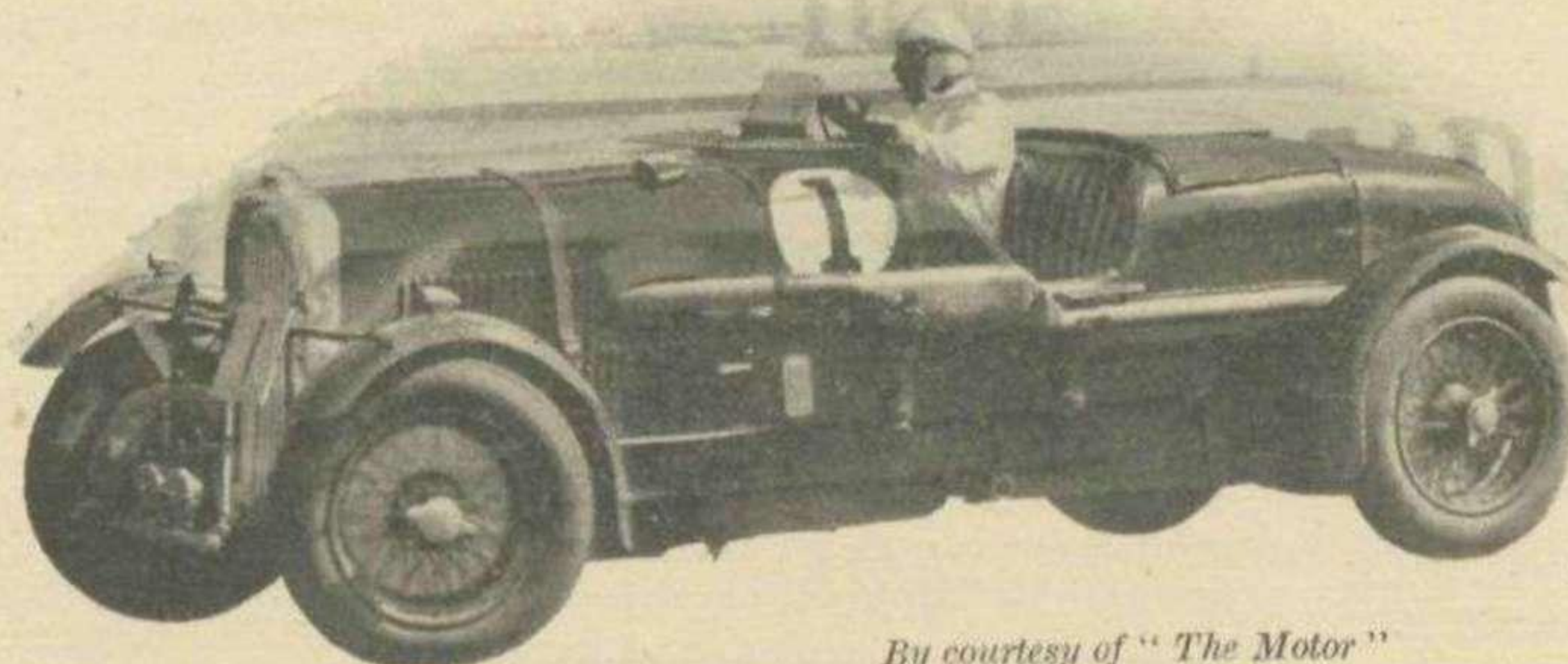
minutes 20 seconds behind on the twenty-fourth lap and picked up no less than 35 seconds on his next time round.

Davis's run on the Singer ended in dramatic fashion on the second bend of Bradshaw's Brae. The car crashed into the bank not more than six feet from No. 38, Norman Black's car, and actually ended partly on top of it, the driver being flung out over the tail but fortunately without injury. As in the case of the other two Singers which crashed, the accident was caused by the failure of the steering arm. The case-hardening of the ball-joint had extended further than it should have done, and the arms snapped with the strain of sliding the bends on Bradshaw's. Another moment of anxiety just then occurred when a horse escaped on to the course near Dundonald, and several cars had to slow down to avoid it.

The two Lagondas came in for their second wheel-changes which put paid to their chances of challenging Dixon and Hall, while Dixon had been warned of

**ULSTER T.T.
WINNER of LE MANS GRAND PRIX
FOX & NICHOLL LTD.
OFFER ACTUAL LAGONDA FOR SALE**

Reconditioned
for
Ordinary
Touring



Price
£600

By courtesy of "The Motor"

**FASTEST LAP TIMES EVER RECORDED BY BRITISH CAR IN T.T.
OVER 82 M.P.H.**

DEMONSTRATION BY APPOINTMENT

**TOLWORTH MOTOR SERVICE STATION,
KINGSTON BY-PASS ROAD, NEAR SURBITON**

Telephone : MALDEN 0700 (3 lines)

C A V E

Control **I**NSTANTANEOUS of brake and accelerator.
Added comfort and complete safety under all conditions.
Valuable seconds saved when driving in sporting events.
Easily the most important improvement in car control.

C A V E
AUTO THROTTLE CONTROL

Send Post Card for details and folder "Split Seconds" and particulars of LEE & CAVENDISH
10 numbered services which include :—

A new car, taxed and insured for £15 deposit. Free A.A. or R.A.C. examination on
any used car. Every facility for purchase and construction of the "Flying Flea," etc., to:

LEE & CAVENDISH LTD.,
**72, Park Hill, Clapham Park, S.W.4. (5 MINUTES CLAPHAM
COMMON STATION.)**
Telephone : MACAULAY 4426-7

THE ULSTER T.T.—continued from page 550.

the Bentley's challenge and put up a record lap of 10 minutes 20 seconds and followed it with one in 10 minutes 19 seconds (79.44 m.p.h.). Baird electrified his countrymen by turning completely round in Newtownards Square, while von der Becke bumped the sandbags of the long-suffering Town Hall. Powys-Lybbe, who had been putting up a fine show on his veteran Alvis, came in for plugs, and set off again on five cylinders. His pit manager thought the irregularity was caused by the disappearance of a piston, so the gallant old motor was withdrawn.

Hall continued to peg away, reducing Dixon's lead to 5 minutes 58 seconds on the twenty-seventh lap, 5 minutes 9 seconds next time round, 5 minutes 14 seconds on the twenty-ninth and 5 minutes 4 seconds on the thirtieth. It then became certain, barring accidents, that the big car could not overhaul the 1½-litre, so interest transferred to the other cars on the leader board. Hindmarsh, who was lying third at 4 o'clock had the bad luck to break a petrol pipe,

which cost him 4 minutes and a probable place. Brackenbury and Penn Hughes were still going great guns, a few lengths apart and averaging 75.7 m.p.h. The retirement of French Davis put the Fiat team out of the running, and the Aston folk had some consolation for their mysterious oil pipe failures by securing the team award.

The last laps were marked by the applause which greeted the stout-hearted Dixon, now slowing to avoid any last-minute mistake, and no less so Hall on the Bentley, who concluded with a lap in 10 minutes 5 seconds which brought him home only 1 minute 13 seconds behind his fellow-Yorkshireman. Lord Howe had been making splendid progress on the Bugatti, and on the thirty-third lap caught the two Aston-Martins to secure third place, while last-minute laps of 9 minutes 57 seconds and 9 minutes 59 seconds by Hindmarsh and Dodson brought them within seconds of Cyril Paul on the works Riley. "Ebby's" handicapping had once more ensured a fine finish, and with the task of the smallest cars

somewhat reduced, next year will no doubt see some of them taking their place amongst the first six.

RESULT.

1. F. W. Dixon (1,496 c.c. Riley), 6h. 3m. 31s. 76.90 m.p.h.
2. E. R. Hall (3,669 c.c. Bentley) 6h. 4m. 44s. 80.36 m.p.h.
3. Earl Howe (3,255 c.c. Bugatti), 6h. 7m. 37s. 79.72 m.p.h.
4. C. Brackenbury (1,495 c.c. Aston-Martin), 6h. 8m. 52s. 75.78 m.p.h.
5. C. Penn Hughes (1,495 c.c. Aston-Martin), 6h. 8m. 53s. 75.77 m.p.h.
6. Cyril Paul (1,496 c.c. Riley), 6h. 11m. 28s. 75.25 m.p.h.
7. J. S. Hindmarsh (4,451 c.c. Lagonda), 6h. 11m. 29s. 78.87 m.p.h.
8. C. J. P. Dodson (4,451 c.c. Lagonda), 6h. 11m. 30s. 78.86 m.p.h.
9. A. W. K. von der Becke (1,496 c.c. Riley), 6h. 14m. 5s. 74.71 m.p.h.
10. R. J. B. Seaman (1,287 c.c. M.G. Magnette), 6h. 18m. 12s. 73.68 m.p.h.
11. T. E. Rose-Richards (1,495 c.c. Aston-Martin), 6h. 22m. 20s. 73.11 m.p.h.
12. W. R. Baird (1,287 c.c. M.G. Magnette), 6h. 25m. 24s. 72.31 m.p.h.
13. K. D. Evans (1,287 c.c. M.G. Magnette) 6h. 39m. 55s. 69.68 m.p.h.

Team Prize won by Aston-Martin No. 1 Team—C. Brackenbury, C. Penn Hughes and T. E. Rose-Richards.

TADINI BEATS NUVOLARI AND VARZI

IMPRESSIVE VICTORY FOR FERRARI DRIVER IN THE STELVIO HILL-CLIMB. NO BRITISH DRIVERS COMPETE

To beat Nuvolari by 17 seconds in a hill-climb is a feat of which anyone may justly be proud. By doing so, Mario Tadini has established himself for all time as one of the finest hill-climbing exponents.

The scene of his exploit was the Stelvio Pass, that superb mountain road, in the Italian Alps. Actually, there are 13 corners on the first stretch, which is followed by a straight piece of road, as at Klausen.

Tadini never made a mistake. He has won the Stelvio hill-climb for several years past, but the opposition on those occasions was not as difficult as that last month. However, he succeeded in beating his own record by 45 seconds, and thoroughly deserved his victory.

Second place was taken by Tazio Nuvolari, his team-mate driving a similar Alfa-Romeo. Pietro Dusio (Maserati), made the best performance of his short career by making third fastest time, only 4 seconds slower than Nuvolari. Fourth was Hans Ruesch, on another Maserati,

and fifth the miserable Achille Varzi, on an Auto-Union. Varzi had a tough job taking the long German car to the top. The Auto-Union was hopeless on the hairpins, and he had to reverse on five of them. He made up some time on the straight, but he was a weary man when he reached the summit. His discomfiture delighted the Italian spectators, who loudly proclaimed the virtues of the Alfas and Maseratis to the detriment of the German car. So offensive did their demonstration become that the announcer was constrained to broadcast an appeal for order and sportsmanship. There might have been a different tale to tell had a Mercedes-Benz been on the scene.

Only one British car took part, an M.G. Magnette driven by Cecchini. It acquitted itself handsomely by winning the 1,100 c.c. racing class in 15 minutes 31.97 seconds.

RESULTS.

Racing.

- 1,100 c.c.—1, Cecchini (M.G.), 15m. 31.97s.; 2, Bergamini (Maserati), 16m. 20.66s.; 3, Musso (Fiat), 22m. 46.21s.;

1,500 c.c.—1, Bianco (Maserati), 14m. 46.05s.; 2, Tuffanelli (Maserati), 14m. 54.57s.; Berrone (Maserati), 14m. 59.40s.; Castelbarco (Maserati), 15m. 25.98s.; 5, Vismara (C.T.V.), 16m. 53.24s.

2,000 c.c.—1, Fumagalli (Bugatti), 15m. 49.16s. and Querciolo (Maserati), 15m. 49.16s.; 3, Romano (Bugatti), 18m. 4.07s.

Over 2,000 c.c.—1, Tadini (Alfa-Romeo), 14m. 15.54s.; 2, Nuvolari (Alfa-Romeo), 14m. 32.70s.; 3, Dusio (Maserati), 14m. 36.18s.; 4, Ruesch (Maserati), 14m. 45.69s.; 5, Varzi (Auto-Union), 14m. 51.61s.

Sports.

1,100 c.c.—1, Gilera (Fiat), 16m. 1.73s.; 2, Taruffi (Maserati), 16m. 24.35s.; 3, Beccaria (Fiat), 16m. 39.12s.; 4, Villoresi (Fiat), 17m. 26.84s.; 5, Peroni (Fiat), 17m. 38.7s.; 6, Monici (Fiat), 20m. 26.05s.

1,500 c.c.—1, Lurani (Maserati), 14m. 57.63s.; 2, Barbieri (B.P.M.) 15m. 10.81s.; 3, Carnevali (Bugatti), 16m. 19.37s.

2,000 c.c.—1, Pertile (Alfa-Romeo-Bugatti), 16m. 27.55s.; 2, Arezzi (Alfa-Romeo), 16m. 45.88s.; 3, Castellano (Alfa-Romeo), 17m. 11.21s.; 4, Rani (Alfa-Romeo), 17m. 52.66s.; 5, Gessner (Alfa-Romeo), 18m. 7.60s.; 6, Signorina Rosso (Alfa-Romeo), 18m. 48.52s.

Over 2,000 c.c.—1, Pintacuda (Alfa-Romeo), 14m. 39.42s.; 2, Minozzi (Alfa-Romeo), 15m. 21.11s.; 3, Belmondo (Alfa-Romeo), 15m. 23.74s.; 4, De Pretz (Alfa-Romeo), 15m. 30.71s.; 5, Musso (Alfa-Romeo), 15m. 59.48s.; 6, Barilaro (Bugatti), 16m. 21.27s.

R.A.C. ULSTER T.T. RACE

WINNERS CHOSE FERODO LININGS

All along the course the success of these winning drivers depended on the unfailing reliability of their brakes. Hence they chose the linings which racing drivers have proved time and time again to give the utmost brake-efficiency possible — Ferodo Linings.

FERODO
BRAKE LININGS

FERODO LIMITED CHAPEL-EN-LE-FRITH



1st F. W. DIXON (RILEY)
2nd E. R. HALL (BENTLEY)
TEAM PRIZE ASTON MARTIN
All braked with Ferodo Linings

LATE NEWS
B.R.D.C. 500 MILES
Brooklands, Sept. 21
1st John Cobb and T. E. Rose Richards, Napier-Railton
2nd A. von der Becke and E. McClure, Riley
3rd Lord Howe and Hon. Brian Lewis, Bugatti
All braked with Ferodo

Club News

THE VINTAGE SPORTS-CAR CLUB

The Vintage Sports-car Club Speed Trials at Howard Park Hotel, Aston Clinton, on Saturday, August 31, was an enjoyable affair. Everyone seemed to know everyone else, while the organisation was of the unobtrusive kind which gets things through quickly with the minimum of fuss, so that everybody was able to have second runs, despite the large entry.

The gravel surface, which became increasingly cut up as the day wore on, gave a considerable advantage to cars with solid axles, so that although A. Baron (s/c., G.P. Bugatti) was almost certainly the fastest car present, in the absence of R. J. G. Nash (non-starter), he suffered considerably from wheelspin, despite double rear wheels, and had to cede fastest time to C. R. Instone on the G. N. "Martyr" at 18.7 seconds. In a desperate effort to regain the honours on his last run Baron had the bad luck to break a valve.

The very light specials snaked wickedly right up the course, and considerable respect was felt for the drivers, who sat in such close proximity to their unprotected chassis over the scattering gravel.

The opening run was made by Lt.-Col. J. Clutton, on his beautifully kept 1910 Fafnir, as being the oldest car in the club, and another (competing) veteran whose acquaintance one gladly renewed was the original "razor-blade" Aston-Martin, driven by J. M. Wintour.

The lady drivers handled their motors with judgment, and fastest was Miss M. Wilby, on her 1½-litre Frazer-Nash. Mrs. Carson had a nasty moment when one of the head-lamps left her 30-98 Vauxhall.

Competition was very rife between the numerous members of the "chain-gang" present, and they took the first three places in the 1,500 c.c. sports class, besides a three cornered tie for first place in the 3-litre class.

Fastest time of the day by a "vintage" car (i.e. over 5 years old) fell to D. Monro on his 4½-litre Invicta at the creditable figure of 21.2 seconds.

The Frazer-Nash Car Club (one of the invited clubs) afterwards held a highly successful party at the Howard Park Hotel, and the results (reproduced below) were announced during the evening.

Class B. Sports Cars up to 1,500 c.c.—1. G. H. Walker (Frazer-Nash), 21.3s. 2. Miss M. Wilby (Frazer-Nash), 21.5s. 3. I. O. F. Peters (Frazer-Nash), 21.6s. Special award for first Vintage car driver, J. Ogle (Bugatti), 22.2s.

Class C. Sports up to 3,000 c.c.—1. Tie between G. H. Walker, I. O. F. Peters, J. Furnival (Frazer-Nashes), 21.3s. Special award, first Vintage car, J. G. Clarke (Frazer-Nash).

Class D. Sports Cars up to 5,000 c.c.—1. S. H. Allard (Ford V-8), 19.9s. 2. D. Monro (Invicta), 21.2s. 3. K. Hutchison (Jensen Ford V-8), 21.7s. First Vintage car driver, D. Monro.

Class F. Racing Cars up to 1,500 c.c.—1. A. Baron (Bugatti S.), 18.8s. 2. C. R. Instone (G. N. Martyr), 19.6s. 3. P. F. Jucker (Frazer-Nash S.) 21.3s. First Vintage car driver, J. Ogle (Bugatti).

Class G. Racing Cars up to 3,000 c.c.—1. A. Baron (Bugatti S.), 19s. 2. C. R. Instone (G. N. Martyr), 20.3s. 3. H. P. Bowler (H.P.B.), 23s.

Class H. Racing Cars up to 5,000 c.c.—1. C. R. Instone (G. N. Martyr), 18.7s. 2. A. Baron (Bugatti S.), 19.2s. 3. D. Monro (Invicta), 21.5s.

Class J. Handicap.—1. E. R. Crowther (Frazer-Nash). 2. Tie between G. B. C. Sumner (G. N. Gehenna) and Tim Carson (Carson Special).

Cup for Fastest Run of Day.—C. R. Instone (G. N. Martyr), 18.7s. **Cup for Fastest Run of the Day by a Vintage Sports Car.—**D. Monro (Invicta), 21.2s. **Cup for Fastest Run by a Woman Driver.—**Miss M. Wilby (Frazer-Nash), 21.5s. **Cup for Fastest Run by a Frazer-Nash Car.—**P. F. Jucker, 21s. **Cup for Fastest Run by a s.v. Anzani Frazer-Nash.—**H. Dawbarn, 21.8s.

THE ALVIS CAR CLUB

The Alvis Car Club are holding Speed Trials on Sunday, October 20, in the private drive of Howard Park Hotel, Aston Clinton, starting at 2.30 p.m. There will be classes for all types of Alvis cars, at an entry fee of 5s. per class. The course will be approximately 400 yds. long to be covered from a standing start. Any Alvis owner interested apply to the Hon. Secretary for the meeting:—M. W. B. May, Ashburton House, Send, Surrey, as soon as possible. Entries definitely close October 16. Prizes for F. T. D., fastest pre-1932 car, and for each class.

NORTH-WEST MOTOR CLUB

Regulations have now been received for the Inter Club Team Trial to be held on Saturday, October 19, 1935, for the "Sporting Life" Team Trophy. This event is for teams entered by any recognised club driving four wheeled cars of any capacity.

Entries may be made up to October 12, but not after that date. In the case of a club entering two teams a nomination

may be transferred between the teams up to 11 a.m. October 19, provided a good reason is advanced.

The start will be near Hartland, North Devon, and will be approximately 50 miles in length.

The Hon. Secretary is Mr. C. V. Wells, 86, High Road, Tottenham, London, N.17.

THE GREAT WEST M.C.

The Thatcher Trophy Trial has been fixed for Sunday, November 17, the start and finish being at the Royal Saracen's Head Hotel, Beaconsfield, Bucks. It will be open only to members of the organising club.

Hon. Secretary, Mr. Chas. J. A. Curd, 30, Denehurst Gardens, Richmond, Surrey.

BUGATTI OWNERS' CLUB

The last event of the Bugatti Owners' Club was held on September 7,—the speed-trials at Lewes. S. E. Cummings, driving the 2.9-litre, supercharged Vauxhall-Villiers, made a most sensational run up the course, establishing a new record with a time of 18.13 seconds. A. H. L. Eccles took his "3.3" Grand Prix Bugatti up in 18.81 seconds, thereby gaining the Percy Fawcett Challenge Cup for the best performance by a member of the club. John Ogle won the cup which is contested annually by owners of Brescia-type Bugatti cars, his double-carburettor, modified Brescia, which now has a two-seater body and is reputed to be most reliable, clocking 27.21 seconds. Col. Giles's new "3.3" Type 57 aroused great admiration.

The next event is on October 13. The provisional announcements state that it will consist of a One-Day Trial incorpora-



S. E. Cummings on the Vauxhall Villiers Supercharge, making the fastest run of the day at the Bugatti Owners' Club speed trials.

CLUB NEWS—continued.

ting some interesting hills in Wales, where new ground will be covered by most of the competitors. A simple Rally is being arranged on Saturday, October 12, to an hotel just over the border, where competitors can stay the night preparatory to starting the following morning.

The Bugatti Club always run very good events and this Welsh Trial promises to be extremely interesting. Incidentally, there are still a few Bugatti owners who are not members, and they will gladly be sent particulars on request.

RESULTS.

The Percy Fawcett Challenge Cup (fastest Bugatti) : A. H. L. Eccles, 18.81s.
 The Brescia Cup (fastest Brescia-type Bugatti) : J. Ogle.
 Class Awards. Touring Cars : R. M. Strang (4,168 c.c. Hudson), 24.6s.
 Sports Cars up to 1,500 c.c. : Miss Blathwayt (747 c.c. M.G., S.), 24.35s. 1,500 c.c. to 5,000 c.c. : J. K. W. Baines (2,261 c.c. Bugatti), 24.10s.
 Racing Cars. Up to 1,500 c.c. : F. R. G. Spikins (972 c.c. Spikins Singer Special), 22.6s. 1,500 c.c. to 5,000 c.c. : S. E. Cummings (2,996 c.c. Vauxhall Villiers, S.), 18.13s., making fastest run of the day.
 Handicap Event: Miss Blathwayt (747 c.c. M.G., S.), 23.6s. (received 7.5s.).
 Novices' Event : J. M. Wintour (1,496 c.c. Aston-Martin), 29.5s.

GENERAL NOTES

Good trials are on the way. The M.C.C. have their Sporting Trial on October 5, the Standard Car Owners' Club their Cotswold Trial on October 12, (with a dinner to talk it all over on the 18th), and the Sydenham M.C. are running the Spa Trophy Trial on October 12-13. Then we have the Mid-Surrey A.C.'s classic Experts' Trial on October 26, and the Brighton and Hove M.C. Chandler Trophy Trial the follow-

ing day. The never-to-be-missed Inter-Varsity Trial is on November 2.

* * *

The controversy relating to normal v. comp. tyres, and standard v. solid axles continues to rage in trials-circles. It is interesting that when the Kentish Border people barred comps. but allowed solid axles, the premier trophy went to a super-charged baby-sports car which had a normal axle and ordinary section, Dunlop "90" covers. And a lot of rain had rendered the hills very tricky, which all goes to show what a skilful driver can do with ordinary tyres on a light-weight motor. The Light Car Club tried the experiment of having three classes in their Buxton-Buxton trial, thus dividing competitors into those with normal tyres and axles, those with either comp. covers or locked axles, and those with both comps. and locked axles, the tests varied in severity in each case.

Some people think that it is hard on the "chain-gangsters" to class them with the locked-axle gentry, but one doubts whether the Frazer-Nash drivers worry very much themselves, so long as solid axles are not barred completely.

What is not so fair is the practice of putting, say, an 850 c.c. car into the "over 1½-litres" class, because the small car is fitted with a supercharger. A fairer scheme would be to ban comp. covers on blown motors in trials where such tyres are normally permissible. Some useful entries have recently been lost because drivers of blown small cars will not run against V8s, though they would willingly compete against 1½-litre cars with comp. tyres and solid axles.

A simple rally, either counting as a separate competition or for a few marks only, is a good preliminary to a trial starting well away from London or the club's home town. It is surely preferable to an uninteresting main-road run, members being able to start from their own homes, while it is still possible for members who can only just get away in time to reach the start, to run in the trial proper. The Bugatti folk are trying something of the sort on October 12-13, after having run two rally-events earlier this year.

Not everyone shines in, or enjoys, "freakish" driving-tests, and trials organisers would do well to try a few "real-tests," such as timed acceleration tests over appreciable, up-hill sections, in forthcoming events.

* * *

One imagines that at Olympia earnest trials-men will keep a special look-out for sports cars having ample provision for carrying twin spare wheels shod with comp. covers, having easily detachable wheels not masked by the wings, easy-to-reach shock-absorbers, and really good driving positions, in respect of both comfort and visibility. Cars which give satisfaction on all these points are going to be big-sellers amongst clubmen in 1936.

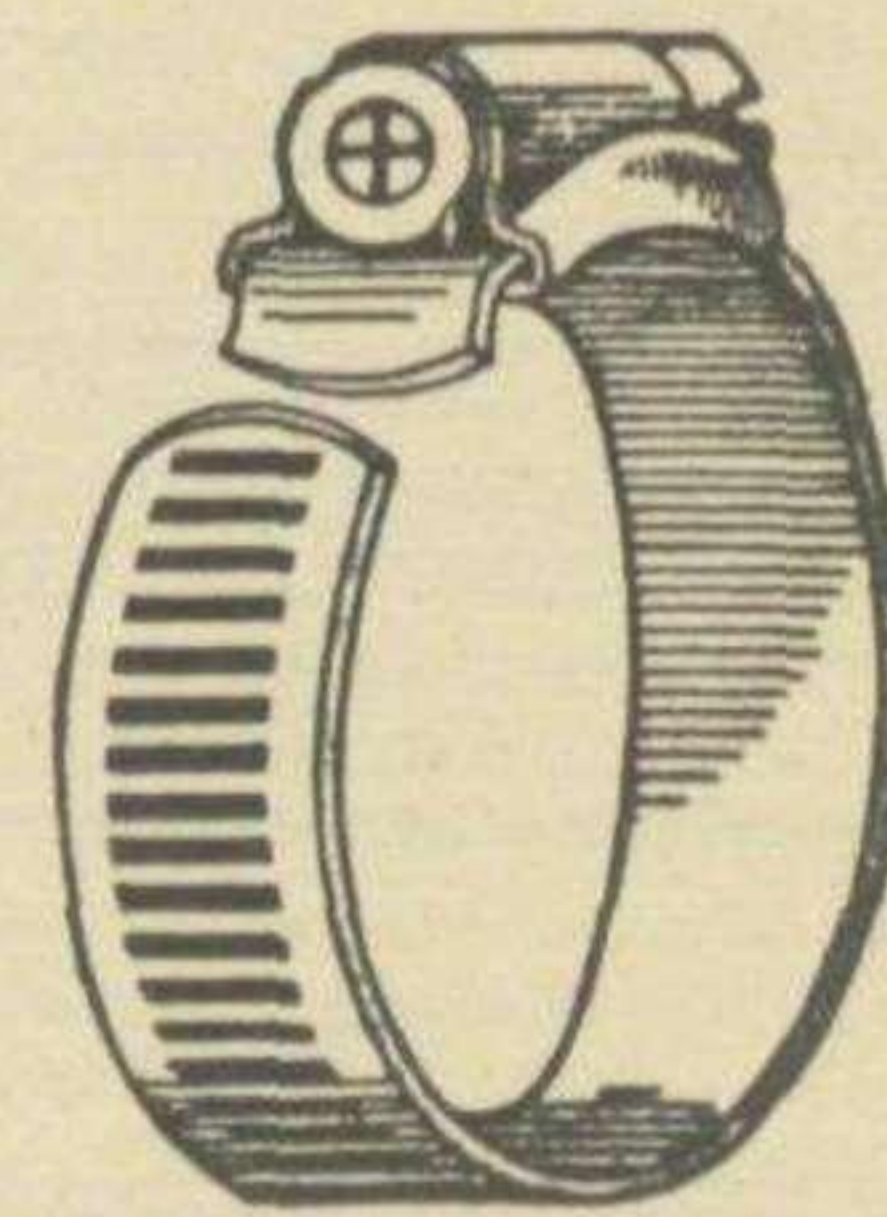
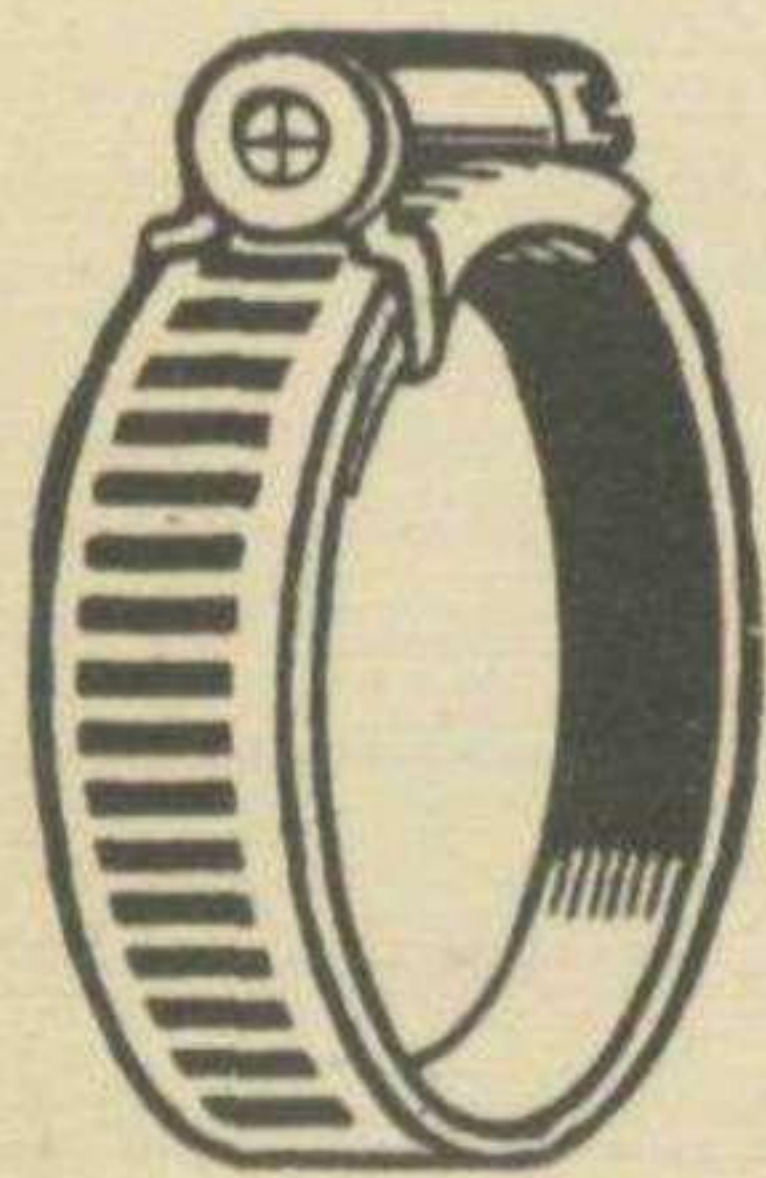
* * *

After Shelsley there are still two more sprint events. The Sporting Owner-Drivers' Club has speed-trials on October 5, the Kentish Border C.C. is arranging a hill-climb near London on October 13.

JUBILEE WORM-DRIVE CLIPS

THE BEST POSSIBLE TO GET

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



ALL IN ONE PIECE.
EASY TO FIT.

NO PARTS TO LOSE.
GUARANTEED NEVER TO LEAK.

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

STOCKED BY ALL GARAGES & ACCESSORY DEALERS

MANUFACTURERS
L. ROBINSON & Co.,

2, London Chambers,
GILLINGHAM, KENT.

Please mention MOTOR SPORT when corresponding with advertisers

DESTRUCTION AT MONZA

STUCK (AUTO-UNION) WINS A WELL-JUDGED RACE, WITH PIETSCH THIRD. ALL MERCEDES-BENZES PERISH AFTER A HECTIC CHASE. NUVOLARI MAKES THE RECORD LAP ON THE NEW ALFA AND FINISHES THE DAY ON DREYFUS' MONOPOSTO. ONLY FIVE FINISHERS OUT OF SIXTEEN

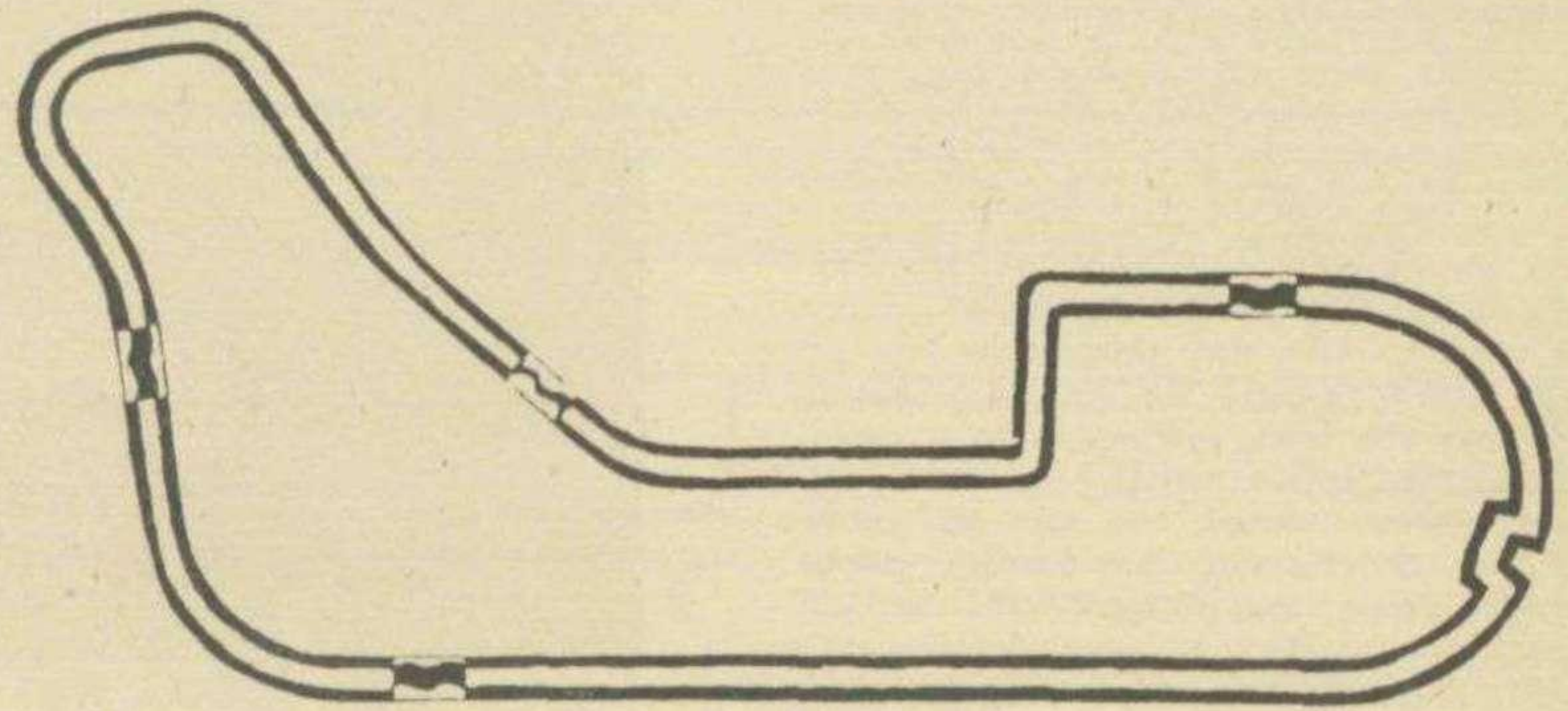
Once again Monza was the scene of the Italian Grand Prix and following the precedent established last year, the authorities decided on a "gymkhana" course. This time a faster course was chosen, taking in the northern loop of the road-circuit, and chicanes formed of the usual straw bales were placed at four points in order to keep down speeds to within safe limits. The race was much improved as a spectacle, but the constant braking and acceleration from 40 m.p.h. through the obstacles to 160 m.p.h. on the straight sections proved too much for most of the lightly-built cars built under the 750 kg. rule and produced the same result as the more sinuous course in 1934.

The greatest surprise of all was the defeat by their less manageable German rivals of the Mercedes-Benz cars, which were hot favourites for the race. At first sight it seemed incredible that not one of four cars so well tested in previous races should be in action after the fiftieth lap. The answer lay very largely in the skilful way in which the Auto-Union team was managed.

Varzi, who had put up the fastest laps in practice, was sent off from the drop of the flag to make the pace, and the Mercedes people fell into the trap. First Fagioli and then Caracciola met with trouble in trying to hold the impetuous Galliatese, Brauchitsch crashed and Lang went out with engine trouble. The large

The sun was shining brightly on the day of the race but a light breeze prevented conditions from being too oppressive. Thousands of spectators made their way by cars, trams and on foot to the gates of the royal park and streamed off in all directions to vantage points near the curves or to one of the twelve stands which overlook the pits and the start.

Wimille and Taruffi are driving Bugattis, Etancelin a V8 Maserati, while Zehender and Ghersi, who is taking the place of Siena, are mounted on the 6-cylinder cars. Last and not least the Mercedes team, with their national flag, all dressed in white except Fagioli, who is faithful to his racing blue, the other drivers being Caracciola, von Brauchitsch and Lang.



The circuit used in this year's Italian Grand, which was run in a clockwise direction. The pits and stands are situated at the beginning of the long straight section.

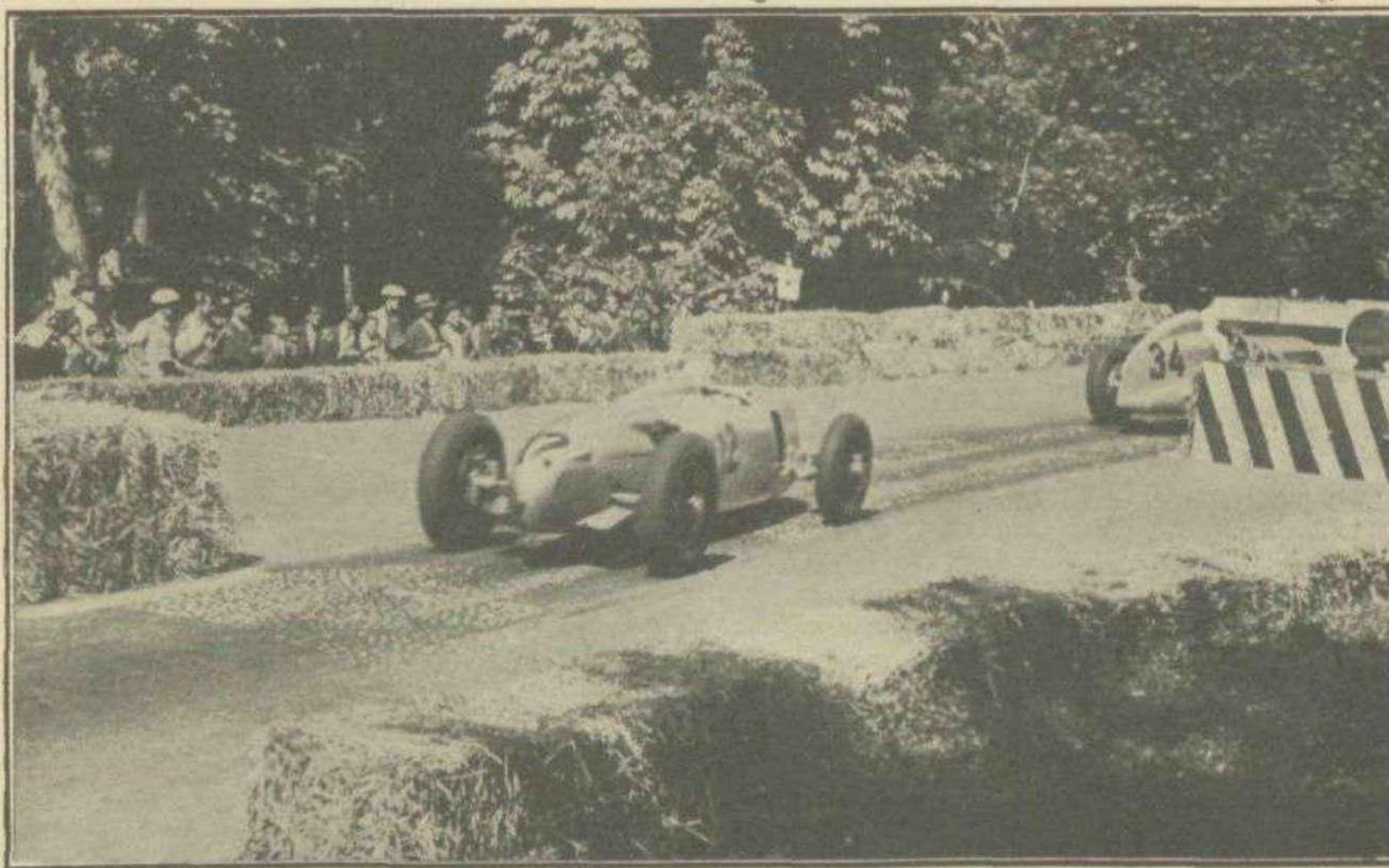
Once again we saw the impressive parade which precedes the race. To the sound of the Italian National Anthem the Alfa-Romeos were wheeled on past

After the parade the cars were lined up in front of the grand stand. Promptly at 11 o'clock the blue starting flag dropped and there was a concerted wail and roar as the cars streamed away led by Caracciola, followed by Stuck, Wimille, Varzi and Dreyfus. In an amazingly short time the first car came into view again, and proved to be Caracciola on the Mercedes-Benz. He had completed his first lap in 3 minutes 9 seconds, with Stuck and Varzi close on his heels. Further back came Fagioli, Nuvolari, Dreyfus, Wimille, Rosemeyer, Brauchitsch and Etancelin.

Once again the howling mob disappeared from view, Caracciola again was the first to come into sight at the far end of the pits, with Varzi and Stuck pressing him closely. The lap-speed of the Mercedes was now 2 minutes 58 seconds, a figure which no one had anticipated so early in the struggle.

Caracciola was not able to stave off the attack of the Auto-Union drivers, and on the third round Stuck took the lead with a lap of 2 minutes 55 seconds (88.5 m.p.h.). The unfortunate "Rudi" was then bottled between his two rivals, but Fagioli moved up to support him. Nuvolari was biding his time, lapping comfortably in an even three minutes, while Ghersi, whose car had been definitely off colour at the start, retired at the pits on his fourth lap. Taruffi called in to clean a choked jet on his Bugatti, a trouble from which the car suffered throughout the race. On the fifth lap Varzi overtook Caracciola with a splendid lap in 2 minutes 53½ seconds, which was particularly good considering the cars were running with almost full fuel-tanks.

The pace showed no signs of slackening, and the leading cars were lapping



One of the chicanes. Stuck is preparing to lap Lang.

engines and reliable though less powerful brakes of the Auto-Unions had told, and Stuck was able to finish without being pressed.

Nuvolari got the new Alfa going at incredible speed in reply to Varzi's early challenge, and actually made the fastest lap. The 8-cylinder engine unfortunately was not quite up to the task, but when the new 12-cylinder appears, the Germans will have to look to their laurels.

the stands preceded by a white-clad standard-bearer with the Italian tricolour, and with the cars their drivers Dreyfus, Marinoni and Nuvolari. Tazio wears his usual yellow jumper and the crowd yell themselves hoarse as they recognise him. Then came the four Auto-Unions whose pilots are Stuck, Rosemeyer, Pietsch and Varzi, who was received almost as well as his rival in the yellow jumper.

THE ITALIAN GRAND PRIX—continued.

at 2 minutes 57 seconds. Varzi then spurred up to 2 minutes 55 seconds and passed Stuck, and continued at the same pace for three laps in succession, building up his lead second by second. On the eighth lap the first cars had already lapped Zehender, who had stopped to adjust a shock-absorber, and at the tenth Fagioli pulled in to his pit with one of the back brakes out of action, and retired. The furious pace was already taking its toll.

Order after 10 Laps (43 miles).

Varzi 29m. 31½s.; Stuck 29m. 39½s.; Caracciola 29m. 41½s.; Nuvolari 29m. 58½s.; Fagioli 30m. 07½s.; Dreyfus 30m. 07½s.; Rosemeyer 30m. 15½s.; Brauchitsch 30m. 21½s.; Lang 31m. 07.4s.; Pietsch 31m. 22.1s.; Wimille 31m. 37.4s.; Etancelin 31m. 42.2s.; Taruffi 32m. 44.3s.; Marinoni 32m. 57s.; Zehender 37m. 02.4s.

Any feelings one may have had about the road-holding of the rear-engined cars were dissipated as Varzi hurled his Auto-Union through the chicanes, but his furious driving was more than the engine could stand. On the thirteenth lap he slowed down passing the pits and waved Stuck into the lead, and came to a rapid standstill a little further on where a broken piston caused the car to catch fire. The two forcing (and foreign) pilots of the German teams were now out of it, and we waited to see if Nuvolari would join battle with Stuck and Caracciola.

The methodical Stuck had no intention of allowing the others within striking distance however, and as the fuel tank emptied he quickened his pace, his best lap being one in 2 minutes 52 seconds. Caracciola could not compete with this and slowly dropped astern, while Tazio on the new Alfa was gaining ground, and drawing away from Dreyfus on the Monoposto. Meanwhile a report came through that Rosemeyer (Auto-Union) was unsteady coming through the chicanes, and he ended up with a skid which broke the back axle. At the same time news came of Etancelin, who had not been seen since the fourteenth lap. The throttle had

Nuvolari it will be seen had only lost 33 seconds in the first 86 miles, which says something for the man and the car.

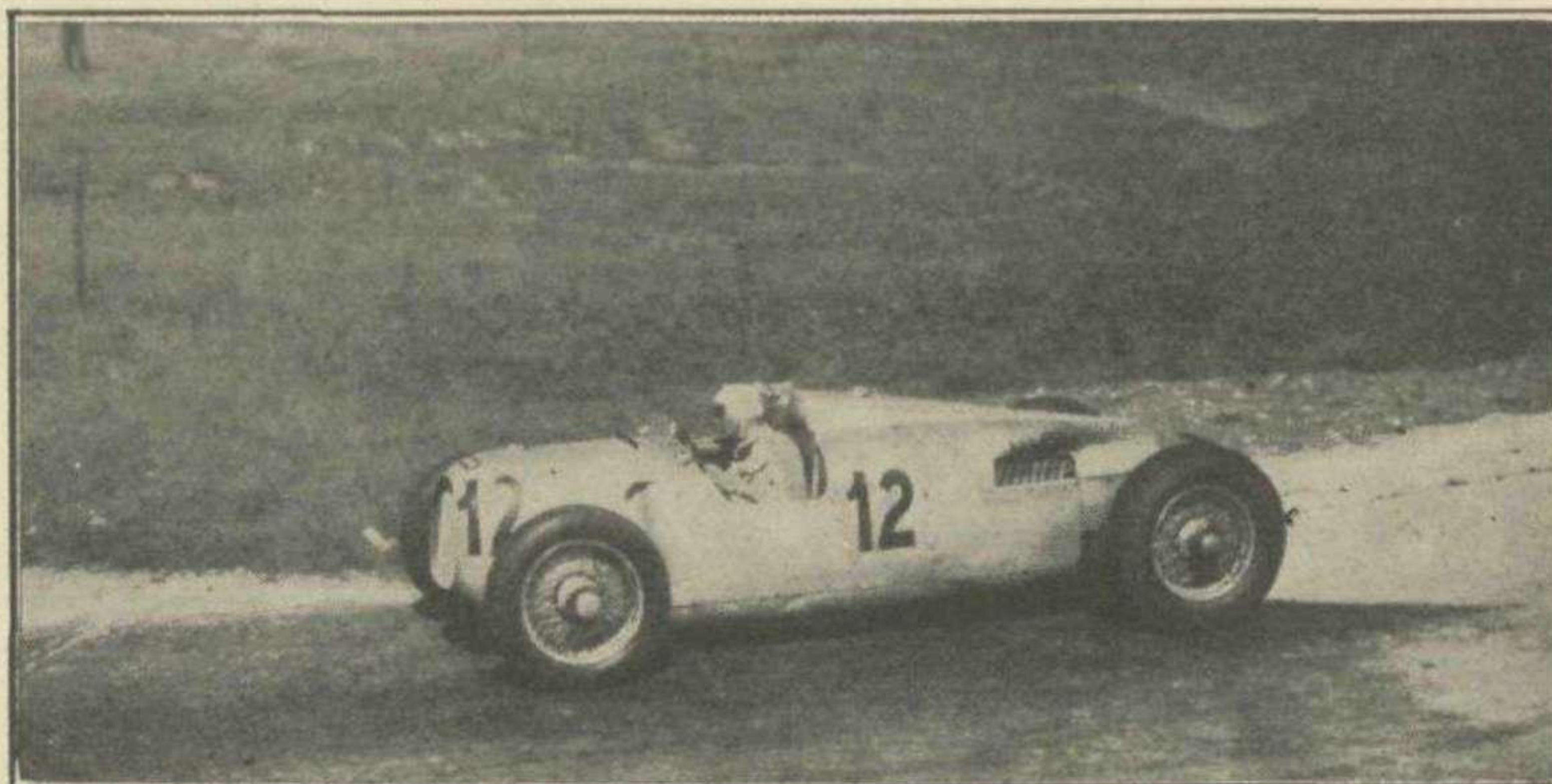
On the twenty-first lap Pietsch pulled in to the Auto-Union pits and handed over to Rosemeyer, losing only 20 seconds in the change, while Taruffi was once again in changing plugs. Caracciola received orders to speed up and gained some ground, but Stuck replied with a lap which clipped off one-fifth of a sec-

German teams and the Italian champion. The crowd, needless to say, were wild with excitement.

Order at the 30th Lap.

Stuck 1h. 27m. 56s. (88.2 m.p.h.); Caracciola 1h. 28m. 17.4s.; Nuvolari 1h. 28m. 30s.; Brauchitsch 1h. 28m. 50.4s.; Dreyfus 1h. 28m. 56.2s.; Rosemeyer 1h. 32m. 38.2s.; Lang 1h. 33m. 6.2s.; Marinoni 1h. 38m. 24s.; Taruffi 1h. 45m. 35s.

Nuvolari's performance was loudly cheered by the crowds round the course. He had done two successive laps in 2



Close cornering by Hans Stuck who scored his first win at the wheel of an Auto-Union.

ond from Varzi's record, indicating quite definitely that the rear-engined car was still in perfect tune.

The Bugattis had not so far distinguished themselves and on the twenty-seventh lap Wimille's car burst in the most decisive way, a con-rod breaking and knocking out large chunks of crankcase, which lay scattered all over the track; this lap was memorable too for the opening of Nuvolari's attack. From a time of just under three minutes he speeded up to 2 minutes 54 seconds and then 2 minutes 53 seconds. This move

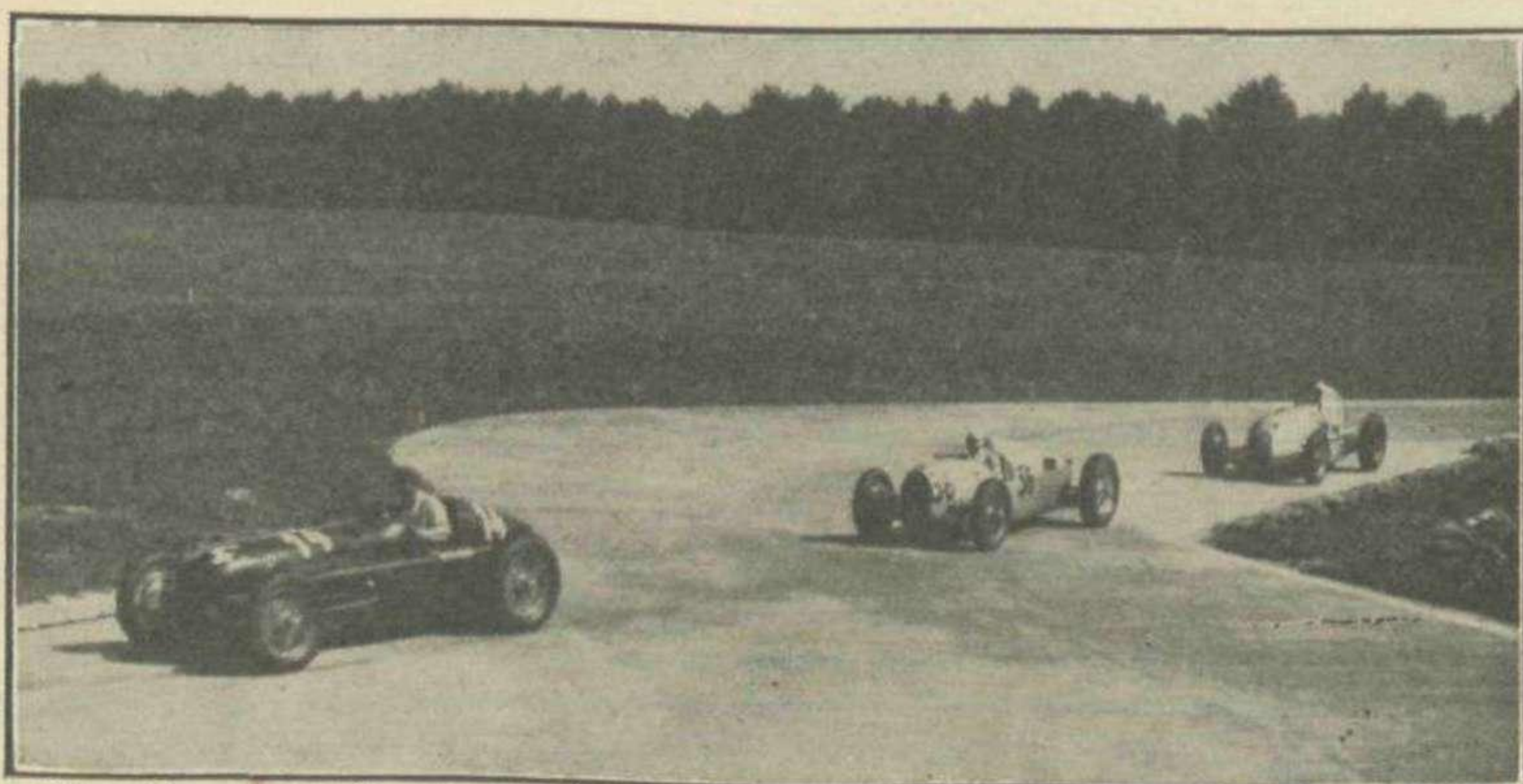
minutes 52 seconds, and was now close on Caracciola's tail. He surpassed himself on the thirty-third lap covering the 6.9 kilometres circuit in 2 minutes 49 4-5 seconds (91.3 m.p.h.) a whole second faster than Stuck's record, but then on the chicane preceding the south banking skidded completely round losing 14 seconds in so doing.

Now came the time for re-fuelling, where precious seconds are so easily lost. Caracciola was the first to stop. Two back wheels were changed and the car got away in 1 minute 44 seconds, now with Fagioli at the wheel. Dreyfus and Brauchitsch pulled in together, but the Ferrari man gained 7 seconds on the operation. The Mercédès pit-staff were not functioning at anything like their usual efficiency.

In contrast to this Stuck's tank was filled and two of his wheels changed in the amazing time of 45 seconds, and Rosemeyer's car was dealt with with equal rapidity. Nuvolari was for the minute first in the race, but on the thirty-ninth lap came his turn at the pits. The crowds watched breathlessly hoping to see some lightning pit-work which meant his advance into second place, but the Ferrari organisation could not do better than 1 minute 17 seconds, which included adjusting the brakes.

All the pit stops had been completed by the forty-first lap and the order then was Stuck, then Nuvolari 58 seconds behind with Dreyfus third. Fagioli was fourth, but on the next lap he came into the pits to retire with damaged transmission. To complete the tale of misfortune, von Brauchitsch found his brakes failing as he came up to a chicane, shot through and turned round three times and shot off the road. Rosemeyer was now fourth in the race, Lang

Continued on page 559.



The S-bend on the South Banking. Etancelin (V.8 Maserati) is in front, followed by Pietsch (Auto-Union) and Lang (Mercédès-Benz).

was not lost on Caracciola and Stuck, who depressed their accelerator pedals with a will. On the twenty-sixth lap the Italian was only 39 seconds in the rear of the leader and at the thirtieth had reduced this by five seconds. Meanwhile Brauchitsch had overhauled Dreyfus, and everything was set for a pitched battle between the leading men of the

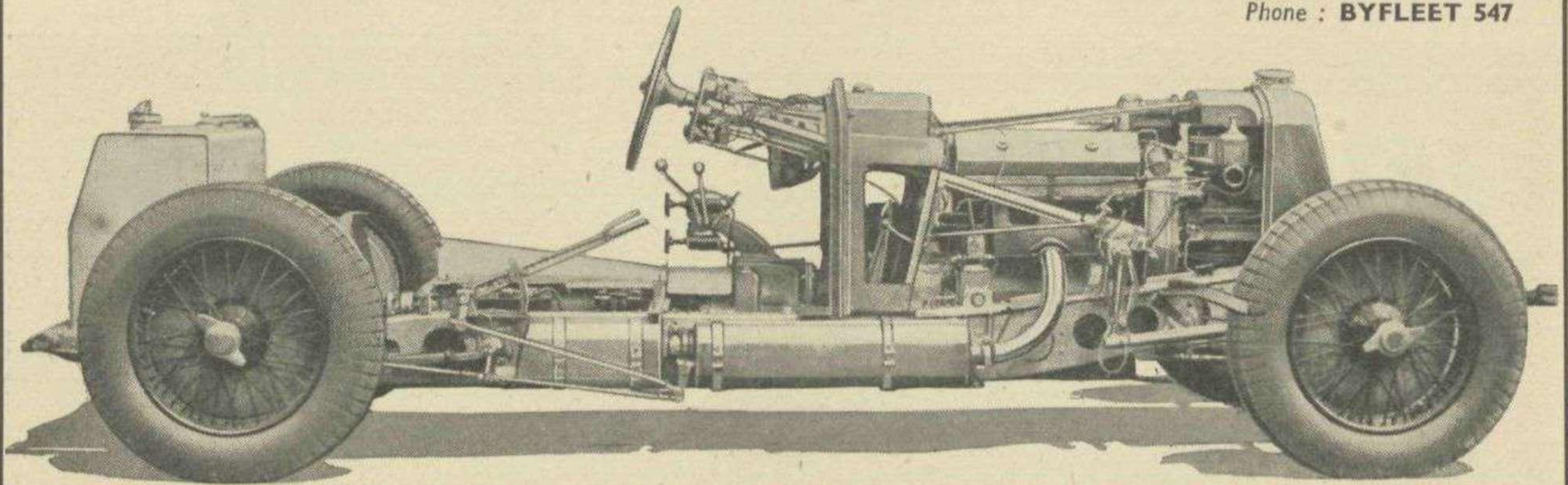
Order after 20 Laps.

Stuck 58m. 55s. (Speed 85.7 m.p.h.); Caracciola 59m. 05s.; Nuvolari 59m. 29.2s.; Dreyfus 59m. 45s.; Brauchitsch 59m. 49s.; Lang 1h. 2m. 10s.; Pietsch 1h. 2m. 13s.; Wimille 1h. 3m. 16.8s.; Marinoni 1h. 4m. 25.4s.; Taruffi 1h. 5m. 26.4s.

MYLES ROTHWELL

CHERTSEY ROAD,
BYFLEET, SURREY.

Phone : BYFLEET 547



WE SPECIALISE IN

DESIGNERS AND CONSTRUCTORS
OF THE F.M. CHASSIS.

HIGH EFFICIENCY TUNING

STREAMLINED RACING
AND SPORTS BODIES

BYFLEET, SURREY

AND

BROOKLANDS RACING TRACK

Telephone : WEYBRIDGE 1495.

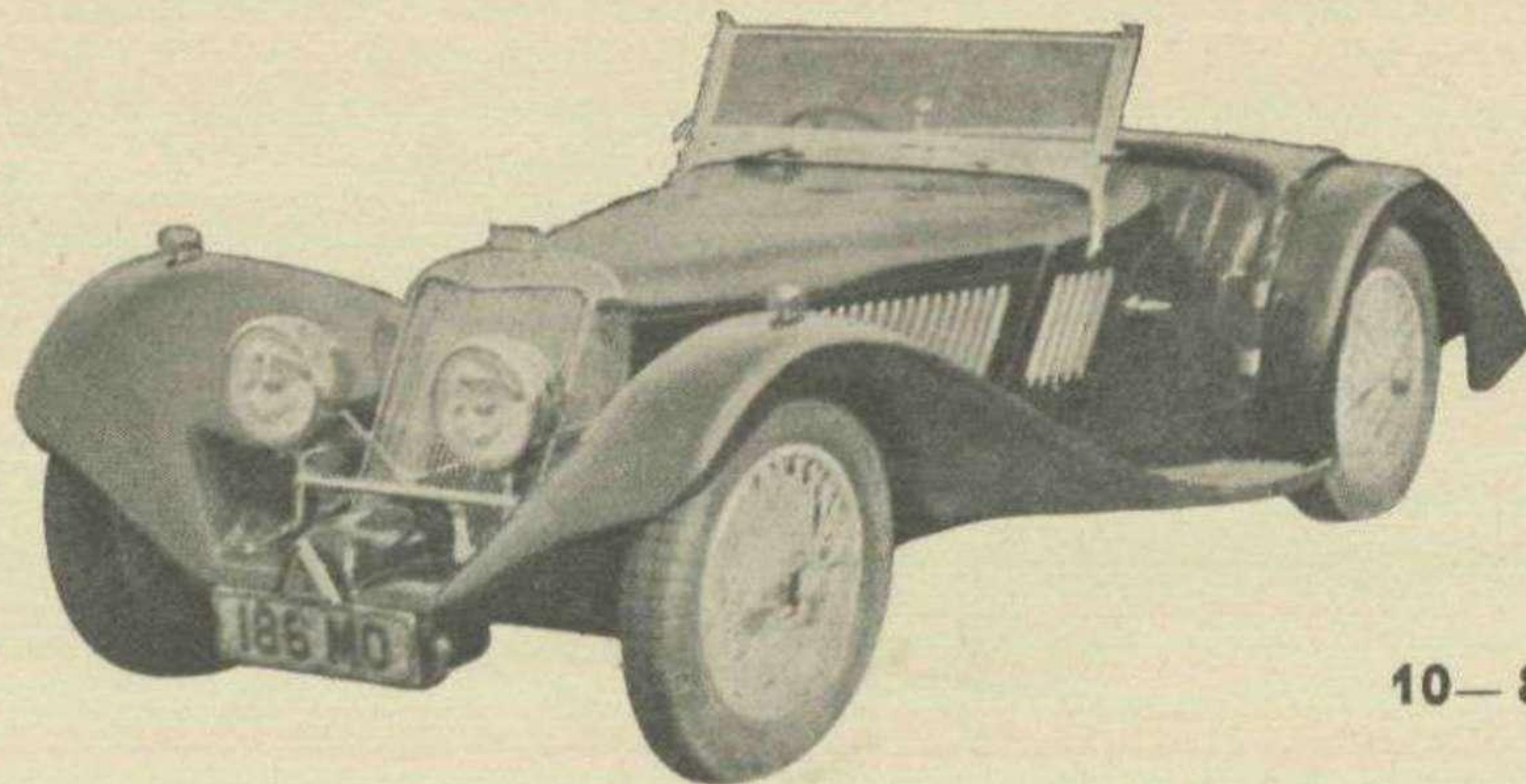
SUPERCHARGING
SHEET METAL WORK
WELDING
TRIMMING & CELLULOSING

LET US QUOTE YOU. OUR STAFF ARE ALL SPECIALISTS

THE 1½ LITRE

SQUIRE CAR

100 M.P.H.



10—80 in 22 seconds

A SUPERCHARGED SPORTS CAR OF OUTSTANDING MERIT
HIGH PERFORMANCE WITH DEPENDABILITY

BUILT AT HENLEY-ON-THAMES BY THE SQUIRE CAR MANUFACTURING CO. LTD.,
REMENHAM HILL WORKS. Henley-on-Thames 475

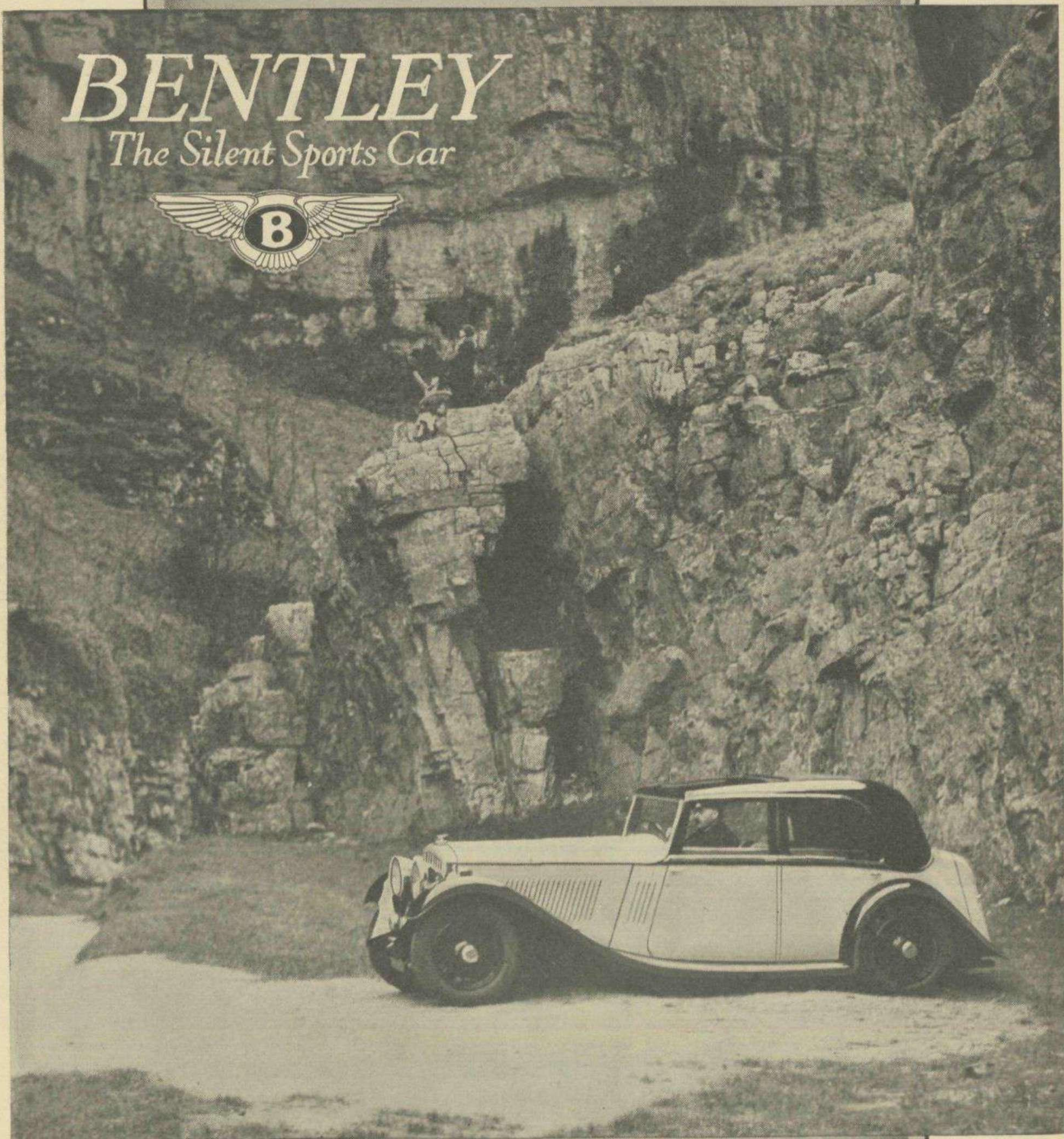
WRITE FOR FULL PARTICULARS TO THE MAIN DISTRIBUTORS :

SQUIRE MOTORS LTD., READING RD., HENLEY-ON-THAMES. Henley-on-Thames 352

Please mention MOTOR SPORT when corresponding with advertisers

BENTLEY

The Silent Sports Car



BENTLEY MOTORS (1931) LTD. 16 CONDUIT ST., LONDON. W.1.
•MAYFAIR 4412•

BUY A CAR MADE IN THE UNITED KINGDOM

NUVOLARI WINS MODENA RACE

The fourth Circuit of Modena was held on September 15, and attracted an all-Italian entry of drivers. The only "foreign" car in the field was Cecchini's M.G. Magnette, in the 1,100 c.c. class.

There were two races. In the first, the 1,100 c.c. and 1,500 c.c. cars battled together, while the "bolides" had a special race afterwards.

The small car race was delayed a little owing to a heated discussion between the officials and a driver named Sandrolino, whose entry was found to be out of order. Eventually the officials won, and Sandrolino was not allowed to start. There were only ten cars on the line, but they gave a fine display. The lead was taken by Ippolito Berrone, with the red Maserati he drove at Dieppe.

The story of the race consisted in a number of challenges thrown out to Berrone, all of which he warded off with the assistance of superior reliability on the part of his Maserati. The first to menace his lead was Guido Barbieri, who had made a bad start, but soon worked his way into second place. In doing so he put in a very rapid lap at 1 min. 54 secs., which was duly applauded by the crowd. For some time the order had been Berrone, Bianco, and Barbieri, all on Maseratis, but Bianco dashed off the road at a corner and had to retire. This put Barbieri into second place, and after 10 laps (the race was 25), the order was Berrone, Barbieri, Tuffanelli, Cecchini (M.G.), Rovere, Taruffi, Platé, Bergamini and Panzacchi.

Barbieri's retirement was caused through mechanical trouble, and now came an interesting tussle between Berrone and Tuffanelli. The latter was driving a 1,100 c.c. Maserati as against Berrone's 1,500 c.c. car, but in spite of this the former began to pick up ground steadily. Meanwhile Cecchini retired.

With only five laps to go Tuffanelli was a mere 4 secs. behind Berrone, who was anxious to avoid being passed by a smaller car.

RESULT.

25 Laps of 3 km. 200 Circuit. 80 kilometers.

1,100 c.c.—1, Tuffanelli (Maserati), 49m. 54s.; 96.321 k.p.h.; 2, Bergamini (Maserati), 1 lap behind; 3, Taruffi (Maserati), 2 laps behind.

1,500 c.c.—1, Berrone (Maserati), 49m. 40s.; 96.644 k.p.h.; 2, Plate (Talbot), 2 laps behind.

Fastest Laps.

1,100 c.c.—Tuffanelli on his 14th, 1m. 57.6s.

1,500 c.c.—Barbieri on his 3rd, 1m. 54.6s.

THE ITALIAN GRAND PRIX—continued from page 556.

on the last surviving Mercedes fifth, followed by Marinoni and Taruffi.

Everyone was watching for a renewal of the struggle between Nuvolari and Stuck, but the Alfa proved difficult to handle with a full tank, and before the wiry Tazio had really got into his stride there was a burst of smoke from under the bonnet and the car was out with a broken piston. Lang dropped out soon afterwards with engine trouble.

Only five cars were now left on the track. Nuvolari came in slowly to his pits amid sympathetic cheering from the spectators, and took over Dreyfus' car in a last effort to catch the Auto-Union. Stuck, however, was on the look-out and drew away easily, and any further hope

Considerable excitement had reigned before the big race at the rumour that Varzi was going to drive a V8 Maserati. Nuvolari *versus* Varzi in the Ferrari home-town would be a scrap worth going miles to see!

As it happened, however, this fight was cancelled owing to the car not being ready, and the eight cars on the starting line consisted of six Ferrari-owned Alfa-Romeos opposed by Farina's Maserati, and Romano's Bugatti.

The start was again at 4.5 p.m., and Farina made one of his characteristic lightning getaways, leading at the end of the first lap from Marinoni. Nuvolari seemed to be in no hurry, and was lying sixth.

On the second lap, however, he devoured Pintacuda, Brivio and Comotti "just like that," and was tailing Marinoni. These positions were unchanged on the third lap, when the news came through that Pintacuda had crashed into the post of a big wireless aerial on a corner, and had turned right round. He managed to restart after losing a minute.

On the fourth lap Nuvolari passed little Marinoni, the Ferrari chief-mechanic, and was now only 8 seconds behind Farina. On the fifth lap Nuvolari gained a second, and yet another on the sixth. On the following circuit he gave the crowd a big thrill by passing Farina on the straight in front of the stands. The cheers died down, however, when it was seen that Farina was pulling into the pits. Thus the only Maserati passed out of the race and Alfa Romeos had the course to themselves.

Antonio Brivio was now second to Nuvolari, and behind him in turn came Tadini and Marinoni. Gradually the first three closed up, and on the twentieth lap there was terrific excitement when Nuvolari was passed by both Brivio and Tadini. Five laps later he was back again in the lead, and Tadini had passed Brivio. Pintacuda was making fine progress after his accident, and on the thirty-ninth lap he succeeded in wresting fourth place from Marinoni, and soon afterwards third place from Brivio.

RESULT.

60 Laps of 3 km. 200. Total 192 km.

1. Nuvolari (Alfa-Romeo), 1h. 47m. 57s. 106.070 k.p.h.; 2. Tadini (Alfa-Romeo), 1h. 48m. 12.4s.; 3. Pintacuda (Alfa-Romeo), 1h. 48m. 19s.; 4. Brivio (Alfa-Romeo), 1h. 48m. 22.4s.; 5. Romano (Bugatti), 10 laps behind.

Fastest lap by Nuvolari on his 44th, in 1m. 44

which Nuvolari may have had disappeared when a valve broke and left him to finish on seven cylinders. At any rate the honour of Italy was vindicated, and when the chequered flag was hung out the crowds showed their approval of the race by greeting Stuck with the plaudits he deserved. Tactics and a reliable car had won the day.

RESULTS.

1. Hans Stuck (5.5-litre Auto-Union), 3h. 40m. 9s. 86.2 m.p.h.
2. Dreyfus and Nuvolari (4-litre Alfa-Romeo), 3h. 41m. 50s. 85 m.p.h.
3. Pietsch and Rosemeyer (5.5-litre Auto-Union), 3h. 40m. 13s. (70 laps).
4. Marinoni (4-litre Alfa-Romeo), 68 laps.
5. Taruffi (4-litre Bugatti) 59 laps.

The race was held over 73 laps of a 6.89 kilometer circuit total distance 314.5 miles.

Introducing the NOTEK non-glaring fog and traffic lamp

The brilliant non-glare illumination of the NOTEK LAMP spreads to a width of 96 feet at 30 feet distance from the car to which it is fitted. Curves are illuminated before approach.

The light of the NOTEK LAMP allows for the same broad field of vision to which one is accustomed in daylight.

NOTEK LIGHT restores the natural field of vision at night.

The sharp edged beam of light, flat at the top and also at the bottom, cuts under fog and mist, illuminating the road surface in its entire width.

Despite its brilliant light, the NOTEK LAMP does not dazzle oncoming traffic. No dimming is required. The consumption of current is negligible.



This untouched photograph shows a dimmed headlight effect. Road surface and boundaries are not visible.



This untouched photograph illustrates the effect of the NOTEK LAMP on the same stretch of roadway. Note clear-cut definition all round.

In Black with Chromium Rim, complete with Cable, Switch and Bulb (6 or 12v. 36w.)
In All-Chromium Finish 7/6 extra.
Brit. Pat. No. 413937. Made in England.

65/

Guaranteed for three years—A sign of faith in our craft. A full Comprehensive Guarantee is issued with each lamp.

DAY AT NIGHT NOTEK LIGHT

Manufacturer:

NOTEK ELECTRIC CO., LTD.
79, Buckingham Palace Road
LONDON, S.W.1 'Phone: VICTORIA 5366
Telegrams: Notekel, Sowest, London

ALVIS ANNOUNCE A NEW 3½-LITRE CAR

A six cylinder rated at 25.63 h.p. All synchro-mesh gear-box and independent front-wheel suspension. Other models, the Speed Twenty, the Silver Eagle and the Firebird, continued with small modifications

With the introduction of a new 3½-litre car for 1936, the Alvis Car Company has made a notable contribution to the de luxe sports cars which are available on the British market. The engine is entirely new, but naturally embodies some of the successful features of the Speed Twenty engine. Independent front-wheel springing, the unique Alvis gear-box, and the special brakes all figure in the specification, and the new car should be eminently suitable for attaining high speeds and maintaining them with a minimum of effort.

The bore and stroke of the engine are respectively 88 and 110 mm., which gives a capacity of 3,571 c.c. The R.A.C. rating is 25.63 h.p. Push-rod operated overhead valves are used in a detachable head, and the use of a number of small spiral springs set round the valve instead of the more usual concentric pattern gives unusual silence in operation. One sparking per cylinder is used, and the ignition is normally by means of a polar inductor magneto, with coil ignition for easy starting and emergency use.

Three S.U. carburetters are fitted, and the petrol is drawn from the 17-gallon rear tank by means of electric pumps.

The crank-shaft runs in seven plain bearings and the camshaft is chain-driven from the rear end. The pistons are of aluminium alloy and the connecting rods have the big-ends die-cast in place. Lubrication is by rotary gear-pump driven by spiral gears from the camshaft providing forced lubrication to crankshaft, big-ends, camshaft and valve rockers.

The cooling arrangements are unusually thorough and should make the car eminently suitable for use abroad. Water is forced to the large honeycomb radiator (which has a neat slatted stoneguard), by means of a pump, and a belt-driven fan is also fitted. Special external water passages between the head and the cylinder-block prevent any chance of leakage from a faulty gasket.

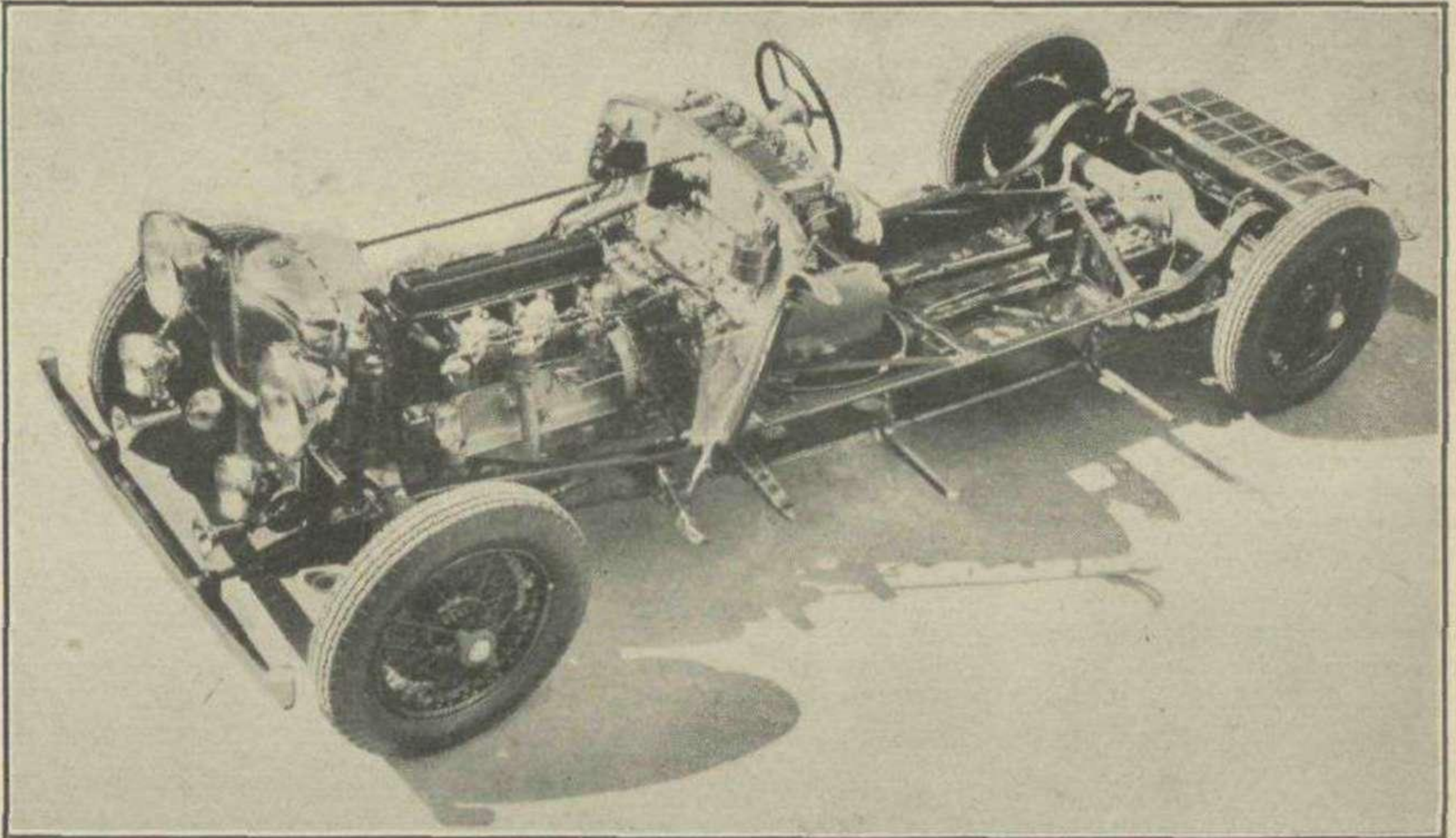
A single-plate clutch is used, and the gear-box is mounted independent of the engine. The box is of exclusive Alvis design with constant-mesh gears, silent on all ratios, and with all changes by means of synchro-mesh mechanism. The gears are controlled by means of a short central lever.

The normal gear-ratios are 4.11, 5.9, 8.34 and 12.95 to 1 with a 14.39 to 1 reverse, but a 4.33 to 1 back-axle ratio is also available. An open tubular propeller shaft is used with two universal joints. The rear axle is fully floating and the differential case is a steel drop forging. The final drive is through spiral bevel gears.

and the hand lever, and no part of the mechanism is in torsion. The shoes operate in 14-inch ribbed drums.

The wheelbase is 10 ft. 4 in., the track 4 ft. 8 ins., and the chassis weighs 23 cwt.

The chassis equipment is of de luxe character, specially practical items being the Lucas P.100 headlamps and the two "Passlights," the one-shot chassis lubri-



The sturdy chassis of the new 3½-litre Alvis, which embodies the special features of all synchro-mesh gear-box and independent front-wheel suspension.

The chassis is particularly sturdy, swept up in front and sharply carried up over the rear axle, with detachable bracing pieces bridging the gap. A particularly sturdy cross member with a slot for the propeller shaft braces the chassis at the front end of the rear springs. The successful design of front-wheel springing, already a feature of the Speed Twenty is also used on the 3½-litre. A transverse cantilever leaf spring is used, and each wheel swings on a parallelogram formed by half the leaf spring, a vertical link, and a second link parallel with the leaf-spring. The rear springs are under-slung half-elliptics and Andre telecontrol shock-absorbers are used on both axles.

The four-wheel brakes are of special Alvis pattern, cable operated by the pedal

and the four wheel jacks.

At the moment the 3½-litre is only quoted in chassis form, the price being £775, but complete cars will be seen on the Olympia stands of Messrs. Vanden Plas, Charlesworth Bodies, Ltd., and Lancefield Coachwork, Ltd.

The Speed Twenty which has a six-cylinder engine of 2,762 c.c. is being continued with few alterations and its features of independent springing and the all-syncho box place it well in the forefront of design. This gear-box is also used on the smaller 6-cylinder Silver Eagle and on the Firebird, which has a 1,842 c.c. four-cylinder engine, but the two latter cars are fitted with springing of the conventional type.

THE 500 MILES RACE—continued from page 534

bringing the Riley into fourth place, the two between them having averaged, in spite of nearly a dozen stops, 111.35 m.p.h. At one time Dixon was lapping at nearly 130 m.p.h. or faster than Cobb, so if the tyres had stood up to his driving there is little doubt that he would have succeeded in winning the race for the second year in succession. As it was, Handley's furious driving was too much for the long-suffering car, and passing the pits a few minutes before Rose-Richards was due to finish, there was a cloud of smoke from the engine and Handley coasted in with a large hole in the crankcase. To complete the misfortunes of the Dixon camp, Brackenbury came in a few minutes later. The undershield, which also forms the support for the driver's

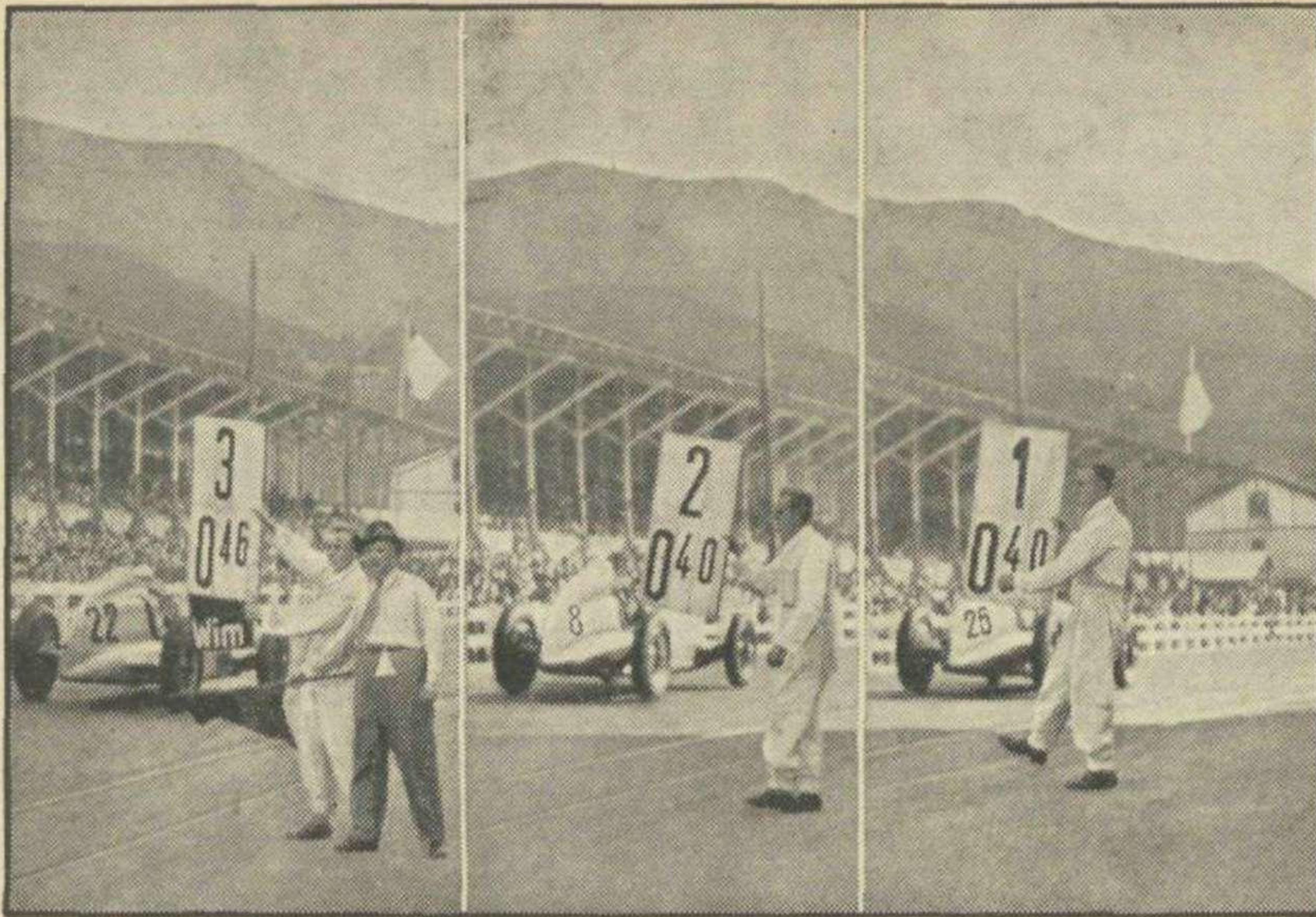
cushion, had broken away, and Brackenbury was in some danger of falling through the bottom and scraping along the track.

At 4.28 Rose-Richards came into sight round the Vickers Sheds for the last time and crossed the line to win in the record time of 4 hours 28 minutes 52 seconds, which is equivalent to a speed of 121.28 m.p.h. Second place was bound to be a close thing, for Lord Howe was less than a minute behind McClure at four o'clock, and there was less than 200 yards between them now. However the Riley pit had hung out the "full-speed" signal in good time, and McClure's final spurt carried him over the line with just 8 seconds to spare.

Hamilton and Gibson won back their fourth place, and the Marquis de Belle-roche who had driven Manby-Colegrave's Magnette single handed was a popular fifth. Divo brought home the Hotchkiss just within the allotted time, and Major Gardner failed by two minutes to make the distance, after lapping at 115 m.p.h. for the last few laps.

RESULTS.

1. John Cobb—T. E. Rose-Richards (23,688 c.c. Napier-Railton), 4h. 28m. 52s. 121.28 m.p.h.
2. Edgar McClure—A. von der Becke (1,986 c.c. Riley).
3. The Earl Howe—Hon. Brian Lewis (3,255 c.c. Bugatti).
4. A. P. Hamilton—R. Gibson (2,336 c.c. Alfa-Romeo S.).
5. Marquis de Belle-roche (1,087 c.c. M.G. Magnette S.).
6. A. Divo—Harry Rose (1,990 c.c. Hotchkiss).



The story of the finish. Mercedes-Benz first, second and third. The drivers are Caracciola, Fagioli and von Brauchitsch.

Even though they may have suffered defeat on one or two occasions, there is little doubt that the Mercedes-Benz racing cars are the finest the world has ever seen. Their superiority was confirmed anew last month when the team gained the first three places in the Spanish Grand Prix, in the face of Auto-Union, Alfa-Romeo and Bugatti opposition.

The most remarkable feature of the three practice sessions was a phenomenal lap by Achille Varzi (Auto-Union) in 6 minutes 8 seconds. The nearest to this was Caracciola's 6 minutes 22 seconds. Wimille covered a significant lap in 6 minutes 23 seconds.

After a glorious Saturday, the weather on Sunday, September 22, was distinctly uncertain. Most of the teams accordingly changed over to "grooved" tyres, in anticipation of rain. The broadcast talk on the race showed that Auto-Unions were the favourites, but public feeling was most sympathetic towards Nuvolari. The Auto-Union to be handled by Pietsch was withdrawn, making the total number of starters fourteen.

This time it was Stuck's turn to make the most rapid getaway, and he was leading Rosemeyer by 6 seconds at the end of the first lap—in spite of having started in the fourth row. The rest followed in this order: Fagioli, Caracciola, Wimille, Varzi, Nuvolari, Chiron, Brauchitsch, Siena, Lehoux, Sommer, Benoist and Léoz, the last named on an old 2.3 Bugatti.

On the second lap the order was unchanged, but Varzi pulled into the pits with his face streaming with blood. A stone had smashed his windscreen, and a fragment had cut his cheek. Pietsch took over for a bit. Farther down the pits Siena drew up and retired.

The next lap saw another Auto-Union casualty, for Rosemeyer pulled up for adjustments. Fagioli was now in second place behind Stuck, and ahead of Caracciola and Wimille (Bugatti). The last named was driving a magnificent race. Behind

him, in turn, came Chiron, von Brauchitsch, Nuvolari, Benoist and Pietsch.

The race was being fought out with the utmost determination. In response to orders from Neubauer, Fagioli and Caracciola made an attack on Stuck. The latter was in touch with his pit, however, and kept the two Mercedes-Benz at a set distance of 15 seconds, try as they might to reduce it. In doing so, Stuck set up a new lap record in 6 minutes 11 seconds. Past the grandstands he was timed unofficially at 145 m.p.h.

Von Brauchitsch had also received orders, to pass Chiron. But it was not so easy as all that, and these two waged a glori-

ous scrap. As for Nuvolari, he did not seem to take much interest in the proceedings. After 8 laps he retired with broken suspension.

Caracciola had now passed Fagioli and was chasing Stuck for all he was worth. The most he could do was to cut down his lead by 3 seconds. The lap record was now his at 6 minutes 9.6 seconds.

But now a new force had to be reckoned with as a lap record breaker. Varzi had taken over his Auto-Union once more, and proceeded to accomplish some amazing circuits. First of all he did 6 minutes 2 seconds, and then followed this up with 5 minutes 58 seconds! Even

MERCÉDÈS-BENZ "GRAND SLAM" AT SAN SEBASTIAN

VICTORY FOR CARACCIOLA.
VARZI (AUTO-UNION) BREAKS LAP
RECORD BEFORE RETIRING.
BUGATTI'S DO WELL.



All boys together. Nuvolari cracks a joke with von Brauchitsch on the way to their cars. The others are from left to right, Chiron, Wimille (on Tazio's left), Fagioli, Leoz and Benoist.

THE SPANISH GRAND PRIX—continued.

so, his early stop had put him back to ninth place.

Bit by bit Caracciola began to pick up on Stuck, who was having difficulty with

the transmission of his Auto-Union. He stopped at the pits for adjustments, and the opportunity was taken to refuel.

At half distance Caracciola was now

leading comfortably from Fagioli. Wimille (Bugatti) was an excellent third. Rosemeyer was fourth, Chiron fifth, von Brauchitsch sixth, Benoist seventh, Varzi eighth, Sommer ninth, Lehoux tenth and Léoz eleventh. The latter retired, after a gallant drive, on the twenty-second lap.

By contrast with the first half, the last part of the race was unexciting. Von Brauchitsch was given the signal to take third place, and promptly did so, at the expense of Wimille. Chiron, who was obviously still a sick man, after his accident at Berne, retired on the twenty-eighth of the thirty laps.

Nothing could now stop a sweeping Mercedes-Benz victory, and Caracciola finally howled over the line to the accompaniment of great applause.

RESULT.

30 Laps. 519 km. 450.

1. Caracciola (Mercedes-Benz), 3h. 9m. 9.1s. 164.150 k.p.h.

(Last year's average by Fagioli; 156.226 k.p.h.)

2. Fagioli (Mercedes-Benz), 3h. 10m. 42s.

3. Von Brauchitsch (Mercedes-Benz), 3h. 10m. 42s.

4. Wimille (Bugatti), 3h. 12m. 53s.

5. Rosemeyer (Auto-Union), 3h. 17m. 35s.

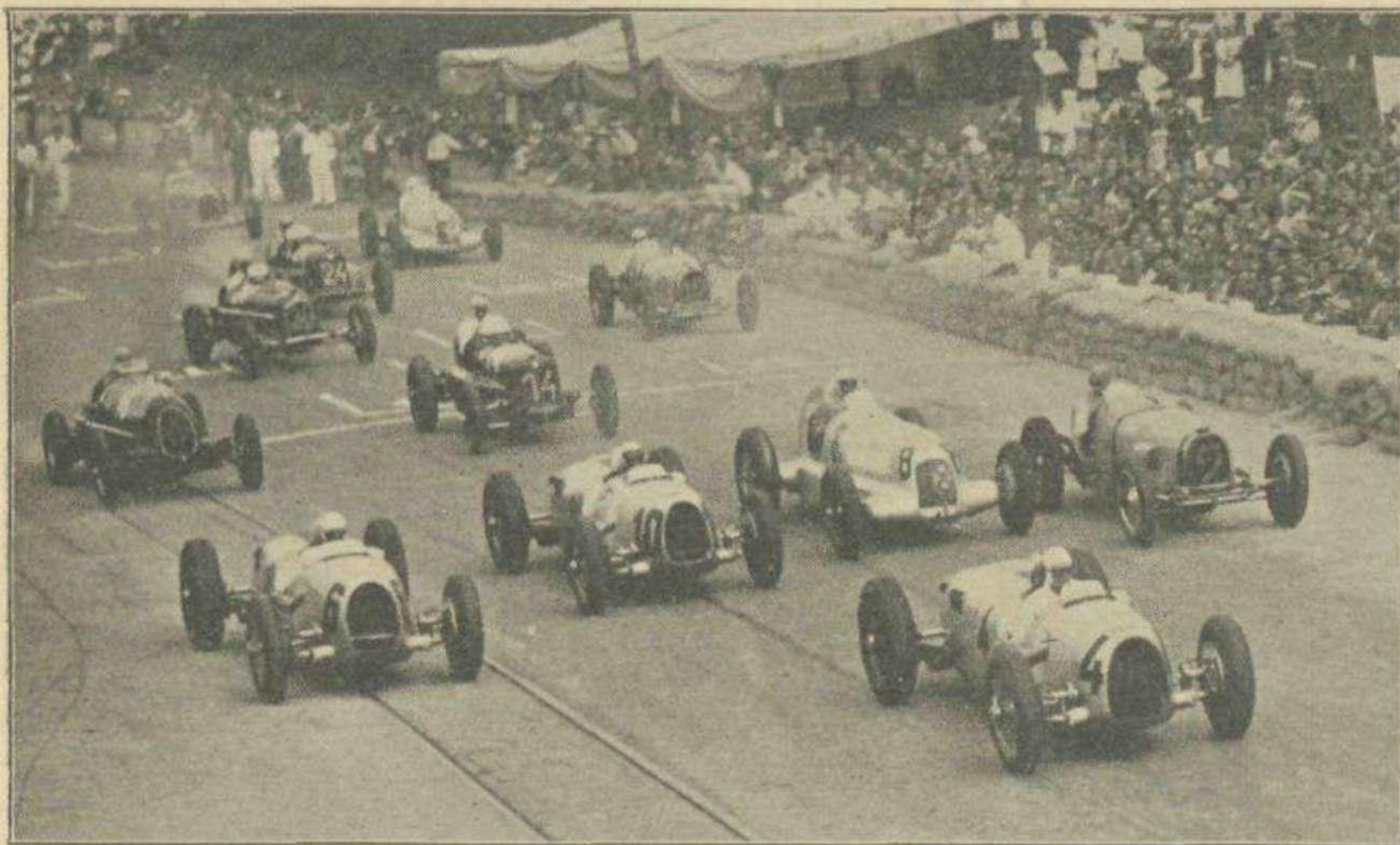
6. Benoist (Bugatti), 1 lap behind.

7. Sommer (Alfa-Romeo), 3 laps behind.

8. Lehoux (Maserati) 5 laps behind.

Also Ran: Varzi-Pietsch (Auto-Union); Siena (Maserati); Nuvolari (Alfa-Romeo); Stuck (Auto-Union); Chiron (Alfa-Romeo); and Leoz (Bugatti).

Fastest lap by Varzi, in 5m 58s. Previous record by Stuck (Auto-Union) 6m. 20s.



Stuck is first away at the start. Behind him are Wimille and Fagioli, while Nuvolari on the 4-litre Alfa-Romeo can be seen on the extreme left of the picture.

TWO WELL-TRIED A.C. MODELS CONTINUED UNCHANGED

A WIDE RANGE OF SPORTS AND ALL WEATHER COACHWORK OF DISTINGUISHED LINE

"When you've got a good thing, stick to it." This is the policy followed by Messrs A.C. (Acedes) Cars this year, in continuing the 16-56 and the 16-66 models for 1936. The engine is, of course, the well-tried two-litre six-cylinder unit, which employs advanced practice in using wet liners in an aluminium cylinder block, a single overhead-camshaft, three carburetors, and a fully-balanced crankshaft. A choice of gear-boxes is available, one of orthodox type with central control and a silent-third gear, or if preferred an epicyclic self-change-box may be fitted, with a neat gear-control on the steering column.

The chassis is particularly rigid with three cross-bracings and the brakes, of self-energising type, give the exceptional stoppage distance of 28 feet from 30 m.p.h. The sports engine running on straight petrol or ethylised petrol gives a speed of 80 m.p.h., while 75 m.p.h. is obtained with the less highly-tuned 16-56, giving a really sporting performance in each case.

One of the special features of A.C. cars is the wide range of coachwork which is available, and as all the bodies are constructed at Thames Ditton under the same roof as the cars, one can be sure that the various types will be well adapted to the chassis for which they are built.

The bodies available for the "16-56" range from an open two-seater to a four-door family saloon. The two-seater is fitted with a smart drop-head which fits down quite flush when opened, and yet converts into a closed car when the top is raised and the glass windows are wound into position. This car, which costs £470, was awarded First Prize in

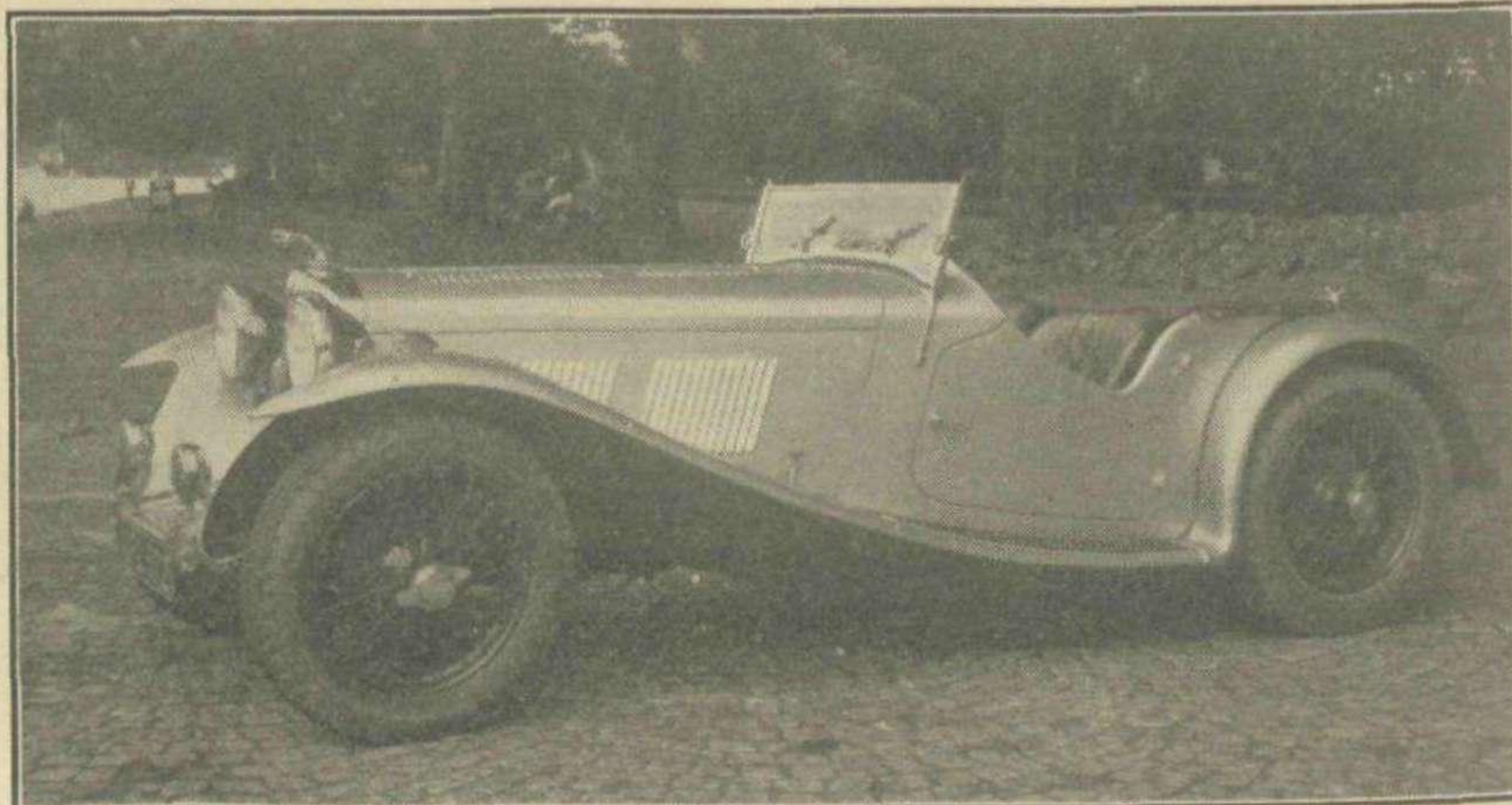
its class at the Ramsgate Concours d'Elegance last year, and repeated its success in the 1935 R.A.C. Rally at Eastbourne.

Another body giving closed-car comfort with the joy of an open car in fine weather is the 4-seater drop-head coupé. Here again the hood folds down almost flush at the rear of the car and the two large metal-framed windows wind flush into the wide doors, giving a smart line quite comparable to that of an open tourer. This body provides comfortable seating accommodation for four people, with luggage space in the locker at the back. This car complete costs £475, while the attractive close-coupled saloon costs five pounds less.

The standard body on the 16-66 chassis is a low-built open four-seater of speedy line. Pneumatic upholstery is fitted, there is a useful luggage compartment at the back, while the all-weather equipment is exceptionally good. This 80 m.p.h. car is modestly priced at £450.

As we go to press, important price reduction are announced. These are as follows:—

Drop Head Two-seater Coupe reduced from £470	£429
Greyhound Saloon reduced from £470	£465
Drop Head Four-seater Coupe (new model)	£475
Aero Saloon (Long or Short body) reduced from £500	£465
Five-seater Saloon reduced from £510	£485
Full Sports Four-seater reduced from £485	£445
Full Sports "Flea" Two-seater (new model)	£425

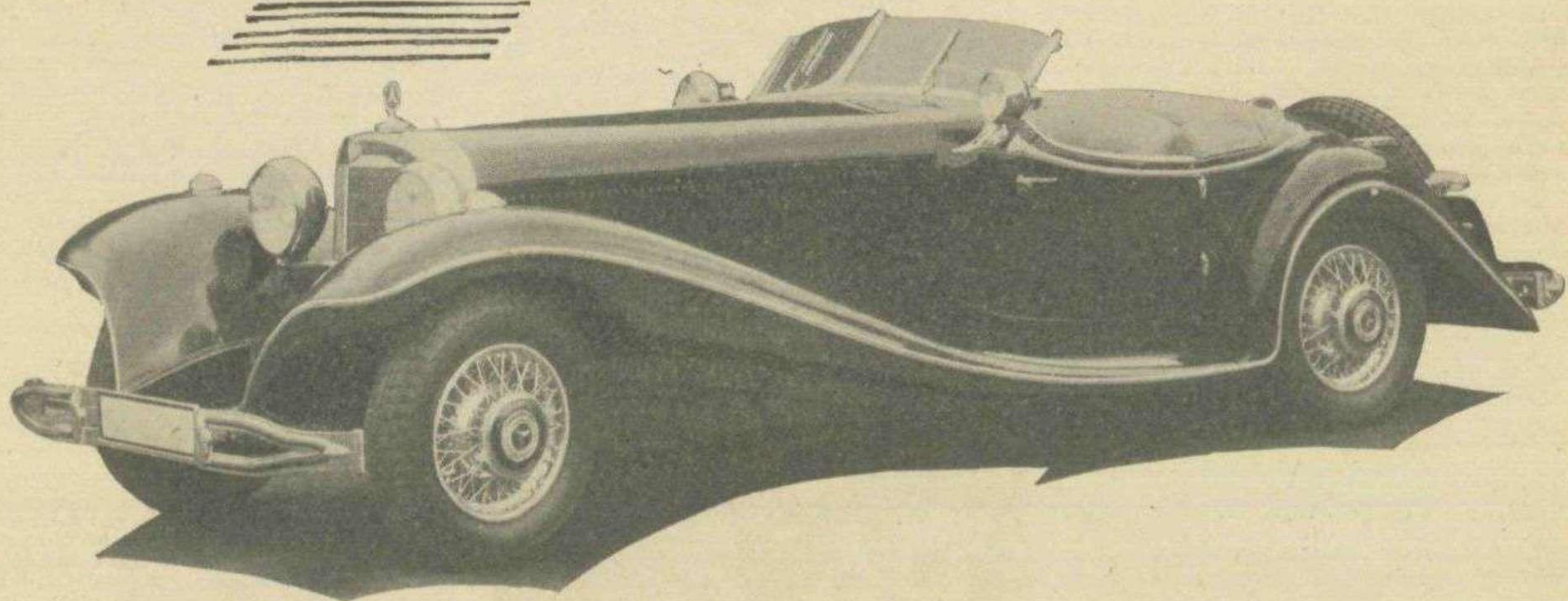
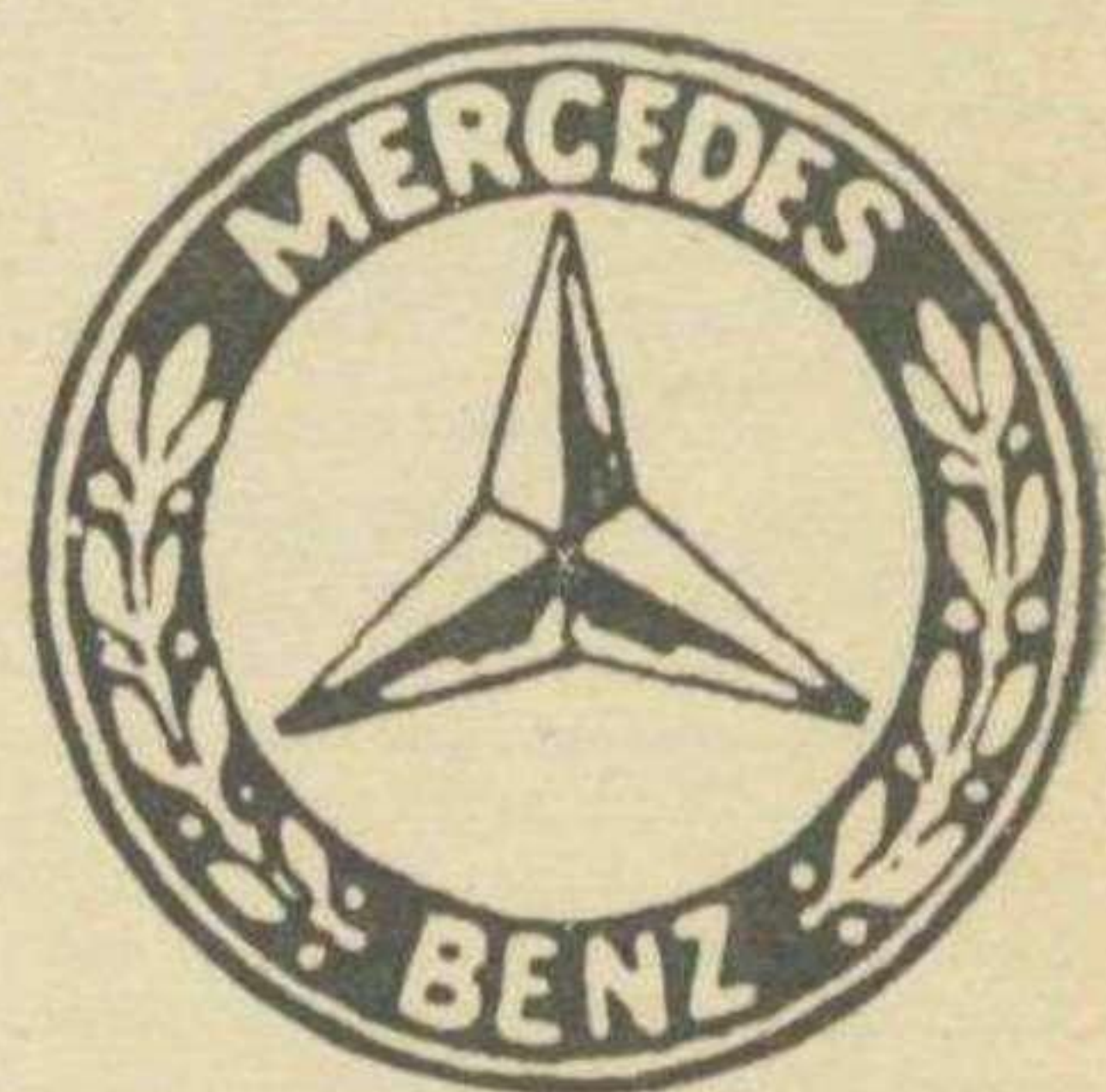
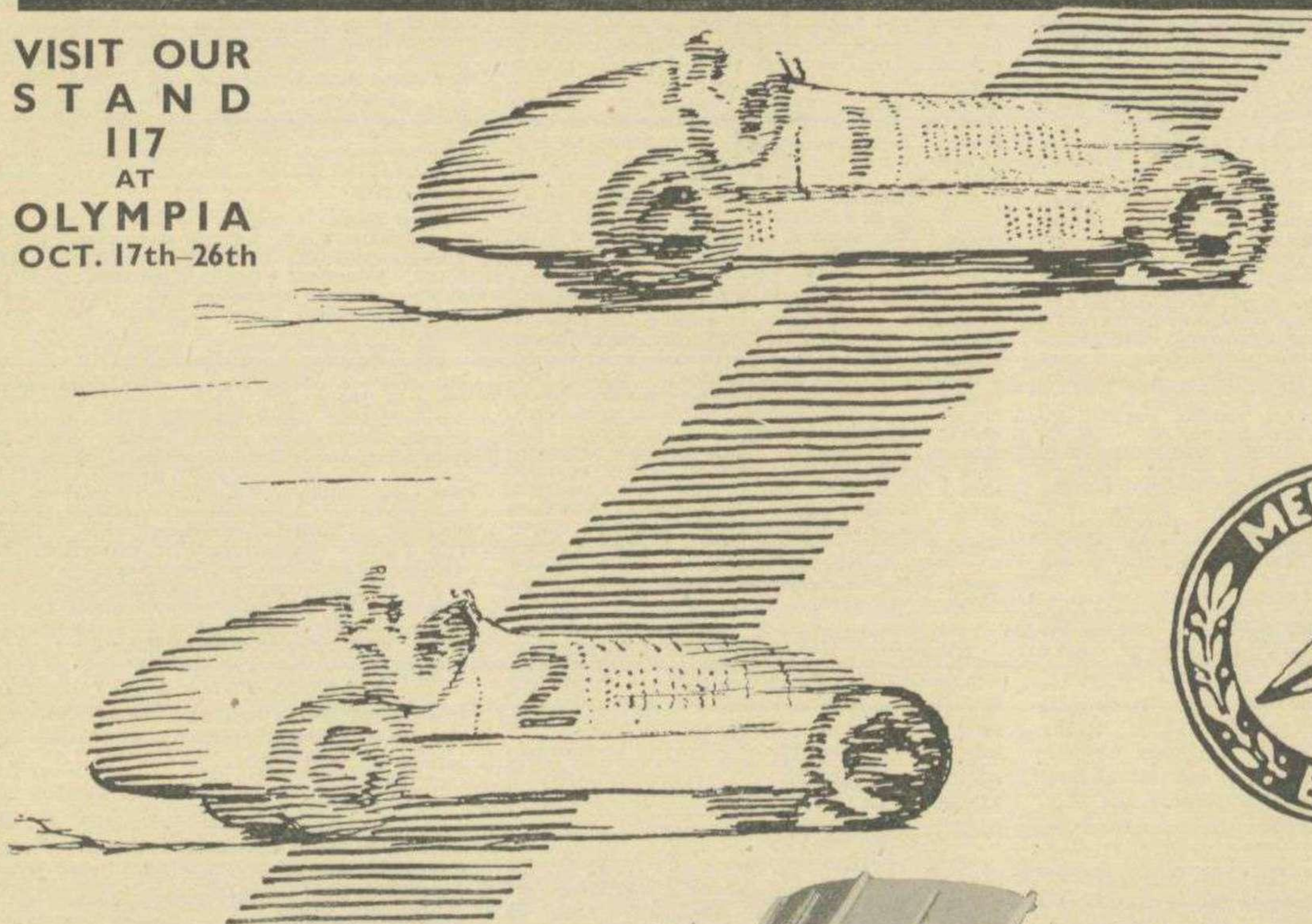


An attractive open four-seater on the two-litre A.C. chassis. The price of this car has been reduced from £485 to £445.

MERCEDES-BENZ

SPEED—SAFETY—GRACE

VISIT OUR
STAND
117
AT
OLYMPIA
OCT. 17th-26th



YOU WILL BE CORDIALLY WELCOMED AT OUR NEW SHOWROOMS

BRITISH MERCEDES-BENZ, LTD., 110, PARK LANE, LONDON, W.1

MAYFAIR
5556

REGISTERED OFFICES, SERVICE STATION & WORKS : 111, GROSVENOR ROAD, LONDON, S.W.1 VICTORIA 8715/6

A GUIDE TO 1936 HIGH PERFORMANCE CARS

THIS LIST OF SPECIFICATIONS AND DATA HAS BEEN COMPILED TO ASSIST THE PROSPECTIVE PURCHASER OF A FAST CAR IN THE DIFFICULT MATTER OF CHOOSING HIS MOUNT FOR THE COMING SEASON.

A.C.

British. A.C. (Acedes) Cars, Ltd., Thames Ditton, Surrey.

"Ace" Special short 2-seater Sports. 6 cyl., 65×100, 1,991 c.c., 15.7 h.p. Tax £12. Overhead valves operated by eccentric base camshaft driven by silent chain. Comp. ratio 7½ to 1. 5 bearing crankshaft. 80 b.h.p. at 4,250 revs. Centrifugal water pump cooling. 3 S.U. carburettors. 3 point engine mounting, s.d.p. clutch. 4 speed gearbox, central control. Ratios 15.3, 10, 5.7, 4.25 to 1. Road speed at 1,000 r.p.m. 1st 6, 2nd 9.1, 3rd 14.6, 4th 19.7 m.p.h. Maximum speed, 1st 26, 2nd 42, 3rd 64, 4th 90 m.p.h. Open prop. shaft. Spiral bevel drive axle. ½-elliptic springs. Andre shock absorbers. Cam steering. Turning circle 36'. Bendix duo-servo brakes. Battery 12 v. 72 a.h. 20 gallon rear tank, pump feed. Wire wheels. Tyres 29×5.00. Wheelbase 8' 10". Track 4' 2". Ground clearance 8". Weight 19½ cwt. Price £425.

"Ace" 4-seater Sports. 6 cyl., 65×100, 1,991 c.c., 15.7 h.p. Tax £12. Comp. ratio 6½ to 1. 5 bearing crankshaft. 72 b.h.p. at 4,250 revs. Centrifugal water pump cooling. 3 S.U. carburettors. 3 point engine mounting, single plate clutch. 4 speed gearbox, central control. Ratios 16.2, 9.5, 6.17, 4.5 to 1. Road speeds at 1,000 r.p.m. 1st 5.1, 2nd 8.8, 3rd 13.5, 4th 18.6 m.p.h. Maximum speeds. 1st 18, 2nd 36, 3rd 60, 4th 85 m.p.h. Open prop. shaft. Spiral bevel drive axle. ½-elliptic springs. Hartford friction shock absorbers. Worm steering. Turning circle 36' 6". Duo-servo brakes. Battery 12 v. 72 a.h. 10 gallon rear tank, pump feed. Consumption 24/25 m.p.g. Wire wheels. Tyres 29×5.00. Wheelbase 9' 7". Track 4' 2". Ground clearance 8". Weight 20 cwt. Price £445.

Anyone who has watched reliability trials must have noticed the way in which ancient A.C. cars, ten years old or more, have put many modern cars to shame, thanks to their light weight and the ample power from the old six-cylinder engine. The announcement of a short chassis A.C. makes it possible to employ the high power of the present-day three carburettor unit to even better effect, and the claim of the makers that the car will go anywhere that the wheels will grip should be well substantiated. Although specifically designed for trials work, the new 2-seater should prove an equal success on the open road and a speed of 90 m.p.h. is quoted.

The other models remain unchanged, while some interesting new bodies have been produced. Prices have been greatly reduced all round and particulars of these will be found elsewhere in this issue.

ALTA

British. Alta Car and Engineering Co., Ltd., Fullers Way, Kingston By-Pass, Surbiton.

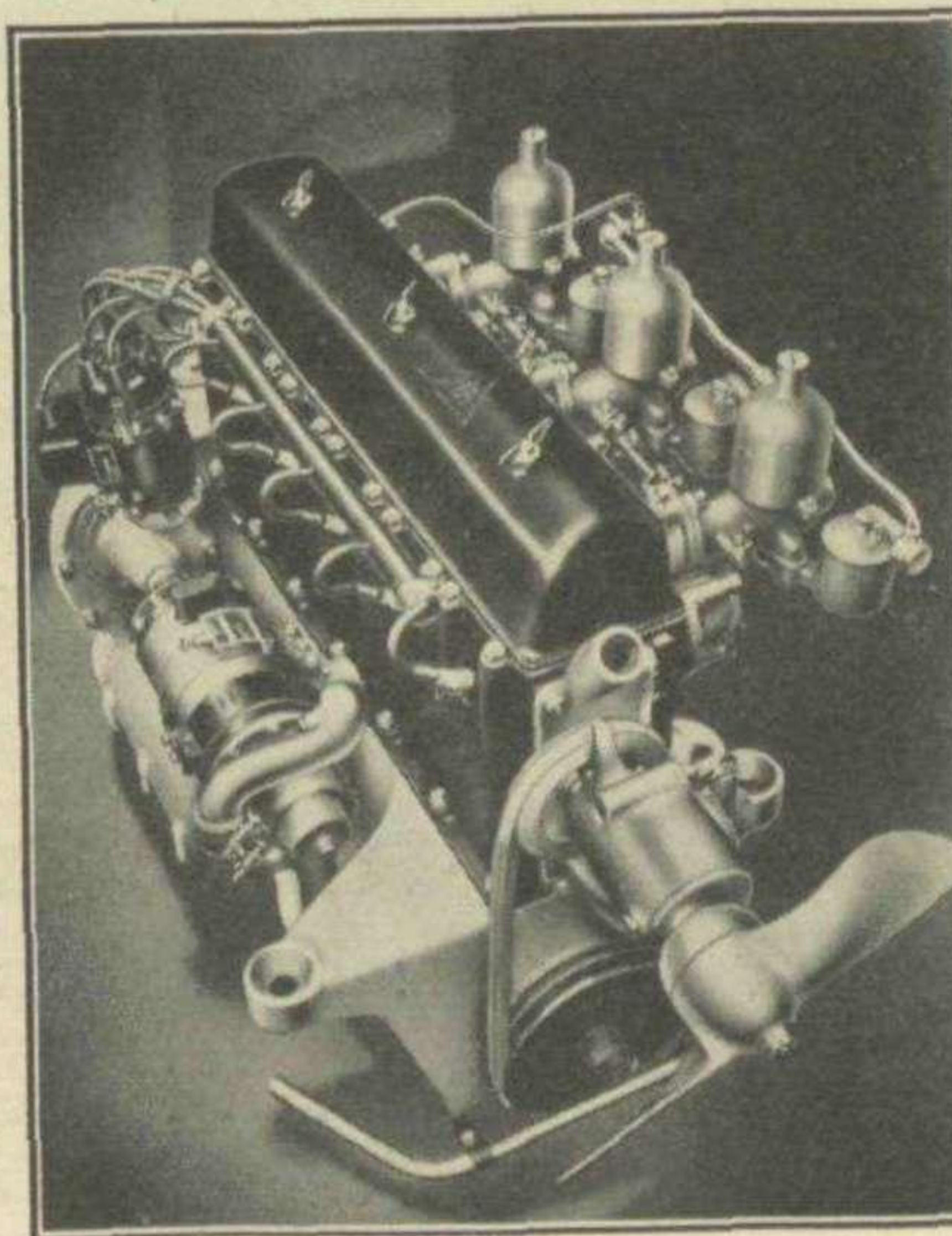
1,074 c.c. 4 cyl., 60×95, 9 h.p. Tax £6 15 0. Comp. ratio 7.3 or 7.9 to 1. 3 bearing crankshaft. B.h.p. at maximum revs.: unsupercharged 70 at 5,200 r.p.m. supercharged, 140 at 5,800 r.p.m. Pump and radiator cooling. Carburettors, unsupercharged 2 S.U. Supercharged 1 S.U. 3 point engine mounting. E.N.V. Preselect 4 speed gearbox, central change. Maximum speed, 115-120 m.p.h. supercharged racing model. Hardy-Spicer propeller shaft. E.N.V. spiral bevel rear axle, straight bevel racing model. Springs, front ½-elliptic 31". Rear ½-elliptic 24". Luvax shock absorbers. Cam and lever steering. Turning circle 38'. 2 shoe cable operated brakes. Battery 12 v. 63 a.h. Mechanical pump feed. Consumption unsupercharged 28 m.p.g. Supercharged 15 m.p.g. Rear petrol tank. Tyre size 5×19 or 5.25×19. Wheelbase 8'. Track 4' 2". Ground clearance 7". Weight 15 cwt. approx. Prices, 2 seater sports £450. 4 seater sports £465. Racing model (supercharged) £750.

1½-litre. 4 cyl., 68.75×100, 1,485 c.c., 12 h.p. Tax £9. 2 overhead camshafts. Comp. ratio 7.3 or 7.9 to 1. 3 bearing crankshaft. 70 b.h.p. at 5,200 revs. unsupercharged. 140 b.h.p. at 5,800 supercharged. Pump and radiator cooling. 2 S.U. carburettors, unsupercharged. 1 S.U. carburettor supercharged. 3 point engine mounting. 4 speed E.N.V. Preselect gearbox. Central control. Maximum speed: Supercharged racing model 115-120 m.p.h. Hardy-Spicer propeller shaft. E.N.V. spiral bevel rear axle, (straight bevel racing model). Springs, front ½-elliptic, rear ¼-elliptic. Luvax shock absorbers. Cam and lever steering. Turning circle 38'. Battery 12 v. 63 a.h. 2 shoe cable operated brakes. Mechanical pump. Consumption, unsupercharged 28 m.p.g. Supercharged 15 m.p.g. Rear petrol tank. Tyre size 5×19 touring, 5.25×19, racing. Wheelbase 8'. Track 4' 2". Ground clearance 7". Weight of complete car 15 cwt. Prices 2 seater sports £450. 4 seater sports £465. Racing model (supercharged) £750.

2-litre. 4 cyl., 79×100, 1,996 c.c., 15 h.p. Tax £11 5 0. O.h.c. Comp. ratio 6.9 or 8 to 1. 3 bearing crankshaft. 85 b.h.p. at 5,000 r.p.m. unsupercharged. 160 b.h.p. at 5,500 r.p.m. supercharged. Pump cooling. 1 S.U. carburettor supercharged, 2 S.U. carburettors unsupercharged. 3 point rigid engine mounting. Preselector gearbox, central change. 4 optional ratios. Open prop. shaft. Straight bevel rear axle. ½-elliptic front springs, ¼-elliptic rear. Hydraulic shock absorbers. Cam steering. Turning circle 38'. Cable operated brakes. Battery 12 v. 63 a.h. Rear tank, mechanical pump. Rudge wheels. Tyres 17×6. Wheelbase 7'. Consumption unsupercharged 24 m.p.g. Supercharged 12 m.p.g. Track 4' 2". Ground clearance 7". Weight of complete car 15½ cwt. Prices, 2 seater sports £470. 4 seater sports £485. Supercharged racing model £775.

All three cars of the Alta range are of the same high efficiency type, with double-overhead camshaft engines, pre-selective gearboxes and low-slung chassis well adapted for the fitting of racing and super-sports coachwork. A supercharger is standard on the 1,100 c.c. model, and may also be had on the two larger cars.

The 1½-litre car made its appearance at the end of the present season, and performed well at Brighton and at Shelsley Walsh, while the 1,100 c.c. cars have had several successes at Brooklands.



The Alvis 3½-litre Engine

ALVIS

British. The Alvis Car Engineering Co., Ltd., Coventry.

Firebird. 4 cyl., 73×110, 1,842 c.c., 13.22 h.p. Pushrod, o.h.v. 61 b.h.p. at 4,300 r.p.m. 3 bearing crankshaft. Pump cooling. S.d.p. clutch. All synchro-mesh gearbox, central change. Comp. Ratio 5.22 to 1. Fully floating spiral bevel rear axle. Springs, ½-elliptic front and rear. Turning circle 40'. Alvis self-emerging brakes. Battery 12 v. 63 a.h. 14½ gallon rear tank, pump feed. Wire wheels. Tyres 5.50×19. Wheelbase 9' 10½". Track 4' 4". Ground clearance 6½". Weight chassis 18½ cwt. 4-seater sports 26½ cwt. Price chassis £410. 4-seater sports £490.

Silver Eagle. 6 cyl., 67.5×110, 2,362 c.c., 16.95 h.p. Pushrod o.h.v. ½-elliptic springs front and rear. Turning circle 40'. 14½ gallon rear tank. Tyres 5×20. Wheelbase 9' 10½". 3 carburettors. Track 4' 4". Ground clearances 6½". Weight saloon 28½ cwt., 4-seater sports 27½ cwt. Price chassis £575.

Speed Twenty. 6 cyl., 73×110, 2,762 c.c., 19.82 h.p. Tax £15. Pushrod o.h.v. 4 bearing crankshaft. Pump and fan cooling. 3 S.U. carburettors. Special 3 point flexible engine mounting. S.d.p. clutch. All synchro-mesh gearbox, central change. Independent front wheel springing and steering. Hardy Spicer enclosed prop. shaft. Fully floating spiral bevel rear axle. Springs, transverse independent front, ½-elliptic rear. Telecontrol shock absorbers. Turning circle 40'. Alvis self-energising brakes. Battery 12 v. 75 a.h. 17 gallon rear tank, pump feed. Wire wheels. Tyres 5.50×19. Wheelbase 10' 4". Track 4' 8". Ground clearance 7". Weight chassis 23 cwt. 4-door saloon 31½ cwt., 4-seater sports 29½ cwt. Price chassis £600, 4-door saloon £850, 4-seater sports £700. Price at works in Great Britain.

The big event on the Alvis programme is of course the new 3½-litre model. Full details of this striking car appear elsewhere in this issue.

The Speed Twenty, a handsome and fast car on which one can put up high averages with the minimum of effort is for 1936 only changed in slight details of equipment. The same applies to the Silver Eagle Sixteen on which high speeds and economical operation are well combined. Small but important alterations have been made to the steering and suspension which improve control and riding comfort, while no changes have been found necessary on the Firebird, the descendent of the 4-cylinder which established the reputation of the Alvis make.

ASTON-MARTIN

British. Aston-Martin Ltd., Feltham, Middlesex.

Mark II. 4 cyl., 69×99, 1,495 c.c., 12 h.p. Tax £9. O.h.c. Comp. ratio 7.5 to 1. 3 bearing crankshaft. 70 b.h.p. at 4,750 r.p.m. Pump and thermo-syphon cooling. Two S.U. carburettors. Silent-bloc engine mounting. S.d.p. clutch. 4 speed straight tooth gearbox. Central change. Ratios 12.9, 8.1, 5.91, 4.66 to 1. Road speed at 1,000 r.p.m. 1st 6.51, 2nd 10.4, 3rd 14.2, top 18.1 m.p.h. Maximum speeds, 1st 32, 2nd 52, 3rd 71, top 90 m.p.h. Spiral bevel rear axle. ½-elliptic springs. Hartford Duplex shock absorbers. Cam type steering. Turning circle 41' approx., 38' short chassis. Directly operated brakes through cables and rods. Battery 12 v. 63 a.h. Rear tank, 2/4 seater, 13 gallons, 4 seater and saloon 11 gallons. 2 electric pumps. Consumption 26 m.p.g. Rudge wire wheels. Tyres 5.25×18. Wheelbase, 2/4 seater 8' 7", 4 seater and saloon 10'. Track 4' 4". Ground clearance 6". Weight of complete car, 2/4 seater 20 cwt., 4 seater 22 cwt., saloon 24 cwt. Price, 2/4 seater £610, 4 seater £640, saloon £700.

A GUIDE TO 1936 HIGH PERFORMANCE CARS—continued.

Consistent participation in races at home and abroad has failed to reveal any weakness in the Aston-Martin design, and the Mark II chassis is continued without alteration for 1936. The robust single-overhead camshaft engine produces 70 h.p. without a trace of vibration and an unfailing 80 m.p.h. can be achieved on the 2-4-seater car which is the standard model. A long-chassis model with a wheelbase of 10 feet is also produced, and which allows full four-seater or saloon coachwork to be fitted.

The Ulster road-racing car is identical in specification with the Mark II except for having a higher compression and a streamlined racing body. A road-test of this car appears on another page.

AUSTIN

British. The Austin Motor Co., Long-bridge, Birmingham.

Nippy. 4 cyl., 56×76, 747.5 c.c., 7.8 h.p. Tax £6. S.v. Comp. ratio 5.8 to 1. 2 bearing crankshaft. 21 b.h.p. at 4,000 r.p.m. Thermo-syphon and fan cooling. One Zenith down-draught carburetter. 4 point insulated engine mounting. S.d.p. clutch. 4 speed gearbox synchro-mesh 2nd, 3rd and top, central change. Ratios 21.9, 13.3, 8.38, 5.6 to 1. Road speed at 1,000 r.p.m., 1st 3.29, 2nd 5.69, 3rd 9.02, top 13.44 m.p.h. ½ floating rear axle, spiral bevel. Springs, front semi-elliptic transverse, rear ¼-elliptic. Friction shock absorbers. Worm and worm wheel steering. Turning circle 33'. Direct operated brakes. Battery 6 v. 51 a.h. 5 gallon rear tank, pump feed. Magna wheels. Tyres 3.50×19. Wheelbase 6' 9". Track 3' 4". Ground clearance 5¼". Weight 9¼ cwt. Price: Sports 2-seater £142.

Ripley. 4 cyl., 63.5×89, 1,125 c.c., 9.9 h.p. Tax £7 10 0. S.v. Comp. ratio 6.5 to 1. 3 bearing crankshaft. 30 b.h.p. at 3,800 r.p.m. Thermo-syphon and fan cooling. One Zenith down-draught carburetter. 3 point insulated engine mounting. S.d.p. clutch. 4 speed gearbox, synchro-mesh 2nd, 3rd and top, central change. Ratios 18.9, 11.39, 7.19 and top 5.25 to 1. Road speed at 1,000 r.p.m., 1st 4.03, 2nd 6.69, 3rd 10.58, top 14.50 m.p.h. Open prop. shaft. ¼ floating rear axle, spiral bevel. Semi-elliptic springs, friction and hydraulic shock absorbers. Worm and worm wheel steering. Turning circle 37'. Direct operated brakes. Battery 12 v. 50 a.h. 6 gallon rear tank, pump feed. Magna wheels. Tyres 4.50×18. Wheelbase 7' 9". Track 3' 9". Ground clearance 6¾". Price: Open sports tourer, £215.

The Austin Seven was the pioneer of the small sports-car, and the modern version, with its low chassis and under-slung front springing, is a stable and attractive little car well suited for fast travel on present-day crowded roads. Not least amongst its attributes is the modest price of £142.

The larger car, the Ripley Sports tourer on the Ten chassis, gives a similar performance, but provides comfortable room for four people. In saloon form the Standard Ten horse-power car is capable of speeds exceeding 60 m.p.h., so this new model with specially tuned engine should give a good account of itself.

BENTLEY

British. Bentley Motors (1931), Ltd., 16, Conduit Street, London, W.1.

3½-litre. 6 cyl., 3¼×4¼", 3,669 c.c., 25.3 h.p. Tax £19 10 0. O.H.V. Pump and fan cooling. 2 S.U. special carburetters. S.d.p. clutch 4 speed gearbox, synchro-mesh, right hand change. Ratios 11.3, 7.088, 5.104, 4.1 to 1. Open prop. shaft. Fully floating back axle, hypoid gears with base differential. Semi-elliptic springs. Hydraulic shock absorbers of Rolls-Royce design. Worm and nut steering. Turning circle right 40' 11", left 39' 7". Servo foot brake on four wheels, independent hand

brake on rear only. Battery 12 v. 18 gallon rear tank, electric pump. Wire wheels. Tyres 18"×5.50". Wheelbase 10' 6". Track 4' 8". Weight of chassis 2,510 lbs. Price: chassis £1,100.

The high ideals of reliability and silence inherent in the name of Rolls-Royce and the delights of driving a fast, light, and perfectly balanced motor-car have resulted in the production of the 3½-litre Bentley, which continues to gain in reputation in England and abroad, and is so well described by the phrase "The Silent Sports Car."

By using a powerful yet perfectly smooth engine in a chassis the weight of which has been reduced by perfected design and the use of the latest high-duty steels and alloy, it has been found possible to produce a car which runs easily from a crawl to speeds round 90 m.p.h. with open or closed coachwork, and under these conditions high speed travel is seen at its best by driver and passenger alike. On the latest cars a steering wheel control allows the resistance of the shock-absorbers to be varied to suit the road-surface, the load and the speed of the car. The oil pressure which does the regulating is derived from a gearbox-driven pump which increases the damping as the speed of the car rises.

MERCEDES-BENZ

German. British Mercedes-Benz Ltd., Grosvenor Road, London, S.W.1.

Type 500. 8 cyl. supercharged, 86×108, 5,018 c.c., 37 h.p. Tax £27 15 0. Pushrod o.h.v. Comp. ratio 5.5 to 1. 100 b.h.p. without supercharger, 160 b.h.p. with supercharger at 3,400 r.p.m. 8 bearing crankshaft. Pump and fan cooling. Two Mercedes carburetters. 4 point elastic engine mounting. S.d.p. clutch. 4 speed gearbox, with over-top, silent third and second, central change. 5 gears including over-top, plus reverse. Rear axle ratios, direct top 4.88 to 1, overtop 3.03 to 1. Swinging half axles. Differential casing direct on frame with rubber buffers. Independent coil springing front and rear. Hydraulic shock absorbers. Worm and nut steering, each wheel individually. Turning circle 40' 8". Lockheed brakes, servo assisted. Battery 12 v. 75 a.h. 24 gallon rear tank, pump feed. Consumption 10/11 m.p.g. Wire wheels. Tyres 6.50×17. Wheelbase 10' 9½". Track 4' 11". Ground clearance 7¼". Weight of complete car 45 cwt. Price, chassis £1,395, with any standard body £1,890. Special sports roadster £2,200.

Always a name to conjure with in the realm of fast supercharged sports cars, the 5-litre Mercedes-Benz has all the features which make for fast long distance travel.

A slow-speed engine, furnished with a supercharger which can be cut in when accelerating up to the cruising speed desired, gives, in conjunction with a special gearbox with a silent running over-top gear, a touring gait without disturbing driver or passengers and an all-out speed of well over 100 m.p.h. The chassis is outstandingly rigid and is of box-section throughout and with all four wheels independently sprung the car can be run at high speed over indifferent roads without the car or the occupants suffering.

The sporting driver will probably prefer the striking "roadster" or 2-seater body, but in addition there is a fine range of drop-head coupes which combine full weather protection with the advantages of an open car.

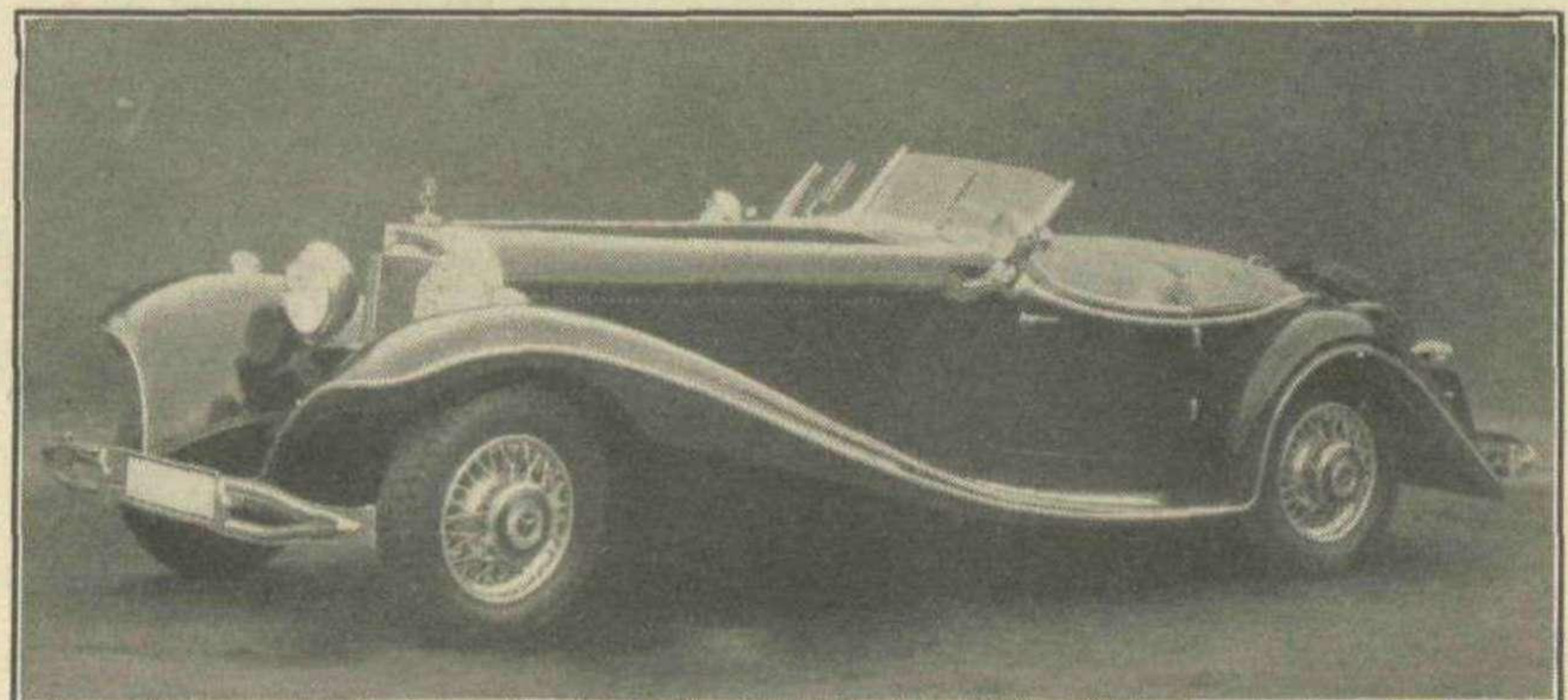
BRITISH SALMSON

British. British Salmson Aero Engines Ltd., Raynes Park, London, S.W.20

20/90. 6 cyl., 75×98, 2,596 c.c., 21 h.p. Tax £16. Two overhead camshafts. Comp. ratio 6.1 to 1. 4 bearing crankshaft, 90 b.h.p. at maximum revs. Thermo-syphon and fan cooling. Two S.U. carburetters. Engine mounted on rubber blocks. Borg and Beck single plate clutch. British Salmson 4 speed gearbox, synchro mesh 3rd and 4th, central change. Ratios 15.88, 8.22, 6.38, 4.5 to 1. Road speeds at 1,000 r.p.m. 1st 4.5, 2nd 9, 3rd 12.4, 4th 17.5. Maximum speeds, 1st 23, 2nd 46.5, 3rd 64, 4th 90 m.p.h. Semi-floating rear axle. Springs, transverse front, ¼-elliptic rear. Friction shock absorbers. Turning circle 29' 6". Bendix hand and foot brakes. Battery 12 v. 90 a.h. 15 gallon rear tank, pump feed. Consumption 22 m.p.g. Pressed steel wheels. Tyres 150×40. Wheelbase 9' 4¼". Track 4' 3¼". Ground clearance 7". Weight of complete car 23 cwt. Prices, chassis £500. Sports 2 seater £645.

12/70. 4 cyl., 69×98, 1,470 c.c., 12 h.p. Tax £9. Two overhead camshafts. Comp. ratio 6.1 to 1. 3 bearing crankshaft. 70 b.h.p. at maximum revs. Thermo-syphon cooling. 1 Solex carburetter. Borg and Beck single plate clutch. British Salmson 4 speed gearbox. Synchro mesh on 3rd and 4th. Ratios 15.95, 8.1, 4.75 to 1. Road speed at 1,000 r.p.m. 1st 5.2, 2nd 8.25, 3rd 11.5 4th 16.5 m.p.h. Maximum speeds, 1st 25, 2nd 40, 3rd 56, 4th 80 m.p.h. Torque tube drop shaft. Semi-floating rear axle. Springs, ¼-elliptic front, ¼-elliptic rear. Friction shock absorbers. Marles steering. Turning circle 37'. Bendix brakes. Battery 12 v. 90 amp. Pump feed. Consumption 28 m.p.g. 10 gallon rear tank. Rudge Whitworth wheels. Tyres 4.75×18. Wheelbase 9' 2¼". Track 4' 2¼". Ground clearance 7". Weight of complete car 22 cwt. Price, 2 seater sports £395. Chassis £305.

12/55. 4 cyl., 69×98, 1,470 c.c., 12 h.p. Tax £9. Comp. ratio 5.6 to 1. 3 bearing crankshaft. 55 b.h.p. at maximum revs. Thermo-syphon cooling. 1 Solex carburetter. Engine mounted on rubber



One of the few standard cars capable of exceeding 100 m.p.h., the 5-litre supercharged Mercedes-Benz fully looks the part.

A GUIDE TO 1936 HIGH PERFORMANCE CARS—continued.

blocks. Borg and Beck single plate clutch. 4 speed gearbox synchro-mesh 3rd and 4th, central change. Ratios, 16.5, 10.4, 7.4, 5.2 to 1. Road speeds at 1,000 r.p.m., 1st 5, 2nd 7.75, 3rd 11, 4th 15.5 m.p.h. Maximum speeds 1st 22.5, 2nd 35, 3rd 50, 4th 70 m.p.h. Semi-floating rear axle. Springs, $\frac{1}{2}$ -elliptic front, $\frac{1}{4}$ -elliptic rear. Friction type shock absorbers. Marles steering. Turning circle 37'. Bendix brakes. Battery 12 v. 90 amp. Pump feed. Consumption 30 m.p.g. 10 gallon rear tank. Rudge Whitworth wire wheels. Tyres 5x18. Wheelbase 9' 2 $\frac{1}{2}$ ". Track 4' 2 $\frac{1}{2}$ ". Ground clearance 7". Weight of complete car 23 cwt. Prices, chassis £295. Full length saloon £395. Close coupled saloon £395. Foursome coupe £395, 4 seater tourer £365.

British Salmson cars are built in the same factory and under the same conditions as the equally well-known aero engines, and practically every part of the car is hand-made at the Raynes Park factory. For 1936 there is an important addition to the range of models, the 20-90 h.p. six-cylinder car.

Following the design of the smaller model, the engine has two overhead camshafts, two carburetters, and various other points which make for high power output, while the gearbox is fitted with a perfected form of synchro-mesh mechanism. The independent suspension of the front wheels is carried out very neatly, with a transverse leaf spring beneath the chassis, and pressed-steel links which embody friction shock absorbers acting as parallel arms. A 2-4-seater body with very sporting lines is available on this car.

The four-cylinder models are unchanged, but a novel type of 2-seater with unusual luggage space under the hood will appeal to the sporting motorist who covers large mileages at a distance from his headquarters.

FRAZER-NASH

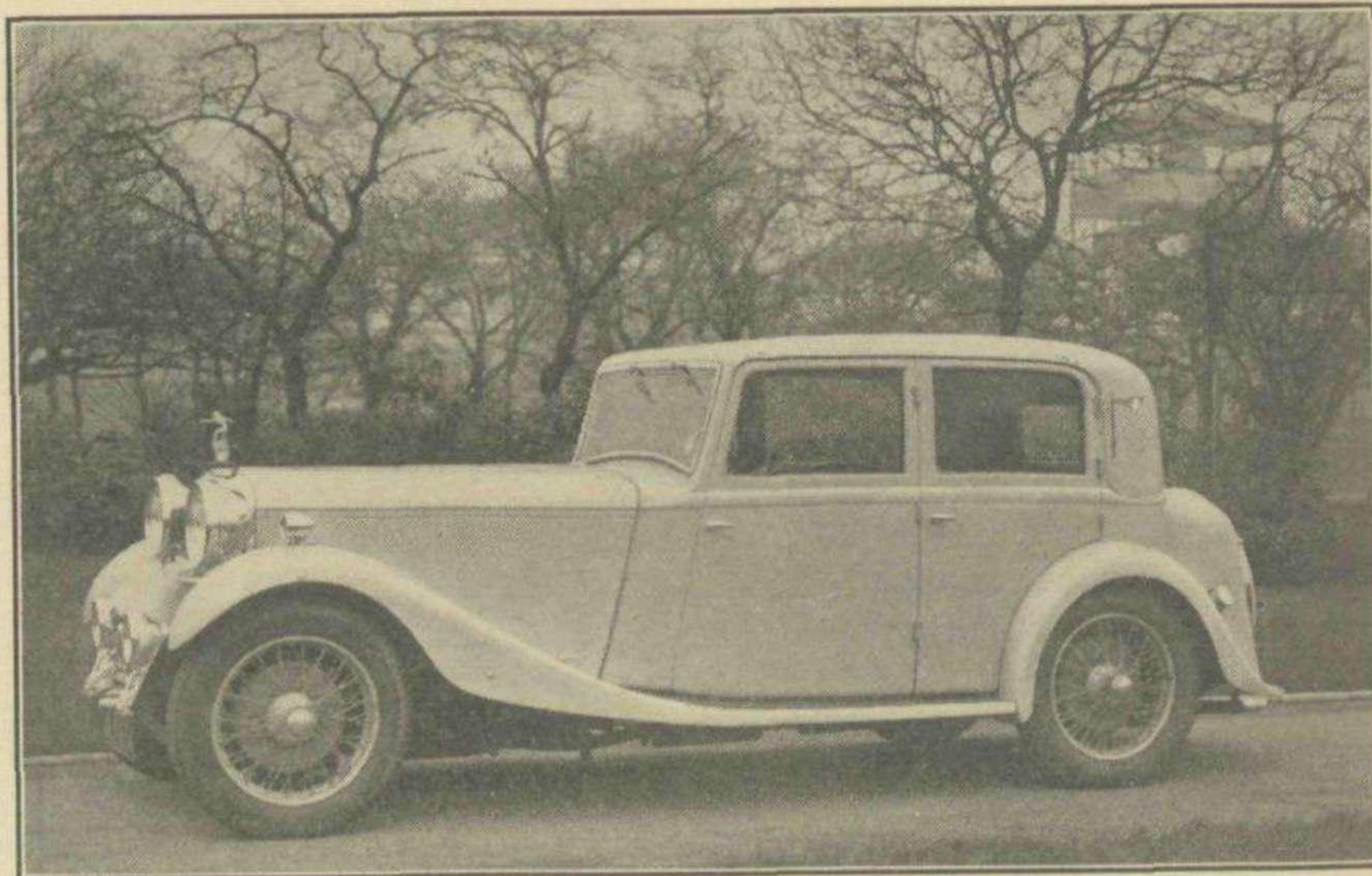
British. A. F. N. Ltd., Falcon Works, London Road, Isleworth, and 32, Grosvenor Street, London, W.1.

"Reply." 6 cyl., 65x100, 1,911 c.c., 15.71 h.p. Tax £12. Pushrod o.h.v. Comp. ratio 6.8 to 1. 4 bearing crankshaft. Pump and fan cooling. 3 Solex carburetters. S.d.p. clutch. Chain drive, right hand gear change. Ratios optional. Solid rear axle. $\frac{1}{4}$ -elliptic springs, front and rear. Hartford duplex shock absorbers. New pattern

cushioned engine mounting. S.d.p. clutch, right hand gear change. Chain drive. Solid rear axle. $\frac{1}{4}$ -elliptic springs, front and rear. Hartford duplex shock absorbers, front and rear. F.N. cam steering. 14" brake drums, cable operated. 12 gallon rear tank. Racing wire wheels. Track 4' front, rear 3' 6". Price £650. Alternative with 12 h.p. twin overhead camshaft 6 cyl. engine £825.

Impeller pump and fan cooling. 2 Solex carburetters. 4 point cushioned engine mounting. S.d.p. clutch. 4 speed synchro-mesh gearbox, central change. Open prop. shaft. Spiral bevel rear axle. Springs, steering etc. as Type 34. Price £350.

Frazer-Nash—B.M.W. Type 40, 2-seater sports. 6 cyl., 65x96, 1,911 c.c., 15.71 h.p. Tax £12. Pushrod o.h.v. Comp. ratio 6.5 to 1. 3 bearing crank-



A handsome closed car. The new three-litre Crossley Sports Saloon.

"Shelsley" Supercharged. 4 cyl., 69x100, 1,496 c.c., 12 h.p. Tax £9. Single overhead camshaft. 3 bearing crankshaft, water cooled. Twin Centric superchargers with single large S.U. carburetter, S.d.p. clutch. Chain drive, right hand gear change. Solid rear axle. Hartford duplex shock absorbers. F.N. cam steering. Turning circle 34'. 14" brake drums. Bosch Battery. 17 gallon rear petrol tank, pressure and S.U. pump feed. Racing wire wheels. Tyres Dunlop Fort 90. Wheelbase 9'. Track, front 4', rear 3' 6". Price £850 with T.T. 1936 Replica body.

Frazer-Nash—B.M.W. Type 34, Saloon. 6 cyl., 58x94, 1,490 c.c., 12.51 h.p. Tax £9 15 0. Pushrod o.h.v. Comp. ratio 5.6 to 1. 4 bearing crankshaft. Pump and fan cooling. Twin Solex carburetters, 4 point cushioned engine mounting. S.d.p. clutch. 4 speed synchro-mesh gearbox. Central change. Open prop. shaft. Spiral bevel rear axle. Springs, front independent, rear semi-elliptic. Independent

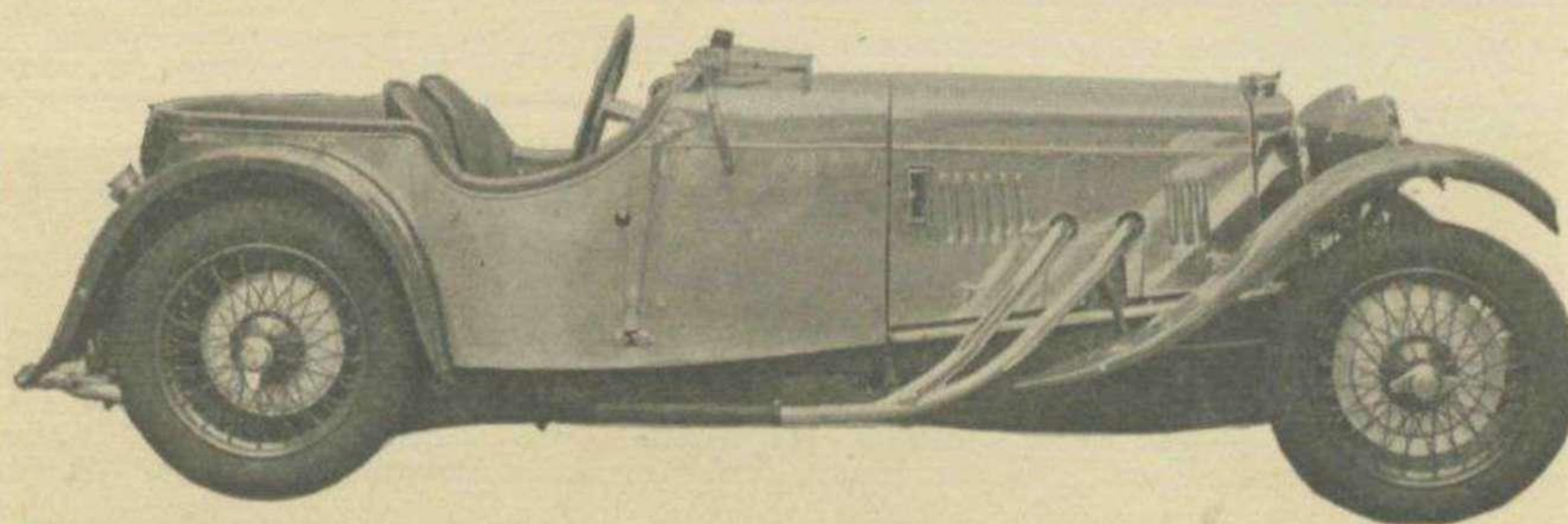
shaft. 3 Solex carburetters. Cooling. Engine mounting, clutch speeds, gearbox, transmission, rear axle, springs, etc., as Type 34. 10 gallon front petrol tank, Auto-pulse feed. Weight 14 $\frac{1}{2}$ cwt. Price £398.

Frazer-Nash—B.M.W. Type 55, 2-seater sports. As type 40, with the following exceptions. Comp. ratio 6.8 to 1. Ground clearance 8 $\frac{1}{2}$ ". Weight 14 $\frac{1}{2}$ cwt. Price £460.

Racing, reliability trials and years of testing on the road have been responsible for Frazer-Nash design, and for 1936 there will be the same wide range of fast sporting cars, any of which can be modified in specification to suit the requirements of the individual owner.

All models are notable for their high power-weight ratio and the unique chain drive which gives a direct gear on every ratio, any one of which can be quickly changed for the work in hand without disturbing the others. Two types of engine are available, four-cylinder type, a 1 $\frac{1}{2}$ -litre unit with a single overhead camshaft and the 1,657 c.c. unit, a six with two overhead camshafts. In addition to the models listed above there is the T.T. Replica car which costs with the four-cylinder engine £650. The supercharged Shelsley model a car which exceeds 100 m.p.h. in touring trim, is another striking production.

The B.M.W. range is of more touring character, with exceptionally good road holding and suspension; the 2-litre open sports model has a performance quite unexpected in such a sturdily built car.



The T.T. Replica Frazer-Nash, which may be had with either four or six cylinder engine.

F.N. cam steering. Turning circle 34'. 12" brake drums, mechanically operated. Battery 12 v. 75 a.h. 12 gallon rear tank, electric pump or hand feed. Racing wire wheels. Wheelbase 8' 6". Track, front 4', rear 3' 6". Price £425.

"Colmore" 3-4-seater. 6 cyl., 60x97, 1,657 c.c., 14 h.p. Tax £10 10 0. Twin overhead camshaft. 5 bearing crankshaft. 2 S.U. carburetters. 3 point

high geared steering. Turning circle 29' 3". Internal expanding cable operated brakes. Consumption 30 m.p.g. Wire or disc wheels. Tyres 5.25x16. Wheelbase 8'. Track, front 3' 10", rear 4'. Ground clearance 8 $\frac{1}{2}$ ". Weight 16 $\frac{1}{2}$ cwt. Price £208.

Frazer-Nash—B.M.W. Type 45 Saloon. 6 cyl., 65x96, 1,911 c.c., 15.71 h.p. Tax £12. Pushrod o.h.v. Comp. ratio 5.6 to 1. 3 bearing crankshaft.

Owing to pressure on space a number of specifications have unavoidably had to be held over until the November issue.

A 2-LITRE M.G. FOR FAST TOURING

INTERESTING NEW CAR MARKETED IN SALOON FORM

New ground was broken last month by the announcement of a new 2-litre M.G. The car is produced primarily as a fast touring car and the first ones produced will be fitted either with saloon or drop-head bodies.

The body style adopted at present is as handsome as anything which has emerged from the Abingdon factory which is high praise, and all the more gratifying when it is learnt that the car is priced at the reasonable figure of £375.

The engine and chassis design departs considerably from current M.G. practice, which is to be expected from the rather different conditions under which the car is intended to be used. The overhead valves are push-rod operated, the gear-box is fitted with synchro-mesh mechanism, and the chassis is swept up over the rear axle and not underslung, as on the smaller models.

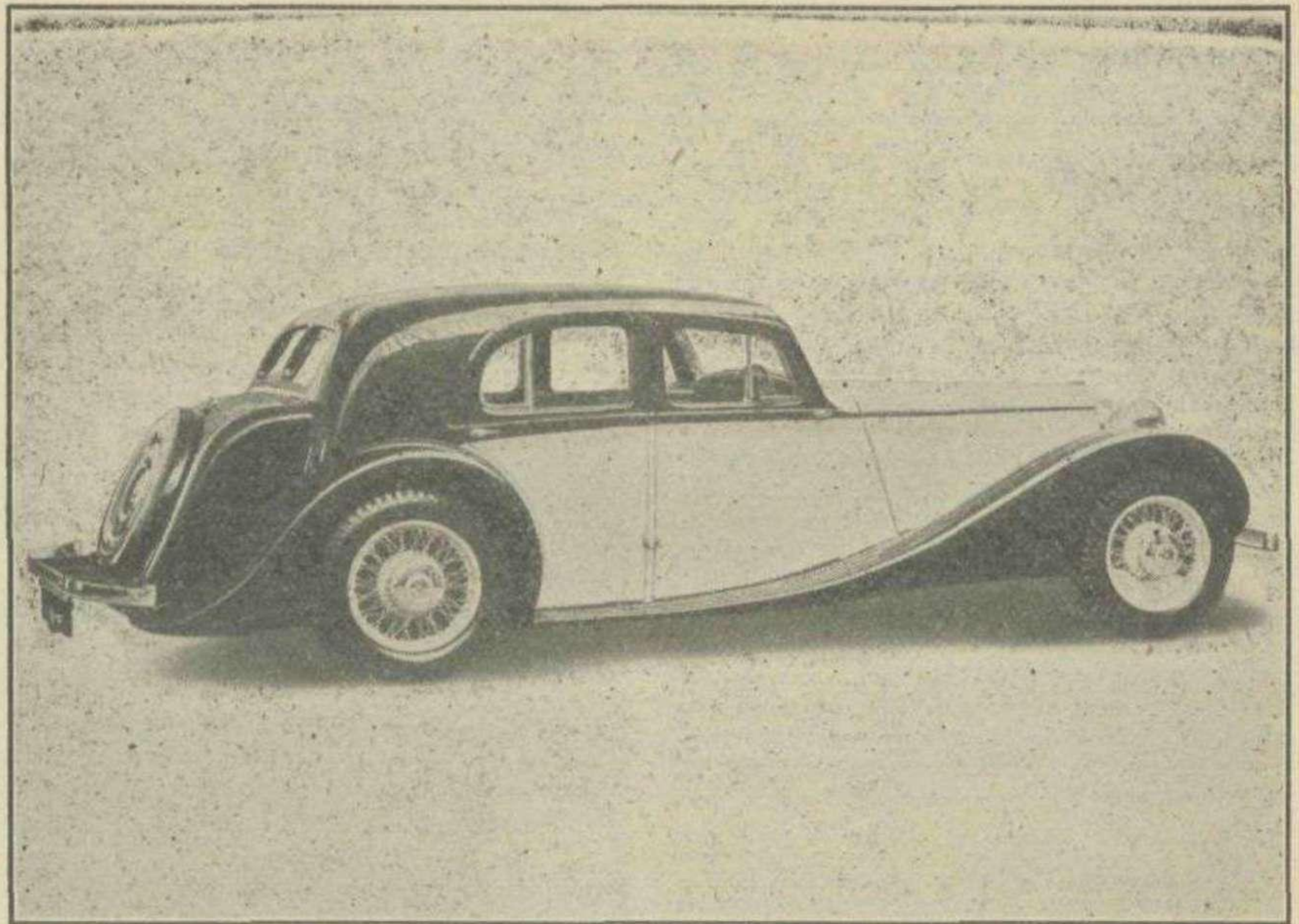
The six-cylinder engine has a bore and stroke of 65 mm. and 102 mm. respectively, the capacity is 2,062 c.c., which gives a Treasury rating of 15.96 h.p. and a tax of £12 per annum.

The overhead valves are operated by straightforward push-rods and rockers, with the usual ball-headed tappet-screw adjustment. 14 mm. sparking plugs are used with coil ignition, and the distributor which is carried accessibly on the side of the engine has automatic advance and retard. Two down-draft S.U. carburettors are carried high up on the off-side and a compact air cleaner is in communication with the valve cover, extracting oil fumes and putting them to good use in lubricating the inlet valves. An S.U. double-unit petrol-pump is mounted on the dash and draws its supplies from a 10-gallon petrol tank.

At the front end of the engine are mounted the fan and the water pump. The radiator follows the distinctive M.G. square-cut line and is further enhanced by a slatted stone-guard. A thermostat fitted in the water circulation system ensures rapid warming up. The ventilated constant-voltage is driven by belt and the two 6-volt batteries are carried in cradles on either side of the propellor shaft.

Coming to the lower regions, the crank-shaft is carried in four plain bearings and the big ends are also of white-metal. Steel rods are used and non-slip alloy pistons. The aluminium sump is ribbed, the filler is accessibly mounted on the top of the valve cover, and a large Tecalemit oil-filter is carried on the side of the crank-case where it can be readily dismantled for cleaning.

The engine is carried on rubber mounting and flexible pipes connect with the two silencers at the rear of the chassis. The gear-box is mounted in unit with the engine, and the single-plate clutch has cork insets and runs in oil. Double helical silent-running gears are used for third gear and the constant-mesh wheels, and synchro-mesh mechanism is fitted to third and top gears. The gear-ratios are 4.45 to 1, 6.59 to 1, 10.15 to 1 and 17.82 to 1, with reverse 22.27 to 1. A central gear-lever is used, mounted directly on the gear-box. An open



This photograph shows to advantage the sweeping wing line and the handsome bonnet with hinged ventilators, both features of merit on the new 2-litre M.G. Despite the low build there is plenty of headroom, with ample ventilation by means of the hinged D shaped windows.

propellor shaft with Hardy-Spicer needle-bearing universals connects with the sim-floating back axle, which is bevel-driven.

The chassis is sturdily constructed and should be adequate to resist the effect of high speeds and fast cornering. The side-members are of box section throughout their length, stout tubular cross-members are used, and a Y-shaped member behind the gear-box further stiffens the centre of the chassis.

Long semi-elliptic springs are used shackled at the rear ends and damped by hydraulic shock-absorbers. Lockheed hydraulic brakes are fitted and the torque reaction of the front one is taken by torque-cables running from the frame to the front axle. The wheelbase is 10 ft. 3 ins. and the track 4 ft. 5 ins.

As may be gathered from the illustration, the coachwork is low in build and dignified, yet sporting in character. The interior is upholstered in leather, and the two front seats give good support and, in conjunction with the well-raked steering column, an excellent driving position. The rear seat is wide enough to take three people, though the propellor shaft tunnel limits the leg-room for the occupant in the centre. Deep foot wells are provided on either side and with the central armrest in position the back passengers are as well provided in respect of comfort and leg-room as those in front.

One of the special features of the car is the enormous luggage locker, which provides room for half a dozen suitcases or a cabin trunk. Altogether a handsome well-found car which should be ideal for fast cruising in silence and comfort, and well able to take its place with the smaller models of the M.G. range.

AN IMPORTANT ANNOUNCEMENT

The Phantom III Rolls-Royce, which has a 12-Cylinder Vee Engine and Independent Front Wheel Suspension

A new Rolls-Royce model is a motoring event of the first magnitude. Details of the Phantom III, which have just been released, show the new car to be as distinctive and advanced as were its famous forebears the Silver Ghost, Phantom I and Phantom II, and one which will still further maintain the prestige of the British motor industry at home and abroad.

The engine has two blocks of six cylinders mounted in Vee formation, with push rod overhead valves operated from a centre camshaft. Four carburettors are used. The gear-box is silent on all gears, including reverse, and synchro-mesh mechanism is provided on second, third and top. Independent suspension with coil-springs is used for the front wheels, with long half-elliptics at the rear.

By using a 12-cylinder engine, which incidentally has a capacity of 7.3-litres and is rated at 50.7 h.p., chassis space has actually been saved, and with a wheel-base of 11 feet 10 ins. it has been found possible to mount coachwork identical with that standardised on the 12 ft. 6 ins. chassis of the Phantom II. The chassis price is £1,850.

A fully illustrated description of this magnificent car will appear in the November issue of MOTOR SPORT.

A NEW 4½-LITRE LAGONDA

THE OLD NAME REVIVED IN A RE-DESIGNED CAR WHICH PROMISES OUTSTANDING PERFORMANCE

A car which is able to win the Grand Prix d'Endurance at Le Mans and to perform so magnificently on the two occasions at which it has run at Ulster was obviously too good to be allowed to disappear. The new Company took over the Lagonda works at Staines at the beginning of July, and under the technical direction of Mr. W. O. Bentley, whose name is too well-known to readers of "Motor Sport" to need further qualification, a completely designed 4½-litre model now makes its bow.

Under the old régime, it will be recalled, there were two 4½-litre models, the Standard and the Rapide. The new car has the same wheelbase as the Standard, which was 10 ft. 9 ins., which will allow full five-seater coachwork to be fitted without overhang at the back. Particular attention has been paid to the springing and the new cars will be comfortable to ride in without losing any of that road-holding which one associates with the cars which Mr. Bentley has designed.

The powerful Girling brakes which were such a feature of the Rapide will be used on the new car, while the engine has been modified and the power output raised to 140 h.p. which will ensure a certain 100 m.p.h. with open coachwork.

At the moment two styles of coachwork have been decided on, the open four seater, which will cost complete £975, and a four-door saloon which is priced at £1,050. As will be seen from the illustrations, both of these are graceful yet essentially practical designs, which should appeal to the man who wants to use his

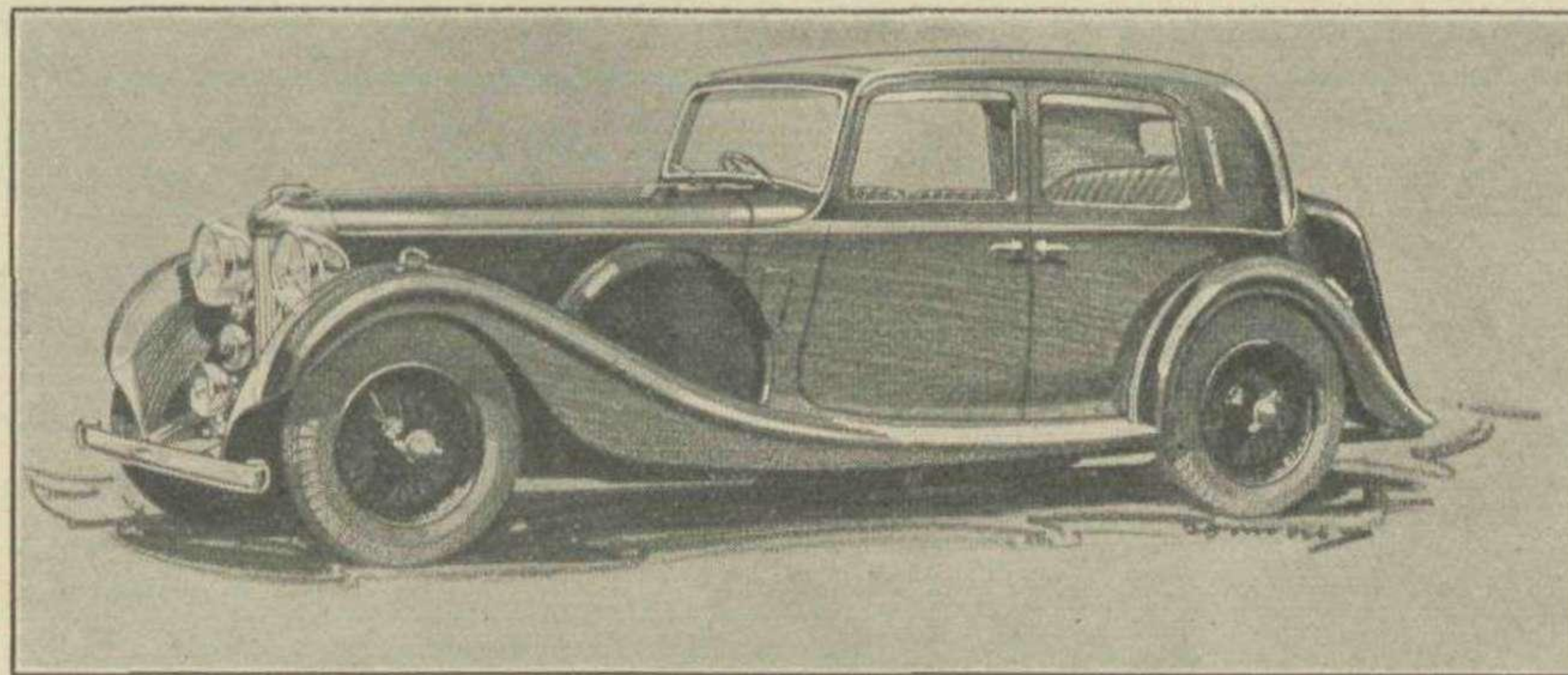
luggage compartment is provided in the usual position.

The dimensions of the six-cylinder engine are bore 88.5 mm., stroke 136.4 mm., giving a capacity of 4,453 c.c. and an R.A.C. rating of 29.13 h.p. With a compression ratio of 6.8 to 1, 140 horsepower is produced at 3,800 r.p.m.

The engine has a detachable cast-iron

The clutch is a single dry-plate unit, and the gear-box, which is mounted separately from the engine, has synchromesh mechanism on third and top gears. The ratios are 3.66, 4.76, 6.5 and 11.49 to 1 and a right-hand gear lever is used.

The transmission is by an open propeller-shaft fitted with a needle-bearing universal joint at each end and the final



The four door saloon is a handsome and practical car. The sporting lines have not been allowed to interfere with good visibility for driver and passengers. This car sells at £1050.

head with two valves per cylinder, operated by push-rods and rockers. The pistons are of special alloy and are fitted with three compression and two scraper rings. The crank-shaft is carried on four main bearings.

Magneto ignition is used, with automatic advance and retard in conjunction

drive through the semi-floating rear axle is by spiral bevel. The petrol tank holds twenty gallons and a quick-opening filler cap is provided on each side of the car. Electric pumps feed the petrol to the carburettors, and there is a reserve of two gallons which can be turned on from the driving compartment.

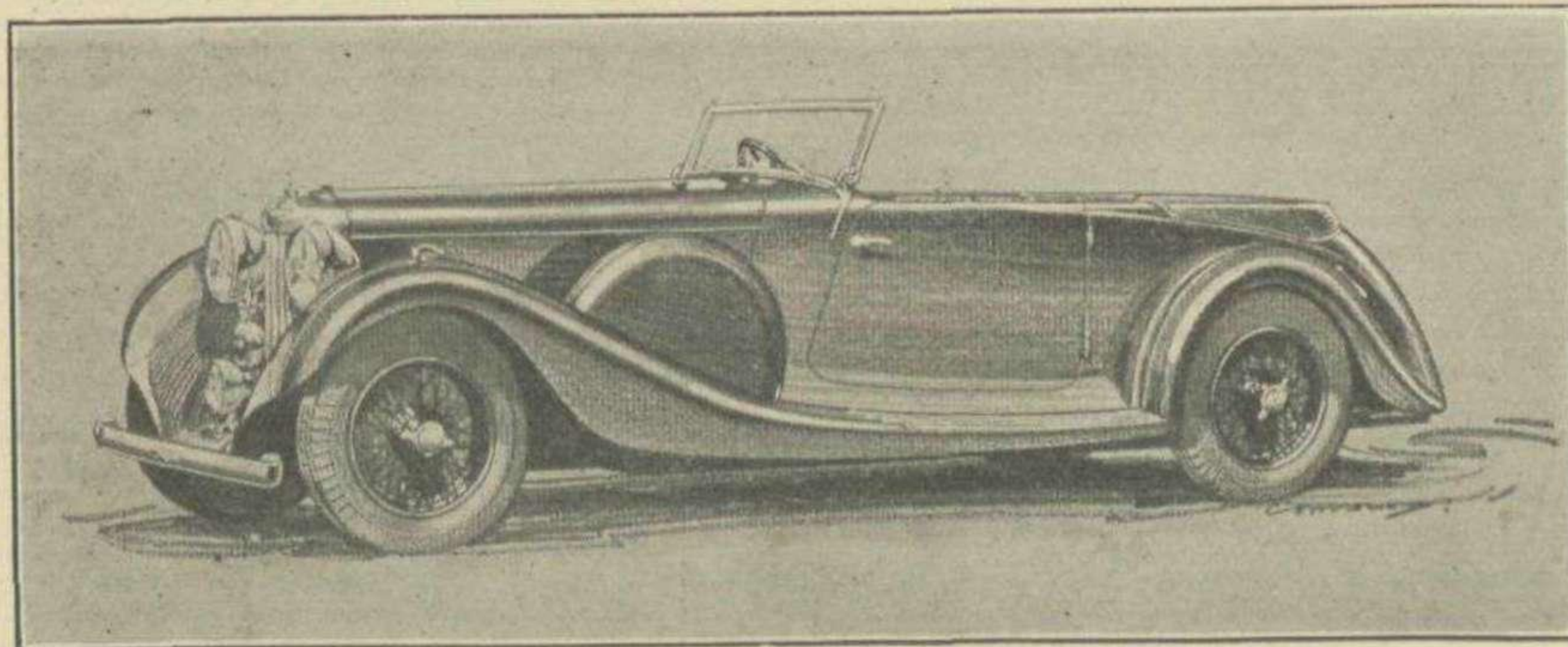
The suspension is by means of long semi-elliptic springs of special design, with hydraulic shock absorbers controllable from the driving seat. The brakes are of the Girling type, working in drums almost as large as the wheels. These latter, incidentally, are 3.62 by 18 ins., and carry Fort Dunlop tyres measuring 6 ins. by 18 ins.

Worm and lever steering is used with adjustment for rake, and a longer column can be supplied to order.

The chassis is automatically lubricated by means of a Tecalemit pump, while the Jackall hydraulic jacking system is another item which will be appreciated by the owner-driver.

The wheelbase is 10 ft. 9 ins., and the track 4 ft. 9½ ins. The weight of the chassis, which is priced at £795, comes out at 27¼ cwt, while the tourer and the closed cars weigh respectively 34 and 37 cwt. The drop-head coupé will cost £1,125.

Unfortunately the new Lagonda was produced too late to allow its being exhibited at Olympia, but one of the new cars may be seen in London at the showrooms of Messrs. Kevill-Davies and March at 28, Berkeley Street, W.1. The 4½-litre Lagonda as originally produced already had many admirers amongst sporting motorists and this faster and better-sprung successor should command even greater favour.



An open sports four-seater on the new Lagonda. Luggage space is provided in the swept tail.

car for hard driving and finds it difficult to reconcile himself to the exaggerated tail and other "embroidery" which disfigure so many of the vehicles of the present-day.

On the tourer the wheels will be carried in wells in the wings and a locker for two large suitcases is concealed in the tail. The back panel hinges down and can be used as a luggage platform for carrying a trunk. On the saloon a large

with a lever on the steering column. Two S.U. carburettors are standardised, with a mixture control for easy starting.

The oil is pressure-fed to all parts of the engine, and the sump holds 2½ gallons. The characteristic Lagonda radiator with its thermostatically-controlled shutters is retained, and cooling is assisted by a water pump and a fan. The engine is mounted on slightly flexible supports.

SHELSLEY WALSH—continued from page 519.

then the tinkle of the bell as he passed the crossing, and almost simultaneously he was at the first corner. He brought the car round perfectly, snaking through the cutting at the top and crossed the finishing line amid applause, further improving his time to 40.4 seconds.

Dick Nash tried more air in his tyres this time and improved his time to 43 seconds, but he was beaten by 2.5 seconds by Fane on his aptly named Shelsley Frazer-Nash. Fane came up at a tremendous rate, fairly cast the car at the lower bend, recovered from a momentary skid thanks to the high-g geared steering, and shot unperturbed to the summit. Miss Allen this time made better use of the sister car owned by "Davies" and clocked 47.6. Fay Taylour gave a good display on Dixon's 2-litre Riley and got within 2.5 seconds of Freddy's own time, but the best amongst the ladies was again Mrs. Petre. The car approached the corner with a real Mays note and after some wrestling with the wheel she got round and to the top with a time of 44.8 seconds, which was a dead heat with Miss Evans. Other improved times were Day-Dewdney (Bugatti) 47.8 seconds and E. R. Hall (M.G.) 44.6 seconds.

The 1½-litre class ended with an incident which caused a delay of close on half an hour. Mrs. Millington got as far as the first bend, stopped and started to return down hill. It was then found that some oil had been spilt on the corner, and at first attempts were made to remove it with brushes and sand. Then there was a call for petrol, which was set alight by Lord Howe who was one of the stewards of the meeting. More sand was sprinkled as though some heathen rite was in progress, then the sweeping brooms caught fire, Leslie

Wilson arrived to see that there should be no repetition of the disaster at Monza and so for a considerable period the first bend took on the appearance of a camp fire meeting.

Returning to our muttons again, von der Becke came up well on his 2-litre Riley fighting it through the S-bend to the top in 44.2 seconds. Once again the E.R.A. The same tremendous dash right up to the S-bend, the car again lifted slightly as Mays turned and mounted the gradient leading up to the second corner. He was round the top corner like a flash, shot crabwise through the cutting to the finishing stretch, and crossed the line at tremendous speed to equal his record of the previous meeting, which was 39.6 secs. Really a tremendous performance with only one sound arm to hold the car.

John Bolster in his twin-engined special provided a good contrast with the E.R.A. as far as the outside of his car was concerned, but in spite of the usual disturbing snaking he completed his climb in 44.6, a time which put many of the "pukka Grand Prix" cars to shame. Charlie Martin made a meteoric start on his 2.3 Bugatti and tore up the hill with his usual fury. The whole car skated across the road at the lower of the two bends but he held it perfectly and continued at speed round the last bend. His time on this run was a level 42 seconds, which made his the third fastest car in the meeting.

The larger cars as usual came as something of an anti-climax, the only improvement being Lindsay Eccles, who climbed in 44.2 seconds. Hall lost a second at the start and got away with much wheel-spin. He was steady on the higher stretches and but for losing time at the

start would have done better than 47.4. In order to settle the tie between Miss Evans and Mrs. Petre they were each given a third run. Miss Evans was very fast everywhere up to the lower part of the S-bend but then got into bottom instead of second gear and naturally pulled up rather short, her time nevertheless was 46 seconds. Mrs. Petre was just about as fast up to the corner but got her foot hard down on the last section and finished in 43.8 seconds with her car sliding about all over the road, well deserving her success.

RESULTS

750 c.c. Racing.

1. R. Kohlrausch (746 c.c. M.G. S.), 44s.
2. Miss D. Evans (746 c.c. M.G. S.), 44.8s.
3. A. N. L. MacLachlan (747 c.c. Austin, S.), 45.8s.

1,100 c.c. Racing.

1. R. J. W. Appleton (1,089 c.c. Appleton Riley S.), 44s.
2. E. R. Hall (1,086 c.c. M.G. S.), 44.6s.
3. A. A. Rigby (1,086 c.c. M.G. S.), 47.2s.

1,500 c.c. Racing.

1. R. Mays (1,488 c.c. E.R.A., S.), 40.4s.
2. A. F. P. Fane (1,496 c.c. Frazer-Nash, S.), 42.4s.
3. R. J. G. Nash (1,496 c.c. Union Special, S.), 43s.

Sports.

1. A. von der Becke (1,496 c.c. Riley), 49.4s.
2. A. F. P. Fane (1,496 c.c. Frazer-Nash), 52.2s.
3. R. Davies-Millar (1,104 c.c. Lagonda), 59.8s.

2,000 c.c. Racing.

1. R. Mays (1,986 c.c. E.R.A., S.), 39.6s.
2. A. von der Becke (1,986 c.c. Riley), 44.2s.
3. J. Bolster (1,962 c.c. Bolster), 44.6s.

3,000 c.c. Racing.

1. C. E. C. Martin (2,263 c.c. Bugatti S.), 42s.
2. A. G. Bainton (2,263 c.c. Bugatti S.), 44s.
3. A. C. Dobson (2,263 c.c. Bugatti S.), 46.6s.

Sports.

1. A. Powys-Lybbe (2,511 c.c. Alvis) 51s.
2. C. Follett (2,762 c.c. Alvis), 54s.

5,000 c.c. Racing.

1. A. H. L. Eccles (3,255 c.c. Bugatti S.), 44.2s.
2. E. R. Hall (3,669 c.c. Bentley), 46.4s.
3. R. Hughes (4,234 c.c. Vauxhall) 53.2s.

Sports.

1. E. R. Hall (3,669 c.c. Bentley), 46.4s.
2. R. R. K. Marker (4,168 c.c. Ralton), 49.2s.
3. S. H. Allard (3,622 c.c. Ford), 50.2s.

Motor Sport Classified Advertisement Section

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

AMILCAR

A MILCAR Special, 8.3 h.p., first registered 1-10-26. Long Tail Racing Body by Duval of Paris, staggered seats, cycle type wings, 8 knock-off Rudge wheels, 4 wheel brakes, Rene Thomas spring wheel, chrome cowl. £40 spent on rebore, new Pistons, timing wheels etc. in 1934. Aero and V screens, rev. counter speedometer, twin dash lights, Marchal head lights, and spot with switch over. Host of spares including steering box, cruising speed 45-50 m.p.h., good acceleration and road holding. Only 2 owners. Insured till May 1935, transferable, taxed Sept. 38 m.p.g., oil consumption negligible. Orange and Red. Any trial, car can be seen London any day after 6 p.m., or by special appointment. All at £37 10s. Box M 41, c/o MOTOR SPORT.

BUGATTI

SPECIAL competition Brescia Bugatti (1926). Fastest of its type in existence. Winner Brescia Cup last two years. Numerous awards in speed events. Fitted special light body, new upholstery, full road equipment, f.w.bs. L.P. tyres. Block rebored, Martlett pistons, twin Solex carbs. Spare back axle, £125. Enquiries J. Ogle, c/o Baron's Garage, Mill Lane, Dorking. Phone 2928.

M.G. 18/80

M.G. 18/80 late speed model, ex. cond. Coach built cutaway side, recently overhauled, perfect all weather equipment £70. 39, Lancaster Mews. Padd. 6016



We specialise in the re-building and super tuning of the above cars.

120 m.p.h. guaranteed with special models.
6½ Speed models a speciality. Guaranteed 3-litre and 4½-litre models in stock.

McKENZIE'S GARAGES LTD.

Vic. 4923-4.

Specialists in the Servicing of Rolls and Bentley Cars.

1, BRIDGE PLACE, BELGRAVE ROAD, S.W. 1.

(Back of Victoria Station)

FRAZER-NASH

FRAZER-NASH Cars, Falcon Works, London Road, Isleworth (Hounslow 0011) have for disposal a number of reconditioned cars.—Full particulars on application.

FRAZER-NASH Vitesse 4-speed! £100. Chassis and body just rebuilt. Phone Lewes 41 or seen at Mid Sussex Motors, W. Grinstead.

THE Halliwell petrol pump for private and commercial owners. Only first-class material and workmanship used in construction of these pumps. Catalogue on application to W. F. Halliwell, Wothorpe, Stamford, Lincolnshire.

30/98 VAUXHALL

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

CHASSIS

O.H.V. 30/98 Vauxhall chassis. F.w.bs., special rods. New low pressure wheels. 700x18 tyres. £40. Baron's, Mill Lane, Dorking. Phone 2928.

ENGINE

T.T. Lea Francis engine 1½-litre roller bearing. No. 9 Cozette supercharger, really good condition. £25. Baron's, Mill Lane, Dorking. Phone 2928.

SPORTS CARS

VINTAGE SPORTS CARS

BUGATTI, BENTLEY, ALVIS, ETC.

ALVIS 12/50 2-str. special dry-sump., rev. counter etc. 95 m.p.h. £50.

AMILCAR. Pump model. Crab tracked front axle with large F.W.B. Knock offs. Zip tonneau £30.

MERCEDES. Red, black and chromium. Sports 2-str. Very fast. £75.

30/98 VAUXHALL. Special 2-str., O.E. chassis overhauled for racing £65.

TUNING AND RACING WORK A SPECIALITY. CARS BUILT TO ORDER.

**PORCHESTER MEWS,
W. 2.**

PADDINGTON 0511

Also The Paddock, Brooklands

SPEED MODELS Ltd.

R. C. MURTON-NEALE

FOR BETTER SPORTS CARS.

Condition is more important than age.

Alfa-Romeo 2-litre supercharged 2-4-seater, red, taxed, re-conditioned, full equipment, genuine 90 m.p.h. on road, won numerous events £385

1929 Bugatti 12 h.p., streamlined 2-4-seater, completely rebuilt £85

1926 Daimler 16 h.p., streamlined 2-seater, excellent condition £35

Bentley 3-litre speed model short chassis, Van den Plas 4-seater. All new low pressure tyres, engine completely re-conditioned, latest type pistons £130

1926 Bentley 3-litre speed model Van den Plas low pressure tyres £145

Speed twenty Rover, 1931 (late) streamlined coupe, black and green, 85 m.p.h., 23 m.p.g., engine overhauled by Laystall's, amazing performance with superb condition £95

M.G. 18/80 sports 2-door saloon, black and red, taxed year £48

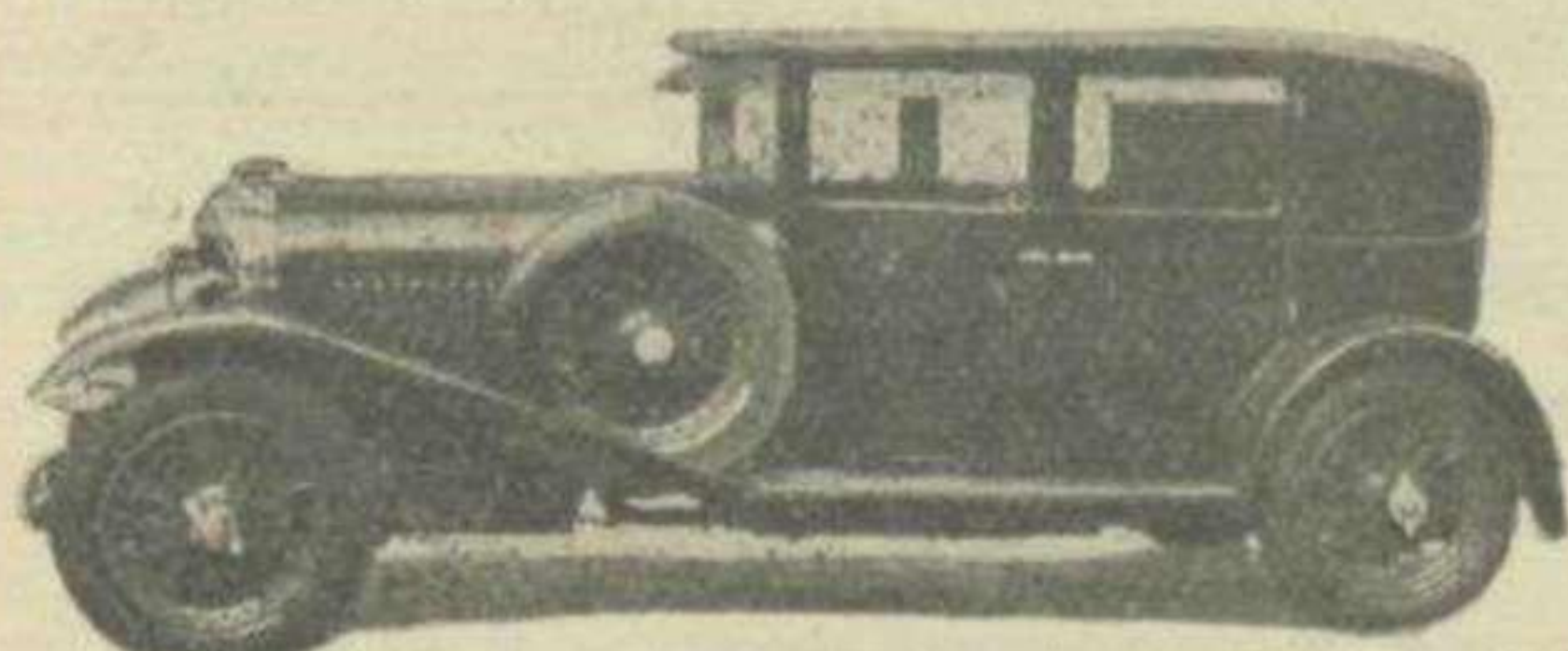
Let us know your requirements and we will do our best to help you.

SPORTS CARS WANTED FOR CASH.

Open on Sundays by Appointment.

PEMBRIDGE MEWS, PEMBRIDGE VILLAS,
NOTTING HILL GATE, W.11.
BAYswater 3132.

BENTLEY



4½-litre, super condition, Bentley, report with pleasure, chromium plated radiator and fittings, fog lamps, spot lights, new tyres, improved universals, a delightful machine maintained by an enthusiast ... £195

S. D. C. TAYLOR & CO., LTD.

6, KENDRICK PLACE, SUSSEX PLACE,
SOUTH KENSINGTON. Ken. 8965.

BARTLETT

FOR

GUARANTEED SPORTS CARS

Nowhere in the world would it be possible to find a better selection of Sports Cars than the following extract from our stock :-

ALFA-ROMEO, first registered 1935, 2.3-litre supercharged, 8-cyl. short chassis 2-seater, 120 m.p.h. £875.

ALFA-ROMEO, latest series 1½-litre supercharged 6-cyl. 2-seater, mileage 7,000, the whole car indistinguishable from new. £595.

ALFA-ROMEO, first registered 1933, 1½-litre 6-cyl. supercharged 2-seater. £295.

MERCEDES, special 100 m.p.h. supercharged low chassis 36/220 drop-head Coupe. £450.

LAGONDA, 1934 4½-litre Speed model 4-seater. £395.

M.G., 1935 special T.T. type Magnette, total mileage approximately 6,000, specially tuned and prepared. £245.

M.G., 1,100 c.c. special racing K.3. Magnette, unused since specially tuned and prepared for racing. £350.

BUGATTI, 2.3-litre 8-cyl. supercharged Grand Prix 2-seater, Brooklands lap speed 120 m.p.h. £450.

RILEY, special 1,100 c.c. big crank Brooklands T.T. 2-seater. £145.

FRAZER-NASH, 1935 T.T. Replica, one owner, small mileage, indistinguishable from new. £345.

ASTON MARTIN, 1931, 1½-litre International sports 4-seater. £175.

Full list of Sports and Competition Cars sent on request.

Part Exchanges and Deferred Terms easily negotiated.

OPEN SUNDAY MORNINGS.

J. H. BARTLETT LTD.,

27a, PEMBRIDGE VILLAS,

LONDON, W.11.

BAYSWATER 0523.

L.

B.

**B. MOTORS
LTD.**

EXPERIMENTAL
and
RACING DEPT.
BROOKLANDS
TRACK
Tel.: Weybridge 1415

1934 ASTON-MARTIN Le Mans 2/4-seater, outside exhaust, 5,500 miles since new, car been in store for eight months, appearance and condition of a new car. £365
Taxed for year ... PRICE

1930 SPEED 6 BENTLEY, fitted with attractive close-coupled Saloon by Park, Ward. Engine just completed 100% overhaul by Bentley Motors. Appearance as new ... PRICE £325

1930 4½-litre BENTLEY, supercharged, open Vanden Plas 4-seater, cycle type mudguards, Aero windscreens, large petrol tank, condition as new. PRICE £295

2-litre BUGATTI. Non-supercharged Grand Prix, in full racing trim PRICE £260

1934 RILEY 12 h.p. 4-seater Saloon, 5,000 miles, fitted with special Zoller supercharger, astounding performance, mechanical condition perfect throughout PRICE £250

1930 8th series 17 h.p. LANCIA 4-door saloon; perfect chassis, body having been completely refabricated in black. £125
New tyres ... PRICE

19, BERKELEY ST., W.1.

MAY. 3043-4

SPECIAL BARGAIN

Special Speed 20 h.p. ALVIS fitted with Sports 2/4 seater road racing body, tonneau cover to front seat, cowl to rear; finished Red; capable of high speed; small mileage; exceptionally smart in appearance; originally cost over £1,000. Offered at the special price of **£295**

JACK OLDING & Co. Ltd.,
8, 9, 10 & 42, North Audley Street,
Grosvenor Square, W.1.

Telephone: Mayfair 5242 (Six Lines)

WEST

AND

CHITTENDEN

THE

LANCIA

SPECIALISTS

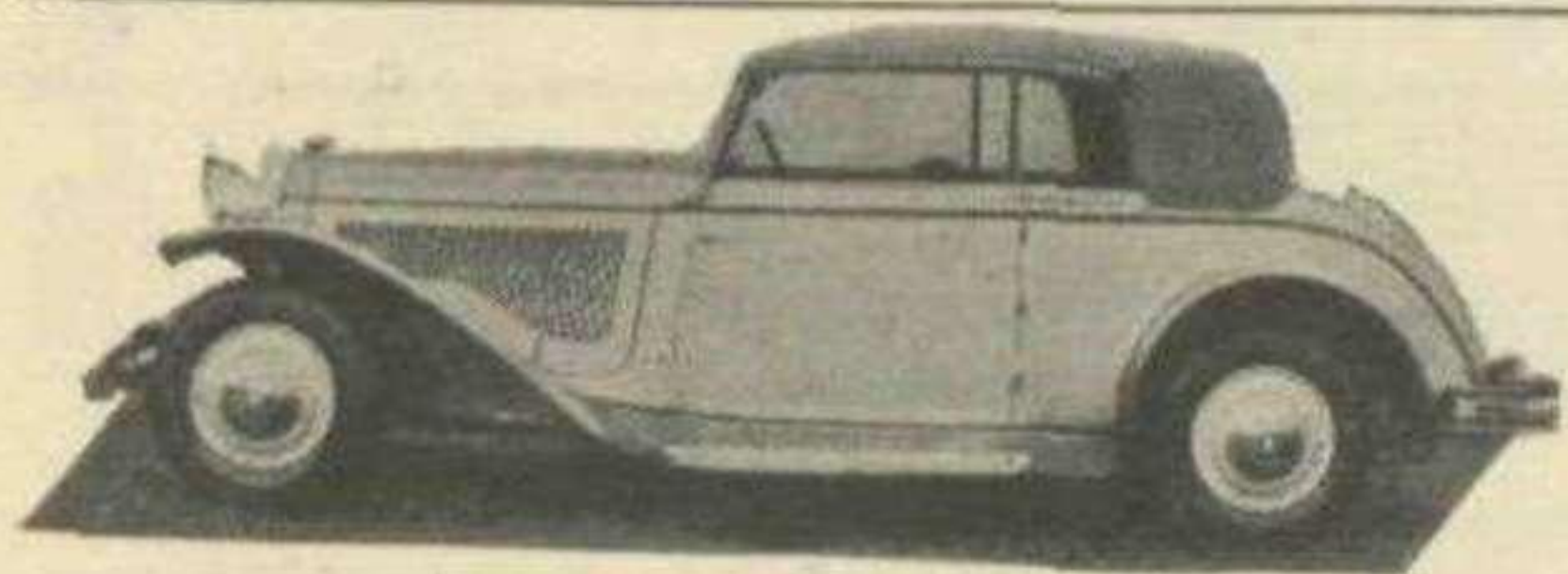
ALL TYPES OF CONVERSION.

Tuning • Supercharging • Etc.
For Road and Track.

306a, WALWORTH ROAD,
LONDON, S.E. 17.

RODNEY 4284.

& SPECIALISTS



LANCIA Dilambda 8-cylinder, short chassis, 229 type, with silent third gearbox, with sports 4-seater Coupe body by Messrs. James Young & Company of Bromley, fixed head with sunshine roof, just repainted battleship grey, head re-covered, red leather upholstery, numerous extras, chassis overhauled, attractive car with wonderful performance, one owner only, price £495.

C. R. ABBOTT & CO.,
19, BERKELEY STREET, W.1.
(Tel. Mayfair 6680).

VICTOR GILLOW

RILEY AGENT

RECONDITIONED AND
GUARANTEED
RILEY CARS

HIGH SPEED TUNING A SPECIALITY

142, HOLLAND PARK AVENUE,
Park 6736. W. II.

Huge Reductions on Sports Cars at DENMANS

Alvis 12/60, streamlined 2-seater, like new, 9,000 miles, latest series, reduced from £260 to £160.

Austro-Daimler track car, 27 h.p. special racer, cost thousands, late property of G. Newman, £45.

Alvis speed 20, 1933, Van den Plas tourer, one owner, small mileage, ideal sports car £295
Singer 1934, 9 sports 4-seater, green, fine order, fast, £100.

Lagonda 1934/5 series, Rapier 4-seater, 10 h.p. amazing car, preselector, £220.

M.G. 1928, 14/40 tourer duo-grey, £20.

Railton sports 4-door saloon. 28 h.p. neat speed model. £275.

Stutz supercharged Becucat special sports 4-seater, cost over £3,000, late property Dr. Benjafield, has lapped at 115 m.p.h. £250.

200 more normal types at cut prices.

DENMAN HOUSE,
132, LONG ACRE
W.C. 2.

Tel.: Temple Bar 8135.

SPEED AND SAFETY TUNING FOR ROAD AND TRACK AT BOOTH AND CROFT

Frazer Nash Specialists

27, PAVILION ROAD,
KNIGHTSBRIDGE, S.W.1

Telephone: SLOANE 4111

DAGENITE

BATTERY SALES AND SERVICE

SPECIALISTS IN CAR
ELECTRICAL SERVICE

Established 1900. Tel.: MUS. 5434.

A. FORT & CO.,

Electrical Engineers,

51, WHITFIELD ST., LONDON,
W. 1.

SINGER 1935 SPEED SPECIAL

Fitted with four seater Le Mans body. Special gear box. Car prepared and viced by Singer & Co. Two comp. spares. Tuned engine. Very fast. Coachwork like new. **£160**

BEECHOLME MOTOR CO.
NIGHTINGALE LANE, S.W. 12.

TRACK AND SPORTS CARS

£42-10—Amilcar, 9 h.p. Special o.h.v. Sports 2-seater. Taxed year.

£47-10—850 c.c. unsupercharged Triumph Special 2-seater.

£57-10—1929 Amilcar, 4-speed. Rebores.

£87-10—1929 supercharged 12-75 h.p. Alvis, 2-seater.

£87-10—Aston-Martin, 1½-litre ex-racing, 2-seater.

Many Bugattis, 30/98 Vauxhalls, 3-litre Sunbeams, etc., etc., in stock at competitive prices.

EXCHANGES. DEFERRED TERMS.
INSURANCE COVER EFFECTED ON THE PREMISES.

G. S. GRIFFITHS,
1a, SALTRAM GRESCENT,
SHIRLAND ROAD, W.2.
WILlesden 5407

C. R. ANDREWS
(MOTORS) LTD.,
BOURDON STREET, W.1.
MAYFAIR 3523.

SOLE DISTRIBUTORS FOR
LONDON AND SURREY.

MARENDAZ SPECIAL

LATEST MODEL NOW AVAILABLE
FOR INSPECTION AND TRIAL.



TYRES ?

YOU'LL DO
BETTER
AT

BULL'S
RUBBER CO., LTD.,
3, UPPER STREET,
MARTIN'S LANE, LONDON,
W.C. 2.

Phone: Temple Bar 1747.

The Supercharging Stables,
Brooklands Aerodrome, Byfleet,
Surrey.

Come and see the
New Zoller Compressor

for M.G.s at

£27

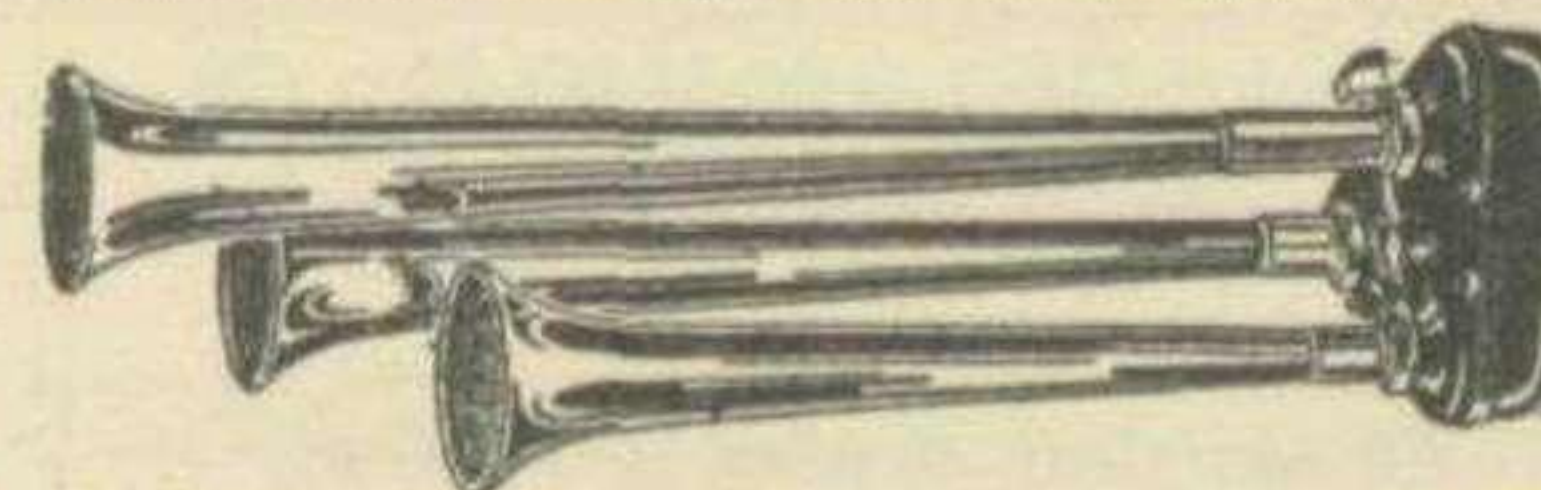
Complete Installation

STOCKIST:

J. GRANVILLE GRENFELL, M.I.B.E.

Telephone: Byfleet 672

FINEST WARNING SIGNAL ON THE MARKET



INDUCTION THREE NOTE HORN

This induction three note horn is a well-made article and works at any engine speed, all chromium plated trumpets.

It is supplied complete with tubing and foot switch and can be fitted under the bonnet or outside.

Retail Price: Three trumpet model **£3 15 0**
Single trumpet model **£1 17 6**

ANGLO-AUTO ACCESSORIES CO., LTD.
Factors & Merchants. Tele: HOLborn 4464-
11, GREAT QUEEN ST., KINGSWAY, LONDON, W.C. 2.

Motor Sport Classified Advertisement Section

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

BENTLEY
WINDRUM & GARSTIN Ltd.



Park 4032.

WE have a comprehensive range of 3 and 4½-litre models of this famous marque in stock. We take a personal interest in every car that passes through our hands, and do not offer it for sale until we are satisfied as to its condition. We offer efficient service by Bentley mechanics at reasonable prices, together with a full range of spare parts. 3-litres from £100. 4½-litres from £200. Open 9 till 7 weekdays, 1 Sunday. 5 & 14 Hansard Mews, Holland Road, Kensington.

F. N. HUBS

BOOTH & CROFT—Rebuild and Re-spline Frazer Nash hubs on their special plant at 30/- per hub 11 27, Pavilion Road, Knightsbridge, S.W.1.

TUNING

SPEED Achieved Inexpensively: cars prepared road and track; modifications, designing, machining. 22 years' experience. Sydney G. Williams, M.Inst. B.E. M.I.M.T., Chippenhams Rd., Paddington. Abercorn 4455.

WIRE WHEELS

WIRE WHEEL MANUFACTURING CO. Repairs conversions, replacements. Rims to pattern. Tradescant Road, South Lambeth Road, S.W.8. Reliance 3716.

PATENT AGENTS

WURQUHART DYKES, Chartered Patent Agents, 75 Chancery Lane, London, W.C.2 (Holborn 6060); and at 12 South Parade, Leeds (Phone 22388). Patents, Designs, and Trade Marks.

SPORTS and RACING CARS

We have in stock a complete range of Secondhand Guaranteed spares for all genuine sports cars.

Spare for :-

30-98 Vauxhall (3-litre Sunbeam, Bentley and Lagonda), (2-litre Bugatti, O.M. and H.E.), (1½-litre Bugatti, Lea-Francis and Alvis), 2 L.T.S. Ballot, F.W.D. Alvis (Rover 9, 16 and Speed 20), (Talbot 8-18 and 14-45), Amilcar Salmson, Senechal, M.G. 18-80, Hadfield Bean, Lancia, Ansaldo, Jowett, Diatto.

Also over 50 s/hand Cars in stock including—

30-98 Vauxhall, choice of 5 from £35. Aston-Martin 1926... £60. F.W.D. Alvis £25, 4 12/50 Alvis's from £20. Bentley 3-litre £50. Sunbeam 3-litre £50. Marendaz £50. Salmson San Sebastian, choice of 2, £55 and £75.

All parts are cleaned and stored ready for immediate delivery.

SPORTS SPARES,

CHILWORTH STREET,
PADDINGTON, LONDON, W.2.

Telephone: Paddington 2309.

Works 14, South Wharf, W.2.

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

SPEEDOMETERS & REVOLUTION COUNTERS

REVOLUTION COUNTERS, 3½in., 5in., and 6in. dial with transmissions, from £2, according to fittings. Guaranteed.

SPEEDOMETERS supplied or repaired.—Speedometer Supply Co., Ltd., 12 Great Queen Street, London, W.C.2. Holborn 4587.

Note the Address

S. LEWIS'S

OF

RACING, FLYING AND MOTOR CLOTHING FAME

27, Carburton Street,
LONDON, W. 1.

MUSEUM
4793

First turning on left from
Great Portland Street
Station

10% Discount to “Motor Sport” Readers.

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, epaulets 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, 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

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/-, 5 - 85/-
- Camotex Coats for ladies or gents, lined silk, super quality ... £5 0s. 0d.
- Special Camel fleece Coats, made to measure ... from 85/-, 110/-

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
- We specialise in Goggles to Prescription.

KINDLY NOTE

We shall be manufacturing all the latest styles in Winter Sports Equipment in Gaberdine and Grenfell materials for ladies and gents.

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. All colours ... 10/-
- White Drill Helmets, perfect fitting ... 7/6
- Cheaper pattern ... 6/6

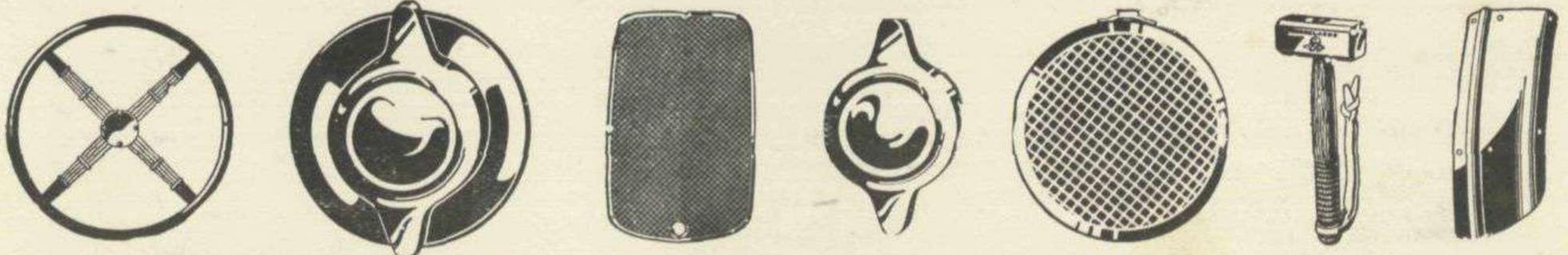
LEATHER JACKETS.

- 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.

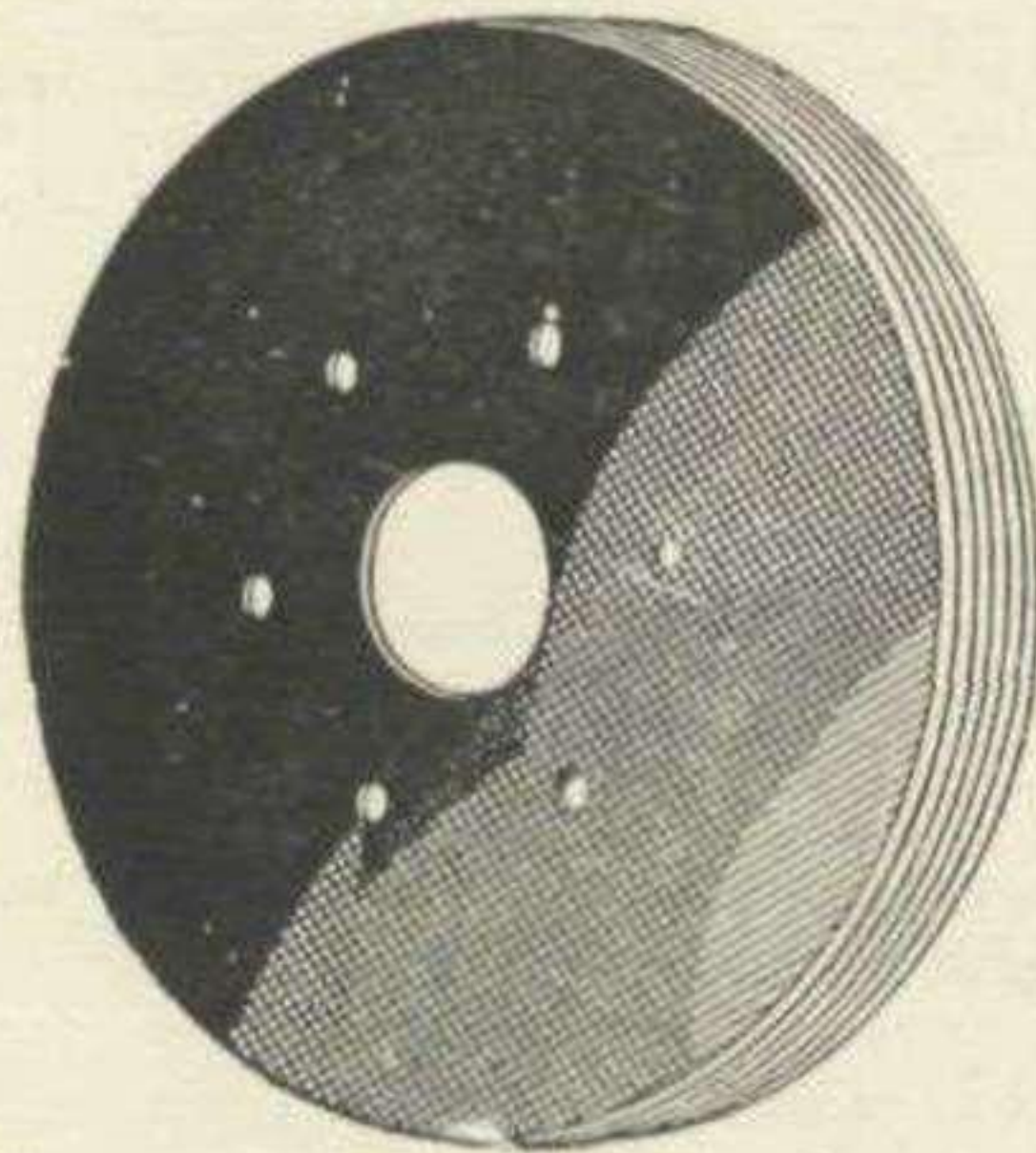
S. LEWIS, 27, CARBURTON STREET, LONDON, W.1.
FLYING EQUIPMENT OF EVERY DESCRIPTION.

“BROOKLANDS” SPORT EQUIPMENT

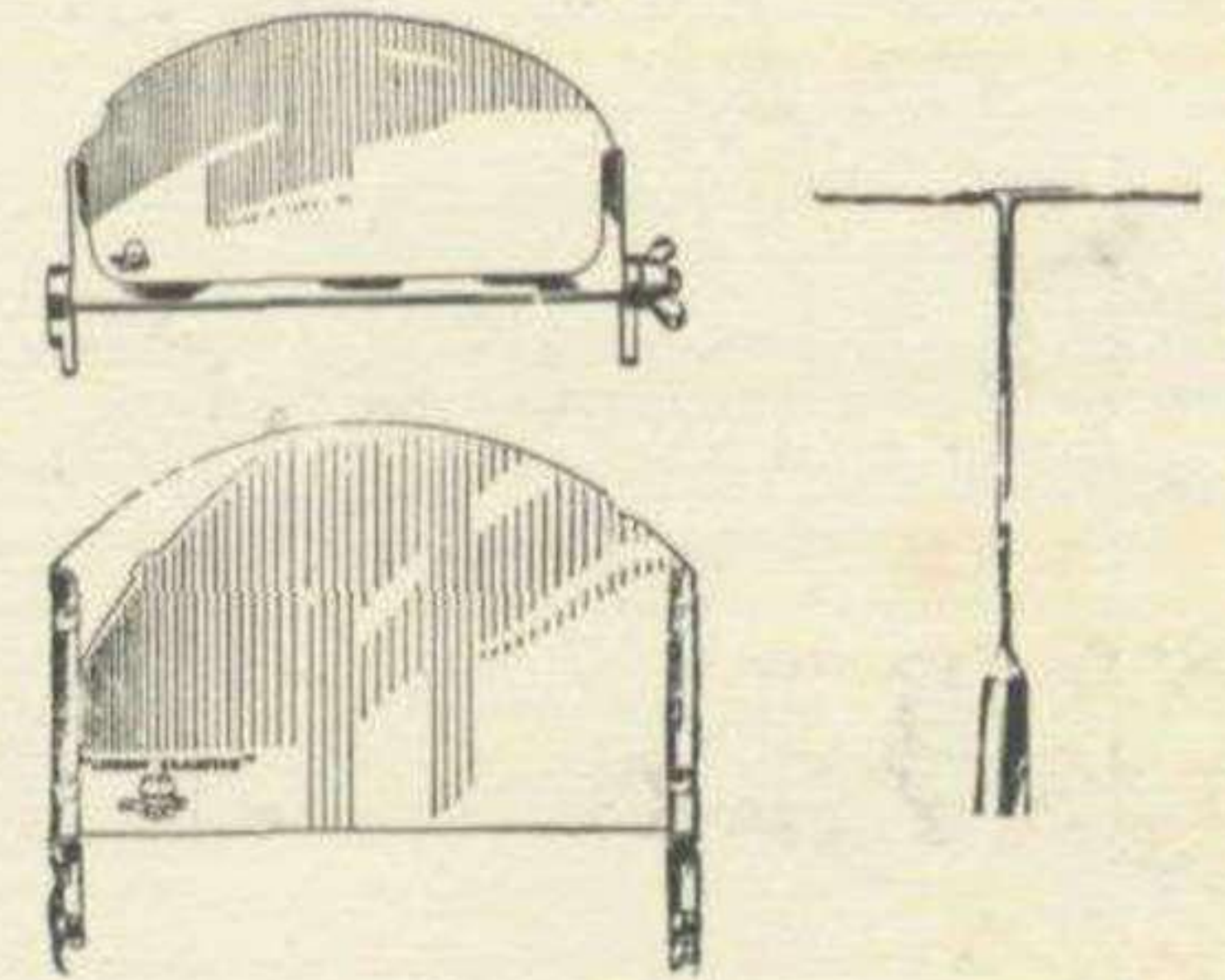


● “Brooklands” Fully Flexible Steering Wheels are available in three sizes, 16”, 17” and 18” in a range of over 200 stock models, from 36/- complete ready to fit. ● Eared Hub Caps are supplied for Magna type Wheels, making easier wheel removal and enhanced appearance, in sets of 5, Chromium Plated, 22/-. ● 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.



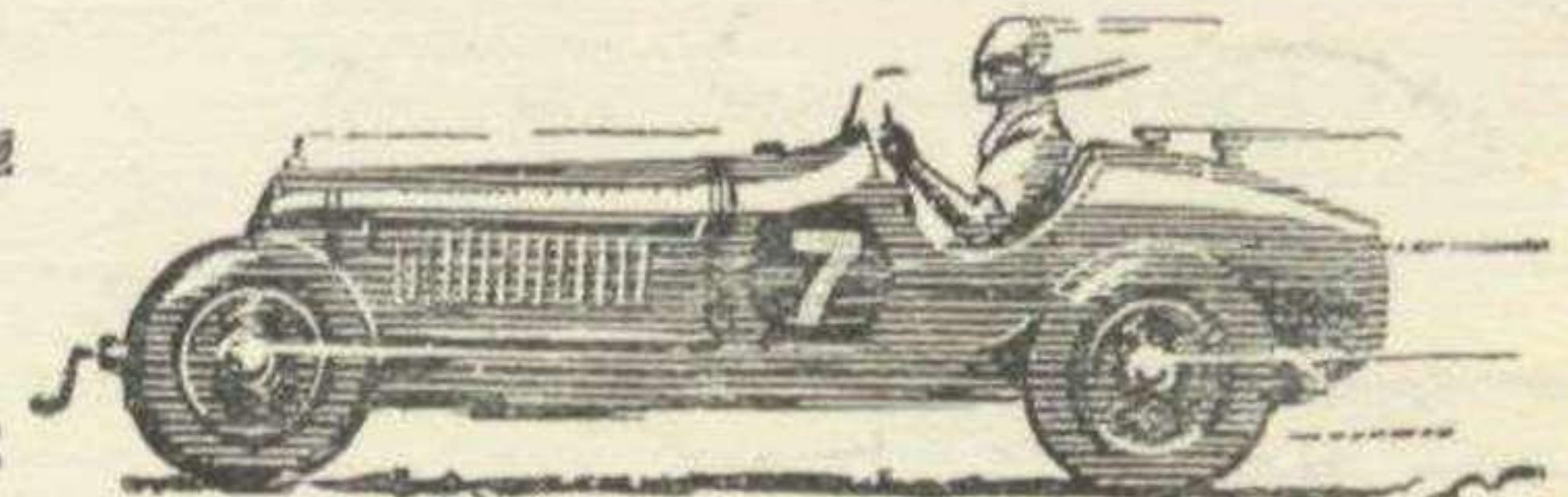
● “Brooklands” Brake Drums enhance the appearance of the car, prevent the ingress of water into the Brake drums and assist in dissipating heat from braking. Size 13” x 1 1/2”. Heavily ribbed flange with face polished or matte for painting. Available for Midgets, Magnas, Hornets, Morris Eights, Singers, 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.



Latest successes secured with cars equipped with “Brooklands” Steering Wheels include :- Mannin Beg 1st, Shelsley 1st (Record), Nurburg 1st, Le Mans 1st (1,000 c.c. Class), Nuffield Trophy 1st, Empire Trophy 1st (1,500 c.c. Class), Brooklands “Mountain” Lap Records 2,000 c.c.; 1,500 c.c.; 1,100 c.c.; 750 c.c. Follow the lead of the Experts—they know.

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

Write for complete Illustrated Lists.



INDEX TO ADVERTISERS

	PAGE
A.C. (Accedes) Cars Ltd.	514
Anglo-American Oil Co. Ltd.	521
Ashby, F., & Sons, Ltd.	inside back cover
Aston-Martin, Ltd.	513
Austin Motor Co. Ltd.	535
Bellevue Garage & Service Station	536
Bentley Motors (1931) Ltd.	558
Booth's Dry Gin	529
British Jaeger Instruments	525
British Salmson Aero Engines Ltd.	533
Cowden Services Ltd.	543
Dunlop Rubber Co. Ltd.	inside front cover
Ferodo Ltd	front cover & 552
Fox & Nicholl, Ltd.	551
Frazer-Nash Cars	517

	PAGE
G. M. S. Plugs, Ltd.	525
Hudson Motors Ltd.	541
Lagonda Motors	531
L.B.B. Motors Ltd.	522
Lee & Cavendish, Ltd.	551
Lucas, J., Ltd.	523
M.G. Car Co. Ltd.	544
Mercedes-Benz, Ltd.	563
Myles Rothwell	557
Nobel Chemical Finishes, Ltd.	543
Notek Electric Co., Ltd.	559
Robinson, L., & Co.	554
Rolls-Royce Ltd.	549
Squire Manufacturing Co., Ltd.	557
Wakefield, C. C., & Co. Ltd.	back cover

5/3

Post Free

To All Motor Sport Readers
4 MOTOR RACING PICTURES (17 ins. x 12 ins.)
 Black and White Photogravure

5/3

Post Free

“Grand Prix.”

“Old Number Seven.”

“Shelsley.”

“The Practice Lap.”

Name.....

Address.....



301 M.P.H.
SIR MALCOLM CAMPBELL
CHOSE

WAKEFIELD
PATENT
Castrol
MOTOR OIL
FOR HIS ROLLS-ROYCE ENGINE

C · C · WAKEFIELD & CO · LTD · WAKEFIELD · HOUSE · CHEAPSIDE · LONDON · EC2

Printed by TEE & WHITEN and J. MEAD LTD., 21 City Road, London, E.C.1, and Published by the Proprietors, MOTOR SPORT (1929) LTD., 39 Victoria Street, London, S.W.1. Agents for Australasia: GORDON & GOTCH (Australasia), LTD. Copies obtainable and subscriptions received by W. H. SMITH & SON, 248 Rue de Rivoli, Paris; and