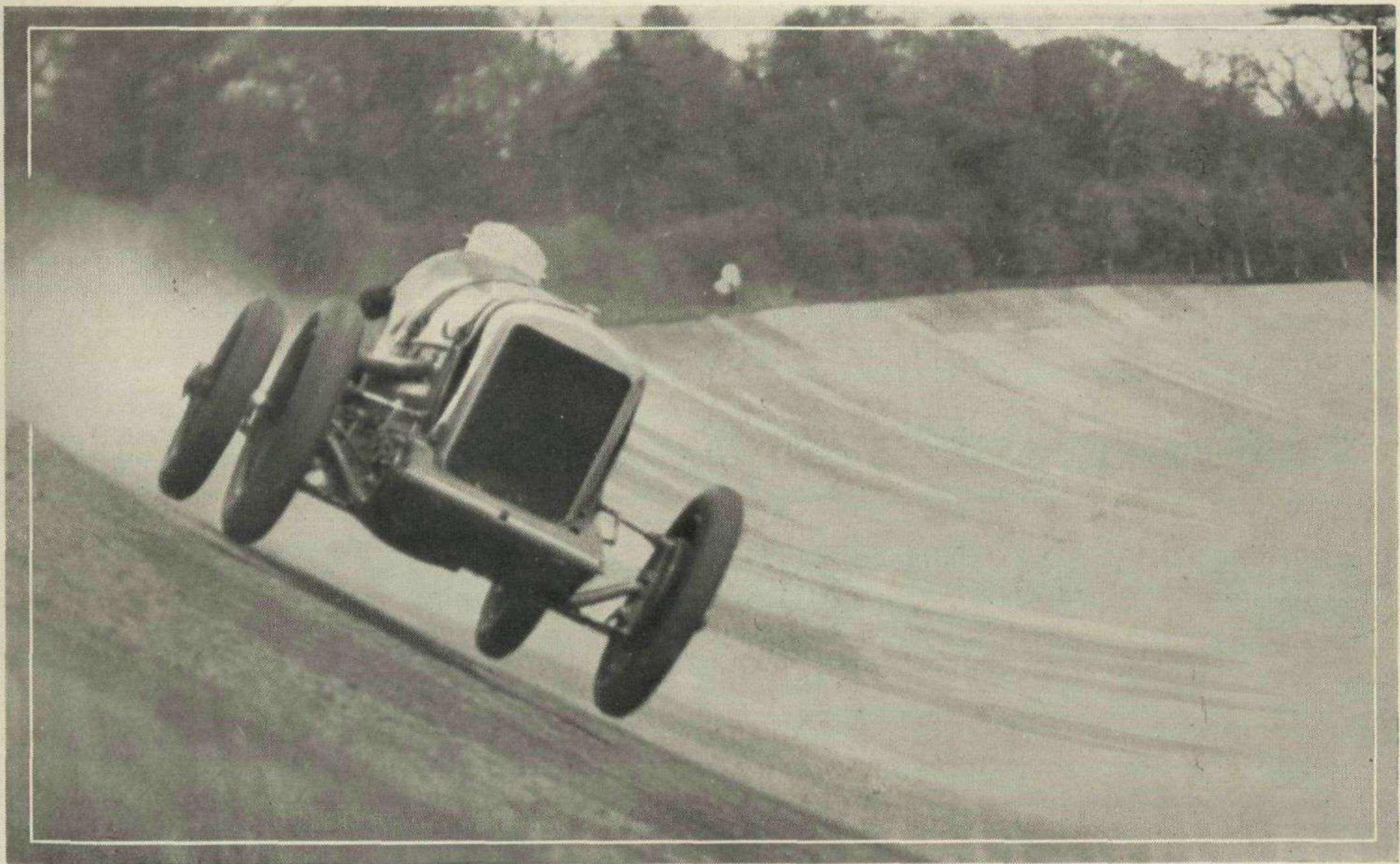


# MOTOR SPORT

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[Motor Sport Photograph.]

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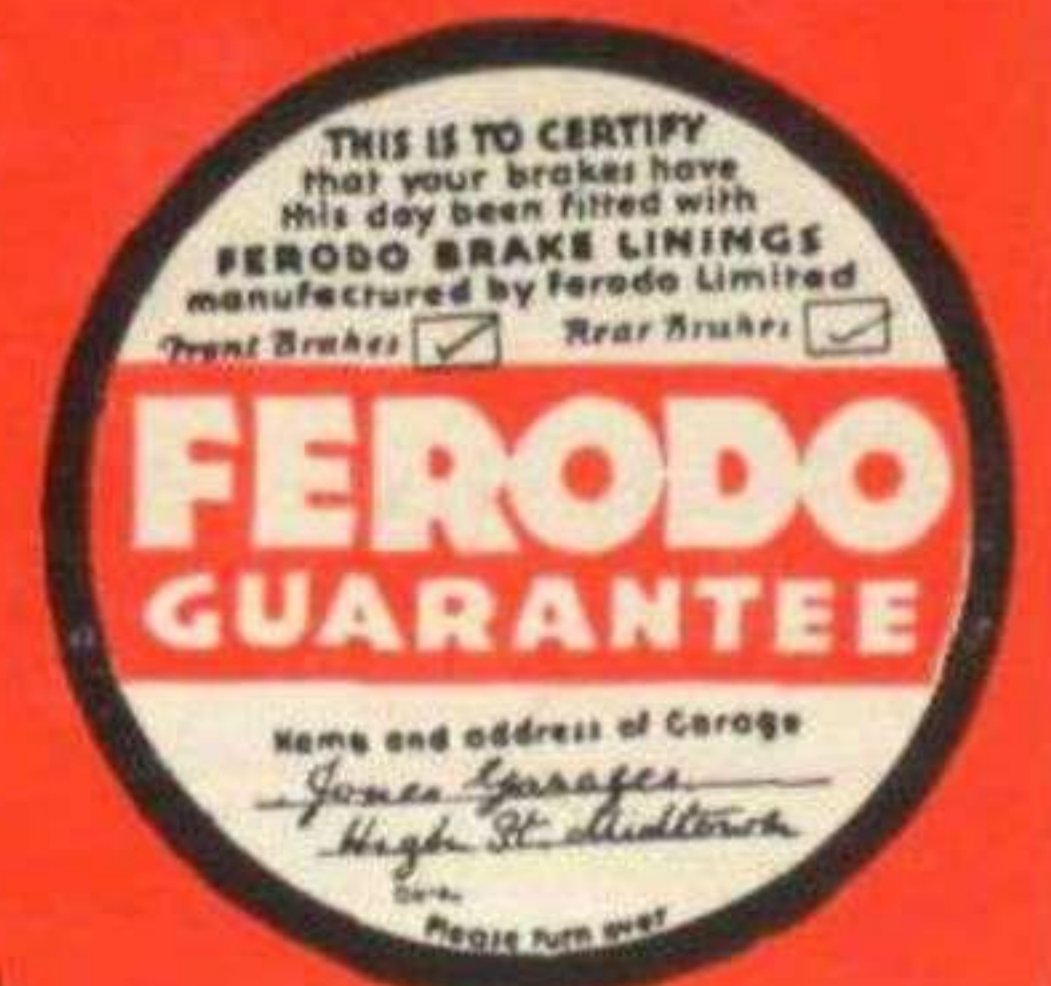
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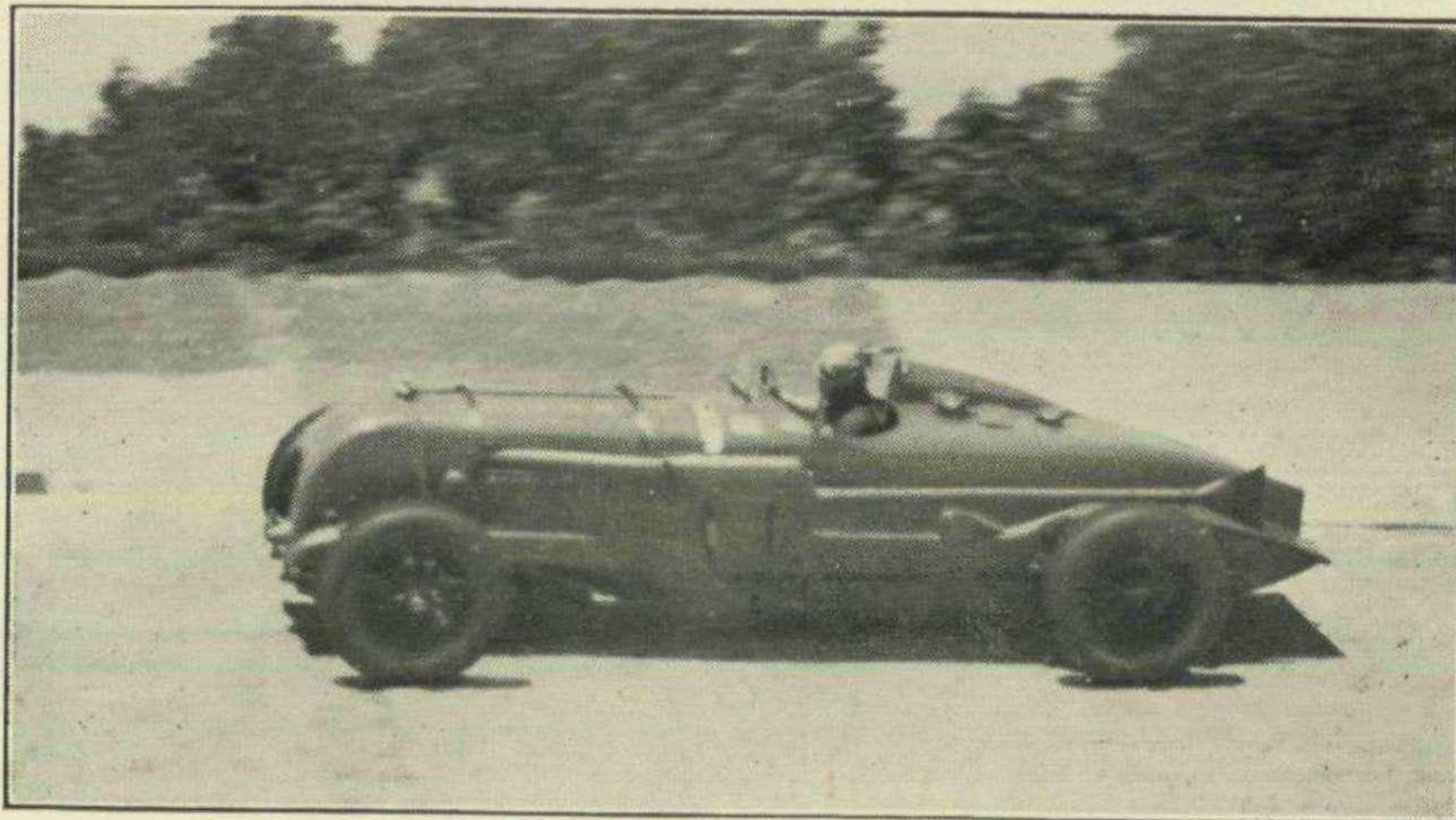


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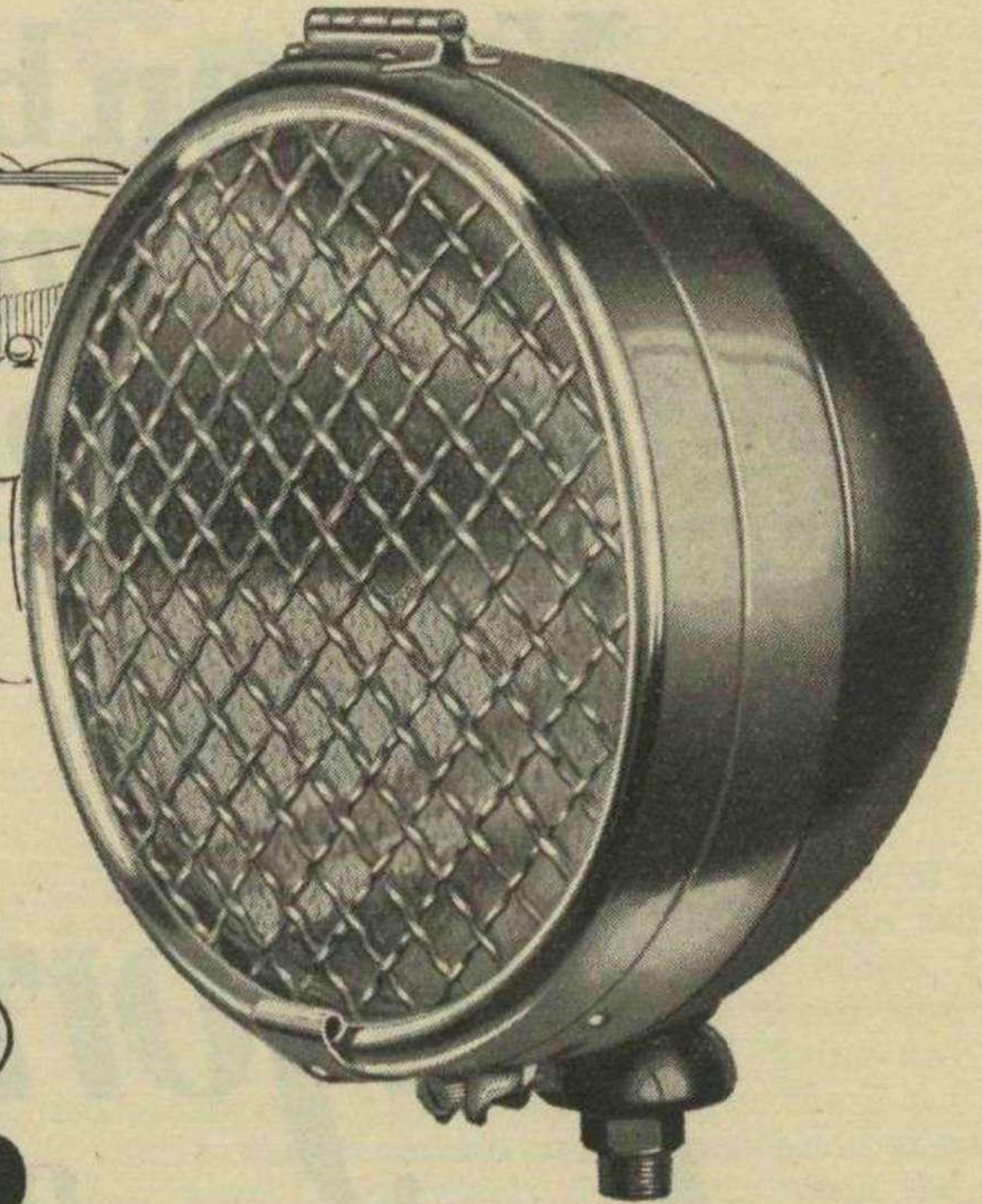
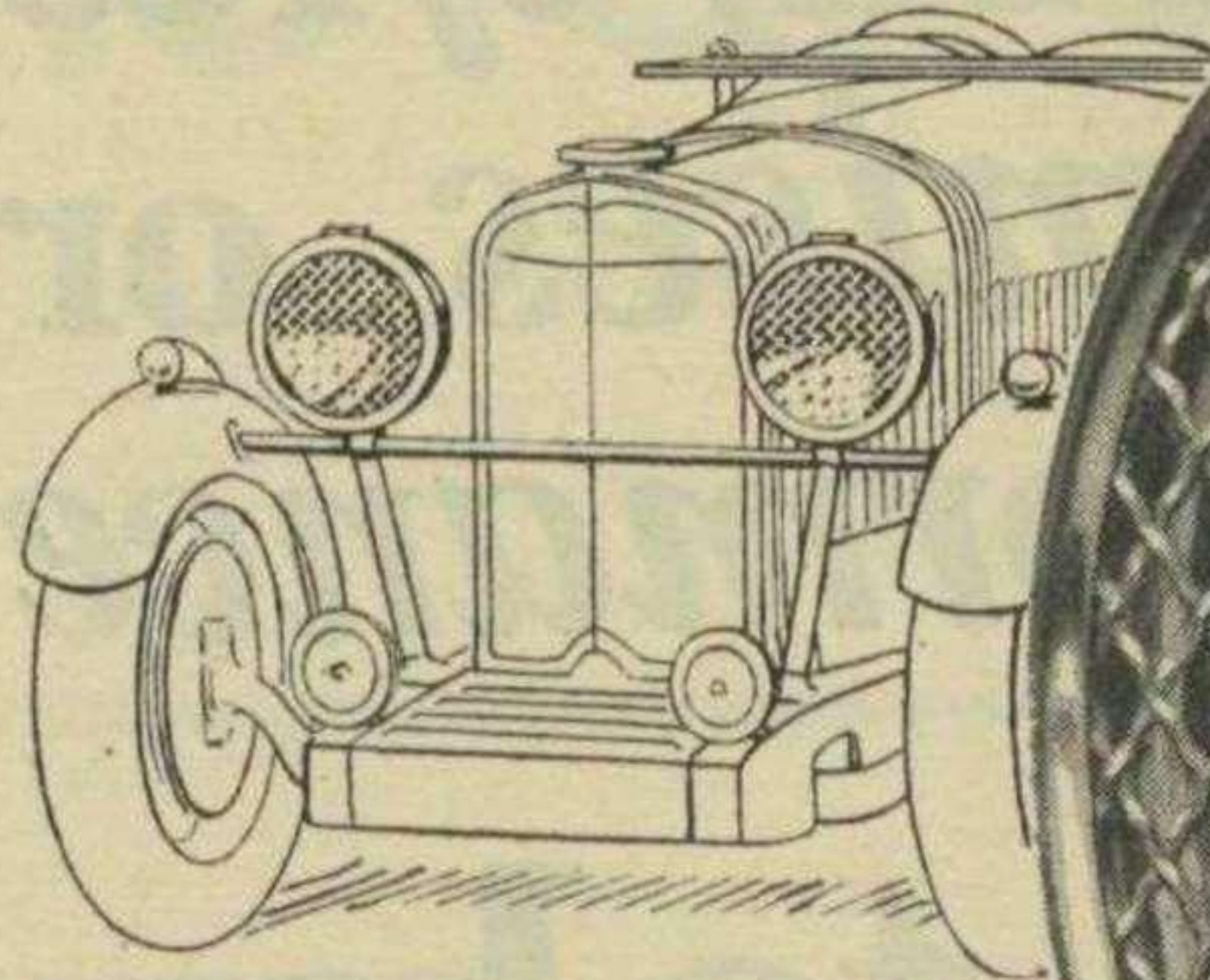
*A charming section of the Dieppe circuit reminiscent of a Sussex byway.*

AUGUST BANK HOLIDAY AT BROOKLANDS, 1932



*The winner of the Match Race—Sir H. R. S. Birkin, Bt. (Bentley).*

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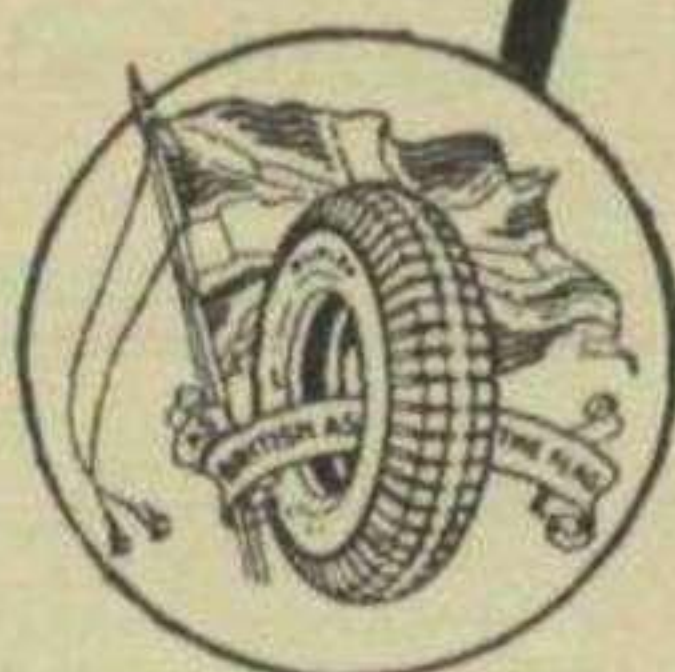
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INCORPORATING THE BROOKLANDS GAZETTE

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## EDITORIAL.

## SPEED LIMITS

WHEN the general speed limit of 20 m.p.h. was abolished in January, 1931, under the Road Traffic Act, it was felt by owners of sports cars that a more rational state of affairs was thereby initiated. And they were right, for in addition to removing from motorists' minds a subconscious admission of law-breaking every time the speedometer needle crept past the 20 m.p.h. mark, the new Act resulted in a substantial decrease in the number of fatal accidents. In 1930, the number of fatalities arising out of road accidents was 7,305, and the number of injured, 177,895. In 1932, after two years without a speed limit for private vehicles, the number of fatalities was 6,651 and the number of injured 206,410. The increase in the number of reported non-fatal accidents is generally agreed as being almost entirely due to the requirement in the Road Traffic Act that all accidents must be reported to the police, and may therefore be disregarded.

In view of this undoubted improvement in road conditions, the action of certain people in making an organized attempt to reimpose a speed limit for motor vehicles, especially in urban areas, is one that can only be regarded as in direct contradiction to proven facts. The Royal Automobile Club, which is always ready with unremitting toil to bring about a satisfactory condition of road safety to motorists and pedestrians alike, has recently issued a forceful plea in favour of the existing freedom from speed limits.

The R.A.C. points out that the official figures of road accidents, quoted above, are abundant proof that speed, in itself, is not one of the main factors to be taken into

consideration in tackling the vital problem of reducing materially what is commonly called "the toll of the road." This fact, together with two others, form an incontrovertible argument against speed limits. We refer, first, to the impossibility of fixing any certain maximum as a "safe" speed, for, as the R.A.C. states, "what is safe in certain circumstances and at particular times, may be extremely dangerous when the time or circumstances are varied. A speed limit of 30 m.p.h. which has been suggested in certain quarters as being safe, might at times amount to sheer recklessness"; and, second, to the equal impossibility of enforcing such speed limits.

For our part, while agreeing with the R.A.C. that the powers placed in the hands of the police by the Road Traffic Act to deal with dangerous or careless driving can be effective in every case where a driver indulges in dangerous speed—be it seven or seventy miles per hour—we are of the opinion that such powers are not as fully exercised as they might be. No one can deny that

there is still a great deal of bad driving seen on our roads, largely due to inexperienced handling of powerful cars (seldom sports cars). The only way to combat this danger is by the use of fast motor-cycles, and we consider that the employment of cars by the mobile police—as distinct from the Flying Squad—should be abandoned in favour of a more widespread utilisation of motor-cycles. In point of fact, twice the number of motor-cycles could be brought into service as there are cars at the present time, for each car always has a complement of two.

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# THE "LAND'S END" COMES OF AGE

21st. M.C.C. TRIAL TO LAND'S END FAVOURED BY PERFECT WEATHER AND A RECORD ENTRY. NEW HILLS FAIRLY EASY.

FOR the 21st London to Land's End Trial the Committee of the M.C.C. decided that the famous event should celebrate its majority by some departures from usual practice. To begin with a new starting point was found, Virginia Water giving way to Heston Aerodrome, a change which is likely to become permanent. Then some new hills were included, notably, an extension of Lynmouth by taking the sharp right hairpin up the Lynton road; a new climb in Lynton called Station hill; and lastly, Gooseham, near Bude.

The new starting point at Heston Aerodrome has much to commend it. There is plenty of room, the club-house is comfortable and looked most attractive with its flood-lighting, and the adventurous can make 10/- flights from the aerodrome, taking off and landing in the beam of the beacon.

The first car left at 11.17 p.m. on Friday night, and at minute intervals the competitors were sent off until 4.15 a.m., when the last man, E. N. Adlington with his Austin Ten took the road to the West. The night was cold, but fine, and little incident took place *en route* to Taunton, the breakfast stop. L. G. Mussi's old Riley Nine which has covered 140,000 miles, and has been re-bored three times, ran a big-end, and S. Sanders stopped for good on Hartford Bridge Flats with his M.G. Magna.

Grabhurst was the first hill, but before the hill was reached G. H. P. Scott had a "moment" when the back axle of his Alta seized, causing much skidding. Although in good condition, Grabhurst caused quite a lot of bother through drivers being determined not to fail so early in the trial, with resulting over-exuberance. Added to this, the sun was shining in competitors' eyes, so that errors

of judgment were frequent. Several Morgans charged about, and many cars nearly ran down the spectators. Worst of all was Strong's Patrick Hornet, which was duly damaged, while others who failed were Brynildson (Talbot) and Pigé-Leschallas (A.C.) who got going again. D. West (Frazer Nash) broke a chain and charged the bank, while others who failed to steer a clean course were Marshall

and Hornets came up quickly. The larger cars were good as a whole, notably Marker (Bentley), Driskell (V8 Ford), Hardwick-Sewell (Vauxhall 30/98), and, as usual, Whalley (Ford).

Porlock was not observed, but we heard that one small car, being driven too close to the inside of the hairpin, had turned over. Lynmouth, for the first part, round the bend up to the new hairpin, caused



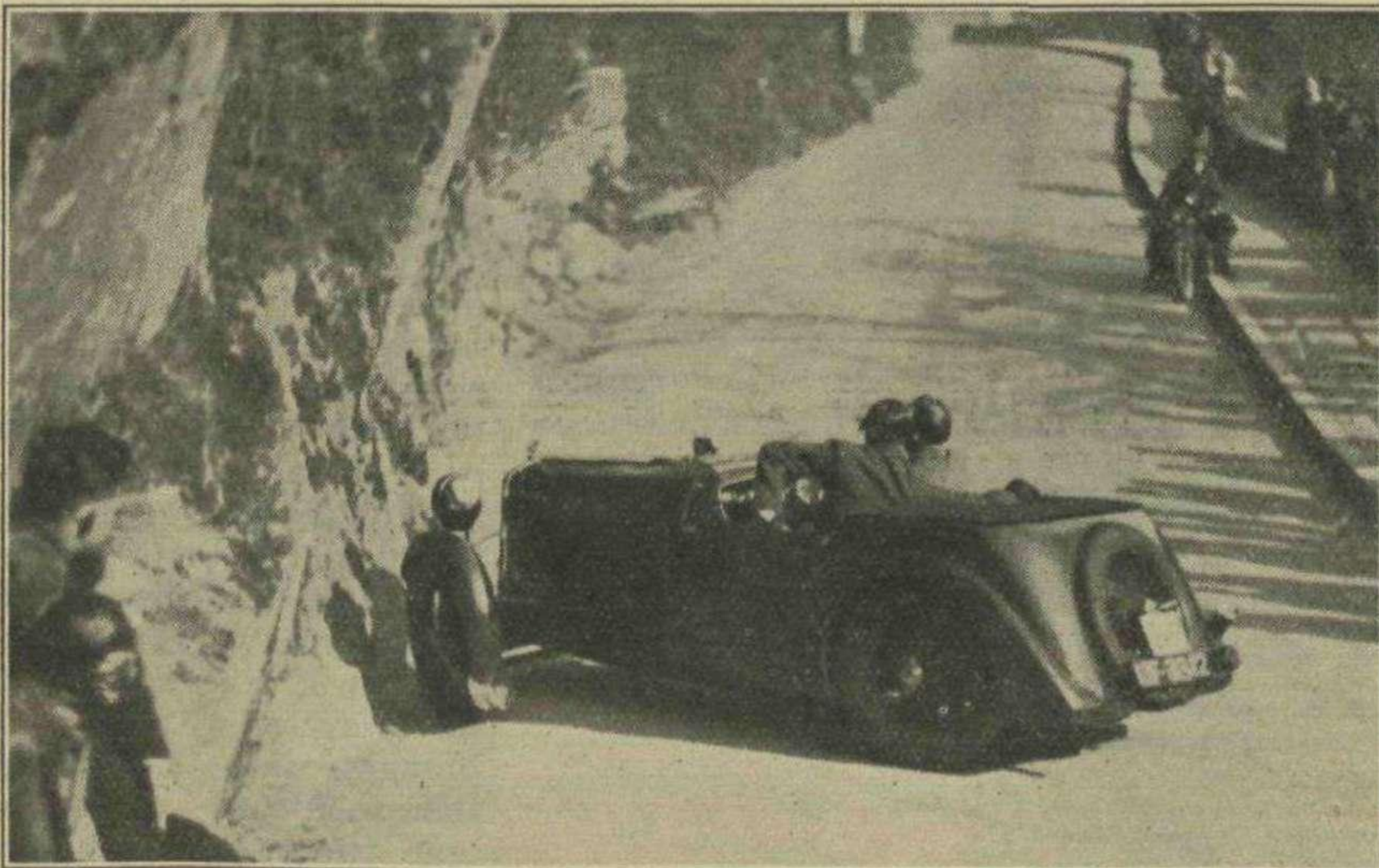
*The Vale Special driven by C. F. Widmann, created a favourable impression in its first trial.*

(Hornet), Littlewood-Clarke (M.G. Midget), Pettit (M.G. Mark I), and Williams (M.G. Midget). The Singers were all safe and steady, while several Frazer Nashes

only a few failures, always through lack of power. The new hairpin, however, caused many drivers to approach it with feelings of considerable alarm, not alleviated by the crowd assembled to witness their downfall. Altogether, 40 cars failed to round the bend without coming abruptly up against the cliff. Im Thurn, on "Pigé's" old A.C. locked over too soon, straightened momentarily, and then got round alright. A. U. Kipling (Hotchkiss) came round much too fast, found his lock was insufficient, but was too late to brake, and so hit the cliff good and hard. C. J. Fryer (M.G. Midget) was very neat, but M. L. Curtis, obviously afraid of damaging the badge-laden front of his V8 Ford, failed to round the bend.

There was a certain amount of baulking caused by cars coming down, and H. Hillcoat restarted his V8 Ford unassisted. S. F. Seyfried, on a Talbot "90," showed how the bend could be taken by a large car, but G. May (Alvis), J. Torromé (Standard Avon), R. R. K. Marker (Bentley) and A. S. Whiddington (Alvis Firefly) all failed. W. A. V. Davis (Wolseley Hornet) amused everyone by his anxious expression, and a non-competing Lancia sailed round in an effortless manner which many competitors would have liked to emulate.

The new hill, Station, proved fairly



*The new hairpin on Lynmouth caused many failures of this sort. In this case the victim is F. F. Patrick (Wolseley Hornet Special).*

[Motor Sport Photographs.]

# A Claim Substantiated By Facts—

*"A general-purpose Car built for the enthusiast, who, although primarily requiring a Car for business and really fast averages, wishes to compete in Speed Events, Reliability Trials and Hill Climbs. The Frazer Nash is pre-eminently THE car for the owner-driver."*

(Taken from a Frazer Nash advertisement in the January 1931 issue of "Motor Sport.")

—furthermore, a claim proven in 1931 and 1932 by a long list of convincing successes, and equally true in 1933.

Proved leader of the 1,500 class, and the finest "all-round" standard production sports car—Proof? Shelsley Walsh, Gopsall Park, Brighton, Lewes—a repetition of first, second and third in the 1,500 class. Best performance, John o' Groats to Monte Carlo, in the recent Rally up to 1,500 c.c. Fastest non-supercharged time of the day in the Mont des Mules hill climb, and a new record for the 1,500 class. Holder of Graigantlet, Lewes, Brooklands Test Hill records, and British Champion

of Shelsley Walsh—to mention only a few achievements. However hard a car is driven on the road, it will never come up to the severe gruelling to which a car is subjected in competition and racing—particularly the latter.

The two actual examples herewith are adduced as proof of the all-round efficiency of the Frazer Nash in widely contrasted spheres of motoring sport—events in which a car to achieve success must be absolutely reliable, fast and possess outstanding acceleration, 100 per cent. braking efficiency and superb road-holding qualities.

## Example I.

**FRAZER NASH M.V. 3079** (privately owned by R. Brooke, Esq., of Grazeley Court, near Reading).

### INTERNATIONAL ALPINE TRIAL, July 28 to August 3, 1932.

Recognised as the world's most severe reliability trial—over 1,500 miles in length including the Dolomites, Austrian and Eastern Alps, and a further 1,700 miles approximately of Continental roads out to Munich and home from San Remo. Competing in this event for the first time the non-supercharged Frazer Nash gained a Coupe des Glaciers—the highest possible award—finishing without the loss of a single mark. Incidentally, the other Frazer Nash entered also gained a Coupe des Glaciers, and put up the fastest time of the day on the Stelvio up to, and including, the 2,000 c.c. class. Frazer Nash was the only make of car in the 1,100-1,500 class to score a 100 per cent. success, and the only 4-cyl. 1,500 c.c. cars to gain an award.

### TOURIST TROPHY RACE, Ards Circuit, Belfast. August 20, 1932.

This success in the Alpine Trial was a fine achievement, but to further demonstrate the stamina of a standard Frazer Nash, M.V. 3079 competed in the Tourist Trophy, being one of only 10 cars to finish out of 32 starters, having an absolutely trouble-free run, only stopping once to take on petrol. Although driven well within its capabilities its average speed of 68.68 m.p.h. (fastest lap 70.76 m.p.h.) was nevertheless higher for the non-supercharged 1,500 class than in any previous race of the series, and the Frazer Nash was the fastest 4-cyl. 1,500 c.c. car on the course. "Motor Sport" (September, 1932) said, "The Frazer Nash was the most 'touring' car in the Tourist Trophy Race!"

### M.C.C. HIGH SPEED TRIAL, Brooklands, September 3, 1932.

Frazer Nash M.V. 3079 was out once again in this annual M.C.C. event, open only to standard production sports cars—the entry included every well-known make of sports car. The Frazer Nash was the first car to finish, covering 31 laps in the hour from a standing start—averaging 85.43 m.p.h., two up and fully equipped for the road—the highest speed of the day. Incidentally, among other successes the same day, in the Morning High Speed Trial the only cars to gain Premier Awards were 3 Frazer Nashes. "Motor Sport", in reporting this meeting, said, "Frazer Nashes carry all before them."

## Example II.

**FRAZER NASH M.V. 3742** (a standard production model—non-supercharged).

### LONDON—GLOUCESTER TRIAL, December 10, 1932.

Frazer Nash M.V. 3742 won the ACCELERATION TEST on Bismore Hill (maximum gradient 1 in 4) putting up fastest time of the day with a bottom gear ratio of 9 to 1! There was a total entry of 126 including supercharged cars.

### LONDON—EXETER TRIAL, December 31, 1932—January 1, 1933.

Frazer Nash M.V. 3742. GOLD MEDAL.

"One must not forget the efforts of the Frazer Nash drivers who followed the example of their leader, H. J. Aldington, and roared round the corners to the delight of the crowd." "The Frazer Nashes were travelling far too fast for the camera in the somewhat indifferent light."

"The Motor", January 3, 1933.

"Gripper's Frazer Nash was very fast, causing excitement among the spectators."

"Clayton's Nash was certainly the fastest machine so far, and Marshall on another Frazer Nash much the same as regards velocity."

"H. J. Aldington skidded his Frazer Nash beautifully round the second corner and then literally shot up the rest of the hill."

"The Autocar," January 6, 1933.

### BROOKLANDS, B.A.R.C. MEETING, March 11, 1933.

The First Three-Lap Mountain Handicap.

Frazer Nash M.V. 3742 THIRD. Lap speeds—56.92, 63.44 and 64.21 m.p.h. (official).

The Weybridge Lightning Mountain Handicap. FIRST, at an average speed of 62.31 m.p.h.

Lap speeds—56.16, 63.63, 64.60, 63.63 and 63.82 m.p.h. (official).

"The last Mountain race was the most thrilling of all. H. J. Aldington (Frazer Nash) drove magnificently and maintained his lead to the end—but it was not for want of trying on the part of others. Time after time a horde of Bugattis descended on the Fork, sorted themselves out and got round somehow—most of them, that is!" "The Light Car and Cyclecar," March 17, 1933.

FRAZER NASH CARS    FALCON WORKS    LONDON ROAD  
ISLEWORTH    MIDDLESEX    HOUNSLOW 3171 . 3172

## THE "LAND'S END" COMES OF AGE—continued.

easy, although a shower of rain might have caused a very different story to be told. The hill was straight, and therefore gave the Frazer Nashes a chance to demonstrate their ability to climb such gradients at high speed. Fastest of all was H. J. Aldington, who roared up at a great pace, scattering marshals and spectators. W. A. Ponting, on another Nash, tried to do the same thing, but struck a gully and shot headlong into a concrete post, with much damage to his front axle and sump. K. N. Hutchison (V8 Ford) made a very fast climb, as did most of the Fords, Frazer Nashes, Singer Nines, J.2 Midgets and Wolseley Hornets. G. R. Brocklebank (M.G. Magna) just got over the bump at the top. A lot of people failed, among them being I. S. Macdonald (Riley), H. G. Smith (Morris Minor), H. E. Williams (M.G. Midget), R. Rose (3 litre Bentley), Pigé-Leschallas (A.C.), C. P. Madden (Rover) and D. F. Durward (Austin Seven).

Beggars Roost, for many years a notorious climb of the Land's End, was not so crowded this year with spectators, although some women in shorts and flannel trousers gave the barracking members of the audience a chance to show off their wit. The Roost was in good condition, and some first-class climbs were seen, notably by Marker (Bentley), P. D. Walker (Talbot "105"), E. Russell (1926 Morris Cowley), amid cheers, and N. Tweedale (Rally). J. A. Driskell did his usual melodramatic stuff of yelling to the crowd to stand back, waving his arms, and generally causing a sensation. Wearing a yellow jumper, he drove his V8 Ford up the hill very quickly, in spite of giving so much of his attention to the crowd.

seley Hornet), G. A. Ladwig (Jowett), Lt. Comm. C. M. D. Maltby (M.G. Midget), G. F. Gaskell (Trojan), D. J. C. Gamble (Riley), H. C. Smith (Morris Minor), H. E. Williams (M.G. Midget), R. Rose (Bentley), G. E. Ferguson (La-

was easy for cars with adequate lock and a fair amount of power. The surface was covered with thick white dust, so that the policeman at the top was gradually transmuted into a grey ghost. Some good climbs were seen by large cars, H. A.



H. Hearn (M.G. Midget) makes light of the "Roost." Note the "birds" in the trees.

gonda), L. A. Sandford (Singer) and C. Montague-Johnstone (Riley).

Taken as a make, outstandingly good performances were put up by the Frazer Nashes, the Singer Nines, the J.2 Midgets, the V8 Fords, and the Hornet Specials.

On the cross-country route to the new

Nash (Humber Snipe), P. D. Walker (Talbot "105"), B. W. Clarke (Talbot) and Marker's Bentley. N. A. Watkins (Frazer Nash) made a fast climb to the accompaniment of loud encouragement by his friends. The Rally driven by Tweedale was fast, as were C. B. Beeby's £100 Morris Minor, Longman on the André V.6, and C. F. Widmann on a Vale Special. Every car raised a great cloud of dust, and on some corners, stones. J. R. H. Baker (Singer Nine) did his best to stun spectators with stones flung up by his rear wheels, while the biggest cloud of dust was raised by K. N. Hutchison, who made a star climb with his V8 Ford. The unfortunate spectators who were doomed to remain on the hill the whole time became more and more parched. Failures included I. S. Macdonald (Riley), R. M. Tufnell (Salmson), A. S. Whiddington (Alvis Firefly), D. J. C. Gamble (Riley), H. G. Smith (Morris Minor), J. Harrison (V8 Ford), A. L. Mason (M.G. Midget), and the 3 litre Bentley driven by R. Rose which had come to a standstill on every hill so far.

Hustyn caused few failures, but the water splash at the foot enabled some over-enthusiastic people to submerge their carburetors in a wave of water. Among the failures we noted S. F. Seyfried (Talbot 90), A. Powys-Lybbe (Alvis), R. R. K. Marker (Bentley), W. T. Platt (supercharged M.G. Midget), and C. E. C. Martin (M.G. Magna).

Bluehills Mine seemed to be easier this year, an impression which may have been given by the sun changing the gloomy surroundings of the hill into cheerful brightness. As usual, the hairpin caused the greatest number of failures, most of them big cars. A. Powys-Lybbe distinguished himself by baulking two other



[Motor Sport Photographs

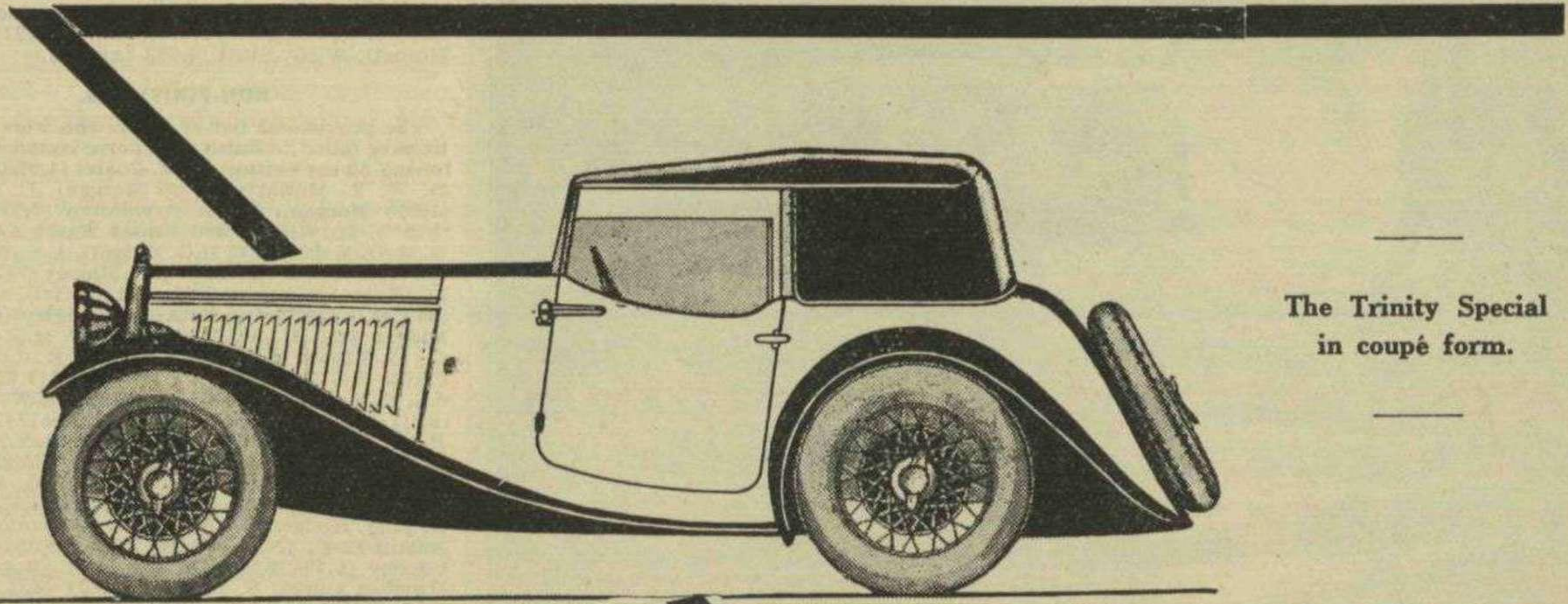
Some idea of the dust at Gocseham can be judged by this picture of C. E. C. Martin (M.G. Magna) rounding the second bend.

Failures included I. S. Macdonald (Riley), R. M. Tufnell (Salmson), J. Torromé (Standard Avon), W. J. Davies (Wolseley Hornet), R. Varley (Essex Challenger), P. Butler-Henderson (Wol-

hill, Gooseham (pronounced Gūsham, à la Francaise, by the locals), Powys Lybbe misjudged a corner and turned his Alvis over, fortunately without injuring his passenger. The hill itself, in dry condition

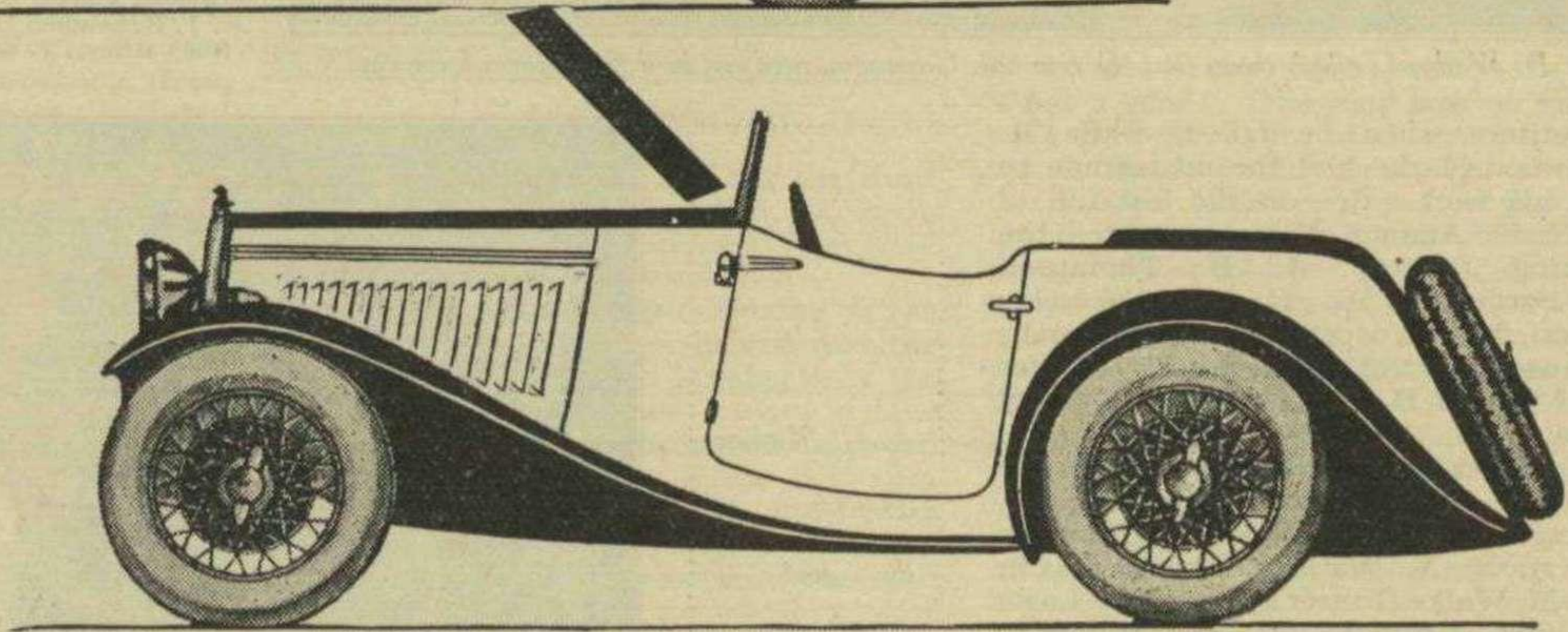


# The One Car for Every Occasion



The Trinity Special in coupé form.

The SAME CAR as an open two-seater. The head has simply been lowered into the tail, the windows into the doors, and the rear seat squat moved into a horizontal position by means of its patent link motion.



## TRINITY



## COACHWORK

(PATENTS PENDING).

In coupé form this car provides true saloon comfort. The equipment includes safety-glass windows, rear blind and interior light. The rear of the head is panelled to produce pleasing shape and to ensure absolute rigidity.

In a few seconds the coupé can be converted into a smart open four-seater or a most attractive two-seater. There are no loose parts to be mislaid or damaged and there is nothing in the car's appearance to denote its convertibility.

THIS EXCLUSIVE COACHWORK IS AVAILABLE ON:—

RILEY 9 h.p.  
12 h.p.; 14 h.p.

WOLSELEY HORNET  
SPECIAL - £289

B.S.A. 9 h.p.  
f.w.d. £215

M.G. Midget  
Magna

**MEREDITH COACHCRAFT, LTD.,** TRINITY WORKS, AERODROME ROAD, CASTLE BROMWICH  
Phone: Castle Bromwich 2166.

THE "LAND'S END" COMES OF AGE—continued.



P. D. Walker (Talbot) shows that the new hill, Gooseham, need not be difficult for a large car.

competitors when he failed, while R. Littlewood-Clarke had the misfortune to shear his back axle—on the last hill of the Trial. Among others, we noted the following failures:—J. B. Thompson (V8 Ford), W. G. Harvey (Wolseley Hornet), D. C. Vosper (Wolseley Hornet), R. Rose (Bentley), R. R. K. Marker (Bentley), G. H. C. Goodban (Wolseley Hornet), P. D. Walker (Talbot 105), W. H. Haden (M.G. Midget), C. P. Thorpe (Alvis), W. St. Clair Smith (M.G. Midget), P. Ferguson (Lagonda), W. J. Hampton (Singer), N. A. Watkins (Frazer Nash), E. R. M. Walke (Frazer Nash), S. T. Lowe (Wolseley Hornet), B. H. Holloway (Hillman Minx), F. T. Rainey (Frazer Nash), G. R. Strong (Alvis), A. T. Wickham (Aston Martin), H. A. Hardwick-Sewell (Vauxhall), and A. F. Jackson (Wolseley Hornet).

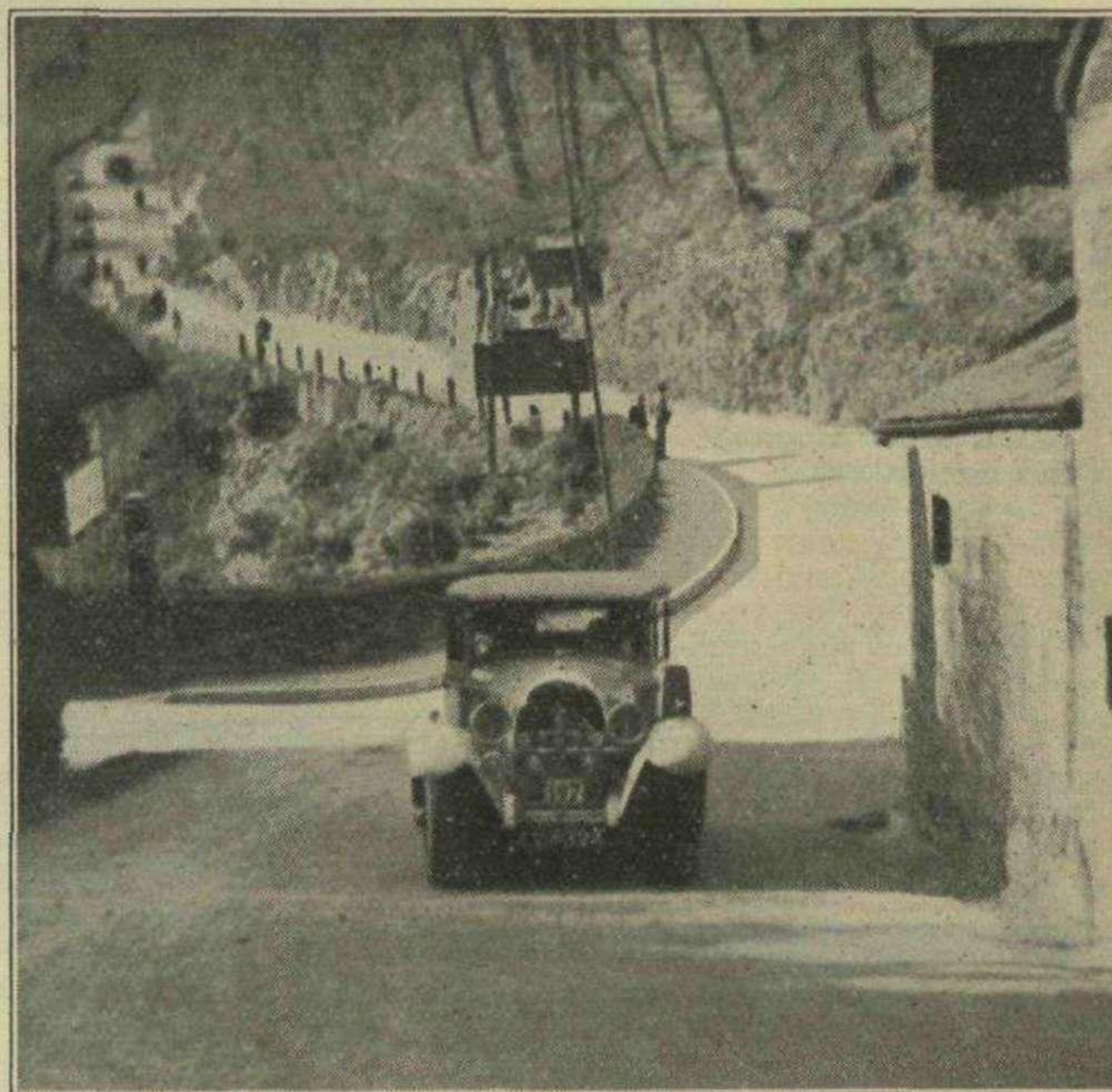
In past years the last competitors have had to climb Bluehills Mine in the dark, but this year the flares were not needed, and the last car was speeding away to Penzance before the light finally failed.

No account of this Land's End would be complete without a bouquet for the M.C.C. officials, whose organisation of the trial was absolutely faultless—in spite of having an entry of 405!

A. U. Kipling

(Hotchkiss) at  
the foot of  
Station Hill.

The dry surface  
caused few  
failures here.



[Motor Sport Photographs.]

#### NON-STARTERS.¶

There were only 11 non-starters amongst the car entrants. These were:—R. H. Aldworth (1,096 Morgan), R. E. Wright (1,496 Frazer Nash), C. H. Wagstaff (1,496 Lea-Francis), R. H. Massey (1,938 A.A. Special), H. B. L. Hillcoat (933 Ford), R. C. B. Buckley (847 M.G. Midget), W. G. Marshall (1,925 Lancia), W. J. Haughton (847 Morris Minot), M. H. Lawson (972 Singer), J. H. E. Marsh (1,271 Wolseley Hornet), W. G. Stott (4,962 Invicta).

#### NON-FINISHERS.

The provisional list of those who were reported to have failed to finish the course included the following 33 car entrants:—T. Coates (1,096 Morgan), D. W. R. Moriarty (1,096 Morgan), L. H. Creed (1,096 Morgan), E. L. Brynildsen (2,276 Talbot '75'), D. West (1,496 Frazer Nash), Lt.-Comdr. G. M. D. Maltby (847 M.G. Midget), A. S. Whiddington (1,496 Alvis "Firefly"), A. Massey (747 Austin), F. Allott (1,271 Patrick Hornet Special), A. C. Hess (847 M.G. Midget J.2), A. B. Langley (847 M.G. Midget J.2), H. E. Williams (847 M.G. Midget), G. E. Taylor (847 M.G. Midget), R. Littlewood-Clarke (847 M.G. Midget), D. Percival (1,954 Lagonda), F. P. Barker (1,496 Lea-Francis), W. A. Ponting (1,496 Frazer Nash), M. S. Aldridge (747 Austin), P. A. E. Strong (1,271 Wolseley Hornet), G. H. P. Scott (1,074 Alta), J. R. G. Finch (1,074 Alta), S. H. Allard (1,100 Allard Special), G. F. Horan (747 Austin Special), G. C. Garbett (2,628 Essex), A. J. M. Hodges (972 Singer), O. B. Bennett (1,450 Austin 12-4), J. R. Elliott (2,054 S.S.1), S. H. H. Cundey (1,496 Frazer Nash), R. T. Bagot (3,498 Humber Snipe), S. Sanders (1,271 M.G. Magna), R. J. B. Seaman (1,271 M.G. Magna), L. G. Mussi (1,089 Riley), J. Stark (2,996 Bentley).

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## AN HISTORIC MONACO GRAND PRIX

ACHILLE VARZI (BUGATTI) AFTER A TENSE DUAL WITH NUVOLARI (ALFA ROMEO) WINS ONE OF THE MOST THRILLING RACES EVER KNOWN

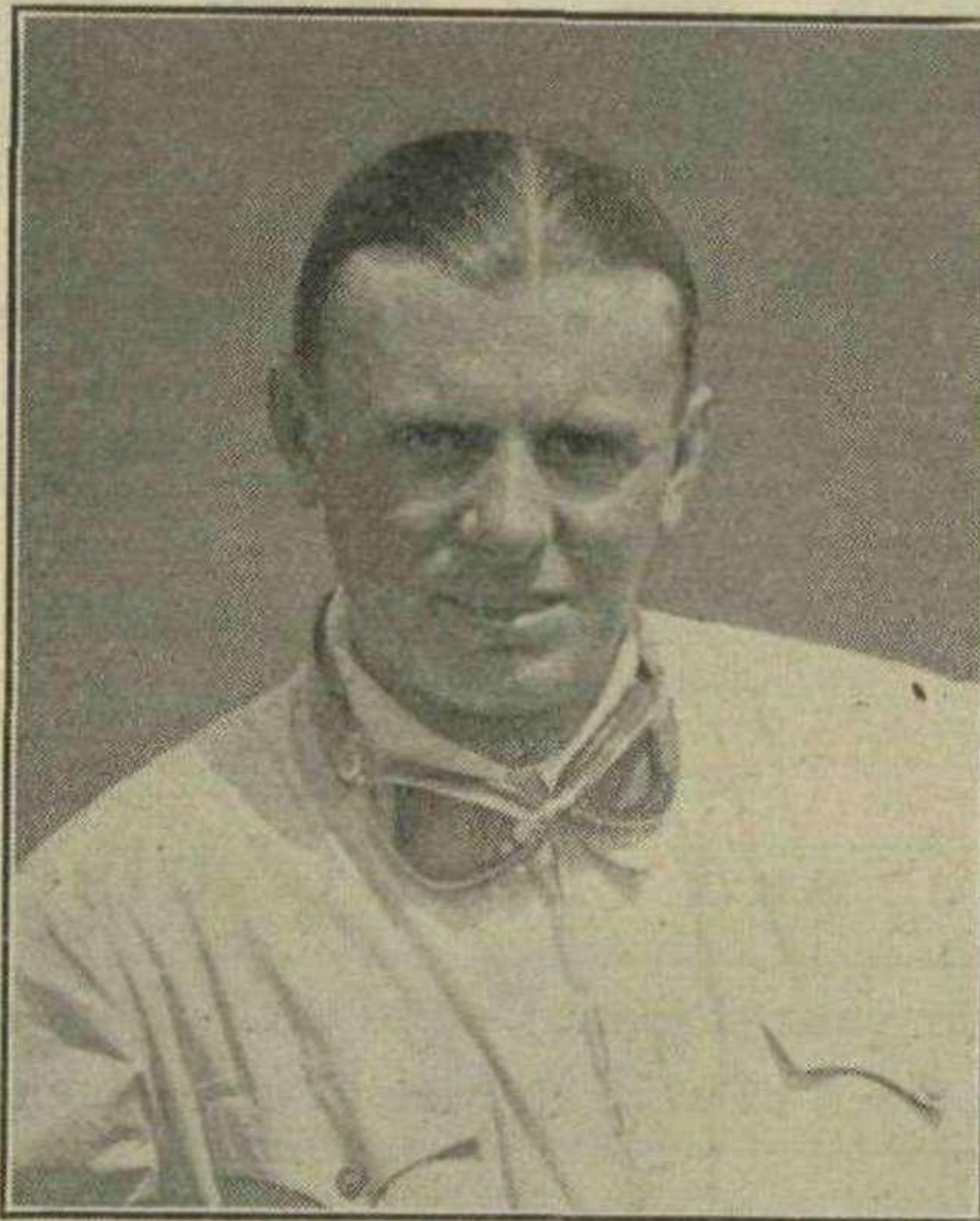
MONTE CARLO,  
Sunday Night.

**N**EVER has there been a more thrilling race! For the whole distance, occupying nearly 3½ hours, the blue and the red, France and Italy, Varzi and Nuvolari, Bugatti and Alfa Romeo, have waged a battle that will live for ever in the annals of motor-racing history. As the two cars roared up the hill on that last 99th lap, and Nuvolari's car slowed down in a wreath of smoke, I have never seen such intense, hysterical excitement in a crowd before. But let me begin at the beginning.

Practice. On the first day the new Caracciola/Chiron team of Alfas made fastest time, both getting within one second of the record. Then, in trying to better this, Caracciola had one of his brakes seize, crashing badly on that tricky little twist between the Quai de Plaisance and the Quai d'Albert. The car skidded sideways, crashed into some steps, and the force of the impact fractured Caracciola's thigh. So, to his great chagrin the German driver was a non-starter in the race. On the second day it was wet, but in spite of this Varzi equalled his own record of last year with a time of 2 mins. 2 secs.

A word about the cars. Nuvolari and Borzacchini drove Alfas with the 2.3 litre chassis and two-seater bodies, but fitted with 2.6 litre engines from the famous "monoposto" cars, tuned to give 25 extra h.p., making about 210 b.h.p. in all. These Alfa-Romeos weighed 14 cwt. The official Bugattis of Varzi, Williams and Dreyfus were the usual "2.3's," but with geared-up blowers, and developing about 180 b.h.p. Earl Howe drove his last year's 2.3 Bugatti, and Sir Henry Birkin, after failing to obtain delivery of a 3 litre "Monoposto" Maserati from Bologna, rushed to Milan, secured a 2.3 Alfa-Romeo, drove furiously to Monaco, was delayed by an accident en route, fitted a new front axle, and arrived just in time for the race. The Maseratis of Sommer and Zehender were the new 3 litre "Monoposto" cars with hydraulic brakes.

The day of the race dawned fine and clear, the hot sun being tempered by a cool breeze. An enormous crowd had gathered all round the course by the time the cars were lined up in threes. On the suggestion of M. Charles Faroux the order of the cars was decided by their fastest



Achille Varzi.

lap speeds in practice, so that the front row was Borzacchini (Alfa Romeo), Chiron (Alfa Romeo) and Varzi (Bugatti). Nuvolari was in the second row.

The noise was simply deafening as the cars revved up when the drivers saw the flag raised. Then, with a rising note the whole pack roared away, leaving a blue haze behind them. Who would be round first? It must be one of the first row. Yes, it was Varzi, with Borzacchini (Alfa Romeo), Lehoux (Bugatti), who had started in the second row, and Nuvolari all close on his heels. Round they came again, Varzi still in the lead, but Nuvolari had passed Lehoux. On the third lap he caught Borzacchini, and went after Varzi—the duel had begun. Then a great cry rang out all round the course. Nuvolari was in the lead! But Varzi was equal to the occasion, and to the accompaniment of a still greater shout, once more led the field. For 30 laps there was only one second between them, both giving a flawless display of driving, until on that lap Nuvolari managed to slip by at the Gasworks Corner.

Meanwhile, Lehoux (Bugatti), after a magnificent start, had to retire, but another driver was making a performance that would firmly establish him in the front rank of racing drivers. It was the wealthy French sportsman, Philippe Etancelin, at the wheel of his new 2.3 Alfa

Romeo, and who was now lying third, being ahead of Borzacchini (Alfa Romeo), Dreyfus (Bugatti), and Chiron (Alfa Romeo). At 40, and 50 laps he was still third, only once faltering, when he turned right round at that dangerous "kink" on the Quai de Plaisance. Then, on the 60th lap his differential broke, and Etancelin was out. Birkin started slowly, for his Alfa Romeo was not properly run in, and after a short run retired with the inevitable back-axle trouble, when lying seventh. Earl Howe was another back-axle sufferer, and was forced to retire on the 40th lap, being then in 9th position. Sommer dropped out with magneto trouble on his Maserati—the same defect he experienced at Tunis.

At 60 and 70 laps Nuvolari still led, winding his steering wheel fiercely from side to side, and sitting bolt upright. Another sensation, Varzi was in the lead—but only by 10 yards. On the 90th circuit Nuvolari was ahead again, but on the 93rd Varzi pushed his Bugatti to the fore. What a race! Everyone was on tip-toe with excitement, for at this rate a really terrific finish would result. At the end of the 98th, Nuvolari appeared first, and as the cars streaked up the hill to the Casino the spectators, eyes glued to the two flashing specks of colour, suddenly uttered a tremendous roar. Nuvolari's red Alfa Romeo, its driver keeping in third gear all the time, had slowed, smoke pouring from the bonnet, and in a trice Varzi was past. By the time Nuvolari had finally coasted to a standstill Varzi had the race in his pocket, but Nuvolari, never admitting defeat for a moment, courageously began to push his car with the assistance of his mechanic and others, reaching the line in an exhausted condition. Varzi, to the terror of his pit-staff, drove like one possessed, even though his nearest rival was out of the race, and on the last lap set up a new record for the circuit in 1 min. 59 secs., or 59.9 m.p.h. Nuvolari, not having finished under the power of his Alfa Romeo, was unplaced—appallingly bad luck! Borzacchini was second, 2 minutes behind, and Dreyfus completed the triumph of Bugatti by finishing third.

### RESULT.

1. A. Varzi (Bugatti), 3h. 27m. 49s. 57.01 m.p.h.
  2. B. Borzacchini (Alfa Romeo), 3h. 29m. 49s.
  3. R. Dreyfus (Bugatti), 3h. 30m. 10s.
  4. L. Chiron (Alfa Romeo), 3 laps.
  5. Count Trossi (Alfa Romeo), 3 laps.
  6. F. Zehender (Maserati), 6 laps.
- Varzi's Bugatti was equipped with Dunlop tyres.

### THE SCOTTISH RALLY

rest will be allowed each night between the various stages, the necessary average speeds of 25 m.p.h. in the Large Class (over 1,500 c.c.) and 22 m.p.h. in the "Small" Class only applying to the time taken between each stage.

On arrival at the Final Control at Glasgow a close examination of the cars will be made for defects in the general condition of the machines, and this will be followed by an acceleration and braking test as follows:—With engines stopped

and gear levers in neutral the cars will have to start up, accelerate to a line some distance ahead (the distance will vary according to classes), stop astride a line with all four wheels clear, and then accelerate to another line and stop there. Finally, there will be the usual kerb driving-skill test, and a coachwork competition.

Application forms may be obtained from the Secretary, R.S.A.C., 163, West George Street, Glasgow.

Regulations are now to hand for the second annual rally organised by the Royal Scottish Automobile Club, which will be held this year on June 5th to 9th. There will be three starting points, Harrogate, Edinburgh and Glasgow, and the route in each case will be approximately 1,200 miles, divided into three stages of 550 miles, 350 miles, and 120 miles.

In order that the Rally may be an enjoyable tour for competitors, giving them a chance to enjoy the scenery, periods of

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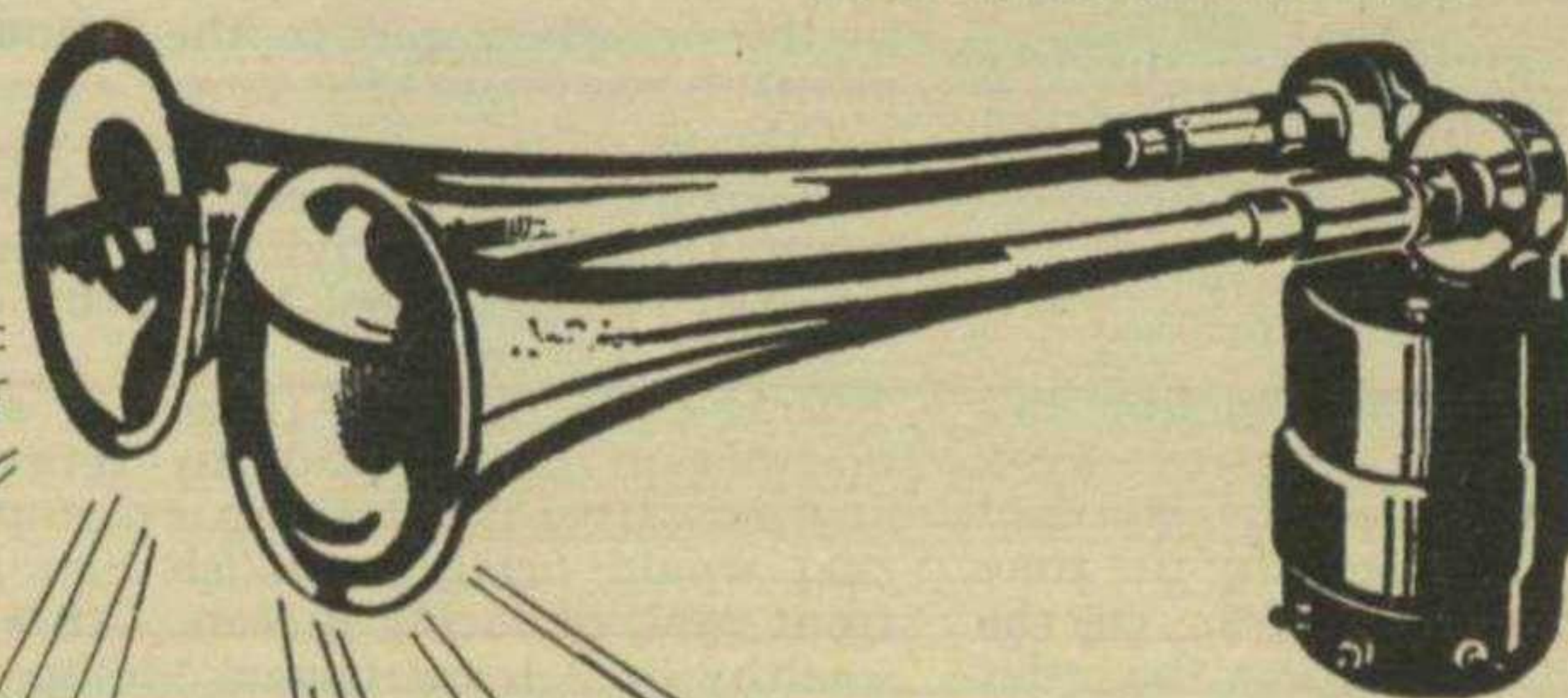
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# The Seventh Mille Miglia.

VICTORY FOR TAZIO NUVOLARI, WITH AN ALFA ROMEO. MAGNIFICENT DEBUT OF M.G. MAGNETTES IN WINNING 1,100 c.c. CLASS FROM NEW MASERATIS.

**T**HAT the Italians are more enthusiastic about motor-racing than any other community in the world is proved by the ability of the Royal Automobile Club of Italy to hold its annual 1,000 mile race over roads voluntarily closed by the general public. Even in France such a race would be impossible, while what would happen if the suggestion were put forward in our own House of Commons could only be done justice to by a Bateman cartoon!

The mere fact of never having driven in a sports or racing car does not detract from the excitement of the Italian peasant at the prospect of witnessing a motor

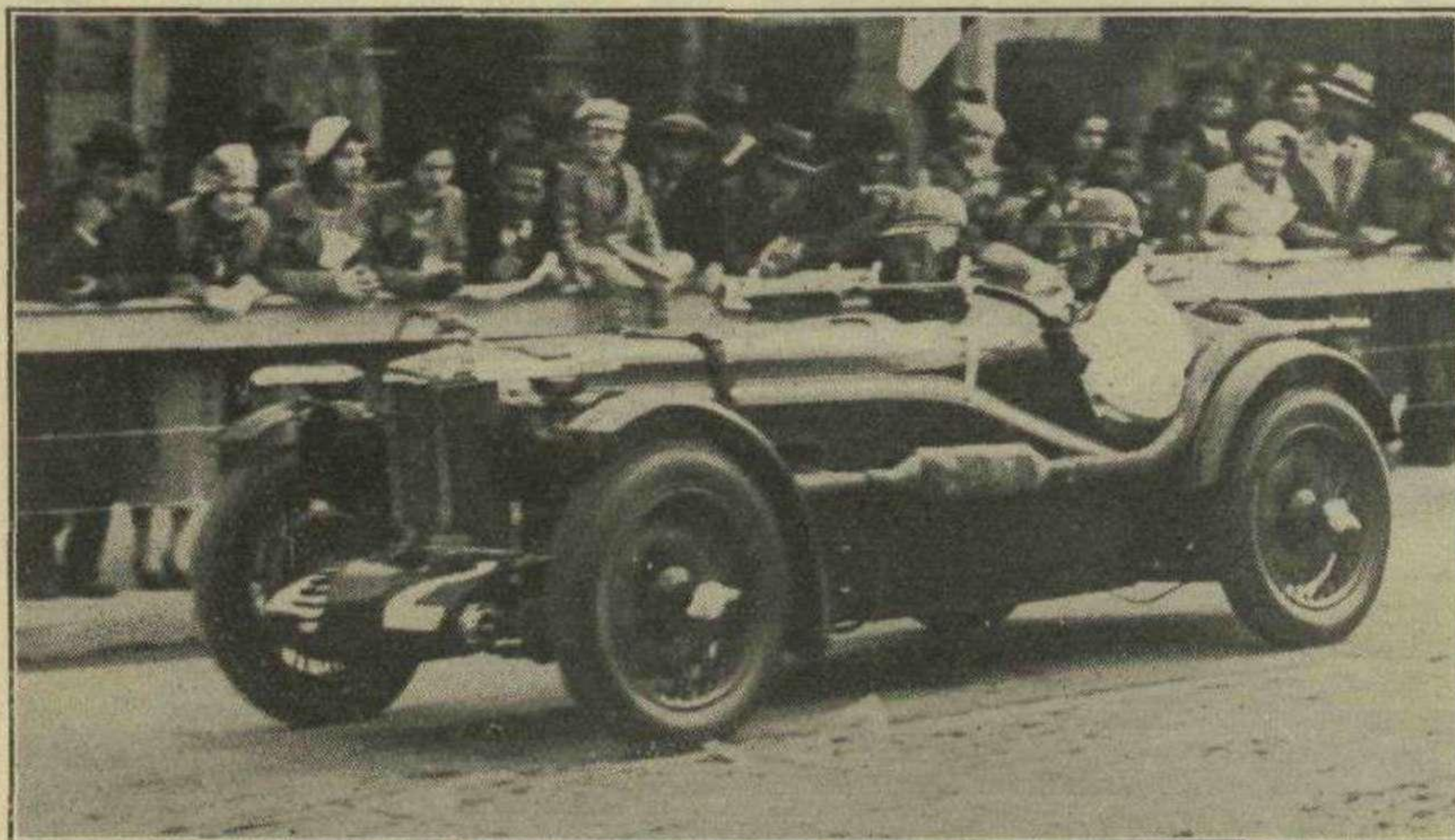
Race organised by R.A.C. of Italy.  
Distance 1,000 miles.  
Previous winners:  
1927 Minoia-Morandi (O.M.), 48 m.p.h.  
1928 Campari-Ramponi (Alfa Romeo), 52 m.p.h.  
1929 Campari-Ramponi (Alfa-Romeo), 55.6 m.p.h.  
1930 Nuvolari-Guidotti (Alfa-Romeo), 62 m.p.h.  
1931 Caracciola-Sebastian (Mercedès-Benz), 62.85 m.p.h.  
1932 Borzacchini - Bignami (Alfa-Romeo), 67.7 m.p.h.

He wrecked his Alfa Romeo, receiving slight injuries himself and hurling his mechanic through space.

From the start it was evident that Sir Henry Birkin was destined to pursue his well known *role* of setting up a very fast pace in order to crack up the rival cars in the class. At the Bologna control he was well ahead, and over the Raticosa Pass to Florence he maintained a record average. And so to Siena, where the note of the gallant Mulette began to falter, and finally the car had to be withdrawn with a broken valve. By this time, too, the rear axle was giving trouble, but in any case Birkin's work was done, for the Maserati, driven desperately by Tuffanelli in an effort to keep pace with the flying Mulette (which had averaged 87 m.p.h. for 129 miles), came to a standstill on the Futa Pass, before Siena, with an irreparably damaged gear-box.

Of the larger cars, Borzacchini held his lead over Nuvolari all the way to Rome, beating the record to Florence by some three minutes. Von Brauchitsch, the German driver of a Mercedès-Benz, was experiencing a tremendous amount of tyre trouble, throwing three treads in 24 miles, and eventually gave up the unequal battle. Penn-Hughes, who was driving Earl Howe's Mercedès-Benz as a sort of tender to the Mullettes, experienced little trouble, on the other hand, with normal Dunlop Fort covers.

After Rome had been passed, a different complexion was put on the race by the retirement of Borzacchini, with a cracked cylinder head on his Alfa Romeo. Nuvolari took the lead, which he was to hold until the end, and as he had a comfortable advantage of thirteen minutes over the next man, Castelbarco, on a similar Alfa Romeo, he could afford to ease up considerably. Then came the difficult section to Perugia, Macerata and Ancona, after which there is a fast run through Pesaro, along the shores of the Adriatic, to Bologna.

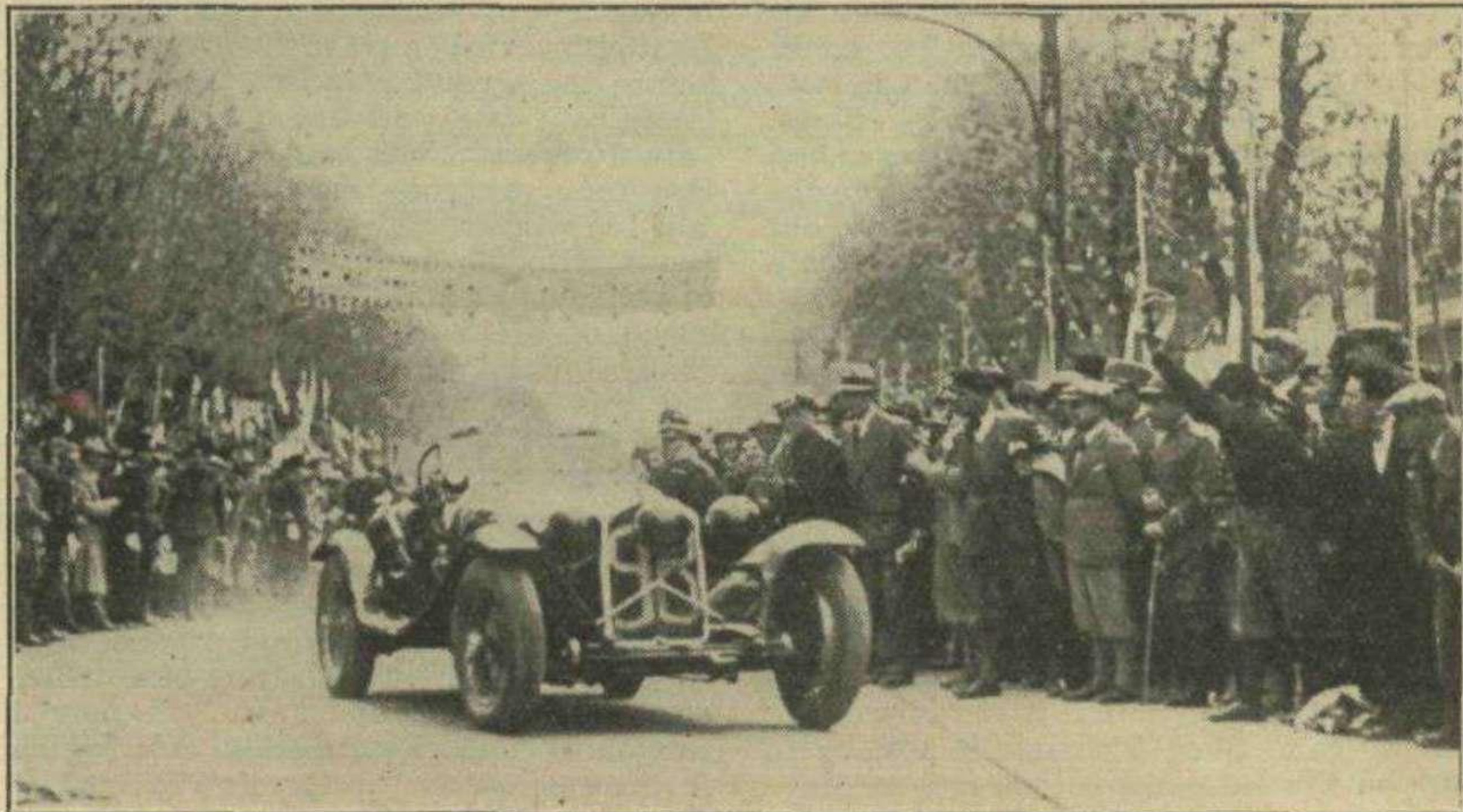


Before admiring eyes. Earl Howe (at the wheel) and H. C. Hamilton speeding through a town with their M.G. Mulette.

race. Weeks before the Mille Miglia takes place the word is passed round that the cars will be passing through a particular town or village at a certain time, and woe betide the cyclist or driver of a cart who tries to use the road and thereby impede the progress of the racing cars. So that, in effect, the public are their own marshals, which no doubt accounts for the few accidents which occur, when one considers that the entry list is always about one hundred cars.

In accordance with usual practice, the Utility class, the Saloons, and the 1,500 c.c. and 1,100 c.c. cars were sent off first, and a tremendous crowd assembled in Brescia to see the start. In quick succession the machines disappeared out of sight towards Cremona, great interest being aroused by the green M.G. Mullettes, driven by Lord Howe and H. C. Hamilton, G. E. T. Eyston and Count Lurani, and Sir H. Birkin and B. Rubin. The first stage of the 1,000 miles course, the first control at Bologna, is the fastest of the whole route, towns and villages being taken flat out at speeds of anything up to 130 m.p.h. Through Cremona, Parma, Reggio and Modena the cars roared, fastest of all being Borzacchini on

one of the Ferrari-stable Alfa Romeos, who averaged 100.5 m.p.h. and beat the record by 10 seconds. On this stretch Count Trossi, a popular Italian driver, got into a disastrous skid on a corner.



Tazio Nuvolari, idol of the Italian crowds, cheered on his way to victory.

## THE SEVENTH MILLE MIGLIA—continued.

Although the two Magnettes were leading in the 1,100 c.c. class, unexpected opposition was coming from the little Ballila Fiats. These unsupercharged 4-cylinder side-valve cars of under 1,000 c.c. were putting up a most impressive show, averaging about 60 m.p.h. for the 750 miles to Bologna. On arrival at Bologna Eyston had to fit new batteries, for his dynamo had ceased to function. Howe's trouble was plugs and a broken headlamp bracket, but eventually the two cars got going again within twelve minutes of each other. The remaining Maserati, driven by Tabanelli, had run off the road and damaged its front axle. With great deter-

mination the crew had removed the axle, heated and straightened it at a local garage, and returned to the fray, arriving at Bologna an hour after the Magnettes had left. Eyston, through having to economise with his lights, using one only wherever possible, was gradually overhauled by Earl Howe, but no sooner had the latter got within striking distance than he was delayed once more with faulty plugs. Strazza, on a special Lancia Astura, had made a splendid run until just before the second Bologna control, when he tore out the fabric of a universal joint. After a hasty repair, however, he continued. At two o'clock in the morning we stood at the finishing point, a street on the outskirts of Brescia. All around thronged a dense crowd of Italians, excitedly discussing the possible winners of the various

classes. So powerful were the street lamps that it was almost like daylight, but up above the mysterious foliage of the budding chestnut trees held the darkness. Suddenly the sound of a bugle rang out (how well the Italians can stage-manage a motor-race!) and simultaneously a car with blazing headlights appeared down the road from Verona. It was difficult to distinguish the make of the car in its dazzling lights, and we screwed up our eyes in an effort to overcome this disability. Then the car came so near that we could see, and a great shout went up from the crowd, such as to gladden the hearts of the few Englishmen present. For the

utes behind, so that Nuvolari could well afford to take it easily. The first nine cars were Alfa Romeos, when the sequence was broken by Strazza's Lancia, which, had it not been for the delay caused by its universal, could have finished third. But there should be no "ifs" or "buts" in motor-racing!

The victory of the M.G. Magnette, apart from being a splendid performance on the part of its drivers, George Eyston and Count Lurani, is a good omen for the future of the car itself. It is safe to say that the average speed of both Magnettes would have been considerably higher if suitable plugs had been used. As it was, an enormous quantity were burnt out, and the constant stoppages brought down the average speed greatly. In spite of this, the cars showed themselves capable of very high speed, the chassis stood up to the rough roads without trouble, and the Wilson pre-selective gear box has been triumphantly vindicated as a definite improvement in the design of a racing car.

Special praise must be given to the little Ballila Fiats, which gave a performance little short of miraculous. Unsupercharged, with side-valve 995 c.c. engines, these little cars averaged over 53 m.p.h. for the race, being 100% reliable, and possessing remarkable road holding qualities.

## RESULTS.

1. Nuvolari and Compagnoni, Alfa Romeo, 15h. 11m. 50s. Average 67.45 m.p.h.
2. Castelbarco and Cortese, Alfa Romeo, 15h. 38m. 2s.
3. Taruffi and Pellegrini, Alfa Romeo, 16h. 0m. 57s.
4. Scariotti and D'Ippolito, Alfa Romeo, 16h. 22m. 10s.
5. Santinelli and Berti, Alfa Romeo, 16h. 25m. 39s.
6. Ruesch and Kessler, Alfa Romeo, 16h. 25m. 46s.
7. Gazzabini and D'Allesio, Alfa Romeo, 16h. 31m. 28s.
8. Foligno and Comotti, Alfa Romeo, 16h. 41m. 48s.
9. Peverelli and D'Orto, Alfa Romeo, 16h. 51m. 55s.
10. Strazza and Gismondi, Lancia, 16h. 58m. 20s.
11. Casti and Favero, Alfa Romeo, 17h. 7m. 37s.
12. Auricchio and Rosa, Alfa Romeo, 17h. 9m. 33s.

## 1,100 c.c. Class.

1. Eyston and Lurani, M.G., 18h. 1m. 4s. Average 56.89 m.p.h.
2. Earl Howe and Hamilton, M.G., 18h. 2m. 34s.
3. Ambrosini and Menchetti, Fiat Special.
4. Tabanelli and Borgnino, Maserati.

## Saloon Cars.

1. Sperti and Donnini, Alfa Romeo, 17h. 49m. 58s. Average 57.5 m.p.h.
2. Count Rossi Theo-Cattaneo Alfa Romeo.

## 1,500 c.c. Class.

1. Berrone and Carraroli, Alfa Romeo, 17h. 38m. 35s.
2. Dalla-Mura-Crivellari, Alfa Romeo.

## Utility Class, under 1,100 c.c.

1. Ricci and Maggi, Fiat, 19h. 11m. 36s. Average 53.8 m.p.h.
2. Spotorno and Ghiringelli, Fiat.
3. Ceschina and Guagnellini, Fiat.

## Utility Class, above 1,100 c.c.

1. Martinelli and Tragella, Bianchi, 18h. 54m. 15s. Average 54.2 m.p.h.

The M.G.'s equipment included Lucas ignition, Ferodo brake-lining, Dunlop tyres, K.L.G. plugs, T.F.T. fuel tank filler and Wilson gear box. 80 out of 88 starters used Ferodo brake-linings.

## A Positive Change for Pre-selective gear boxes.

Princes Avenue, Watford. Mr. Lewis's idea is to retain the lever beneath the steering wheel as in normal practise, but to do away with any selecting of notches, so that to change 'up' the lever is moved in an anti-clockwise direction, after which it returns automatically to the centre. To change down, the reverse movement on the lever is required, when it once again

returns to the centre position, and so on for each gear, up or down as the case may be. This method of operation can be carried out by a spring loaded cam to hold the change lever in a central position, while a similar lever, operating the gear box, can be placed at the foot of the steering column, and can be held in each gear position by a spring loaded plunger.

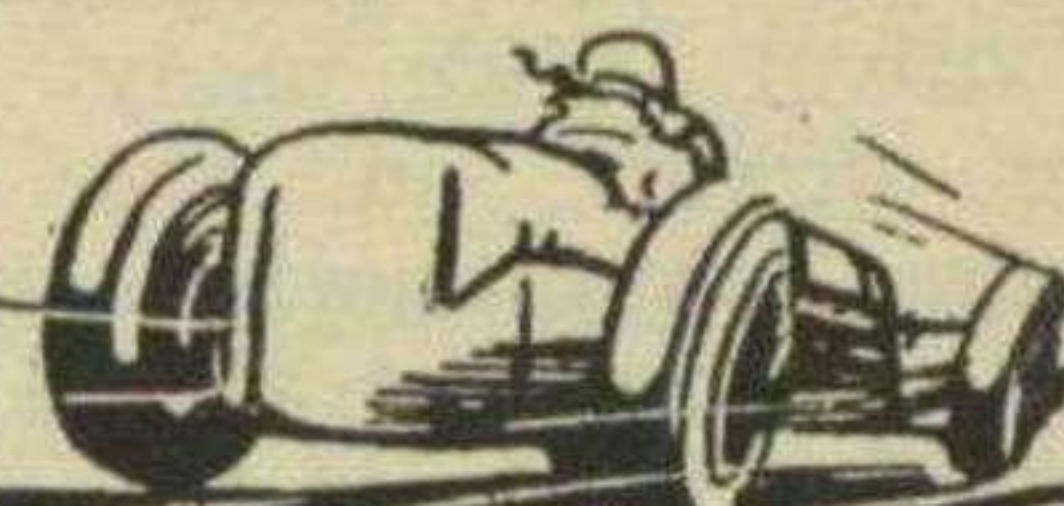


One of the finest performances in the race was made by the little "Ballila" Fiats. They are here seen lined up for the start.

# Rumblings



## BOANERGES



### The Magnettes.

SURELY no car has made a more promising *début* than the M.G. Magnette, with its splendid performance in the Mille Miglia. However carefully a car may be tested before a race there are generally weaknesses which can only be revealed during the course of the actual contest—but of these the Magnette apparently had none. The Italian race probably throws more strain on competing cars than any other—always excepting the Targa Florio—and demands the best from every part of a car's anatomy. The Magnette bids fair to be as supreme in its class as the Midget in the 750 category.

### A Popular Winner.

In view of George Eyston's association with M.G.'s in capturing all the records in the 750 c.c. class, it seemed particularly fitting that he should carry off the honours in the Mille Miglia, partnered by Count Lurani. I believe I am correct in saying that Eyston holds, or has had a hand in, more world's and International class records than any other man living. In addition his experience of road racing is extremely varied, as are the cars he has driven.

### Records.

Talking of Eyston and records reminds me of one particular record which will probably fall during the coming year to the Eyston/M.G. combination, but in this case a Magnette. I refer to the 1,100 c.c. record for the outer circuit of Brooklands Track, which stands to the credit of A. Goutte on a Salmson, at 114 m.p.h. Goutte's record has stood since 1926, and I remember very vividly his terrifying performance at the Easter Meeting seven years ago. Round the Home Banking the Salmson was never in a straight line for a moment, and the sight was rendered all the more sickening by the look of apparent terror on Goutte's face!

Horton's Midget has already beaten Goutte's speed, so it should not be difficult for the Magnette to raise the 1,100 c.c. record. Incidentally, the 750 c.c. Midget's speeds for the outer and mountain circuits are higher than the 1,100 c.c. figures.

### Motor-racing History.

The problem of keeping a record of motor-racing history is one that has taxed the minds of all enthusiasts, and I recently had an opportunity of examining a very

excellent solution to the problem carried out by one of our readers, R. C. Walden.

For each season Walden has a large scrap book, in which he keeps a pictorial record (together with lists of winners, etc.) of every motor racing event of the year. His books are particularly interesting because cuttings are taken from all the Continental sporting papers in addition to English journals, making an extraordinarily complete record. Walden is sufficiently keen on his hobby to make more than a mere scrap-book of his collection, and pages of international interest are ornamented with meticulously executed flags of the various competing countries. Finally, on the front page appear the autographs of, among others, many well known racing drivers.

### News Reels.

For some time I have had a great admiration for the good work done by the operators of the sound-film vans at motor-races, and I was particularly struck by two news reels of motoring events during last month. The first was the Donington Park film, which most of you have probably seen. In addition to some excellent shots of the corners, the operator had carried out a plan which has frequently been advocated in MOTOR SPORT, i.e., of taking a film from the cockpit of a racing car. There was one first class picture of the front wheel of the car, with the view ahead, while the rest were taken from the normal passenger's view. Incidentally the car used was Eason (hoots!) Gibson's Riley.

The second was a film of the Tunis Grand Prix, taken by Pathé, so far as I remember, and was a very fine picture throughout.

### Bugattis at Brooklands.

A feature of the Easter Meeting at Brooklands was the crop of fast Bugattis present. Rose-Richards' brand new double-camshaft "2.3" was a delight to the eye, and should give its owner a good chance of success during the season. As it was he scored a "second" and a "third." I was particularly impressed with Mathieson's car, a blown 2 litre, which won the fastest race of the day, 111 m.p.h. for a short handicap, and put up a new 2 litre mountain record at 72 m.p.h. Mathieson is undoubtedly one of the finest drivers on the mountain circuit.

Carr's Bugatti, as fast as ever, added to the general "Continental" air, but its driver did not seem at home on the unorthodox mountain circuit.

RUMBLINGS—continued.

### Straight's record.

I find difficulty in restraining my pen when writing about Whitney Straight's magnificent handling of the 2.5 litre Maserati. Certainly no such driving has been witnessed on the Mountain circuit before, and his record is likely to remain unbeaten for a long time. In spite of being so fast, Straight inspires the utmost confidence in spectators, and has that elusive "mastery of man over machine" air which distinguishes the first class Continental driver. With many dashing drivers on the Mountain Circuit one feels that at any moment they may overdo things a bit, but Straight always looks safe, and in complete charge of his car. His course at the Members Bridge corner is unusual. He shoots up to the top of the banking, and then cuts down and across as he accelerates away.

On one occasion he arrived at the Fork at a terrific speed, but without the slightest hint of overshooting. He was forced to brake so hard that the back of the car snaked from side to side, albeit under perfect control, and the sight sent my mind back to the British G.P. of 1927, when the grim Materassi, constantly chewing gum, approached the sandbank turn in the Finishing Straight on every lap with wheels locked, his Bugatti sliding on the wet track, sitting bolt upright and countering skids with firm mastery.

By the way, is it too much to hope that Straight will enter for the French G.P.?

1, 2, 3, 4!

Frazer Nash's had a field-day at the Brooklands meeting, Eccles scoring a first, Grogan a second, Kirkaldy a third, and H. J. Aldington himself a fourth.

Incidentally, the dinner dance given at the May Fair Hotel to celebrate the inauguration of the Frazer Nash Car Club was a very jolly affair. "H.J." was in the chair, and "Archie" Nash's consent to act as patron

of the Club was received with the enthusiasm it deserved. Now that it is an accomplished fact, the thanks of the Club are due to the man who was responsible for all the "donkey-work" of formation, namely "H.J.'s" brother W. H. Aldington, than whom a more ardent "Nash" enthusiast it is difficult to find.

### Sorry!

In our last issue I was careless enough to give as a



One of the brightest functions of the Season—the informal dinner held at the May Fair Hotel, London, on April 1st, by the Frazer Nash Owner's Club.

fact a piece of "news" which had not been verified at its source, viz., that a 1,660 c.c. 6 cylinder Meadows engine was to be fitted in Frazer Nashes. This epoch-making news caused a constant ringing of telephone bells at the Frazer Nash Works at Isleworth from every Nash owner in the country, actual and potential.

Let me explain the true facts of the case. A 6 cylinder engine has been tried recently in a Frazer Nash chassis, but, only as a part of the normal experimental work being carried on the whole time by manufacturers of high efficiency automobiles, who are constantly testing all possible means of "improving the breed."

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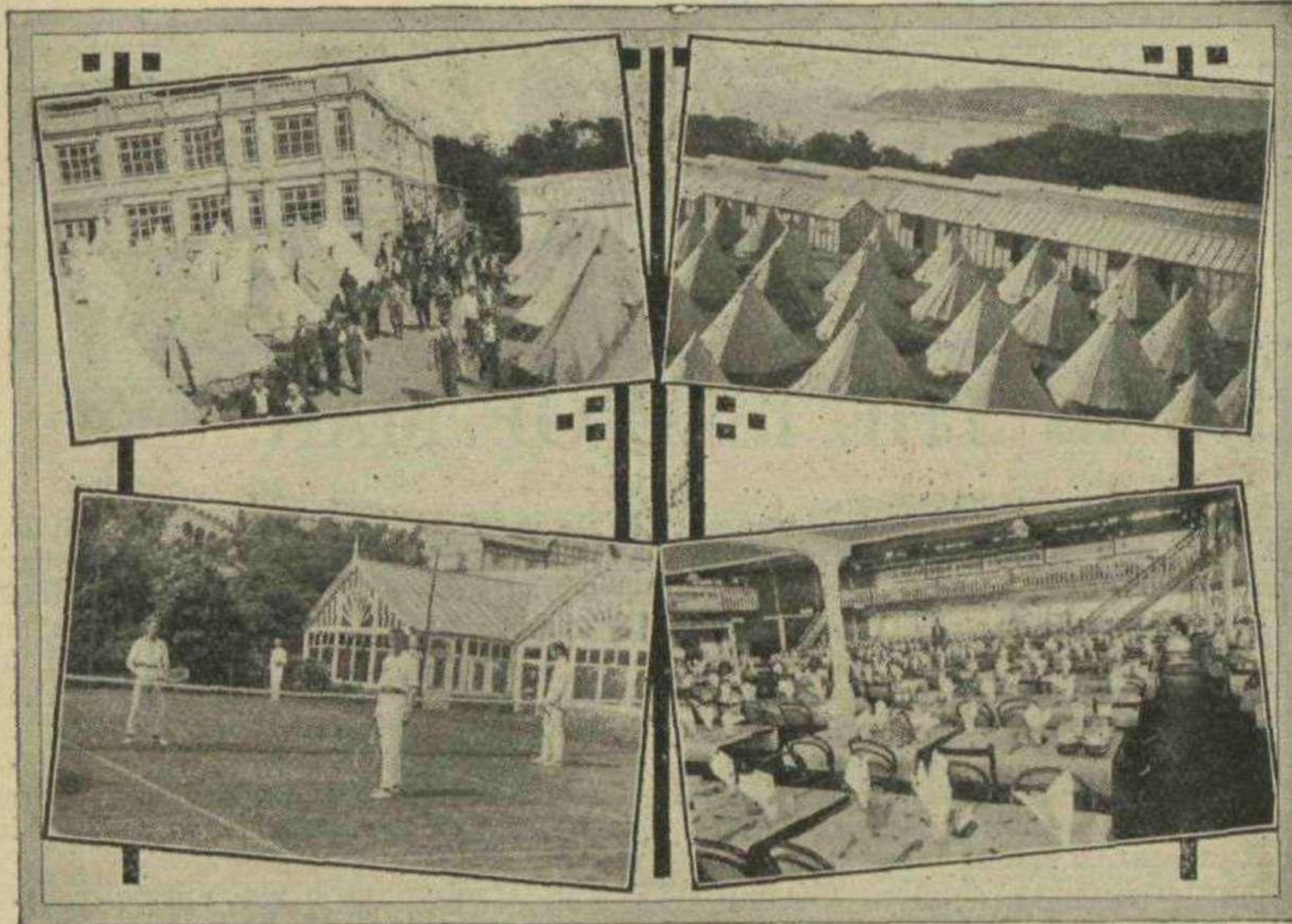
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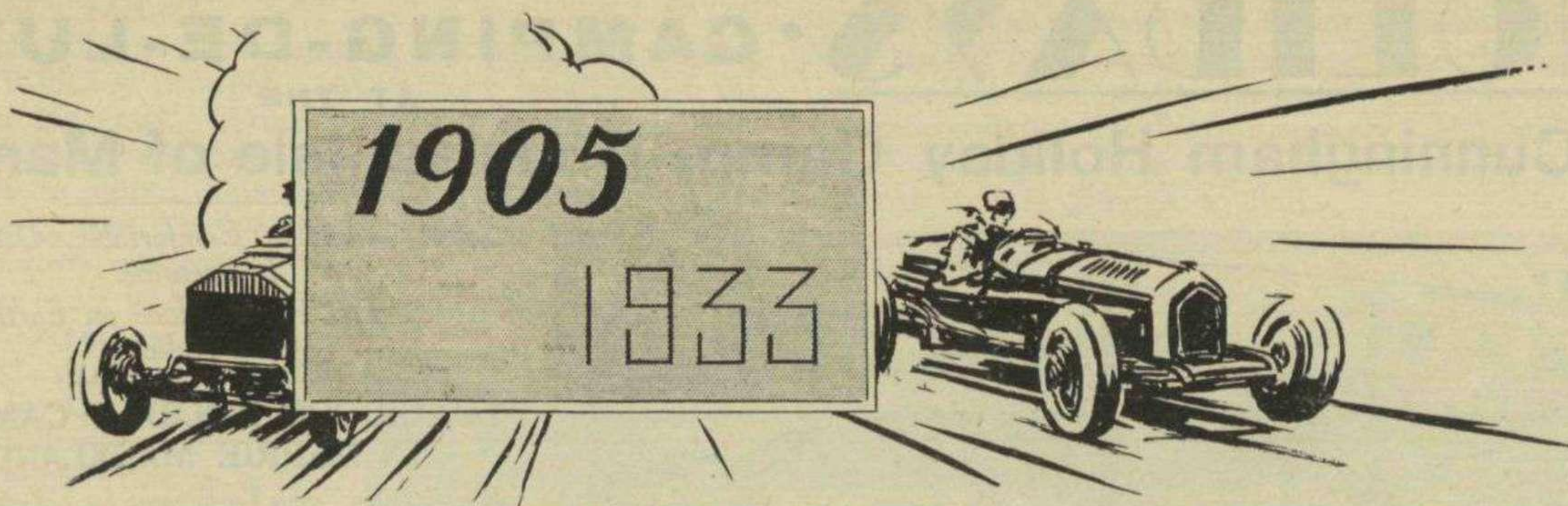
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T.T. MOTOR CYCLE RACES (JUNE)

R.A.C. CAR RACES - - (JULY)



## MOTOR RACING IN THE ISLE OF MAN

**N**OT quite "thirty years on," but what a series of changes has taken place in the world of motoring between these dates! The Gordon Bennett Races which began with the century had in six years developed monster cars, the biggest of them propelled by engines of 120 h.p., carried in flimsy chassis, machines which were obviously of no direct use in furthering the advance of touring-car design. In 1905 the Royal Automobile Club decided to organise a race which would effect this latter object, with the title of Tourist Trophy Race. The laws of England prevented such a race being held on the public roads and so the Club was glad to accept the invitation of the Government of the Isle of Man, which had also permitted the holding of the Gordon Bennett Eliminating Trials in its territory, to hold the T.T. Race there in September.

As usual, there was a rule setting forth the maximum and minimum weights of the cars, which had to come within the limits of 2,250 and 2,550 lbs., and to get down to these figures all sorts of methods had to be used, most of which at once took away from the value of the race as a means of developing the touring qualities of the cars entered. Drilling the chassis was usual, but in many cases small tyres had to be used, mudguards and other parts of the car removed, cardboard bonnets fitted, rope substituted for the brake rods, and even the hub caps replaced by cloth covers.

### A False Prophecy.

The wheel base had to exceed seven feet, and the winning car managed to accommodate a four-seater body on a chassis only eight inches above the minimum. Imagine a top-heavy structure on a chassis about six inches longer than the J.2 Midget and one gets an idea of the typical touring car of the day. The famous critic of the time who declared that the low built racing machines and the normal touring vehicle were totally different, and it must be remembered that the Volsley Beetles and such cars were low even according to our present-day standards, was not exaggerating. His prophecy that the low car would never find favour was as wide of the mark as any forecast could be.

A third regulation designed to exclude the racing car was a petrol allowance of

22½ miles to the gallon. Gear ratios of 1.5 were quite common, and free-wheeling down hill was the rule, while the passengers were often chosen for their strong lungs, as one of their duties was to blow the last drops of fuel from the tank!

The course used was the long one over which the Eliminating Trials had been run, Douglas to Castletown, north to Ballacraigne, then following the route used at present to Ramsey, and back over the Mountain Road to Douglas. The finish was arranged on a piece of rising road immediately after Bray Hill, to prevent cars whose fuel was exhausted from being able to coast over the line.

### Many Retirements.

The cars were sent away one at a time at minute intervals from a side road just above Quarter Bridge. The Hon. H. S. Rolls who was No. 1, was also the first to encounter trouble. A loose nut which had somehow found its way into the gearbox got amongst the pinions and wrecked the mechanism completely. Another car which fell out early was Downie's Argyll, which rammed the Ballasalla corner, while Arnott, whose Minerva was greatly fancied, was delayed by petrol feed trouble.

On the Mountain the surface was greasy, and on the lower part of the course a dust-laying compound had been used rather freely, but the faster cars, notably P. Northey on a Rolls-Royce were making good progress, and of the late starters the Vinot and Arrol-Johnson were obviously doing well.

High speed was already showing up the weakness of the touring cars, and Bennett, driving a Cadillac came to grief at what is now called Creg na Baa corner, through the failure of a wheel, and the six-gear Vauxhall left the road for the same reason. Lee Guinness, driving a Darracq, hit the cottage above Keppel Gate and bent his front axle.

### Victory for Arrol Johnson.

Napier on the Arrol Johnson was now three minutes ahead of Northey on the Rolls, but he lost all his advantage when his silencer fell off and had to be secured. Northey by virtue of his early starting number finished first, and reports of Napier's progress failed to come in. Sud-

denly the squat aluminium bonnet of No. 42 was sighted and the Arrol Johnson hummed over the finishing line, winner by less than two minutes. Its last lap was made at the record speed of 38 m.p.h., not a very high speed by modern standards, but excellent for those times, taking into consideration the shape of the bodies, and the handicap of limited petrol. Napier averaged 33 m.p.h. for the course.

The Arrol-Johnson was specially built for the race, and had a two cylinder engine with the bores set across the frame. There were two pistons per cylinder, and the charge was compressed and fired between them. Rods and links communicated the motion of the pistons to a four throw crankshaft. Low tension ignition was used, and the engine speed was controlled by a governor, which regulated the lift of the exhaust valves.

The chassis was quite low built, and had wire wheels and internal expanding brakes.

The Rolls-Royce and the Vinot, on the other hand were standard cars with normal four cylinder engines. The Rolls had a geared up fourth speed, the Vinot merely a normal three-speed box.

### Later T.T. Races.

The same type of race was run in 1906 and 1907, but in the following year the T.T. was freed from restrictions other than a minimum weight limit while the bore was not to exceed 4 inches for a four-cylinder car, and proportionately less for a greater number of cylinders. The race was held again in 1914 and after the War in 1922, for cars up to 3 litres and then lapsed until run under different rules at Ulster in 1928.

Fashions in car races change according to the wishes of the manufacturers. The Grand Prix period after the War was dominated first by the Sunbeam-Talbot-Darracq teams, and then by the 1½ litre Delages, and only wealthy firms with a fund of racing data could hope to compete successfully. Touring car races then became the vogue until the battle of Bugatti and Alfa-Romeo brought racing cars into prominence again.

With the development of cars with superb brakes, low centres of gravity and the other advances which differentiate the old time racing car from the new,

*MOTOR RACING IN THE ISLE OF MAN—continued.*

race organisers have ceased to trouble about making regulations to limit speed.

**The Development of round the town Racing**

Given cars developing the power and speed of modern "voitures de course," one has either to race them on a circuit like that of Rheims or Montlhéry, or give them narrow and winding roads so that sheer speed is subordinated to acceleration and ease of handling. The latter type is exemplified in the original Round the Town race, the Grand Prix de Monaco, which was first held in 1929. The course is a little under 2 miles long, the two straight sections not more than quarter of a mile in length, and the remainder winding through the streets of the town. As a spectacle and as a test of car and driver this type of race is quite the equal of the old triangular course G.P., and events of a similar type are now run at Nimes, Nice, and latest of all at Pau.

The Manx course differs somewhat from those used in France, as it is almost 5 miles in length. Two thirds of this passes through the ordinary streets of Douglas with a good number of right angle turns, but there is a half-mile straight along the highest part of the course, while the Promenade is a mile long, so that really high speeds should be reached. The Grand Stand will be situated just before the acute bend leading the cars back up into the town, and gear-changing and braking will be effected in full view of those who take seats there. A great many hotels overlook the course, and from their windows one will also be able to have an excellent view of the racing.

**How to get to Douglas.**

Douglas itself is little changed from the days of the Island's first road-race, and is still visited by thousands who take their holidays there in August and September. The Steam Packet Co. run steamers from Liverpool, Heysham, Fleetwood, Ardrossan in Scotland, and Dublin and Belfast, so there will be no difficulty in getting to the races, and the Company's experience in dealing with rush traffic can be gauged from the fact that on one August Bank Holiday, no less than 44 vessels landed their passengers at Douglas.

There is a great variety of accommo-

dation in and around the town. The best hotels lie either at the extremities of the two-mile long bay or along the Promenade, while for those whose enthusiasm for motor racing is not equalled by the extent of their wealth, can stay at the smaller places and boarding houses, where the tariffs are surprisingly low. A host of theatres and cinemas and other places of amusement afford entertainment in the evening.

Douglas is by no means the whole Island. Its thirty miles by ten of area is traversed by a number of excellent roads, the smaller towns are interesting, and the scenery is of the most varied character, the wildness of Scotland on the West Coast giving place to shady glens suggesting Devon as one descends the hills toward the East. Last but not least may be mentioned the fine natural golf courses, covered with the springy turf which one only finds near the sea. For those who can spare the time it is well worth taking a ten days' holiday there, particularly with a car, though bus and train services connect the principal places of interest. It was called the Enchanted Island in the old days, and its glamour and its charm will not be lessened by the additional though strictly modern development of motor racing.

**Mannin Moar and Mannin Beg Car Races.**

The Regulations for the Douglas Car Races in July have just been issued and copies may be obtained from the R.A.C. Pall Mall, S.W.1. All unnecessary restrictions have been cut out, and the arrangements should satisfy the most fervent Grand Prix enthusiast. It seems unfortunate that the first practise date should be so long before the actual race days, but presumably this was found necessary to avoid dislocating local traffic.

The races are to be held over a 5 mile circuit on Wednesday and Friday, 12th and 14th July. The Beg Race, on the first day, is for cars with engines up to 1,500 c.c. unsupercharged and 1,100 c.c. supercharged, cars above those limits running on the Friday. Entries close on Monday, 15th May, and the fee is £15 10s., which includes third-party insurance. Not more than 30 cars may start in each race, and if more than this number are entered the

Club will select the 30 most experienced drivers. The others will either receive back their fees or will be retained as reserves, in which case they will be allowed to practise on the course.

A Trophy will be awarded to the winner of each race, that for the Moar Race being presented by the M.G. Car Co. In addition, prizes of £200, £150, £100 and £50 will be awarded to the first four in each race.

The cars eligible must have two-seater bodies and carry mechanics. They must also have four-wheel brakes, bonnet straps, regulation racing number plates, and exhaust pipes extending to the rear axle.

The races are to be held over a distance of 50 laps. Any fuel may be used. Tools spares and supplies can only be kept at the pits.

Practising takes place on Thursday, 6th July and Monday, 10th July, between 10.30 and noon. Five laps must be completed.

The cars will be started in rows with engines running. The order will be decided by the speed which cars put up in practise, the fastest ones being in the front row.

**Motor Cycle T.T. Races.**

The usual three races, the Junior, Lightweight, and Senior, are to be held in the Isle of Man on the 12th, 14th, and 16th June. The starting time of the Junior and the Senior has been altered to 11 o'clock, and the Lightweight race begins at 9 a.m. This allows time for a four lap Sidecar Race starting at 2.30.

Held previously in 1927 and 1928, the Sidecar Race as a spectacle was more even exciting than the Senior of that period. This year it is open to machines up to 1,000 c.c., and it is hoped that George Brough will drive one of the machines which bear his name, while anyone who ever saw Freddy Dixon's banking sidecar in action will look forward to its reappearance.

The subsidy to foreign riders continues, but this year great care is being taken in selecting them, only riders approved by manufacturers being eligible for the grant. Overseas riders on British machines and foreign riders on their national mounts will add to the variety and interest of the races.

**A One-Piece Quick-Action Filler Cap.**

The Bonora Quick-action Filler Cap marketed by the T.F.T. Trading Company, of 7/9 St. James's Street, London, S.W.1, possesses all the advantages which the normal screw-type filler cap lacks. To begin with, it is really quick in action, only one movement of the lever being required to bring the cap to a vertical position, and vice-versa. Then, being integral with the orifice of the tank, it cannot be mislaid or left behind after a hurried stop at a garage.

Incidentally, as proof of its efficiency under the most stringent conditions, the Bonora filler cap has been used by Italian racing drivers for years, and was fitted to the victorious M.G. Magnettes in the recent 1,000 Miles Race.

The price asked is 15s. 6d., and the accessory can be fitted to any make of car.

**Throw away that piece of Cardboard!**

SOME kind of radiator-temperature control is essential to obtain the greatest efficiency from a sports car, and during the winter months it is astonishing how many cars are running at a far too cool temperature.

In order to avoid the use of a "family" car radiator muff, Messrs. Frank Ashby & Sons, Ltd., of Birmingham, have recently introduced an ingenious accessory, known as the "Sportsmuff." Neatly made, the "Sportsmuff" is in the form of a blanket for the lower half of the radiator, and being a single piece, can be attached to a stone-guard with ease—a difficult matter when a full sized muff is used. Indeed speed of fitting, and ease of storage on the car when not in use are the great advantages of the "Sportsmuff," and being well tailored, it

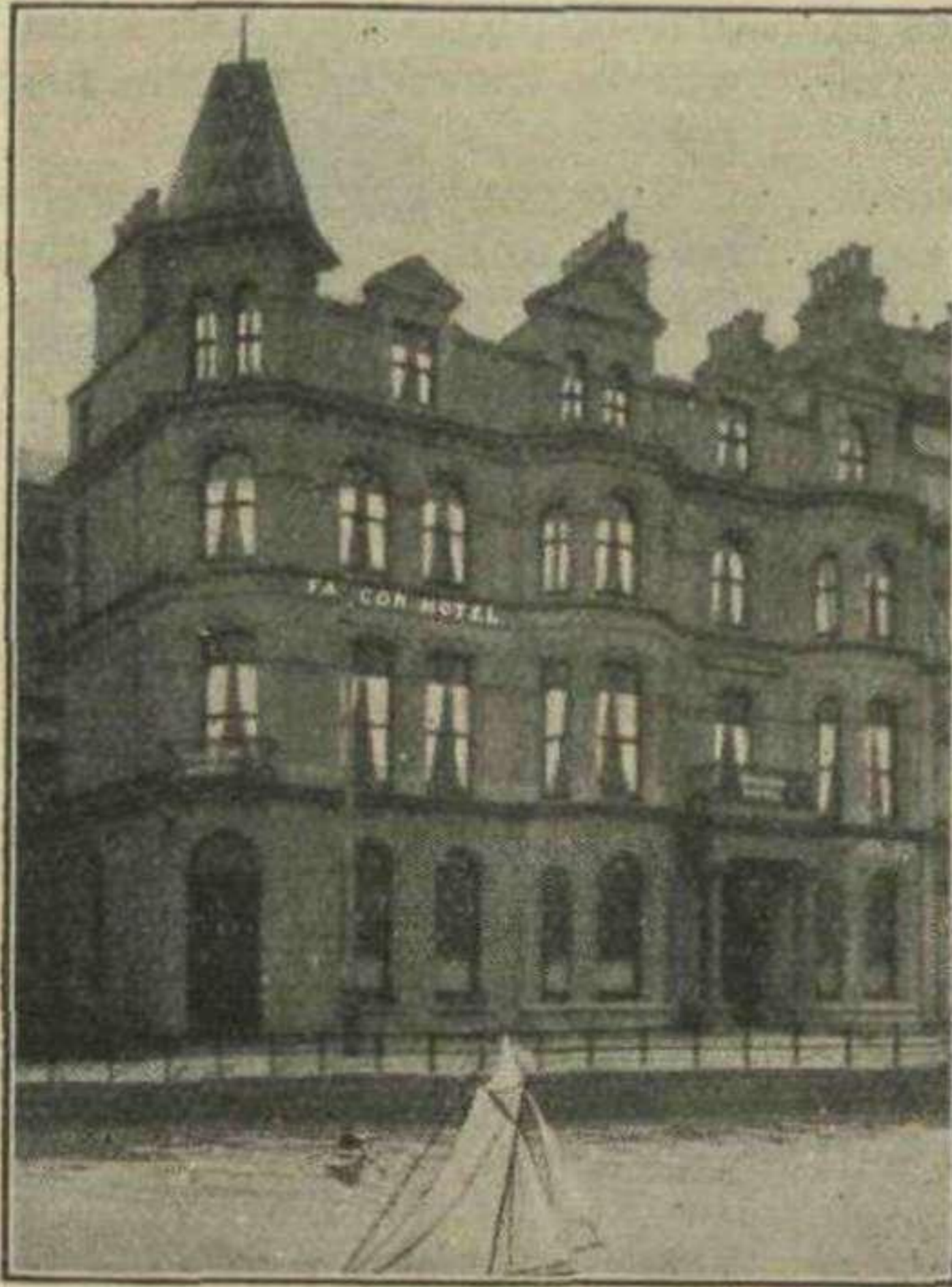
does not sag or gape when in place on the radiator.

There are three types available. Type A, combined with a "Brooklands" stone-guard at a special price ranging from 40s. upwards. Type B, radiator fitting for those who do not wish to go to the expense of fitting a stone-guard, costing 10s. 6d. to 12s. 6d. complete. Type C, for cars having built-in stone-guards, such as M.G. Midget, Hornet special, etc., price 12s. 6d. Finally, all models can be fitted with a "Brooklands" Helmet Badge, at an extra charge of 2s. Existing stone-guards can be converted to take a "Sportsmuff" at a cost of 2s., at Works.

For the man who was to make repeated short journeys in town, or long runs at night in the Summer, the "Sportsmuff" should prove invaluable.

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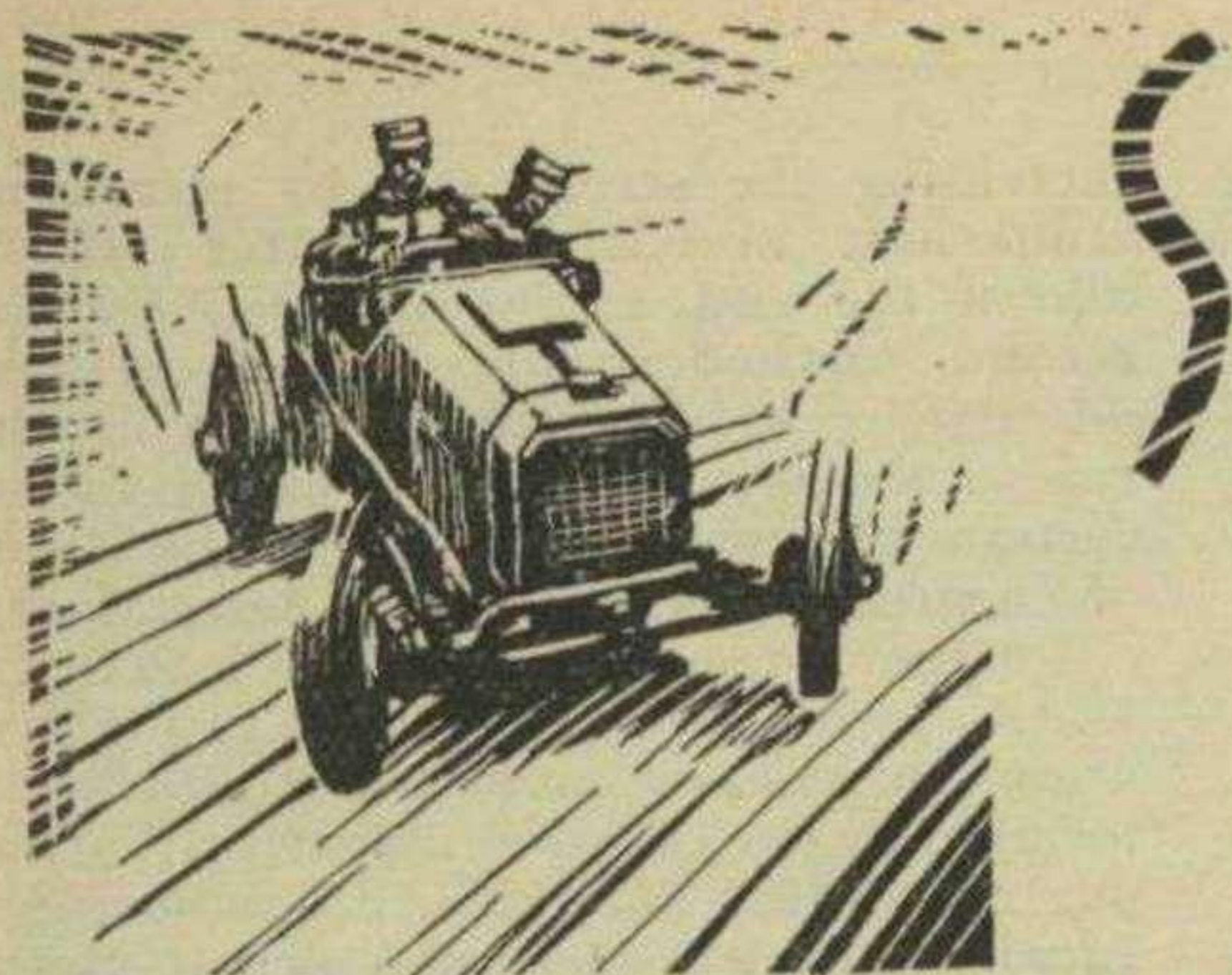
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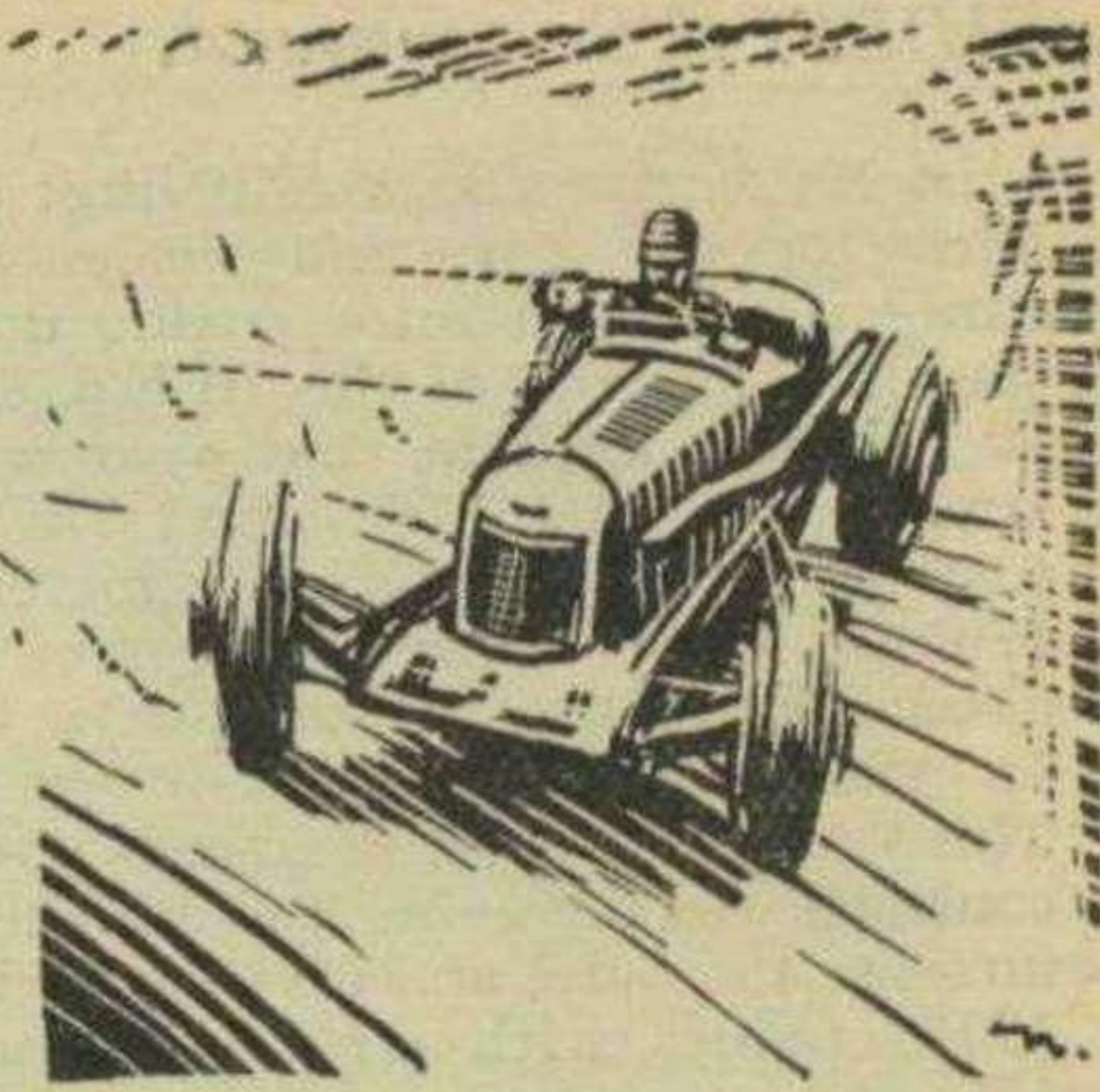
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# SIDESLIP

By  
Baladeur



## An "Alfonso" in Holland.

A PASSING remark in the course of a recent "Sideslip" on the subject of M. Marc Birkigt and pre-war Hispano-Suizas has brought me a letter from a reader in Holland, who has recently purchased a 1912 Alfonso XIII model of the famous marque for 75 florins, which used to be just over £6 and is now about £9. This Dutch enthusiast has apparently given his veteran flyer a thorough overhaul, fitted a braked front-axle off a 1926 2-litre Ansaldo, and, so he tells me, in Holland where there are few sports cars about, can usually hold his own with anything he meets on the road. He asks me in his letter for historical details of the Alfonso model and its forbears and in reply I have referred him to the number of MOTOR SPORT for July 1931, in which we described such a car as his as one of the "Veteran Types" series and traced its descent from the racing car which won the Coupe des Voiturettes in 1910.

## A Famous Driver—now Forgotten.

True sports cars, such as the Alfonso Hispano, were something of a rarity in pre-war days, and the subject is thus perhaps of some general interest. The facts of its descent were responsible as a matter of fact for what is perhaps the most remarkable point about this Hispano engine, at any rate on paper. Its dimensions in fact are 80 x 180 mm., and a stroke-bore ratio of 2.25 : 1 can only be explained by the fact that the engine was directly developed from that designed for a voiturette race run under the limited bore-unlimited stroke regulations. The Alfonso engine was in actual fact moderate compared with that in the car with which Zucarelli won the race at Boulogne in 1910. As a driver, incidentally, Zucarelli is now almost forgotten but in another age his was a name to conjure with. After the withdrawal of Hispano-Suiza from active racing in 1911, Zucarelli joined the Peugeot *équipe*, and with Georges Boillot and Jules Goux, formed a team which was almost invincible for several seasons. Unfortunately in 1913 while practising for a race, Zucarelli's car turned over and the driver was killed. I well remember that a good many years ago we were making the most of a wonderful stretch of road which runs nearly due South from Evreux to Dreux when we espied on the left a stone monolith. In spite of its being in the days of 2-wheel brakes we stopped and reversed to inspect it; but ever afterwards I was quite unable to remember where the monument was or in

memory of what driver it was erected. It was not until a couple of years ago that I was motoring, northwards, this time, along the same stretch of road, when I again espied the monument. In the meantime of course front brakes had made their appearance, but speed also was higher, and again we had to reverse to read the inscription. On my Michelin map a cross now marks the spot and a note in the margin informs me that there is the Zucarelli monument.

## A Roadside Monument.

This incident reminds me of a friend of mine who some years ago was motoring from Paris to Bordeaux on a sports car which had previously belonged to me. Flat out along a beautiful piece of road he suddenly came upon a long gentle bend which in practice proved much more dangerous than it had looked. For some yards he fought that gallant car which longed to go stern first, and then just as he thought he was round, he nearly wiped the tail off on a large stone monument by the roadside. As soon as he and the motor had recovered sufficiently, he returned to see what was this rock on which he had so nearly foundered. On it he read the words, "To the memory of Marcel Renault, killed at this spot in the Paris-Madrid Race, 24th May, 1903."

## A Record Stroke.

However to return to the engine of Zucarelli's voiturette racer, this motor had a bore and stroke of 65 x 200 mm., the ratio in this case being 3.08 : 1. Again these dimensions were moderate compared with those of another car which ran in the same race, a V 4-cylinder Peugeot driven by Georges Boillot. This engine, like the Hispano-Suiza had a bore of 65 mm., which represented the limit assigned by the rules of the race for 4-cylinder engines, but in the case of the Peugeot the stroke was 260 mm., and the stroke-bore ratio therefore no less than 4 : 1! This ratio must I should think, constitute a record, but actually in the same race there was another car with a longer stroke. This also was a Peugeot which was driven by Jules Goux, and which had a V-twin engine of which the dimensions were 80 x 280 mm. I should think that this also constitutes a record as the engine with the longest stroke ever put into a car. Even the giant 110 h.p. Gobron-Brillié which competed in Paris-Madrid and which had two opposed pistons one above the other in the same cylinder only had a COMBINED stroke of 220 mm.

## A Knotty Point.

A propos of Goux's Peugeot I was amusing myself the other day by trying to calculate the minimum overall height of an engine with a stroke of 280 mm. Not being an internal combustion engine designer or anything like it I am sorry to say that I do not think I ever reached a conclusion. One can of course add the stroke to the same number representing twice the length of a crank throw; but supposing that the bore is limited I presume that the centre line of the crankshaft is necessarily a certain distance below the bottom of the cylinders to allow for clearance of the connecting rod in its extreme angular position, and that tested my mathematics a bit. Incidentally I think that the angle between the cylinders was 15°, which makes it more difficult. Perhaps my technical readers will enlighten me. For the benefit of the others I may remark that this Peugeot engine had overhead valves operated by a camshaft beside them, and the top of the bonnet was about 5ft. from the ground.

## Piston Speed.

The exaggerated dimensions of these Peugeot racers of 1910 led to the suppression of the limited bore regulations and its replacement by the capacity limit. The origin and rejection of the old limit is however, of some interest. The earliest motor car engines had quite large stroke-bore ratios, the dimensions of the 3½ h.p. Daimler engine fitted to the Panhard et Levassor car of 1894 for instance being 75 x 140 mm. and the ratio thus 1.87 : 1. This engine attained a crankshaft speed of 750 r.p.m., and a piston speed, therefore, of 210 metres per minute. During the next seven years designers of racing cars were given a free hand to increase the power of their engines without any limitations. The first and most obvious method was to increase the number of cylinders from two to four. Next crankshaft speeds were pushed up to about 1,000 r.p.m., and while strokes remained at 140 mm., piston speed went up to 280 metres per minute. This done, designers set about seeing how far they could increase the bore of their engines without making the reciprocating parts so heavy that crankshaft speed was reduced. To take as an instance Panhard et Levassor, which was the most successful marque during this period, the bore of the 4-cylinder engine increased from 80 mm. in 1896 to 130 mm. in 1901; but during these years no engine had a stroke in excess of 140 mm. and piston speed remained around 280 metres per minute.

*SIDESLIPS—continued.*

In 1902 came the weight limit of 1,000 kilos for the car, and designers were stung by it even into putting up piston speed. The bore of the 70 h.p. Panhard et Levassor built in that year was, it is true, increased to 160 mm., but for the first time the stroke was increased to 170 mm. Piston speed must have reached about 340 metres per minute, a triumph for the engineering skill of the period. This done, however, designers once more concentrated on seeing how far they could increase the bore, and up to and including 1907 engines with strokes in excess of 170 mm. were extremely rare and probably were only used where the crankshaft speed was comparatively low. In the meantime, however, the bore had reached as much as 190 mm.

**An Increase to 432 per minute.**

Then in 1908 came the Grand Prix regulations limiting the bore of engines to 155 mm. Now in order to increase the capacity  $\times$  time product of their engines, designers had to increase piston speed, either by giving their engines longer strokes, or else by increasing the crankshaft speed. Rather naturally the former method was adopted in most cases, although by this date crankshaft speeds had risen to about 1,200 r.p.m. De Dietrich, for instance, whose engine for the 1907 Grand Prix had had dimensions of 180 x 170 mm., and a stroke bore ratio of .94 : 1, produced a motor for the 1908 race with a bore of course of 155 mm., and a stroke of 180 mm., giving a ratio of 1.16 : 1. At 1,200 r.p.m. the piston speed therefore, was 432 metres per minute. Unfortunately, however, owing to the suppression of the Grand Prix in 1909 the later stages of this development, as applied to large cars, was never witnessed.

**A Win for the Single Cylinder Peugeot.**

Nevertheless the development of the process was to be carried on most effectively in the series of voiturette races organised by our contemporary "l'Auto." The 1908 race, like the Grand Prix, was run under the limited bore regulations, the maximum cylinder diameters being 100 mm. for singles, 78 mm. for twins and 62 mm. for fours. Light car design was already much more daring than that of larger vehicles. Small engines were already being made to turn at speeds up to 1,800 r.p.m., and yet the designers of single-cylinder motors were employing strokes as long as those used in the larger cars. The 1908 single-cylinder racing Aries, for instance, had a stroke of 180 mm., giving a stroke-bore ratio of 1.8 : 1 and a piston speed at 1,800 r.p.m. of no less than 648 metres per minute. The strokes of the two and four cylinder engines were of course not so high, and the revs. were probably not materially higher either. In these circumstances it is hardly surprising that the first half dozen places in the race went to singles, the first twin was seventh and the first four eighths.

In 1909 the organisers of the race turned to what was in reality a capacity limit, but the rules were considerably complicated by the fixing of a maximum stroke bore ratio for single cylinders of 2.5 : 1

and various provisions which aimed, unsuccessfully, at levelling up the changes of singles, twins and fours. Peugeot, however, cheerfully adopted the highest permissible ratio with a single cylinder of 100 x 250 mm. Crankshaft speed had by now reached 2,000 r.p.m., and the piston speed in this case must have been somewhere near 1,000 metres per minute. The longest stroke used for a 4-cylinder engine, 140 mm. was that of the Hispano-Suiza, but owing to the small bore of 65 mm. makers were still unable to overcome excessive frictional resistance and the crankshaft speed of the fours was little or no higher than that of the singles. The piston speed in this case was thus only about 560 metres per minute—and as was to be expected the single-cylinder Peugeot proved the winner.

**Hispano versus Peugeot.**

By 1910 the scene had entirely changed. The rules once again merely limited the bore, but all the fastest cars in the race, with the exception of Goux's V-twin Peugeot, were fours. The winning Hispano-Suiza had a bore and stroke of 65 x 200 mm. and ran at 2,300 r.p.m., giving a piston speed of 920 metres per minute. Here, however, is where the interest lies. Boillot's 4-cylinder Peugeot had the same bore as the Hispano and a stroke of 260 mm. instead of 200 mm. Yet both are stated to have developed 45 h.p. Now the Peugeot had 4 overhead valves per cylinder, the Hispano 2 side valves; the Peugeot engineers had more experience of building first class racing voiturettes than had Marc Birkigt. Therefore I conclude that if the larger Peugeot engine only developed the same power as the Hispano, it cannot have turned so fast. In other words Marc Birkigt had seen that the way of further progress in the matter of getting power from a limited bore engine lay not in increasing the stroke but in increasing crankshaft speed.

**A 3 litre Limit.**

Unfortunately the sight of Goux's Peugeot with the top of its bonnet five feet from the ground so terrified the organisers of the voiturette race, that for 1911 they abandoned the limited bore rule and substituted for it a capacity limit of 3 litres, together with the seemingly quite pointless stipulation that the stroke bore ratio was not to exceed 2 : 1. (Peugeot, I may say, lived up to their reputation by building engines of 78 x 156 mm.) By this means the Hispano-Peugeot controversy did not get a chance of being fought out to a final conclusion, as makers were now only allowed to try and increase the power developed by their engines by increasing the crankshaft speed.

**The Limited Bore Regulation.**

From all this I draw the somewhat surprising conclusion that the limited bore regulation, which we have all laughed at in our time for producing Goux's Peugeot, is really a better formula than the limited capacity rule, which we have all doted on for the last twenty years. The former sets makers the problem of increasing piston speed EITHER by

increasing the stroke OR by increasing crankshaft speed. The latter ONLY allows the end to be obtained by the second method. Goux's Peugeot was admittedly a monstrosity; but if the rules had been left alone it would almost certainly have died anyhow at the hands of Zucarelli's Hispano and its descendants.

Further I reach the conclusion that the R.A.C. formula for assessing h.p. for taxation purposes is more scientific than a formula based on cubic capacity. (That ought to sting someone into objecting.) Incidentally why has no British motor manufacturer risen to the problem of the h.p. tax by building a long-stroke engine instead of concentrating exclusively on crankshaft speed? I suppose the only answer is that they are all sub-consciously so powerfully influenced by racing (pace Sir William Morris) that the alternative never occurred to them.

**An Interesting French Car of 1910.**

One other gibe. A good modern straight-eight 2½-litre racing engine with a stroke of say 95 mm. at its maximum speed of 6,000 r.p.m. attains a piston speed of 1,140 metres per minute, or exactly 14% more than the 1909 racing Peugeot engine.

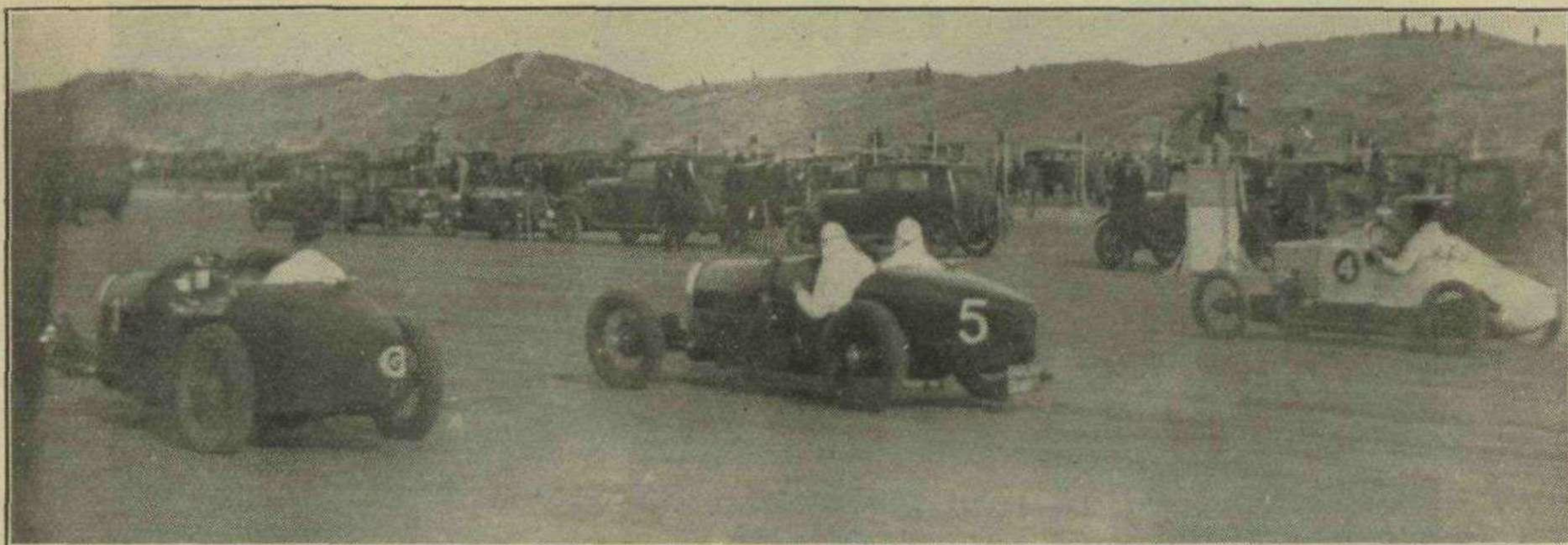
I had finished writing these "Sideslips" when I received a most encouraging letter from a correspondent in France, who after various kind remarks about former articles in this series, goes on to say:—

"An interesting little car to write about is the little Coupe des Voiturettes Hispano, of, was it '10 or '11? Not the 80 x 180 mm. type, but the racer, 65 x 200 mm. Only about 6 of these were made; I never owned one, but drove one that Charles Faroux, the writer in *l'Auto*. etc., had. A marvellous little car with 4 brass-bound port-holes in the bonnet that registered with the 2" exhaust pipes. You could tune in the evening by watching the colour of the 4 exhaust flames that belched from the bonnet, but even the French police of '10 or '11 began to object to this; one called it 'échappement un peu trop libre.'"

WHAT DO YOU  
KNOW ABOUT  
CARS?

PLENTY!

WELL, TURN TO  
PAGE 322.



## RACING AT SOUTHPORT

Many Events but lack of Entries

THE weather was kind to the Southport Racing Club on the second meeting of the year, and bright sunshine tempered the keen inshore wind. The sands were in excellent condition except for a small patch of water near the southern end of the course. As usual, this consisted of a mile-long stretch of sand divided down the middle by a line of flags with hairpin turns joining the two straight sections.

Car and motor-cycle events alternated, 23 in all, and with the small number of vehicles in each event, interest amongst the spectators was obviously flagging before the last race took place some five hours after the start.

Two fast cars which unfortunately did not run were K. Hutchison's Bugatti, which did so well at Donington, and G. J. Jackson's old Grand Prix straight-eight Sunbeam. The former was prevented from running by a leaky petrol union, while the Sunbeam actually started in a sprint race, but split a radiator hose connection, and Jackson was unable to get a replacement of suitable size in the town.

The first eight races were Straight Miles, and No. 1 for 750 c.c. cars was won by

C. D. Parish in an all-Austin event. Parish did well in the 1,100 c.c. class, but was caught just at the finish by H. B. Prestwich, driving a white twin-cylinder Frazer Nash fitted with an unusual single-seater racing body. Parish was again successful in the 1,500 c.c. racing class, as the Nash refused to function a second time, while the 1½ litre Sports class looked painfully slow in comparison. In the open class, Tong, in a three-litre Lagonda, dealt successfully with another car of the same type and a closed three litre Bugatti.

In the 2 Litre Racing class, C. T. Rhodes made a fine start and kept ahead of Noel Carr. In the next race Jack Field's famous 2.3 Bugatti, painted brilliant blue, was seen for the first time, and also the three litre Sunbeam, even more striking with its orange chassis and blue body-work. Ten yards over the line, however, a cloud of steam shot out of the Sunbeam's bonnet and enveloped the mechanic; cause, a burst water connection. Carr crossed the finishing line a few yards ahead of Field. In the following race the order was reversed.

Field had an easy win in the Three Mile Race and Stephenson, who is often seen at

Brooklands, a long distance behind in his Austin.

There were nine starters in the Five Mile Race, but as they varied from Parish's Austin to Field's Bugatti, the smaller fry did little towards making a close finish. Field and Carr seemed, as usual, well matched. The former gradually drew ahead, while Rhodes on a supercharged two litre Bug finished third. The three Austins did a certain amount of private scrapping, as, unlike the larger cars, they all took the hairpins close in with their fronts heeling over in a disturbing way. Walker and Stephenson nearly collided and Parish was again successful in his category.

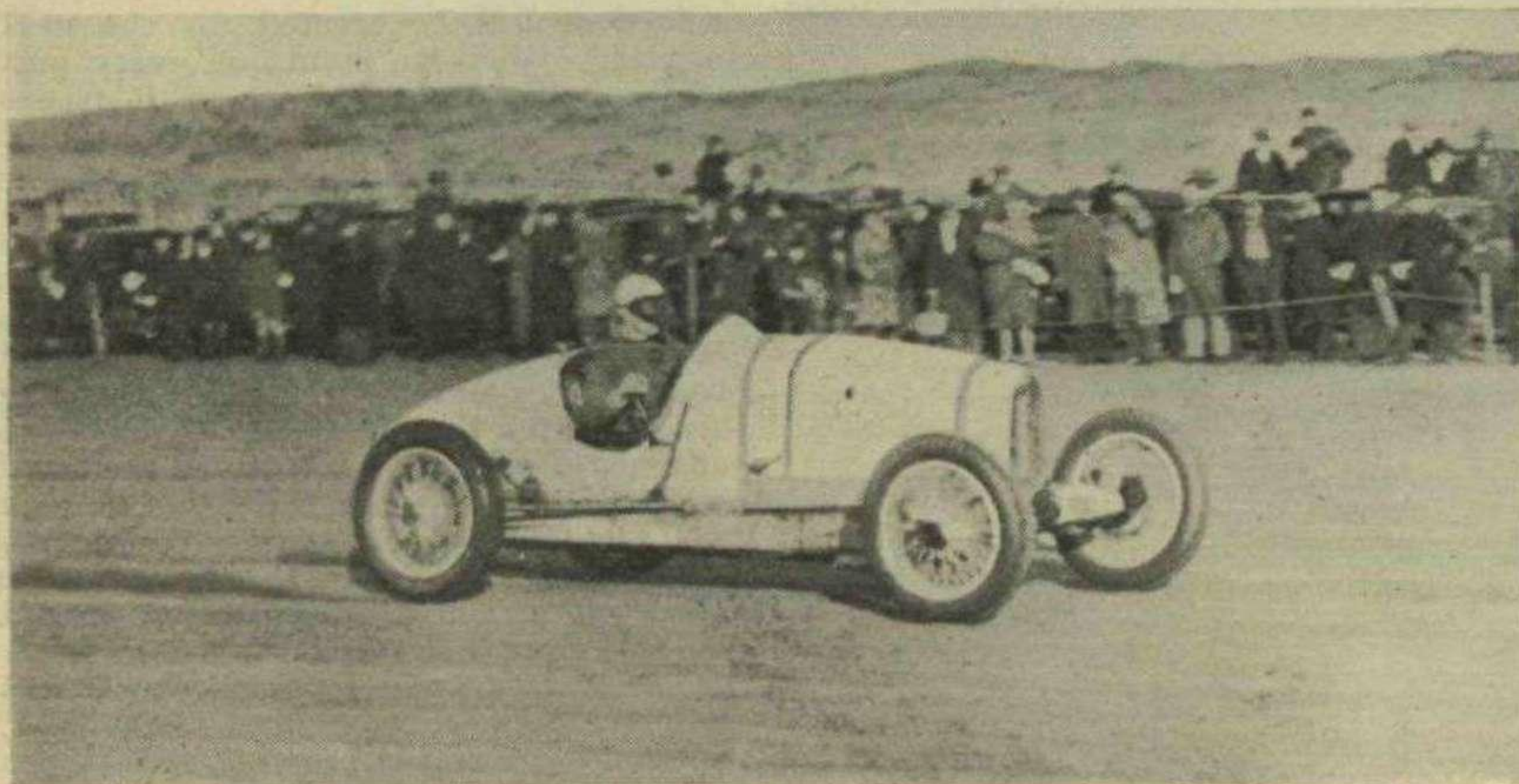
The Fifteen Mile Race for sports cars which followed seemed very slow by contrast. Tong's green Lagonda lead the field for some laps, but was slow on corners and wallowed badly when straightening out. This enabled Moss on a two-seater Magna to slip past him and win comfortably.

An eleven-mile race supported solely by Austins was not exciting, nor was the following one in which Field and Rhodes were the only starters.

Many of the spectators had deserted by the time the last race, over a distance of 25 miles, began, specially when it was seen that neither Field or Carr were appearing. Rhodes (1,500 c.c. 8-cyl. Bugatti) was comfortably leading the slower cars, and had actually completed a lap when Field was seen to start. Undeterred by being one lap behind in twelve, he drove magnificently, sliding his tail very skilfully after the corners, so that he was straight and pointing up the middle of the course, while Rhodes was less steady and took the whole width of the track to get round.

Excitement was intense as the blue car passed the slower vehicles and got on the tail of Rhode's black 2-seater, caught him up and passed him, crossing the finishing line, which was placed a short distance round one of the bends, while Walker was still half a mile behind.

Results on page 318.



Jack Field with the single-seater Bugatti once owned by Sir Malcolm Campbell.

[Motor Sport Photographs



## MOTOR RACING AT DONINGTON PARK

SUCCESSFUL EXPERIMENT BY DERBY AND DISTRICT M.C.

THE undoubted and widespread public interest in road-racing which exists in Great Britain has brought into existence several schemes for building private tracks, but the honour of first making one of these into an accomplished fact falls jointly to Mr. J. G. Shields, the owner of Donington Park, and the Derby and District Motor Club, who organised the racing there on March 25th. Some of the events were poorly supported, largely through difficulty in getting before the meeting particulars of the programme, but the general success of the meeting was undoubted, and any future fixtures will be eagerly awaited.

Donington Park is a short distance from the Ashby-Nottingham road, not far from where this crosses the main London-Leicester-Derby road, and about 10 miles from the latter. It is rather interesting to note that 12 miles further up the Trent lies Drakelow, where the A.R.A. had hoped to lay out a track, and

Gopsall, which has been acquired by a syndicate who also hope to establish road-racing there, is twenty miles south of the first-mentioned.

The Hall, formerly owned by the Earls of Huntingdon, was used during the War as a place of detention for German officers. It was acquired by Mr. Shields and turned into a hotel. The accommodation is comfortable and cheap, and as the course is only half-a-mile away, competitors found it a great convenience.

Two years ago the Derby Motor Club suggested that a road-racing course could be laid out in the Park, and this was contrived by using parts of the existing drives and farm roads. A number of successful motor-cycle meetings were held there, and it was decided to improve the track so that it could be used for car-racing. The roads were everywhere widened to about 20 feet, and surfaced with tarmac.

The circuit measures  $2\frac{1}{4}$  miles in circumference. From the start it runs down-

hill for 150 yards, then rises sharply to Hairpin Corner, which is actually a turn of only 45 degrees. Not being banked on the inside, it caused some excitement when taken too fast and Templer (Fraser Nash) during practise shot along for twenty yards with his off-side wheels a foot in the air. After negotiating a bridge, the cars wind up through a wood with a sharp right hand bend, then up a quarter-mile rise to Coppice Corner, a right-angle turn.

Immediately after the corner the course runs for thirty yards between some farm buildings, and passing is not allowed. Then follows a half-mile straight, leading into an S-bend, then another straight descending towards Starkey's Corner. At the end of a fast section, and without walls to give an idea of its curvature, this corner was the scene of some exciting moments. Another short straight brought the cars to Red Gate Lodge to enter another wood, in which the course bends round again towards the finish. A winding down-hill section completes the circuit. The spectators in the enclosure could see this last section and as far as the hair-pin, and the results were announced at several points by loud-speaker. The provision of a scoreboard would further improve matters, and will doubtless be erected for the next meeting. Vantage points on every part of the course, except where it passes through the woods could easily be reached and a large number of people had parked their cars at Starkey's Corner.

Saturday, March 25th, dawned a perfect day, and from eight o'clock onwards the air was disturbed by exhaust notes of varying character. After a very good breakfast we set forth to inspect the course and to watch the practising, which began at nine. The paddock presented the usual scene of activity, and everyone seemed well pleased with the course. One or two people shot off the road, but all on the open parts where misjudgment meant nothing more than running on to the grass.

The surface was well finished, but was unfortunately covered with fine sand, applied to protect the road material when it was drying. It caused some discomfort in the earlier races, but dispersed with the



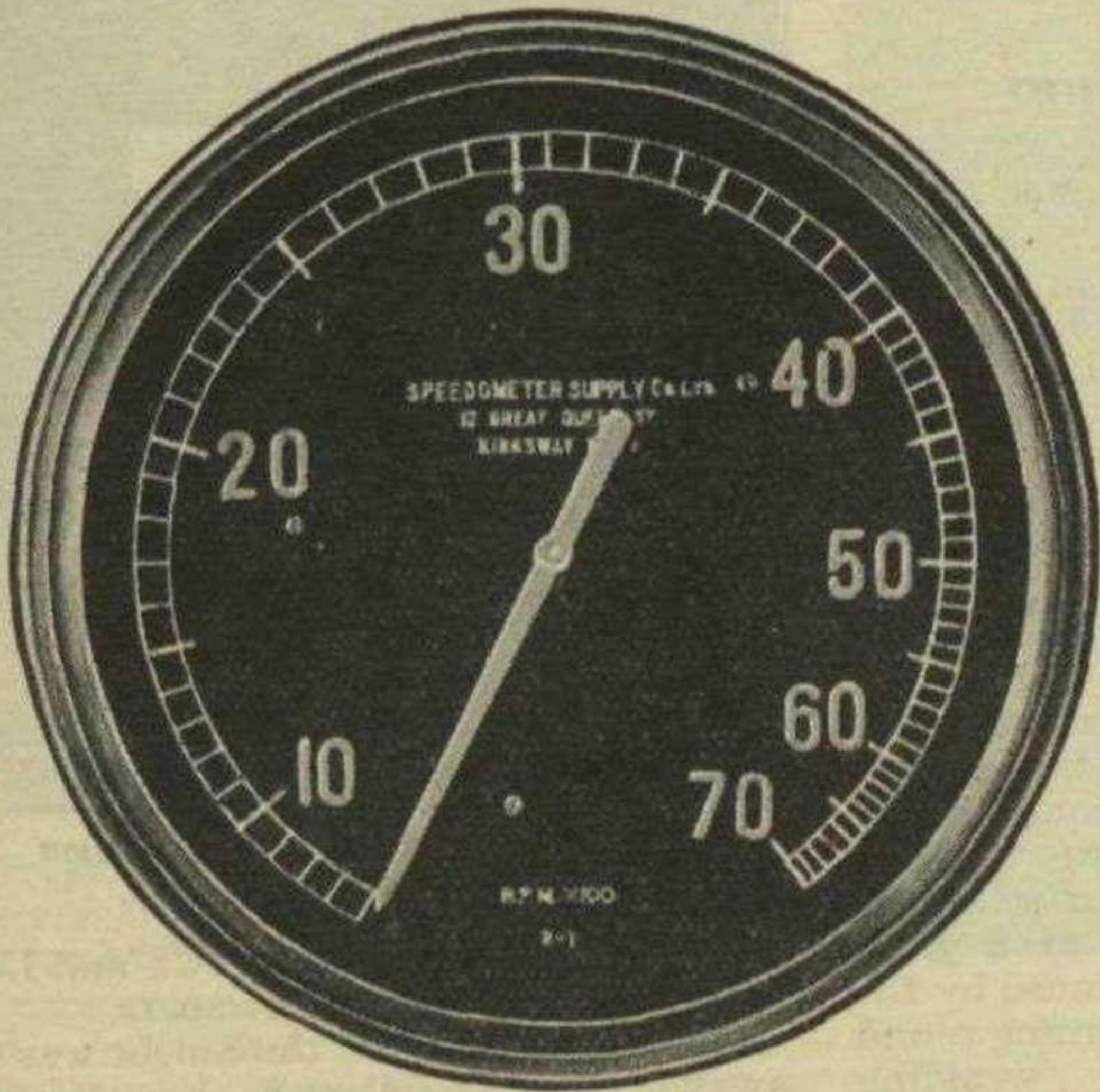
G. Casswell (Fraser-Nash) raises the dust in winning the first heat of the 1,500 c.c. unsupercharged class.

[Motor Sport photographs



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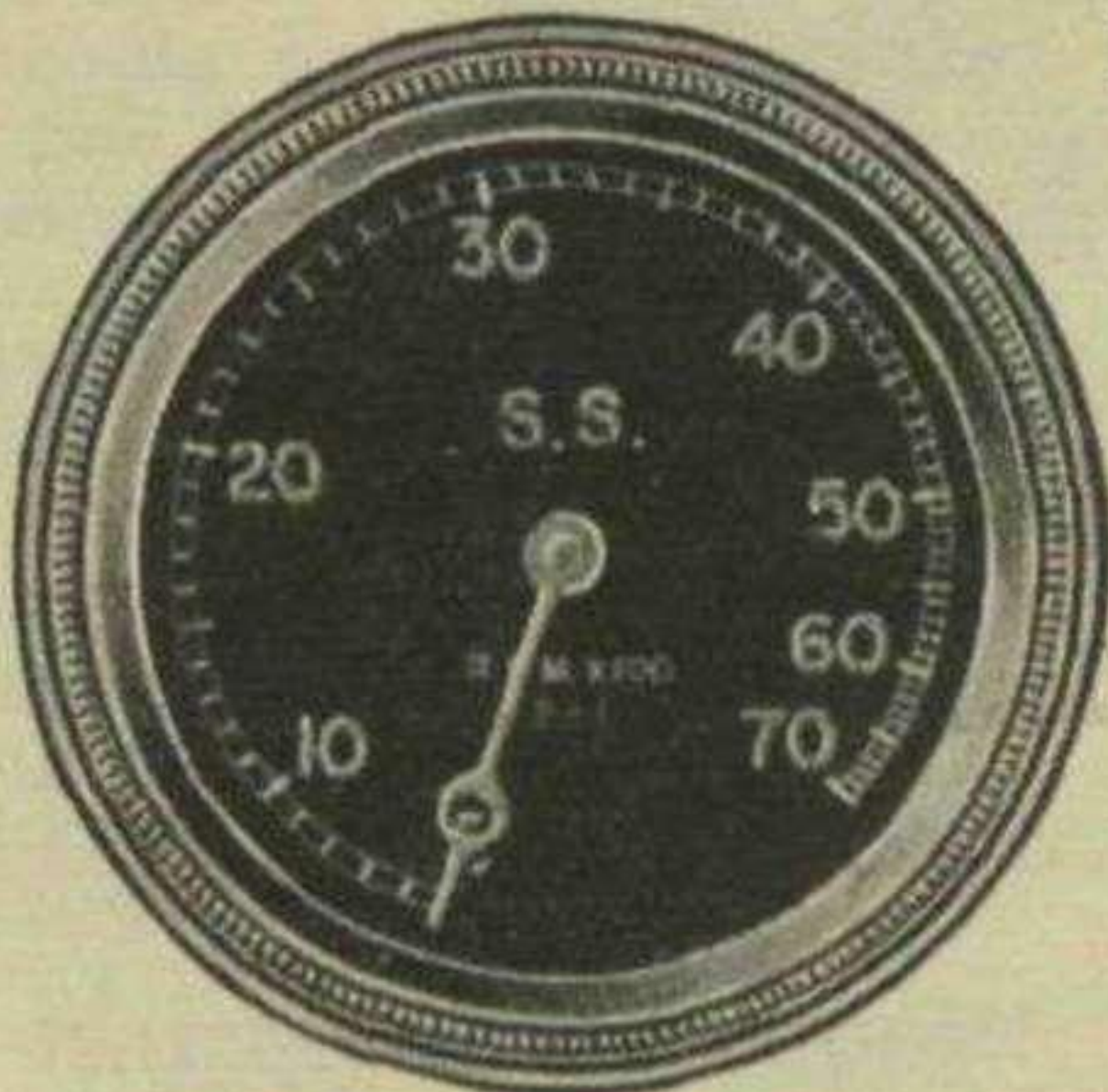


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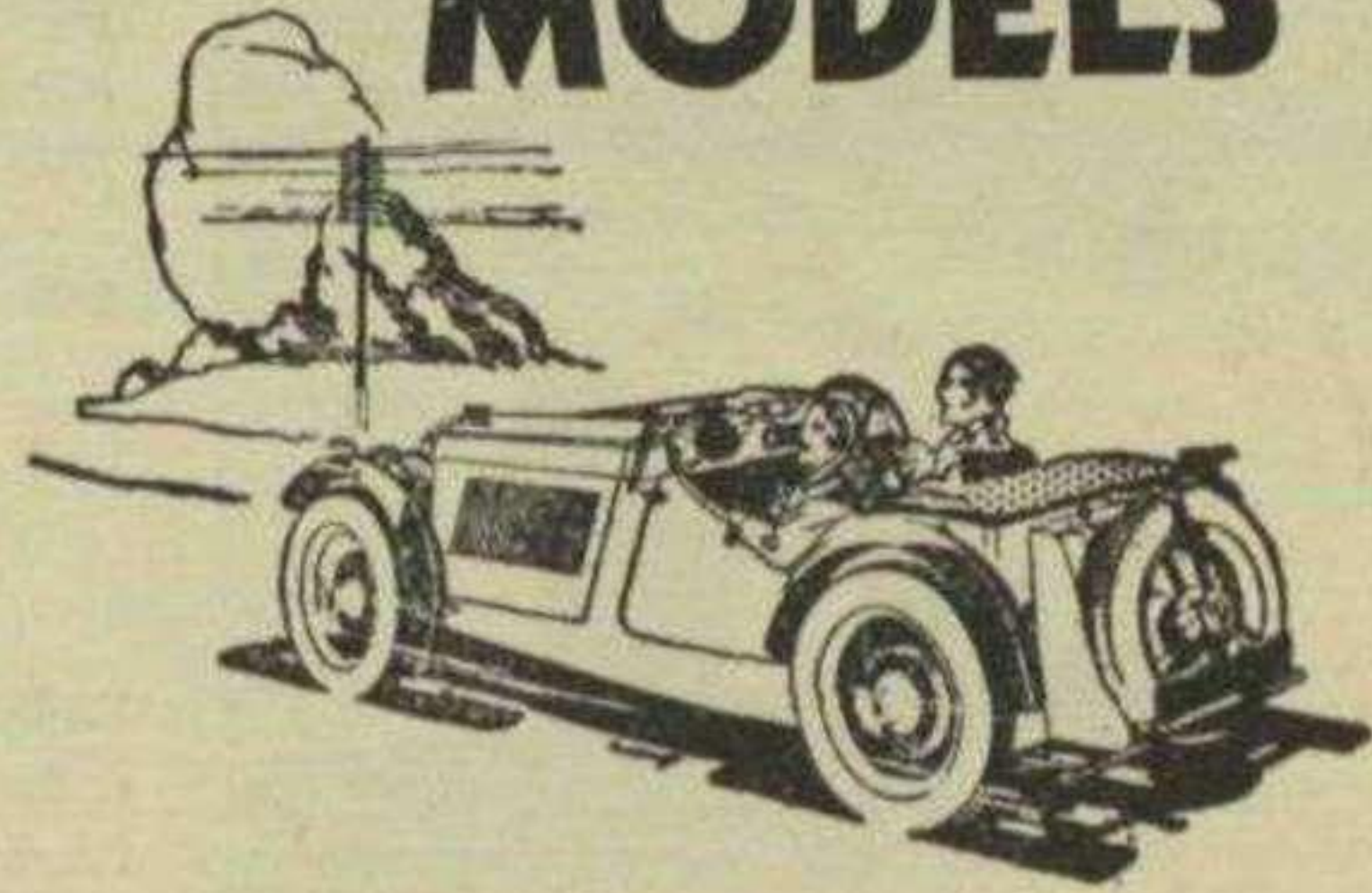
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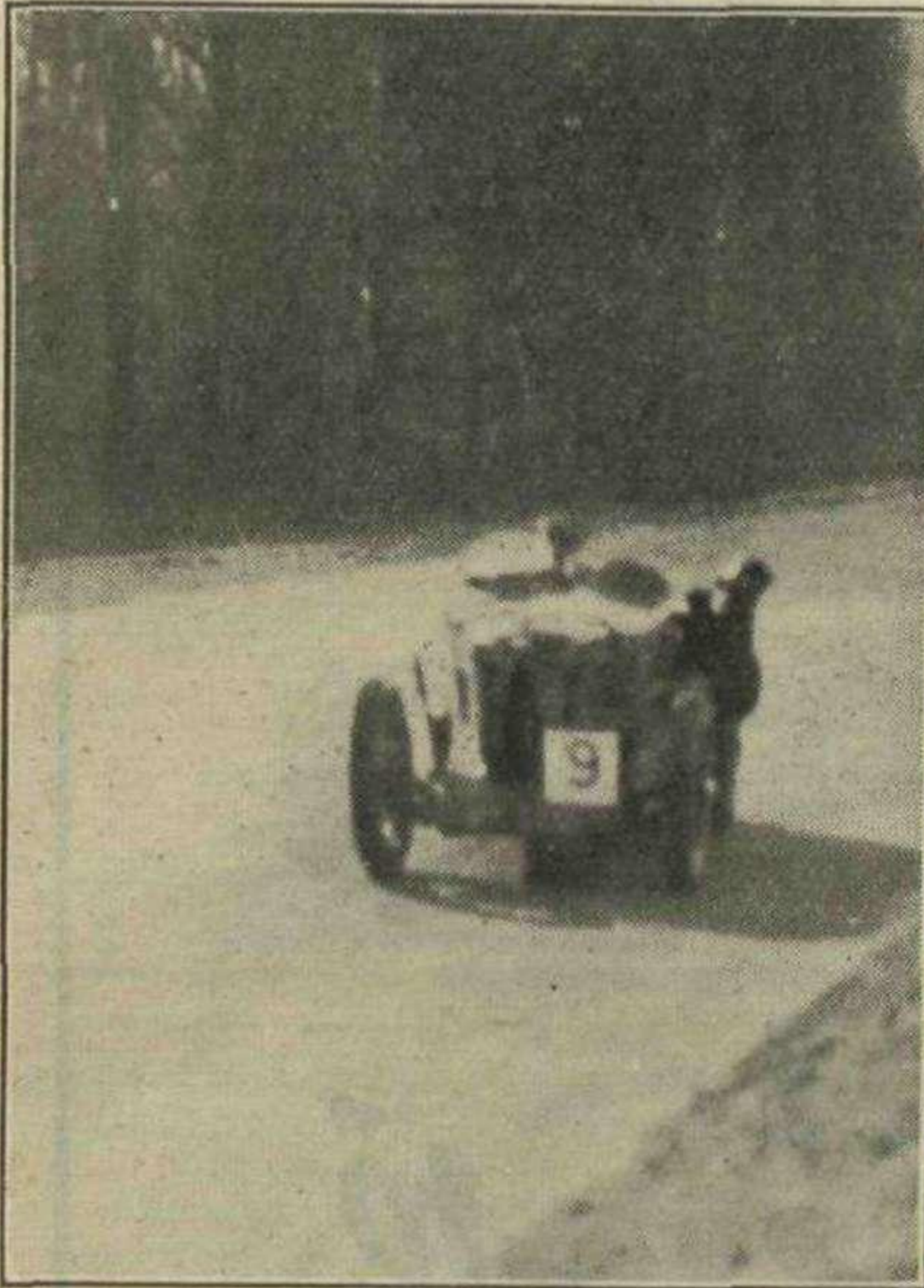
Major Wilson, C.M.G., Patentee of the Self-Changing Gear, writes:

"I have no hesitation in recommending S.C. 'Filtrate' for use on my gear  
**ON WHATEVER CAR  
IT MAY BE ADOPTED."**

## MOTOR RACING AT DONINGTON PARK—continued.

passing of the cars. Warning signs were erected at the principal corners, which were well protected with sandbags. Marshalling was efficient, and spectators were kept off the course by wire fences. The organisation in fact was sound.

Proceedings opened at 11 a.m. with a preliminary talk by Sir George Beaumont,



All alone in the 850 c.c. unsupercharged race. A. H. Langley (M.G. Midget).

who explained how the scheme had come into existence, mentioning that laying out the track had cost £12,000 and that the organisers were happy in bringing into existence the first licensed motor track in England. Col. Lindsey Lloyd for the R.A.C., spoke with satisfaction about the sporting nature of the track and hoped that it would meet with the support it deserved.

Meanwhile cars were warming up in the Paddock and shortly afterwards took their places at the Start. The first race was for supercharged or unsupercharged cars up to 850 c.c. There were four starters, Turner on an Austin having the best position, then Barnes, Hall and Evans on M.G.'s. The first two got away well, then Hall and Evans after some trouble in starting. The first time round the Austin was well in the lead, snaking as it came down the slope to the start, then Hall and Evans, the unsupercharged car having been passed by the other two.

This order continued for some laps, the Austin's brakes making curious noises as it approached the hairpin corner. Hall at first could make no

impression on the leader but by the fifth lap he was noticeably closer. His lap-speed had risen to 57.6 m.p.h. which was faster than that of Turner, and he passed him on the straight before Starkey's Corner. Turner continued to make great efforts, coming down the hill with more snaking but was obviously slowing, and Hall was able to ease down a little. Evans was no longer in the race. A trail of steam came from the Austin's radiator vent.

Hall came over the line with a 21 seconds lead, the Austin suffering from a seized blower and coasting in. Evans, who had started off with very little oil pressure had apparently thrown a rod and arrived pushing his car, which had a nasty rent in the crank-case.

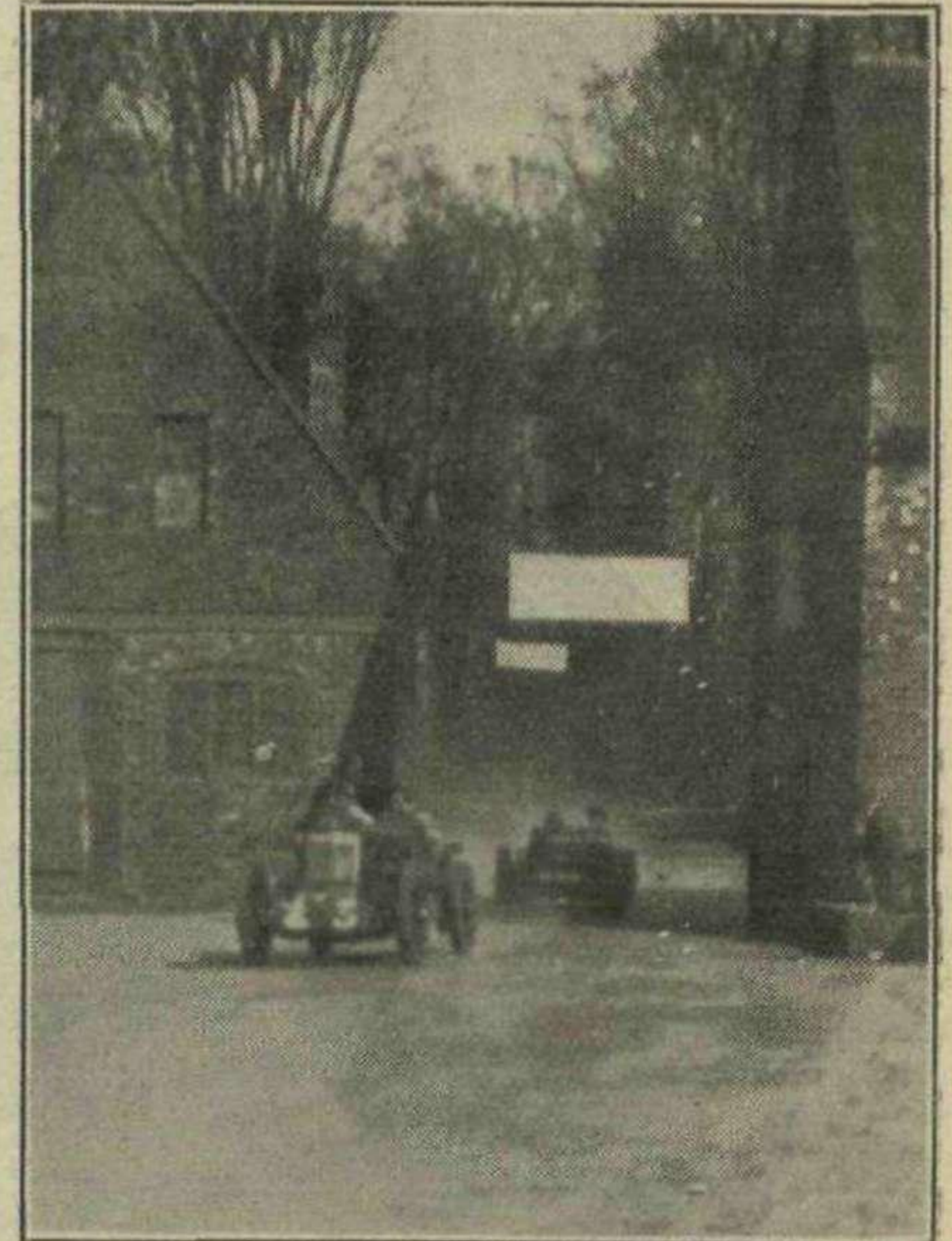
#### 850 c.c. Supercharged or Unsupercharged.

1. E. R. Hall, 746 M.G. Midget s/c, 23m. 19 2/5s.
  2. R. F. Turner, 747 Austin s/c, 23m. 40 2/5s.
  3. J. D. Barnes, 746 M.G. Midget, 27m. 7 3/5s.
- Winner's speed, 56 m.p.h.

There were eight starters in the next race, for 850 c.c. supercharged and 1,100 c.c. unsupercharged cars, and it was run in two heats. Three Rileys and a Singer faced the starter, and Baker on the latter was the first away, followed closely by Ward and Freddy Dixon, who tried to gain the lead before reaching Hairpin Corner. The next lap he was in the lead but then failed to appear. C. A. Richardson (Riley) was also missing and for some time only Ward and the Singer, which was travelling well, were in the running. Dixon toured along the top stretch with a very smokey exhaust, and after replacing plugs set off at a great pace. Some excitement was caused by the Singer leaving the road and turning round at Starkey's Corner, only avoiding the sandbags by a violent application of

his brakes. Apart from this lapse, he drove a sound race, and finished very creditably only two minutes behind Ward.

After a luncheon interval, which gave the increasing spectators a chance to refresh themselves and to admire the country-house setting in which the meeting was being held, the second heat took place.



R. R. Jackson and E. K. Rayson in the non-passing section.

Two Rileys, E. R. Hall's M.G., and Langley's Singers were the runners.

As in the last heat, the Singer was first away, closely followed by Rayson's Riley. Hall, whose car lost valuable time in all the events by slow starting, was 15 seconds behind, and brought up the question of whether a better arrangement in future events would be to allow the start to be made with engines running and drivers seated as at Brooklands.

Rayson knew he had to go all-out to keep the lead, and held first place for the first three laps, and Gibson on the other Riley reached third position by passing Langley just after the Hairpin.

Hall was driving all he knew, and was steadily closing up. Gibson in the excitement of the chase spun round and went on to the grass at Starkey's, and Hall with a great effort overhauled Rayson at the same place. The corner seemed to have a fatal attraction for Rileys and next lap Rayson left the course there. He buckled a wheel and lost valuable time, while Hall put up his fastest lap so far, approximately 59 m.p.h. With Rayson far



[Motor Sport photographs

J. R. Baker "threading the needle's eye," F. Dixon pursuing.

## MOTOR RACING AT DONINGTON PARK—continued.

behind and Gibson retired he was able to ease up, and received a round of applause as he crossed the line an easy winner.

Shortage of time did not allow the winners of the two heats to run off a final, so the winners of the event were decided on their times.

**850 c.c. Supercharged and 1,100 c.c. Unsupercharged.****FIRST HEAT.**

1. E. N. Ward, 1,089 Riley, 25m. 4 2/5s.
  2. J. R. Baker, 972 Singer, 26m. 55 2/5s.
- Winner's speed, 52.3 m.p.h.

**SECOND HEAT.**

1. E. R. Hall, 746 M.G. Midget s/c, 23m. 37 2/5s.
  2. E. K. Rayson, 1,089 Riley, 24m. 16 3/5s.
- Winner's Speed, 55.16 m.p.h.

**FINAL RESULT.**

1. E. R. Hall, M.G. Midget.
2. E. K. Rayson, Riley.
3. E. N. Ward, Riley.

The third event, for unsupercharged 850 c.c. cars only attracted two starters, which was a pity, as the two drivers made up for the poor support by the keenness for their scrapping. Langley, driving a Montlhery M.G. got away in front of Hudson on a J.2., but the latter did his best to make up time by cornering in a spirited fashion. His shock-absorbers did not seem tight enough, and he was quite disturbing coming down to the enclosure. The struggle went on until the sixth lap, when Hudson's engine gave up the unequal task and he coasted in, leaving Langley unopposed.

**850 c.c. Unsupercharged.**

1. A. H. Langley, 746 M.G. Midget, 25m. 7 1/5s.
- Speed, 52.3 m.p.h.

Event Four, for unsupercharged 1½ litre cars, was the most popular race of the day, and the organisers made the successful experiment of starting seven in each heat. In the first batch all except Appleton's Bugatti got away well, but the latter was soon on the heels of the pack and passed two, only to come in at the end of the first lap with the expensive story—no oil pressure! The bolts on one big-end had stretched owing to excessive revving.



E. N. Ward (Riley) leading Baker (Singer) in the event, on Coppice Corner.

The three leaders—Casswell (Frazer Nash), Ward (Riley) and Powys Lybbe on a 12-60 Alvis—were well ahead of the field on their first lap, and the same three led on the second circuit, but the Alvis had gone up a place, and Templer (Frazer Nash) was closing up on the leaders. The cornering at Starkey's Corner was very fast and Casswell regularly touched the grass edge there and was also sliding at Red Gate Lodge. However, he made no



Kenneth Evans in his M.G. rounding Hairpin Corner.

mistakes, and the same three retained their positions a long way ahead of the remainder of the cars.

Dixon was obviously out for blood in the second heat and he led from the first, followed at hundred yard intervals by Hutchison on his red Bugatti, and Jucker on a Frazer Nash. Dixon was extremely fast on Starkey's Corner, Hutchison less safe and indulging in turf-cutting. However he was hot on Dixon's tail, and the latter had to drive all out, in the third lap putting up a record of 59.3, and a lap later 59.5 m.p.h. The hot pace was sending cars off the road at various points and Jucker went off in the wood before Coppice Corner, losing his place to Gibson, and also doing a broadside at Starkey's. The wood was also Dixon's undoing and Hutchison slipped by him. However with a "come on lads, give us a push" he was in pursuit again, and momentary misfiring of the Bugatti at Starkey's nearly let him past. Hutchison now seemed to have the hang of the course, however, putting up the record time of 60.3 m.p.h., and drove magnificently, and Dixon was unable to catch him.

The winners of the final were once more decided on time.

**1,500 c.c. Unsupercharged.****FIRST HEAT.**

1. G. Casswell, 1,496 Frazer Nash, 24m. 11 3/5s.
2. A. Powys Lybbe, 1,496 Alvis, 24m. 48 4/5s.
3. E. N. Ward, 1,089 Riley, 24m. 51 2/5s.

**SECOND HEAT.**

1. K. Hutchison, 1,496 Bugatti, 22m. 47 4/5s.
  2. F. W. Dixon, 1,089 Riley, 23m. 10 3/5s.
  3. J. Eason Gibson, 1,089 Riley, 24m. 20 1/5s.
- Winner's speed, 57.55 m.p.h.

**FINAL RESULT.**

1. K. Hutchison, Bugatti.
2. F. W. Dixon, Riley.
3. G. Casswell, Frazer Nash.

There were only two starters in the next race, E. R. Hall on the Midget, and R. T. Horton who was driving the Magnette which won the Mont des Mules Hill Climb at the conclusion of the Monte Carlo Rally. Horton took the lead from the first, and though Hall made superhuman efforts to

catch him, it was evident that the larger car had something in hand all the time.

**1,500 c.c. Supercharged or Unsupercharged.**

1. R. T. Horton, 1,086 M.G. Magnette s/c, 22m. 59s.
2. E. R. Hall, 746 M.G. Midget s/c, 23m. 5 4/5s.

The last race, for all-comers up to 1½ litres produced a new entry in the shape of R. R. Jackson, whose Midget must be about the noisiest car ever made. However the noise availed him nothing, as he made a bad start. Horton took the lead with Rayson in pursuit, but Dixon passed him after Coppice Corner. Horton was drawing away from Dixon until the fifth lap, when he did not appear. He had retired before Coppice Corner with clutch trouble, the Midget type clutch fitted to his car, which was the first Magnette made, not standing up to the power of the larger engine. Rayson meanwhile struggled to overtake Dixon again, but the black car kept its position and finished 300 yards in front.

**Up to 1,500 c.c., any trim.**

1. F. W. Dixon, 1,089 Riley, 23m. 51 1/5s.
2. E. K. Rayson, 1,089 Riley, 24m. 5s.
3. R. R. Jackson, 746 M.G. Midget s/c, 24m. 48 2/5s.

The results of the Monaco G.P. appear in this issue, but a full report will be published next month.

## NEWS FROM THE U.S.A.

### HARRY HARTZ DOES 152 M.P.H. AT MUROC.

By our American Correspondent

T. MERIWETHER-SMITH.

AT the wheel of a 4-cylinder, 225-cubic inch displacement Miller Special, Harry Hartz smashed the world's one-mile Class "C" record, and other records up to 50-kilos in a brilliant run on the sands of Dry Lake Muroc, California, on March 23, subject, of course, to official confirmation.

Hartz covered the mile at 152.01 m.p.h. to shatter Hartwell Stubblefield's record of last year by almost four miles per hour. He covered the 10-miles at 146.70 m.p.h. to break the mark held by Kay Don, of England, and was clocked at 147.44 for the five mile stretch. Hartz is also claiming the standing kilo and mile, and all other records up to fifty kilos.

The car was designed on plans of Professor Elliott Reid, of the Engineering Department of Stanford University, and was stream-lined similarly to the car in which Stubblefield made his 147-mark last year at the same location. Dry Lake Muroc is a smooth, desert-like, dry lake bed near Lancaster, California, and is ideal for speed trials up to 180 to 200 m.p.h.

This was Harry Hartz's first appearance in an official auto racing test in five years, the veteran American champion of 1926 having confined his activities to building and backing cars since his disastrous accident at Salem, N.H., in 1927. This car is a 200-h.p. unblown job, and will compete in the Indianapolis race with Babe Stapp at the wheel.

#### The Season Opens.

Though several rather important racing events have already been held in the United States, the Championship season will not be underway until April 23, when the cream of America's speedway drivers will gather at Oakland, California, for a 150-mile race.

Contrary to Continental and English custom, American racing drivers are not informed of coming events until just a few weeks before they take place. Therefore, it is impossible to release a complete summary of America's 1933 racing classics thus early in the year. The only two races definitely scheduled and dated are the Indianapolis 500-Mile Classic on May 30, and the Oakland event mentioned above.

Automobile racing is being conducted throughout the United States by various racing groups, but the American Automobile Association, as in the past 20 years, sanctions the events that are considered

of paramount importance. Inclement weather conditions will prevent racing in the Eastern portion of the United States during the months of winter and early spring, but the rest of the year finds this section the centre of activity. At the present time, racing is being conducted on a large scale in California, where mild weather permits sporting contests at all times.

In these California races, single-seat cars are used, as the events are not championship races, and are held on tracks of either 5/8's of a mile or half a mile in length, with the exception of the Oakland Speedway. Ascot Speedway, in Los Angeles, is a 5/8's track, of hard-packed clay surface, and one of the most thrilling courses in the nation. This track stages race meets approximately every two weeks, with the remaining dates being filled by tracks at San Jose, El Centro,

and Oakland, during these winter months. Large crowds attend each race, and the field is composed of the finest speedway and dirt track drivers in the nation.

The Championship season, starting with the Oakland race of April 23, will find the drivers shifting from their "monoposto" Miller 4-cylinder cars to various types of two-seater machines. Some of the drivers use 8-cylinder Miller cars, some 4-cylinder machines of this make, and still others prefer the 16-cylinder Miller. One or two drivers employ Duesenberg 8-cylinder mounts for these races, while a large number of star pilots will drive this type in the Indianapolis event.

After the Oakland race has been won, or lost, as the case may be, the drivers will trek Eastward for the greatest of all American races, the Indianapolis 500-Mile Classic, the Grand Prix of the United States. Following the great Indianapolis grind, the drivers will race at Detroit in a 100-mile dirt track race. This will be followed by similar races over the tracks at Roby, Indiana; Syracuse, N.Y.; Rockingham, N.H.; Langhorne, Penn.; and possibly a few others, before swinging back to the west, and the final 150-mile test at Oakland. Detroit will probably hold two 100-mile Championship races, and there are rumours of two concrete speedways being erected in time to feature Championship races before the end of the year. Art Means, an A.A.A. official for years, has been working on plans for a super speedway in the Metropolitan area of New York, while Harlam Fengler, a famed driver of the old days, is drawing up plans for a similar type track in California.

The annual Pike's Peak Hill Climb, a race against time up the winding, dangerous 12 miles of mountain road in Colorado, will again be held on the first Monday in September. This remains as the only race in America that resembles in any degree the old road races of two decades ago.

Hundreds of smaller, less important events will be held throughout the nation during the year, and many of them will be sponsored by the American Automobile Association. In many of the races, held on finely conditioned speedways, the Championship drivers will be entered.

#### American Slang.

Racing car: "Jaolpey," "Iron," "Alligator," "Crate."



Harry Hartz.

### RACING AT SOUTHPORT (continued from page 313).

#### SOUTHPORT RESULTS.

##### Straight-mile Events.

750 c.c. racing cars, C. D. Parish (Austin 7); 1,100 c.c. racing cars, H. B. Prestwich (Frazer-Nash); 1,500 c.c. sports cars, T. L. Moss (M.G. Magna); 1,500 c.c. racing cars, C. D. Parish (Austin 7); unlimited c.c. sportscars, R. D. Tong (Lagonda); 2,000 c.c. racing cars, C. T. Rhodes (Bugatti); 3,000 c.c. racing cars, J. Field (Bugatti); unlimited c.c. racing cars, N. Carr (Bugatti).

##### 3-mile Events.

750 c.c., P. Stephenson (Austin 7); 1,100 c.c.,

P. Stephenson (Austin 7); 1,500 c.c., P. Stephenson (Austin 7) & 2,000 c.c., H. B. Prestwich (Frazer-Nash); 3,000 c.c., J. Field (Bugatti); unlimited c.c., J. Field (Bugatti).

##### 5-mile Events.

750 c.c., C. D. Parish (Austin 7); 1,100 c.c., C. D. Parish (Austin 7); 1,500 c.c., C. D. Parish (Austin 7); 2,000 c.c., N. Carr (Bugatti); 3,000 c.c., J. Field (Bugatti); unlimited c.c., J. Field (Bugatti).

##### 15-mile Events (Sports Cars).

850 c.c., "Namrevo" (M.G.); 1,500 c.c., T. L.

Moss (M.G. Magna); unlimited c.c., R. D. Tong (Lagonda).

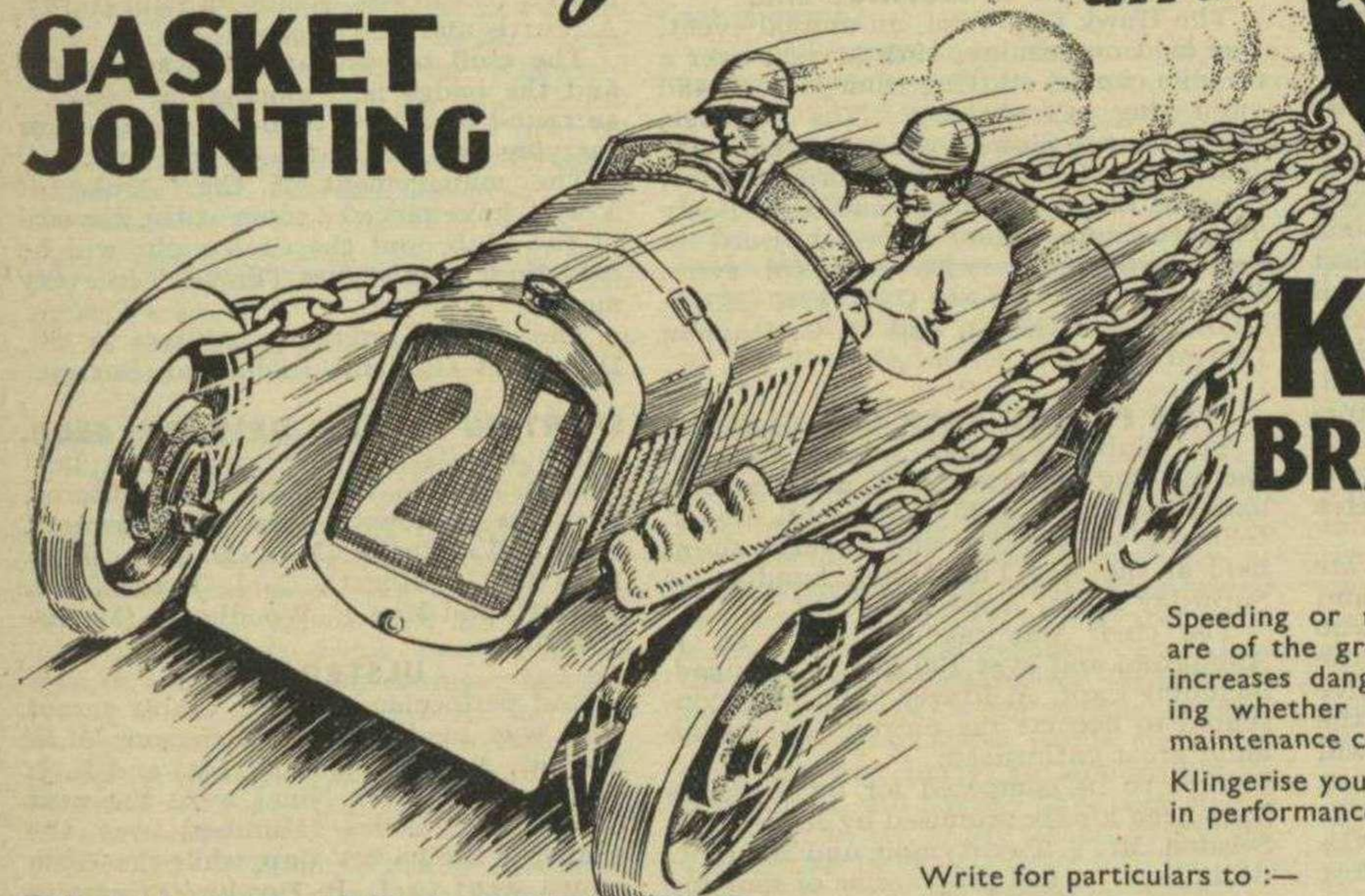
##### 11-mile Events.

750 c.c., C. D. Parish (Austin 7); 1,100 c.c., C. D. Parish (Austin 7); 3,000 c.c., J. Field (Bugatti); unlimited c.c., J. Field (Bugatti).

##### 25-mile Events.

750 c.c., C. D. Parish (Austin 7); 1,100 c.c., C. D. Parish (Austin 7); 1,500 c.c., J. Walker (Bugatti); 3,000 c.c., J. Field (Bugatti); unlimited c.c., J. Field (Bugatti).

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INEFFICIENT  
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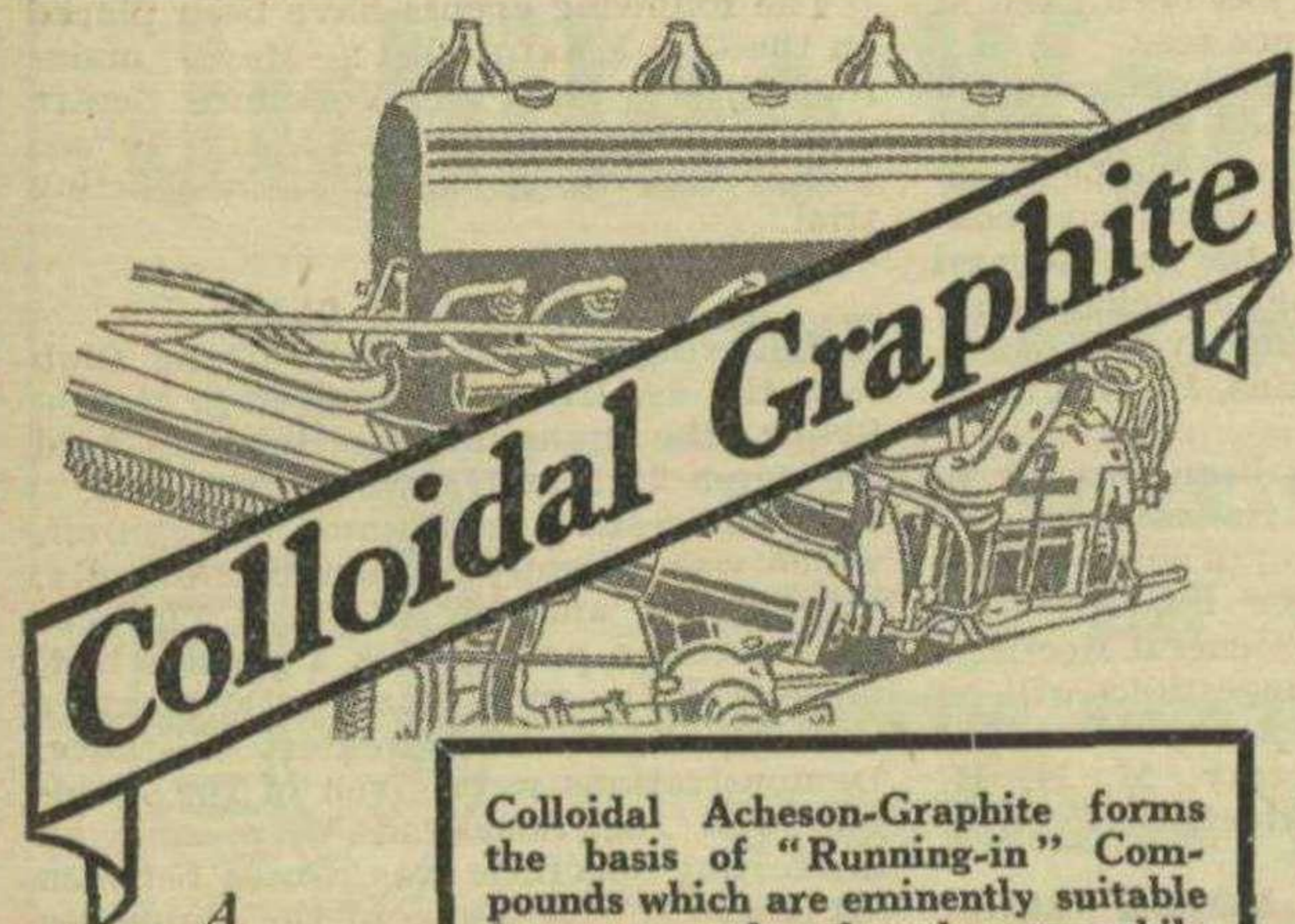
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# Club News

## THE RILEY M.C.

THE Regulations are now available for the third annual 24-hour rally and reliability trial.

There are thirteen English and two Scottish starting controls, all located in important towns for the greater convenience of entrants. Irish competitors will this year join the rally at Liverpool. Norwich, at 294 miles, is the farthest starting point from Llandudno, the final control, and starters from here, who travel via Aylesbury and Chester, receive maximum marks for distance covered. Southsea and Edinburgh competitors have the shortest runs, of 280 miles, the former via Cheltenham and Leicester, the latter by Carlisle and Chester, and receive 1.4 fewer marks on distance.

There is a long list of awards in Private Owners, Lady Owners, Trade, Team and Novices categories, and all entrants who gain not less than 80 per cent. of the winner's marks in their class will receive first-class awards. The day section of the event is to be held in Snowdonia, and will include observed hills, non-stop sections and a brake test. Separate awards are reserved for best performances on the observed hills and marks gained or lost on them are not included in the calculation for the winners of any other awards. In other words, the highly tuned car has no better chance of winning the premier award than an elderly model which is in regular daily use.

## THE M.G. CAR CLUB (SCOTTISH CENTRE).

The inaugural run of this new centre of the M.G. Car Club was a great success. Owing to the rather inclement weather, the Trial, which was really intended to be of a somewhat easy nature, became one of the most severe possible.

Two 10-mile circuits were covered through the hills just north of Abington, the colonial sections being approximately eight miles in length. Speedometers were sealed and an average of 20 m.p.h. had to be maintained. The only one to lose no marks on this section was A. Sinclair (M.G. Midget).

Acceleration and Braking Test was run after the circuits had been completed, the best performance being put up by Miss Dickson (J. 2 Midget).

The results were as follows:—

Complete Trial: First—Miss Dickson (J. 2 Midget); Second—H. J. Stuart (J. 2 Midget); Third—B. Morris (Singer).

The next meeting to be held by the Club will be on the 23rd April. This will comprise a hill climb at Amulree, while sand races will be run at Kirkcaldy on the 6th proximo.

Incidentally, as the Club is now open to owners of all makes of cars, more competition and friendly rivalry will naturally be introduced. Anyone wishing to join should get in touch with the Hon. Sec., D. Donaldson, 71, Lothian Road, Edinburgh.

## MALDEN & DISTRICT M.C.

The Hawk Cup Trial, an annual event, was held on Sunday, 19th March, over a 56 mile course, starting from Milford and embracing Crooksbury, The Grange, Brook Lane, Slow-in-the-Mold, and The Rut. E. F. Jefferies (Morris Minor) receives the Spring Cup, and Miss Betty Tippet (Singer Nine) a special award for best performance with standard tyres. Special souvenirs go to C. G. Fitt (M.G.), G. L. Wilson (M.G.), and H. G. Hannan (Singer Nine).

## THE FRAZER-NASH CAR CLUB.

The Club was brought into existence on the evening of March 29th, and was first announced at a highly successful dinner, followed by a dance and cabaret show, held at the May Fair Hotel, London, on Saturday night, April 1st.

The chair was taken by Mr. H. J. Aldington, and over 100 guests attended, including Capt. A. Frazer-Nash, who consented to become the patron of the Club amid great enthusiasm.

Cups to be competed for by members have been kindly promised by Anne Lady Selsdon, Mr. T. Twentymen, and Mr. H. J. Aldington. A full programme of sporting events is in course of preparation, and details will be announced in due course.

Membership is open to all past and present owners of Frazer-Nash cars, and the annual subscription has been fixed at 10/6; there is no entrance fee.

The Committee will be composed of 10 members, and it is hoped that owners from all parts of the country will be represented; the following members have consented to take office until the first General Meeting:—H. J. Aldington (chairman), N. A. Berry, S. H. H. Cudey, M. Essex, D. F. Greig, D. G. Hopkins, H. H. Cundy (secretary).

A sub-committee has been formed to draw up regulations for the conduct and management of the club; a copy of their recommendations will be forwarded to members before the first General Meeting. In the meanwhile all suggestions will be welcomed and carefully considered if addressed to the Secretary, M. H. H. Cudey, at 6, Neville Street, S.W.

## THE GREAT WEST MOTOR CLUB.

An enthusiastic gathering of motorists attended the inaugural meeting held at the Duke of York Hotel, Great West Road, Brentford, Middlesex, on Thursday, 6th April, 1933.

It was unanimously resolved that the Club be founded, and the Club's rules were drawn up.

The following officers were elected:—M. J. E. Bardrick, F.L.A.A., Chairman; Mr. C. J. A. Curd, Hon. Secretary; Mr. C. P. Curd, Hon. Treasurer; Mr. R. H. Brown and Mr. Paul Hardy, committee.

A discussion took place as to immediate activities, and it was decided to appoint the following to act on a "Sports Com-

mittee":—Messrs. Schofield, Paul Hardy, A. Curtis and G. Osborne.

The club colours are blue and silver, and the badge is a monogram "G.W.", surround blue, with an outer ring of silver carrying the full name of the club.

The management of the "Duke of York" have placed a room at the disposal of the Club, and the Club night will be held there on the first Thursday in every month.

The Hon. Secretary's address is 30, Denehurst Gardens, Richmond, Surrey.

## SPORTING OWNER DRIVERS' CLUB.

The results of the Spring Trial, held over a 60-mile route in the Chilterns, were as follows:—First-class awards, W. E. Watkinson (M.G. Magna), A. C. Hess (M.G. Midget), C. J. Fryer (M.G. Midget), and Miss E. Woodhouse (Morris-Oxford).

## ULSTER A.C.

Best performance in the Club's recent trial was made by H. Jefferson (M.G. Midget), A. R. Scott (M.G. Six) and E. J. Watkinson (Singer Nine) were the next best. Mrs. Colles (Humber) was the winner of the Ladies' Cup, while the Team award went to J. P. Dowlin (Triumph), E. J. Watkinson (Singer Nine), and W. M. D. Montgomery (Singer Nine).

## ILKLEY & D.M.C.

The following events have been placed on the Club's fixture list:—May 7, main-road trial; May 28, Yorkshire Centre A.C.M. Rally; June 10-12, trip to see Junior T.T. race; June 25, semi-sporting trial.

## LAGONDA CAR CLUB.

Following the formation of the Club recently, as already announced in MOTOR SPORT, the inaugural meeting was held on March 25th at Hanworth Air Park.

An interesting programme was run off, which was a happy combination of rally, gymkhana and air display. The car events were a potato race, a parking test, musical chairs, and a prize for the member arriving from the greatest distance. Demonstrations were given of the Auto-giro and the Lockheed Vega, and an interesting spectacle was a race between "Planettes." A dance in the clubhouse concluded the meeting, which everyone decided was a great success.

*The Editor invites Club Secretaries to send details of their fixtures, sporting and social, for publication in these columns. These items should be sent to reach this office not later than the 16th of the month.*

## HERE AND THERE

**Sporting Trophies.**

The R.A.C. is lending to the National Sporting Trophies Exhibition, which is being organised in aid of the "Dockland Settlements," a number of trophies principally concerned with motoring. The best known of all is probably the Tourist Trophy, which was first competed for in 1905, and is at present held by Mr. Victor Riley. There are also the Wakefield Trophy at present held by Sir Malcolm Campbell; the Segrave Trophy held by Mrs. Amy Mollison; the Dewar Trophy, which was not awarded last year; and the Amateur Squash Rackets Champion Cup, which was won in 1932 by Amr Bey, the first string in the R.A.C. squash rackets team.

The exhibition will be held at Shell Mex House from 24th April to 6th May.

**Upper Cylinder Lubrication.**

The value of upper cylinder lubrication in reducing cylinder wear, but more particularly in providing lubrication for valve-stems, has long been recognised by automobile engineers. In the past difficulty has been experienced through the lubricant burning owing to the intense heat of the combustion chamber, but this failing is claimed to have been overcome by the manufacturers of Firezone Oil, which is handled in this country by Firezone Oil Sales Co., of 65, Theobald's Road, London, W.C.1.

The A.C. de France recently conducted a test of Firezone Oil on Montlhéry Track with a Peugeot, which was run for 5 hours

(a distance of about 130 miles) with radiator and fan removed, and which, on examination, was found to have no trace of wear in the valves, pistons, and cylinders.

A convincing proof!

**Jot it down!**

A small memorandum book to fit one's waistcoat pocket will be found useful on a hundred and one occasions, and a very neat little specimen has recently been introduced by Messrs. Richard Klinger, Ltd., of 120, Southwark Street, London, S.E.1, the well known manufacturers of brake linings. Any reader, on mentioning "MOTOR SPORT," will be able to obtain one free of charge on sending a postcard to the above address.

**Visiting Continental Races.**

The excellent idea has been initiated by the Junior Car Club of arranging for their members to visit some of the big Continental road races in specially arranged parties. The great advantage is, of course, that every conceivable detail of the journey and accommodation near the course is provided for, leaving the visitor free to enjoy the race in comfort.

By the time these words appear in print the first party, to Monaco for the Grand Prix, will already have been staged. Next on the list is the Grand Prix d'Endurance at Le Mans, to be held on June 17th and 18th, an inclusive charge for this event being £8 18s. 6d. Then comes

the Isle of Man Races, costing £5 15s. 6d., the German G.P., £8 18s. 6d., and the T.T., £4 14s. 6d.

The idea is a wholly commendable one, and any readers who would like to take advantage of the scheme should get in touch with the General Secretary of the J.C.C., Mr. L. F. Dyer, at Empire House, Brompton Road, London, S.W.7.

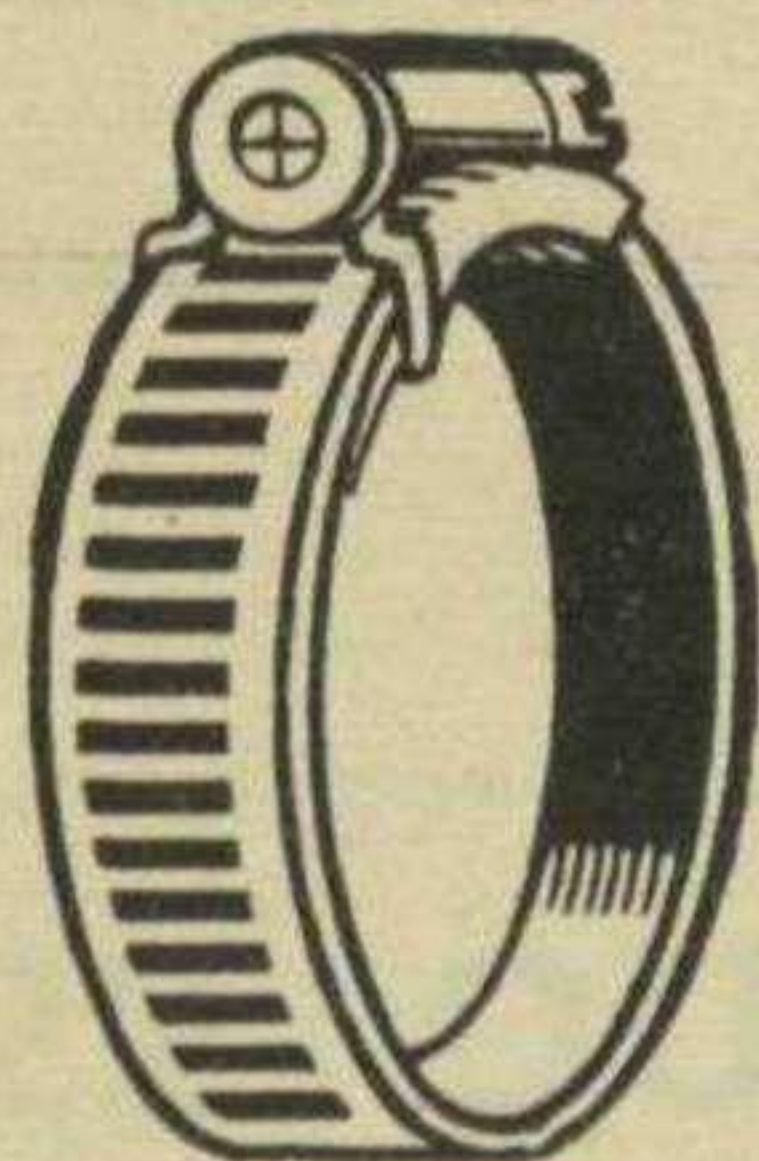
**"Europa Touring."**

The Automobile Association announces the issue of a new edition of "Europa Touring." This book, which may be obtained by A.A. members at preferential rates, contains information concerning twenty-three European countries—three hundred pages of text and two hundred maps and plans giving the continental traveller an opportunity to carry in one volume practically all he need know of any particular territory.

The maps show roads in three classes, and towns are classified by the number of inhabitants—special signs being used to denote those of over 500,000 population, over 100,000, over 20,000, etc. Lakes, rivers, passes, and railways carrying motor-cars are clearly defined. The town plans show main and secondary thoroughfares, railways, churches, post-offices and public buildings.

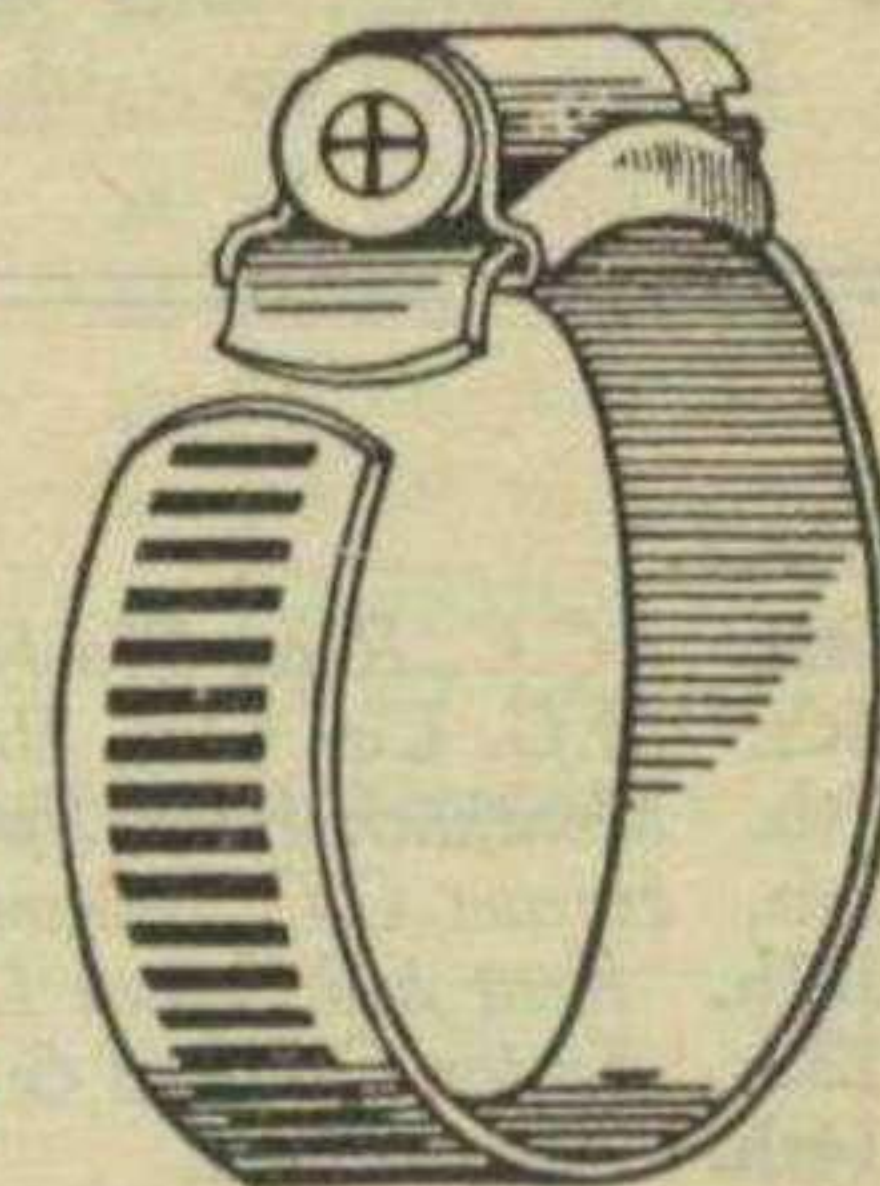
The text is in three languages—English, French and German, and covers Passport Regulations, Taxes, Insurance, Speed Regulations, notes on the best time to travel, roads, the countries and their peoples, places of interest, etc.

# 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  
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# What Do You Know About Cars?

## THE THIRD PROBLEM IN NEW COMPETITION FOR MOTOR SPORT READERS.

### Report on Problem No. 2.

**T**HE specification of the car given in our April issue was that of the 15/80 h.p. Maudslay, the very interesting model introduced at the Motor Show of 1923. The first correct solution opened on April 15th was that submitted by:

**Mrs. J. G. Egan,  
"Mayville,"  
Waterford, Ireland.**

to whom we have sent a cheque for one guinea. Readers seem to have a particular affection for Lagondas, for, as happened last month, the most frequently mentioned make of car apart from Maudslay was Lagonda. Other makes suggested were Vauxhall, Crossley, Maserati, Alfa Romeo, Lea-Francis, A.C., Ballot, O.M., etc. The percentage of correct solutions was 48%, and an interesting point was that a number of competitors did not know the correct spelling of Maudslay, the variations

Maudsley and Maudesley being of frequent occurrence.

Incidentally, a definite clue to the date of the Maudslay was given in the specification by the size of its tyres, 34 inches x 4½ inches, which ruled out the possibility of the car being a Lagonda.

The large number of incorrect solutions bears out the shortness of memory of the motoring community (like any other) in remembering events which are momentous at the time of their occurrence. The 15/80 Maudslay was hailed as a car of rare individuality, as indeed it was, and created a furore during the 1923 Olympia Motor Show, the Maudslay stand being thronged with excited students of automobile design. Now, ten years later, it is only remembered by half of the entrants for our competition!

### Rules for Problem No. 3.

1. Cut out the coupon on the inside back cover, fill in your solution, and send

it to us in a sealed envelope, marked *Competition*.

2. Write your solution and name and address in block capitals. Any alterations will automatically disqualify the entrant.
3. The Editor's decision is final.
4. Entries must reach this office, 39, Victoria Street, London, S.W.1, not later than first post, May 15th, and a prize of one guinea will be given to the sender of the first correct solution opened.
5. More than one coupon may be included in one envelope.
6. No letter must be sent with coupon.
7. The result will be published in our June issue.

### Problem No. 3.

**What was the first V-8 automobile to be produced in Great Britain?**

## LUXURY IN MINIATURE.

In these days of heavy Income Tax and shrunken dividends many people who normally run a luxurious town carriage of 40 h.p. or so are having to look elsewhere for a more economical, but at the same time high-class vehicle. It is to meet this demand that Messrs. Bruce & Co., of 53/54, Hay-

market, S.W.1, have introduced a very well-appointed coupé-de-ville body, with Parisian lines, on the 10 h.p. Lanchester chassis.

The smooth-running power unit of the Lanchester "10," assisted by the Daimler fluid flywheel, makes the car ideal for traffic work, and business men

will be able to make the journey from the West-End to the City in much the same silence and comfort as they have previously done in a car of four times the horse power. Incidentally, the car could be seen all through April at the Grosvenor House Hotel, Park Lane, London, W.1.

## FORTHCOMING EVENTS

### MOTORING FIXTURES FOR 1933.

#### MAY.

- 6th. J.C.C. Race, Brooklands.
- 6th. M.G. Car Club, Brooklands Rally.
- 7th. Montjuich Race, Spain.
- 7th. Hornet C.C. Reliability Trial.
- 13th. Kent and Sussex L.C.C. Lewes Speed Trials.
- 13th. Sutton Coldfield & N. Birmingham A.C. Reliability Trial.
- 14th. Targa Florio.
- 15th-20th. Edinburgh & District M.C. Reliability Trial.
- 20th. M.G. Car Club Speed Trials.
- 20th-25th. Wisbadaner Automobil-turnier.
- 20th. Bugatti Owners' Club Speed Hill Climb.
- 20-21st. Junior Car Club Inter Centre Rally.
- 20th-21st. Newbury M.C. Reliability Trial.
- 21st. Avus Track Race, Germany.
- 27th. Shelsley Walsh Open Hill Climb.
- 27th. M.G. Car Club Shelsley Walsh Rally.
- 27th. Mid Surrey A.C. Grand Cup Trial.
- 28th. Eifelrennen, Germany.
- 28th. Royal Prix de Rome.
- 28th. Liverpool M.C. Trial.
- 30th. Indianapolis 500-miles Race.

#### JUNE.

- 2-3rd. M.C.C. London-Edinburgh Run.
- 4th. Grand Prix des Frontieres, Belgium.
- 4th. Hornet C.C. Social Run.
- 5th. B.A.R.C. Whitsun Meeting.
- 10th. Ulster A.C. Bally Cannon Hill Climb.
- 11th. French Grand Prix.
- 11th. Lvov Grand Prix.
- 11th. Bugatti Owners' Club Treasure Hunt.
- 17th. Southport M.C. Race Meeting.
- 17th. Brighton and Hove M.C. Brighton-Beer Trial.
- 17-18th. Le Mans 24 Hours Race.
- 17-18th. Liverpool M.C. 24 Hours Trial.
- 18th. Kesselberg Hill Climb.
- 18th. Pontedecimo-Giovi Hill Climb.
- 23-24th. Riley M.C. 24-Hour Trial.
- 24th. Kent and Sussex L.C.C. Lewes Speed Trials.
- 24th. J.C.C. High-Speed Trials, Brooklands.
- 24th. M.G. Car Club Night Trial.
- 25th. Italian G.P.
- 26th-July 1st. Batten-Badener Automobil-turnier.





# NOW

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## HOLDS EVERY

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## BABY CAR

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# RECORD

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22 OUT OF 24 ON ●

A page in light car history was written on December 20th and 21st when the Records listed below were broken at Montlhery. Messrs. G. E. T. Eyston, T. H. Wisdom and A. Denly driving a standard production J.3 model M.G. Midget broke the following international Class H Records :—

24 hours	at 70.61 m.p.h.
1,000 miles	at 69.19 m.p.h.
2,000 kilometres	at 69.95 m.p.h.

The next day, driving the Magic Midget fitted with Powerplus Supercharger, Messrs. G. E. T. Eyston and A. Denly broke the following Records in the same class :—

200 kilometres	at 95.52 m.p.h.
500 kilometres	at 91.77 m.p.h.
1,000 kilometres	at 91.77 m.p.h.
200 miles	at 95.02 m.p.h.
500 miles	at 92.50 m.p.h.
1,000 miles	at 88.36 m.p.h.
3 hours	at 94.59 m.p.h.
6 hours	at 92.79 m.p.h.
12 hours	at 86.67 m.p.h.

*(Subject to official confirmation)*

WAKEFIELD  
**Castrol**  
 MOTOR OIL

Capt. Eyston and  
Count Lurani,  
drivers of the  
winning car.



**Magnette upholds British prestige by winning light car class in the classic Italian "Mille Miglia," the world's fastest 1,000 miles road race.**

**FIRST:** Captain G. E. T. Eyston and Count Lurani, **56.90** m.p.h.

**Second:** Earl Howe and H. C. Hamilton, **56.82** m.p.h.

also

Team prize winners, irrespective of engine size.

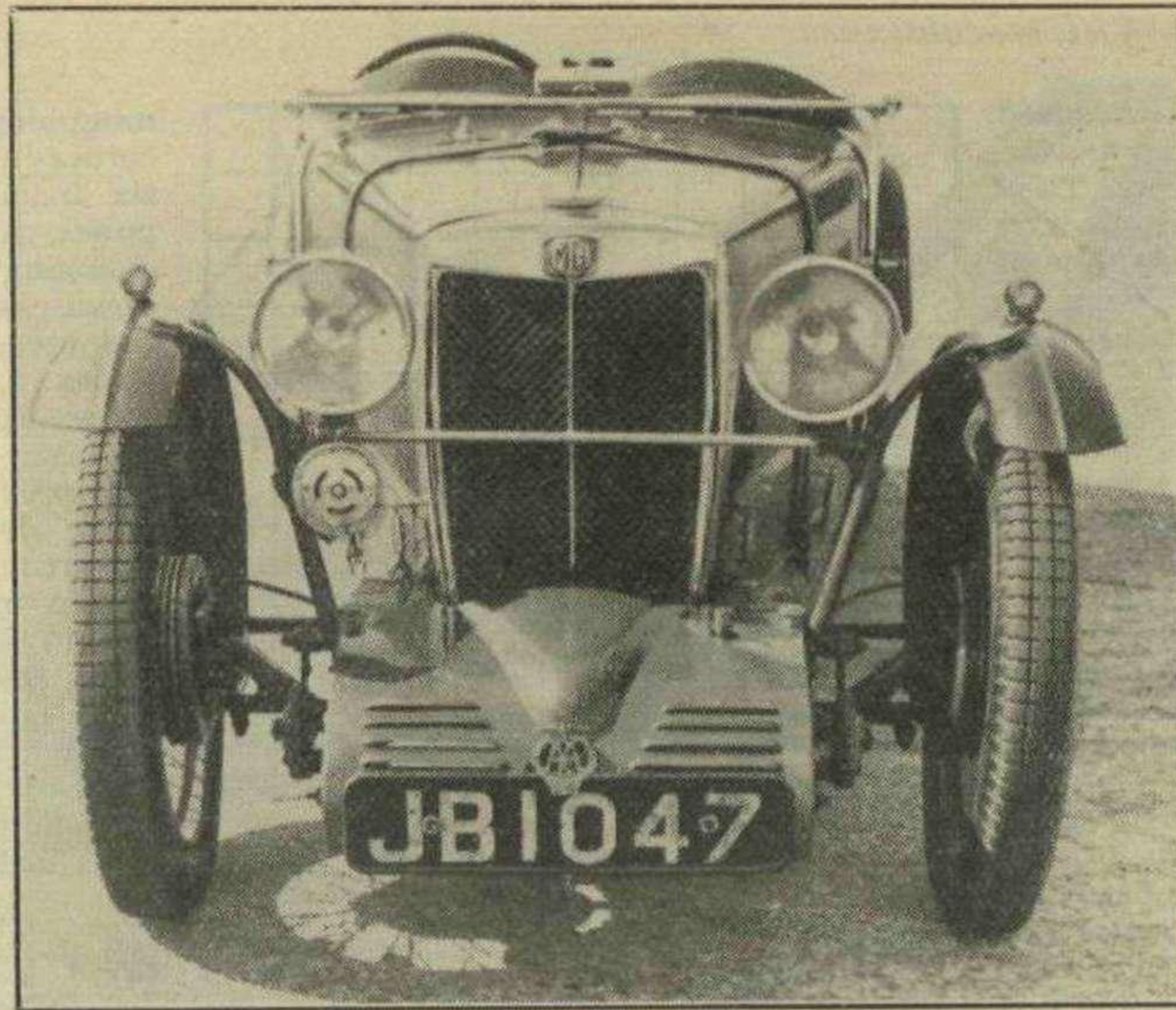
Course record from Brescia to Siena (225 miles) broken by M.G. Magnette at 65 m.p.h., driven by Sir Henry Birkin and Bernard Rubin.

(Subject to official confirmation).

THE M.G. CAR COMPANY LTD., ABINGDON-ON-THAMES, BERKSHIRE.  
EXPORT DEPARTMENT . . . STRATTON HOUSE, 80, PICCADILLY, LONDON, W.1.

*Please mention MOTOR SPORT when corresponding with advertisers.*

Moderate  
Priced  
M.G.  
Midget  
Capable  
of  
90 m.p.h.



The "J.3"  
Combines a High  
Performance  
with Comfortable  
Coachwork.

## SUPERCHARGING FOR ALL!

THE success of the J.2 M.G. Midget has been an accomplished fact since its introduction, but the merits of the J.3, a supercharged version of the same car, are less widely known, excepting for its fine performance at Monthéry, where several records, including 1 to 24 hour at 70.61 m.p.h. were put up at the close of 1932. The car we took on test was the actual record-breaker, and we found the combination of speed and tractability almost incredible for a car fitted with an engine of only 750 c.c.

The chassis layout differs little from that of the J.2 described in the September 1932 issue of MOTOR SPORT. The single overhead camshaft engine has inlet and exhaust ports on opposite sides, 14 mm. sparking plugs, and a two-bearing crankshaft. A 6a Powerplus supercharger is driven direct from the front end of the crankshaft, and the S.U. carburettor is supplied from the 11 gallon rear tank, which has a reserve supply, by means of an Autopulse pump. The J.3 crankshaft is heavier than that of the J.2 and has a shorter throw, so as to bring the capacity down to 746 c.c.

The clutch is strengthened, and transmits the drive through a four speed gear-box, with a constant mesh third gear, to the spiral bevel back axle. With the increased power given by the supercharged engine a final ratio of 4.89 has been found suitable, allowing high road speeds without fuss.

The front axle is dropped and the chassis passes under the rear

one, with a consequent lowering of the centre of gravity. The springs are flat underslung semi-elliptics sliding in trunnions at their rear ends. Cable-operated brakes are used, and they and the other chassis points are lubricated from nipples grouped under the bonnet.

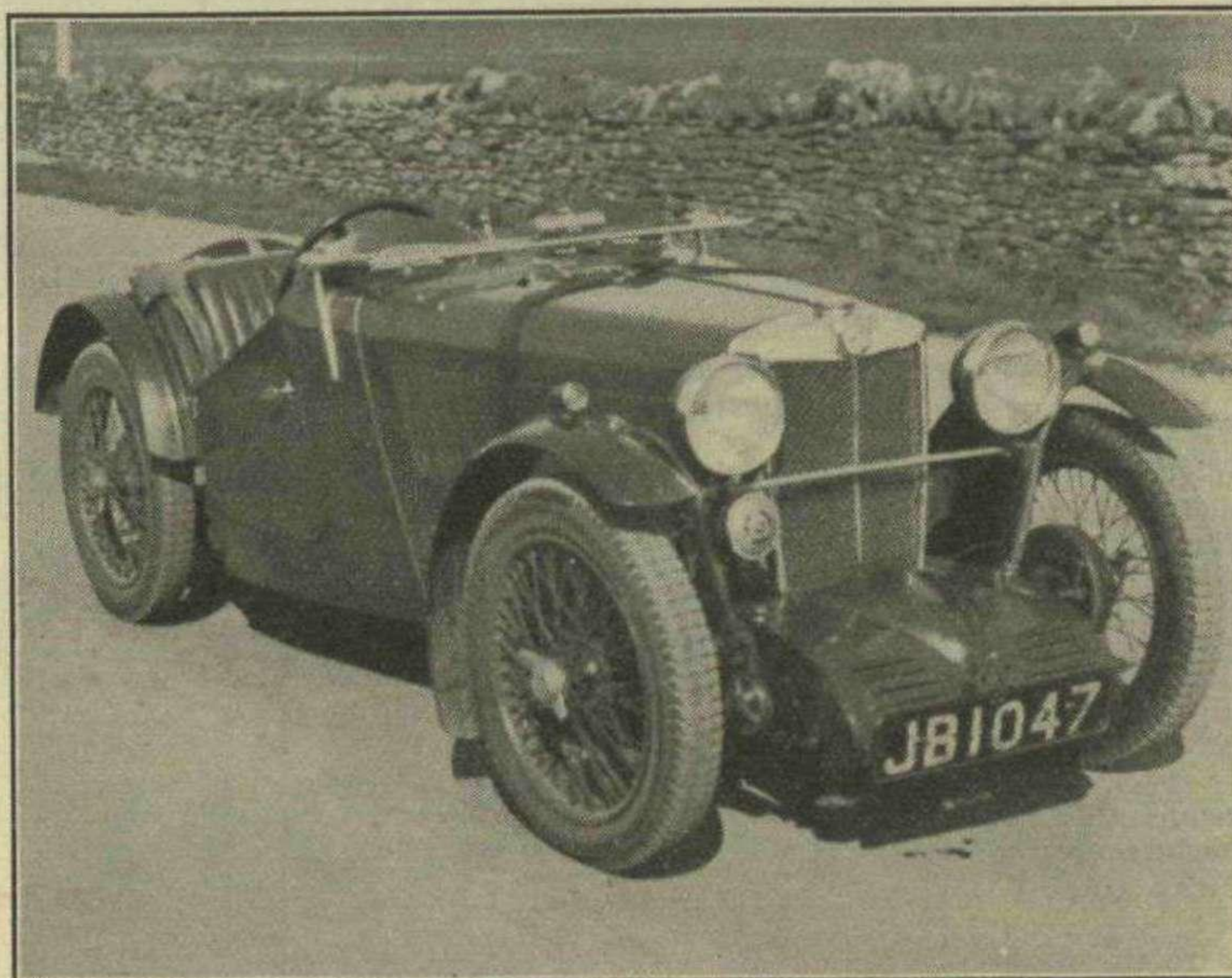
The car, we were informed, had a maximum speed of about 93 m.p.h., an amazing speed when one considers that two years ago the Mile Record for 750 c.c. cars stood at 94 m.p.h. Changing over from a car of three times the engine capacity and much larger chassis dimensions, we were a little doubtful as to whether this speed would prove agreeable on a small car.

Tyre pressures were checked, the shock-

absorbers tightened up hard in front and slightly less so behind and we set off from Abingdon. The pneumatic upholstery damped out any harshness from the tightened suspension, and it was evident that the trial was going to be a success. The steering is unusually light, and so is liable to be overwound by the heavy-handed, but once this feature had been recognised, the car was driven with complete confidence. So much so that it was taken down a main-road slope at 90 m.p.h. and proved perfectly controllable, while on corners the short chassis enabled one to get round with the minimum of effort.

The repairs on Brooklands Track prevented a complete circuit being made, but starting from the Fork side of the damaged bridge, the car reached 70 m.p.h. by the time it was passing the Vickers Sheds. A strong head wind on the Railway Straight kept the speed down to 80 m.p.h., but once under the shelter of the Byfleet banking it rose steadily to 88 and 90 would undoubtedly have been attained if it had not been necessary to stop before again reaching the bridge.

The acceleration chart reveals an excellent performance which might have been bettered at the top end if the strong wind had not made it difficult to do 80 against it. At the maximum engine revs. of 5,500 the speed in third gear is 70 m.p.h. and there was no sign of period throughout the range. 45 m.p.h. seemed about the safe maximum in second. The brakes were as



*Multum in parvo!* The "J.3" Midget with an engine capacity of only 750 c.c. can obtain 90 m.p.h.

## SUPERCHARGING FOR ALL!—continued.

efficient as the high maximum speed demanded and from 40 m.p.h. the stopping distance was 55-57 feet. They were smooth and progressive in effect.

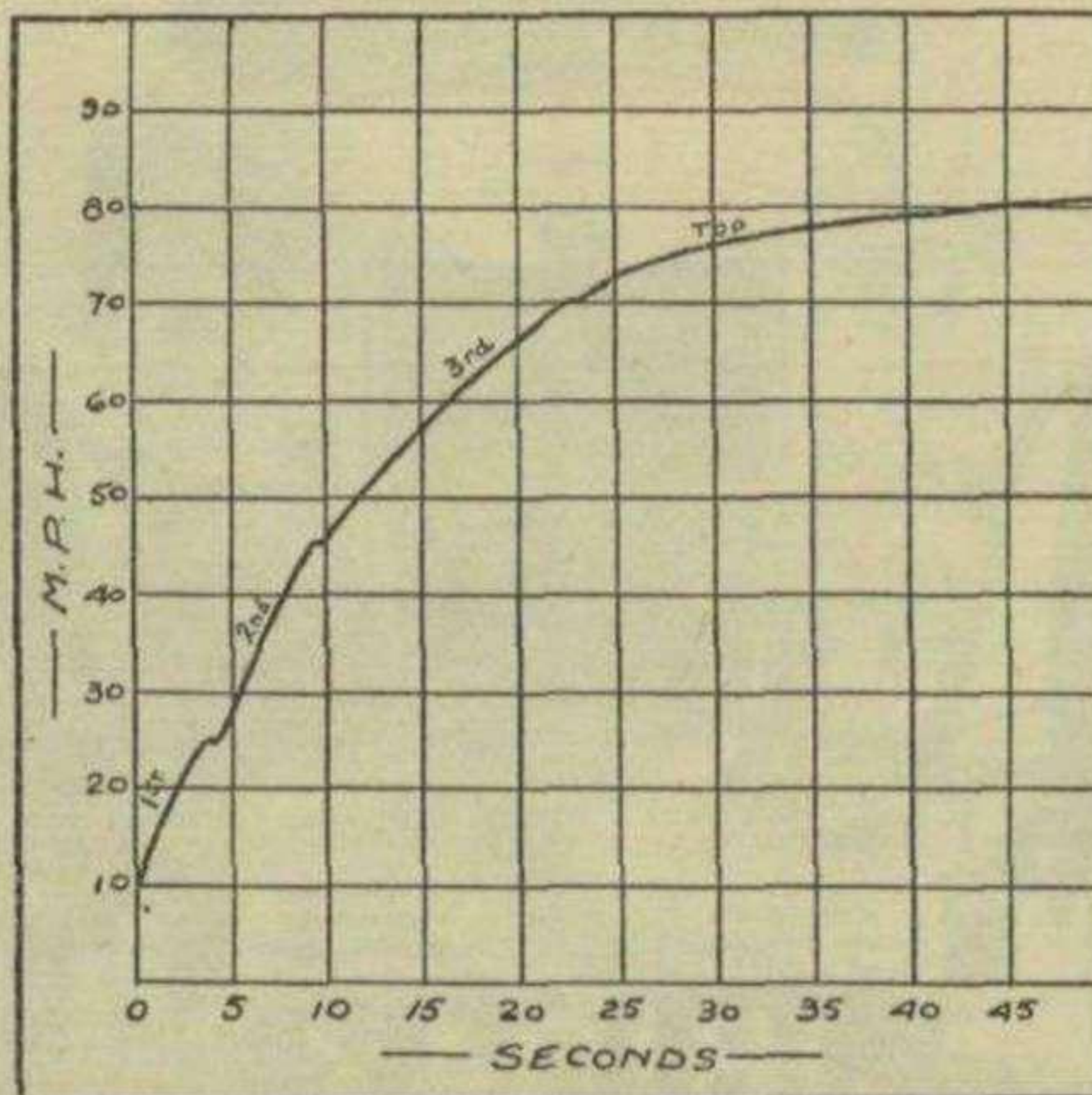
The J.3 is a very successful example of supercharging properly applied. On its normal fuel—50% Ethyl and 50% Benzol—it runs smoothly down to 500 r.p.m. on top gear, though for a fast get-away a change-down straight into second is a help. The K.L.G. 718 plugs, which are of course of the 14 mm. type, are as happy in traffic as on the open road. The bearings of the blower are lubricated from the sump and the blades get their supply from upper-cylinder oil used in normal quantities in the petrol. Because of this the plugs do not become swamped with oil after an all-night stand in the garage, and the car started instantaneously on all occasions. A possible criticism of the blower-installation is that being fitted on the front end of the crankshaft, a starting handle cannot be fitted, but with a light car like the M.G. a push start should not be difficult.

The blower and the engine were both mechanically silent, but the exhaust note becomes prominent at 3,000 r.p.m., which often seems to happen on a four-cylinder engine. Keeping above or below these revs, the exhaust note in traffic is inoffensive, while in the open country the trumpet note effect fits in well with the exhilarating effect of the car's acceleration.

With a touring car, as distinct from the semi-racing machine, one must have good suspension and comfortable upholstery. Even with the shock-absorbers fully tightened, as they were throughout the test, road shocks were hardly noticed, and the seat was adjustable both for distance from the pedals and for rake. The controls all came easily to hand, and the racing-type brake lever was of great use in traffic.

The gear-change from top to third was a joy, and with the 70 m.p.h. maximum there was no difficulty in getting quickly past any vehicles one normally encounters. All the gears were quiet, and third is a constant-mesh ratio. The gate of the remote-control gear-box is not very definite, as it is possible to catch the lever in the slot leading to reverse gear when changing down to second in a hurry, and one is also liable to put the lever into reverse instead of first gear in a traffic block and to rush rapidly backwards. The enthusiast would overcome this by fitting a gate off one of the larger cars, which is interchangeable with the J. type.

The horn button is fitted to the dash where it can be operated with one finger, and the dipping switch with it. The



The acceleration chart of the J.3 Midget.

latter simply cuts out one headlight when required. The lamps allow 60 m.p.h. to be maintained with safety.

The J.3 is a car which fits in with one's every mood, and is just as happy hum-

ming along at 40 m.p.h. as rushing round corners at full revs. with the inside wheels six inches from the gutter. The good power-weight ratio makes frequent gear-changing unnecessary, and one settles down easily to speeds of 65 to 70 m.p.h., the revs. at the latter speed being just under 4,000. Its maximum with the screen up is about 80 m.p.h.

Heavy rain on the second day of the test prevented the maximum road speed being determined, but it gave a good opportunity of trying the hood. When not in use, this folds down in a locker behind the seat. The sticks are of normal type, pivoted inside the body, and the front part of the fabric clips on to the screen. The latter is rigid and sufficiently high to give a good field of view, but the suction wind-screen wiper did not work when the blower was exerting pressure.

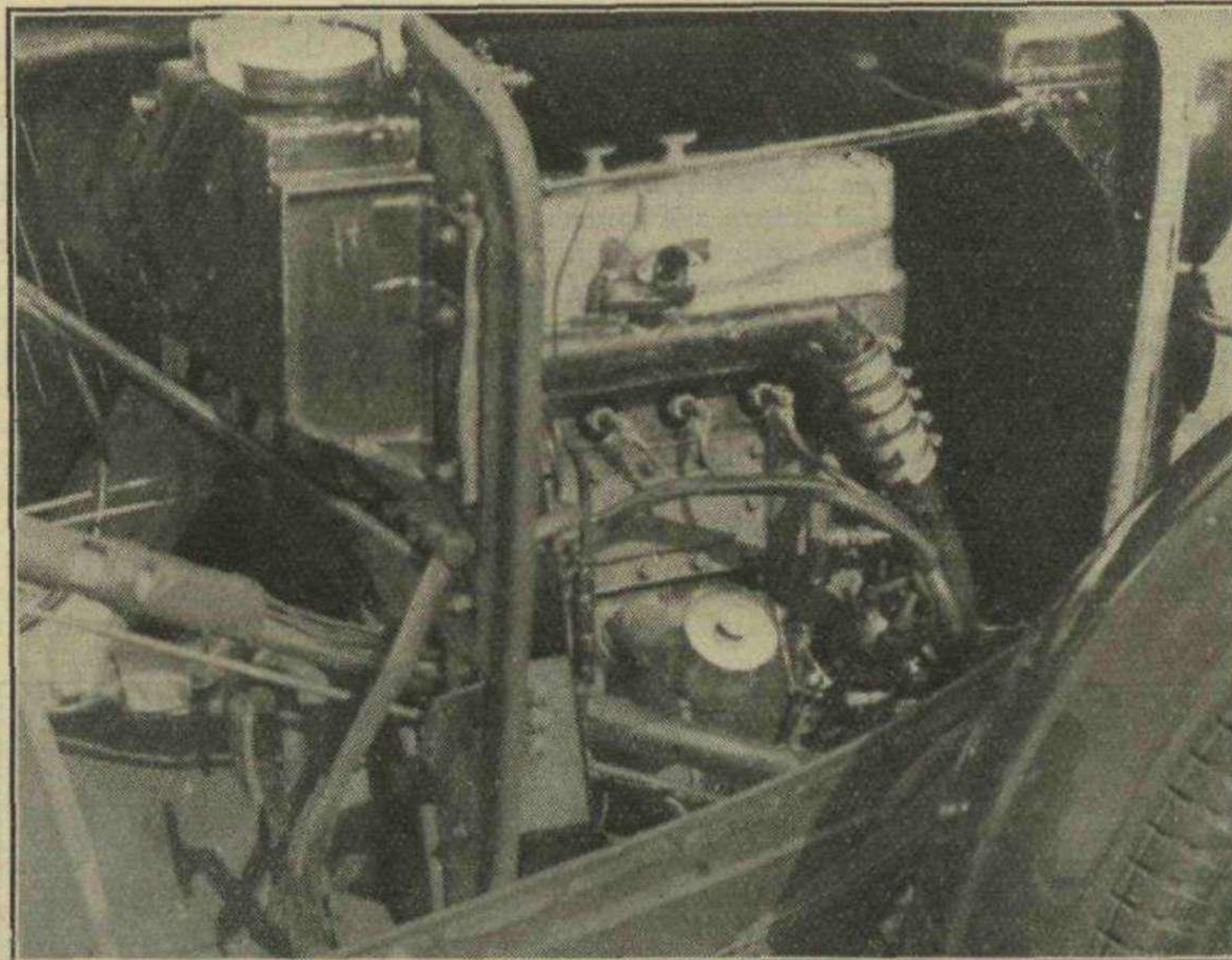
The hood locker is quite spacious, and could hold a pair of useful suitcases, especially if their dimensions were chosen to fill the space available. A removable flap gives access to the back-axle and the transversely placed shock-absorbers.

Other manufacturers please copy!

Wet roads in no way affect the car's steadiness and even on tramlines, where the small tyres might have been expected to give trouble, there was no tendency to misbehave. The brakes were also applied fiercely in emergencies without causing any deviation from the desired path.

Considered irrespective of price, this supercharged 750 c.c. car gives real comfort for two people combined with a performance as high as any normal driver could want. Driven with a little consideration, there is no reason why it should not keep its tune over long periods without attention, while the tax, insurance, and running expenses should be

small. Costing only £299 10s., the car is quite unique in the value it offers.



Offside view of the engine, showing the single S.U. Carburettor.

#### Brief Specification.

Engine: 4 cylinder 57 mm. and 73 mm. bore and stroke. Capacity 746 c.c. R.A.C. rating, 8.05 h.p. Single overhead camshaft. Single S.U. carburettor. Coil ignition.

Gearbox: 4 speeds and reverse. Constant mesh third. Ratios, 4.89, 6.65, 10.46, 16.5 to 1.

Rear axle: Special bevel. Three quarter floating.

Suspension: Underslung semi-elliptic.

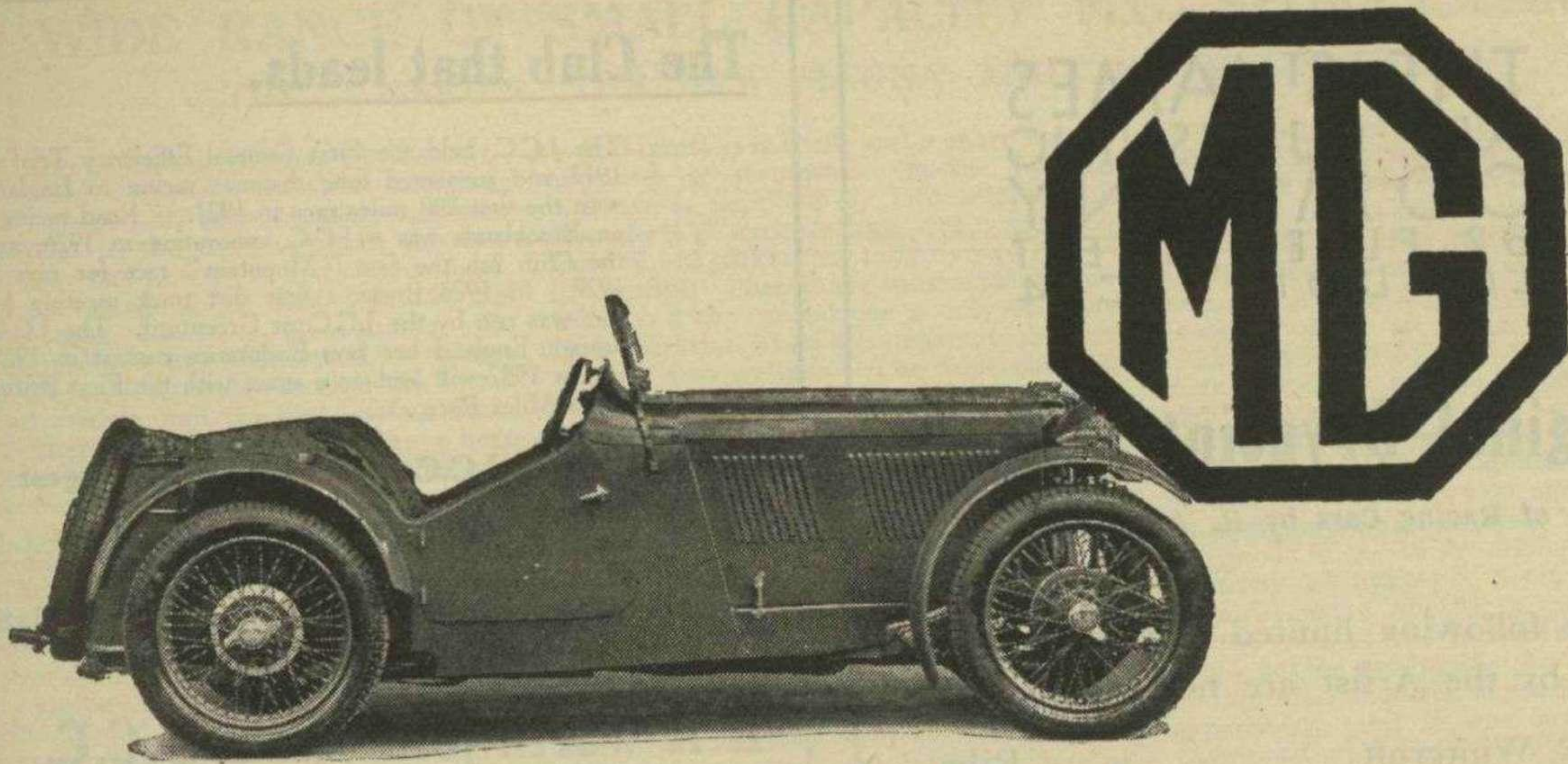
Dimensions: Wheelbase 7ft. 2in. Track 3ft. 6in.

Price with open 2 seater body, £299 10s. 0d.

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## WIDE RANGE OF SMALL CAPACITY M.G. SPORTS CARS.

THE J SERIES, THE NEW MAGNA AND THE MAGNETTE.

THE experience gleaned by the M.G. Car Company from its successes in the 1932 racing season has been embodied in the designs of all the new models. The new type of cylinder head, with its small plugs, first tried in the 1,000 mile Race at Brooklands, the straight underslung frame with flat springs and the cable-operated brakes are found on all models, and the large petrol tanks and other improvements which have been fitted to the more expensive models are now found throughout the range. Dunlop tyres and Rudge Whitworth wheels are also standard.

The J. Series includes all the four-cylinder cars. The J.2, the popular two seater model, and the J.1, which carries a four-seater body, are fitted with 850 c.c. engines, embodying the new type cylinder head, in which inlet and exhaust ports are on opposite sides, and twin S.U. carburettors. A four-speed gear-box with silent third, and 8 in. brakes with aluminium fins all help to improve performance, and the body and equipment is as complete as could be desired. The two-seater at under £200 has placed sports car motoring within the reach of almost everyone.

The J.3 is a supercharged version of the J.2, and is described fully elsewhere in this issue. By shortening the stroke to 73 mm., the engine is brought within the 750 c.c. limit, and is ideal for fast touring or competition work. It costs £299 10s.

The J.4 and J.5 are the supercharged and unsupercharged cars corresponding to the old Montlhéry type. New features are the head, with opposed ports and 14 mm. plugs, and the oiling system with a large Elektron sump holding one gallon. The oil is forced through a Tecalemit filter on its way to the engine, and the oil level is maintained by a float feed, supplied from a two-gallon dash tank. Like the other J models the valves are operated by an overhead camshaft through fingers, and three springs per valve ensures positive closing. The camshaft is driven by bevel gears from a vertical shaft at the front of the engine and the dynamo is incorporated in this.

Coil ignition is used, and a spare unit is supplied as standard. On the J.5 the mixture is supplied by two semi-down-draught S.U. carburettors, and is pumped from the 12 gallon rear tank by two Petro-lift pumps. These have independent pipe lines, and the second one is only brought into operation when it is desired to use the reserve two gallons. The supercharged cars are fitted with No. 7 Powerplus blowers mounted between the front dumb-irons in the familiar cowling. The blower runs at three-quarter speed, and is protected from any end-thrust from the crankshaft by a sliding coupling. A single carburettor is bolted to the casing, and the mixture passes to the engine through the special dual induction pipe, which maintains gas velocity at low speeds. A water pump is fitted.

The J.4 and 5 can either be fitted with the well-tried M.G. close ratio four speed gear-box, or with a pre-selective box of Wilson type, which costs an extra £25. In the first case a two plate clutch is used, but with the second the drive is taken up by the friction bands. A special feature of the pre-selective box is the servo-action of the bands, which increases the pressure when the engine is driving, preventing any possibility of slip on the lower gears. The gear-lever works in a gate carried on an extension of the gear-box, coming under the left hand, and the mixture and slow running controls are mounted below. The brake-lever is of racing type and the ratchet engages only when the knob is depressed and flies off when next the lever is operated.

The transmission follows the lines of the other models, but straight bevels are used in the back axle.

The flat chassis, upswept in front and passing under the rear axle, is retained unaltered, and gives a floor line only 12 inches from the ground. Additional steel bracing has been embodied at the rear. The flat underslung springs slide in trunnions at their rear ends, and are bound with cord and taped to resist the extra strains of violent cornering and braking.

The brake drums are now 12 inches in diameter, and fitted with cooling fins, and

the operating cables, like other chassis points are lubricated from nipples grouped under the bonnet. The brakes are adjusted by means of a hand wheel which is situated alongside the driver.

Cam steering is used and the special M.G. divided track rod contributes to the accuracy of the steering.

The J.4 and J.5, fitted with two-seater racing bodies, normal type gear-box, and Brooklands exhaust system cost respectively £445 and £395.

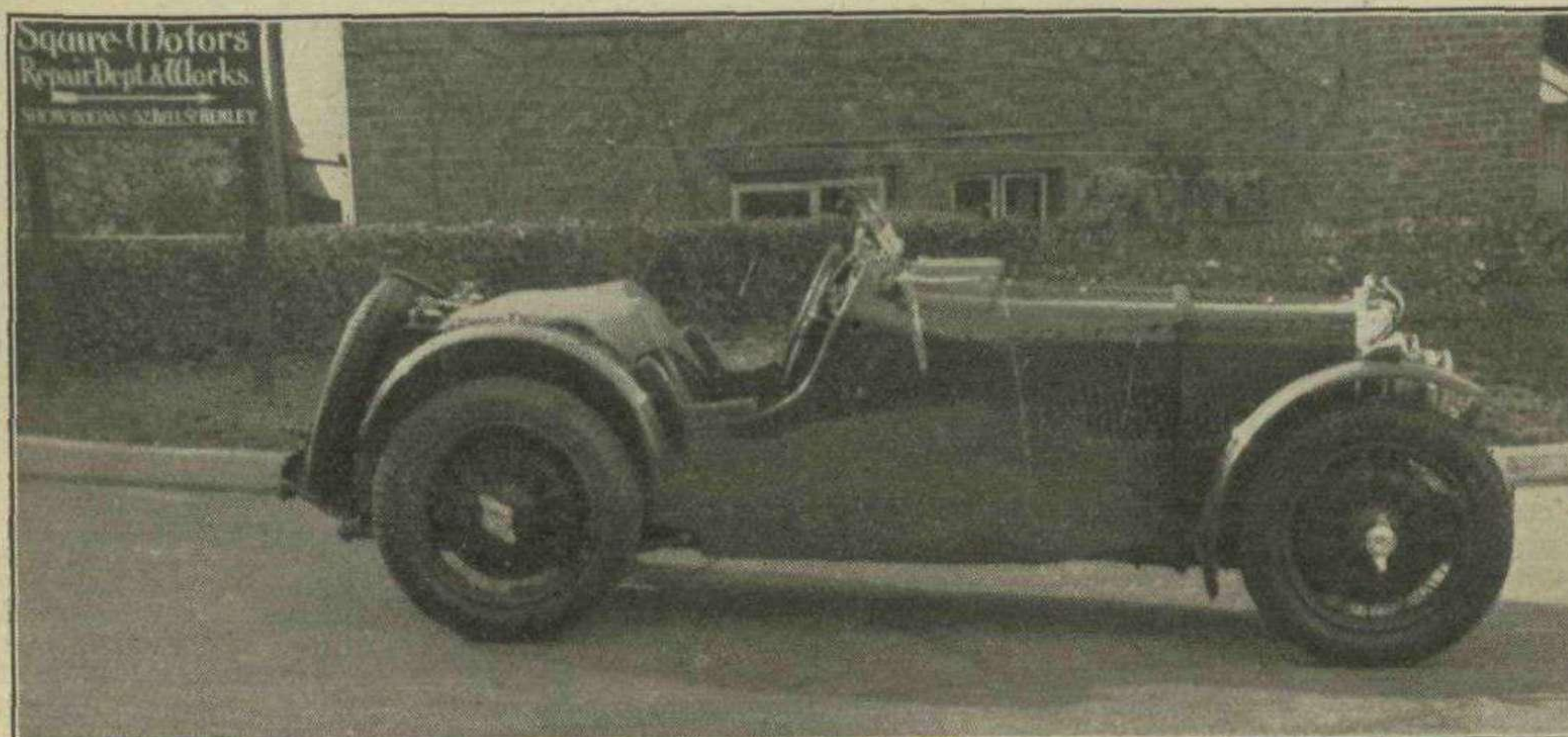
The M.G. Magna appeared on the market a little over a year ago, and made an immediate name for itself by reason of its good lines, brisk acceleration, and economy of upkeep. Soon there were enquiries as to whether a racing version on the lines of the successful Montlhéry could not be produced. An undertaking of this kind requires much research and experiment, and it was not until last Olympia that the six-cylinder racing car, the Magnette made its debut. Its magnificent performance in the Italian 1,000 Mile Race showed that the period of development had not been in vain.

The engine is of course a six cylinder, with bore and stroke of 57 and 71 mm., giving a capacity of 1,086 c.c. The tax is £12. The cylinder block and top half of the crank case are cast in one, and the cylinder head has 6 inlet and 6 exhaust ports on opposite sides, and 14 mm. plugs. The overhead camshaft operates the valves through fingers, and is driven by the vertical shaft-cum-dynamo arrangement as on the 750 c.c. models. There are two valves per cylinder, and on the racing engines these are fitted with three valve springs.

The aluminium pistons carry three rings, and a special type of steel connecting rod is used. The four bearing balanced crankshaft is machined all over.

An unusual feature is the B.T.H. polar inductor magneto, which by reason of its construction sparks four times per revolution, and therefore has to run at three-quarter engine speed.

Three semi-downdraught S.U. carburettors are fitted to the unsupercharged models, and an electric petrolift pump feeds



The enthusiast's ideal, the supercharged K.3. model M.G. Magnette. An account of a short run on one of these cars appears in this article.

## WIDE RANGE OF SMALL CAPACITY M.G. SPORTS CARS—continued.

the petrol from a 12 gallon rear tank, which has a reserve tap. The K.3 racing model has a 23 gallon rear tank, and two electric pumps, one of which is connected to the

Attention has been paid to the reduction of unsprung weight, however, and the drums, shoes, and back plates are made of Elektron, with chrome cast iron liners

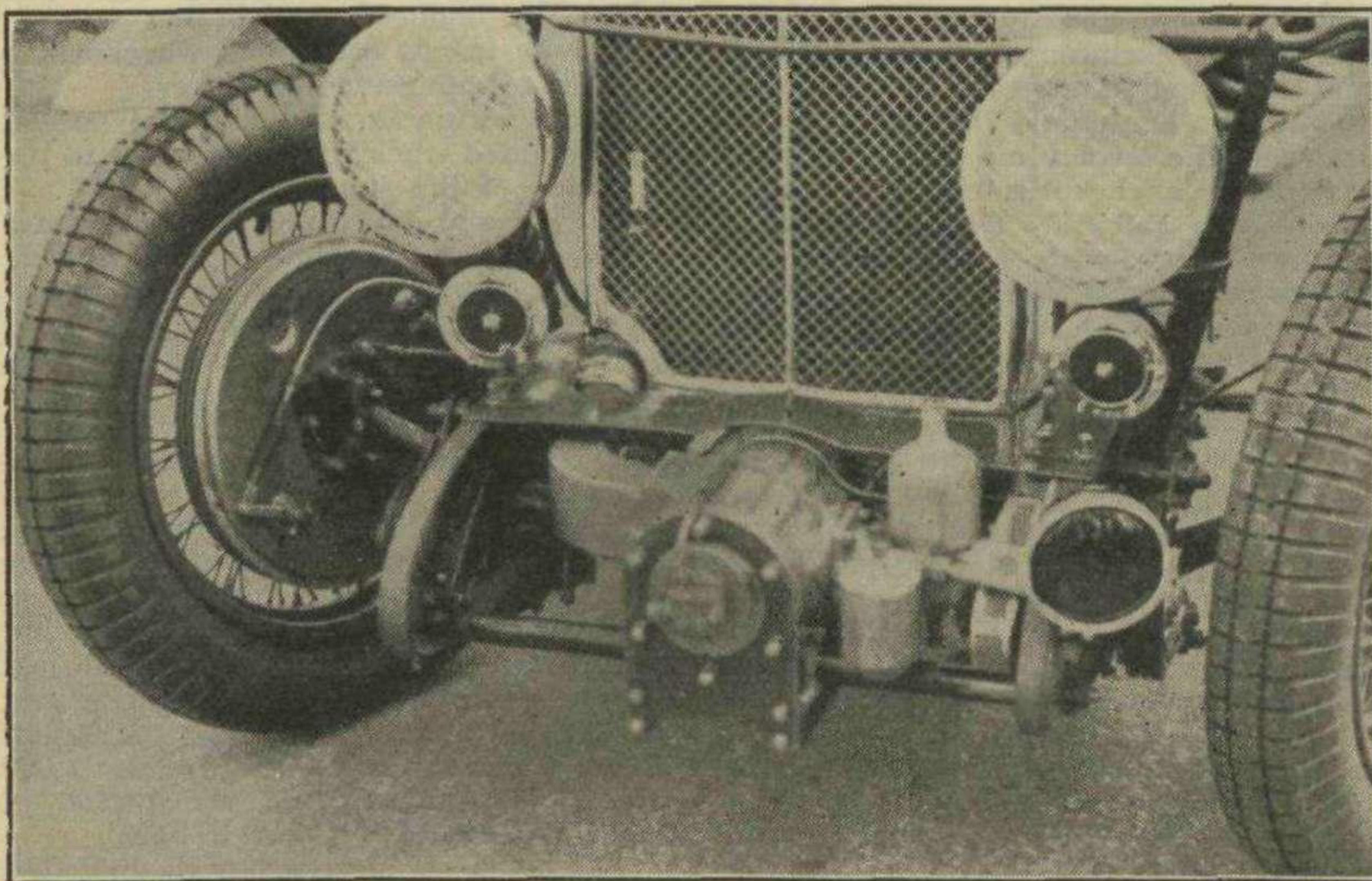
already noted. It can either be had in chassis form, or fitted with the familiar M.G. two-seater racing body. A very full equipment of instruments is standardised, every electric circuit has its own switch and fuse, and the switches and fuse box are mounted on the dash. In fact no item which has been found desirable in racing practise has been omitted. Fitted with T.T. type two-seater bodies and pre-selective gear-boxes the cars cost £650 supercharged, or £100 less without the blower. A streamlined body is also available.

Through the kindness of Mr. G. F. A. Manby Colegrave, of Squire Motors, Henley, we were able to have a short run in a supercharged K.3. The first impressions were the solid and roadworthy feel of the car, partly due no doubt to the width of the track, and the comfortable driving position. The wheel came naturally into the lap, the upholstery soft and the side of the body padded where one's elbow normally gets rubbed. The wind-deflectors and aero screens made it unnecessary to wear a coat even at high speed.

The engine was not run in, so we had to content ourselves with 4,500 r.p.m. on top gear, which was about 80 m.p.h., and of course at this speed the progress of the car was quite effortless. Limitation of revs. also prevented the full benefit of the pre-selective gear-box from being had, for the willing engine reached the limit in each ratio almost in a flash. One can only say that its use is complete joy. The gate is worthy of mention. The lever now moves along a serrated quadrant with a fairly strong spring to ensure engagement, so that the movement is merely a straight pull, but with sufficient resistance to avoid overshooting a notch.

The grouped controls on the gear-lever extension were convenient, and the engine did not appear to be sensitive to the position of the ignition control.

The brakes were powerful, and the general feel of the car was most promising.



This photograph shows the 13" brake drums, and the method of mounting the Powerplus blower on the M.G. Magnette.

reserve. Quick-acting filler caps are fitted to each end of the tank.

The supercharged cars are fitted with No. 9 Powerplus superchargers, driven off the front end of the crankshaft, and running at three-quarter engine speed. A single carburettor is used and the blower is lubricated from the engine.

Lubrication is an important matter on a high-speed engine, and the Magnette is fitted with a finned Elektron sump which holds 1½ gallons. The oil is forced through a pressure filter before reaching the bearings, and on the K.3 a further supply is carried in a dash tank which holds nearly two gallons, and is fed into the sump by an automatic float device.

The Magnette chassis can be obtained either with a manual-type gear-box with constant-mesh third gear, or with a Wilson pre-selective box, which is standard on the saloon and the racing chassis. The gear-lever is mounted on an extension, and grouped with it are the ignition, slow running, mixture and reserve petrol controls.

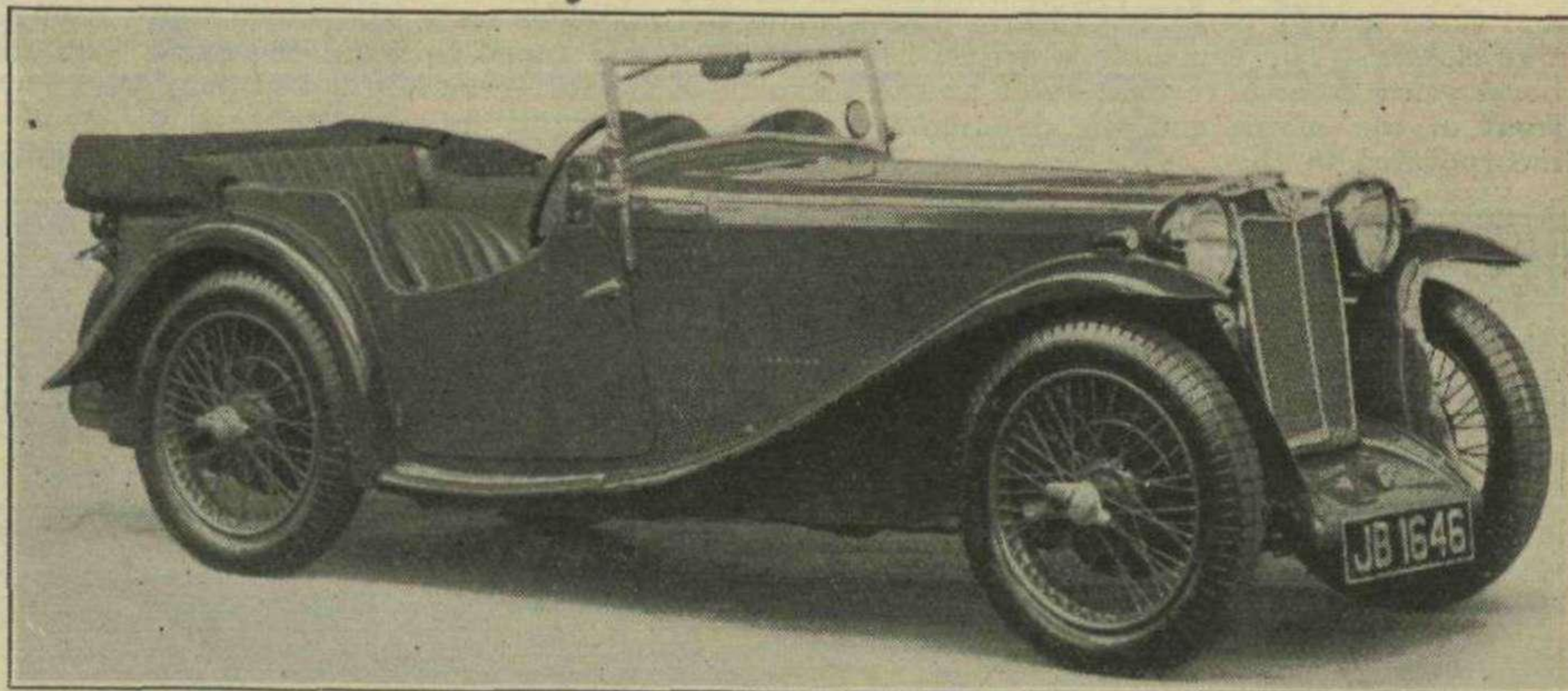
Transmission follows the usual M.G. lines, with an open propeller shaft with two Hardy Spicer joints and a three-quarter floating back axle. On the K.3 straight bevel gears are used.

The chassis, which is upswept in front and straight from the back of the engine to the rear end, passes under the rear axle. It is braced by tubular cross members, and by a special pressing at the rear. The width is greater than that of the Magna, and this with the track of four feet allows really roomy bodywork to be fitted.

The brakes are unusually powerful, and the drums are 13 inches in diameter.

in the drums. Cables from the king pins to the chassis relieve the front springs of the K.3 of any twisting strain. Cam steering is used with a large diameter wheel, and the M.G. divided track rod is a feature of all models.

The increased chassis width and track allows a full-sized four-seater and a most attractive four-door saloon to be accommodated on the nine foot chassis. The sweeping lines of the front wings are most graceful, and not being obstructed by a centre pillar no gymnastics are required to get in and out. The clever luggage container at the back is invisible when not in use. The open car costs £385, while



The latest M.G. Magna has beautiful lines, and the four seater illustrated above sells at £299.

the saloon, which is fitted as standard with pre-selector gear-box, is priced at £445. The K.2 is a short wheel-base model at the same price as the four-seater.

The K.3 racing model has a short chassis, and follows the lines of the rest of the K. series except for the differences

Corners were taken without effort and the steering, though still a little stiff, held the car on an accurate course. A full road test which we hope to publish in the near future will undoubtedly answer a good many of the pleas of English drivers for a national sports car which





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## WIDE RANGE OF SMALL CAPACITY M.G. SPORTS CARS—continued.

can hold its own in Continental events. The Magna range is being continued in a new guise, the L. type, and with the improvements embodied in it will more than retain its place in the ranks of light and economical sports cars.

The engine has been re-designed and now has the opposed ports and small plugs which are featured on the other models. Two carburettors are fitted. A re-designed semi-balanced crankshaft is used giving a shorter stroke, the dimensions now being the same as those of the Magnette. A pressure filter is used, and a

water pump increases the efficiency of the cooling system.

A two plate clutch appears on the L. type, and the gear-box is of a new type with constant-mesh third gear. Marles cam steering replaces the worm and wheel, and the brake drums are 12 inches in diameter.

The tourer, which costs £299, has a wider body than before, more comfortable seats are fitted, and a new body with a cowled scuttle. Long sweeping wings with running boards bring the car into line with the modern fashion in sports coachwork.

## The Boom of the Sports Car.

That the sports car has never been so popular as it is at the present time, in spite of the prevalent conditions of economic stress, is strikingly proved by the latest production figures of the M.G. Car Company.

The Company increased its 1932 pro-

duction by more than 100% over 1931, and plans for a still further increase commencing March, 1933, were made; even so, during that month it was found necessary again to increase the number of employees by as much as 25%, and

A two-seater costing £285 follows similar lines, and should be particularly useful for trials or other competition work, now that the capacity has been brought down to 1,100 c.c.

The saloon is more roomy than the F. type, particularly at the rear and embodies other detail improvements. The price is £345. A noticeable item in the Magna range is the size of the petrol tanks, 10 gallons on the tourer, 9 on the saloon, and 12 on the two-seater. In the latter case this should take the car at least 350 miles without refueling.

the number of cars delivered during March showed an increase of almost 100% over the previous month's output.

Exports, also, which for some time have steadily progressed, showed a marked increase with the advent of Spring.

## Dublin Hill-Climb.

IN the de Selby hill-climb, held near Dublin recently, fastest car time on handicap was made by Miss C. Comerford, on a Hillman Minx. The course was half a mile in length and had an average gradient of 1 in 12.

## RESULTS.

Up to 1,100 c.c.—1, Miss V. Comerford, Hillman Minx (6 secs.), 44 secs.; 2, D. P. Harris, G.N. (5 secs.), 49.5 secs.; 3, S. R. Sheane, M.G. Midget (4 secs.), 52.2 secs.

Unlimited c.c.—1, D. P. Harris, G.N. (5 secs.), 48.5 secs.; 2, Miss Comerford, Hillman Minx (6 secs.), 50.5 secs.; 3, J. Gordon Burney, Lea-Francis (3 secs.), 47.9 secs.

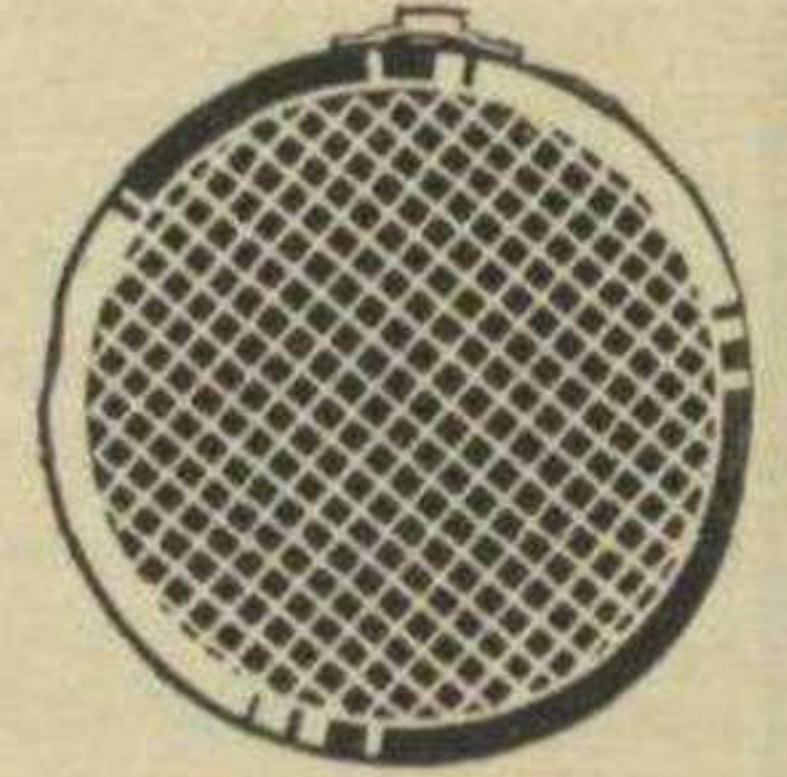
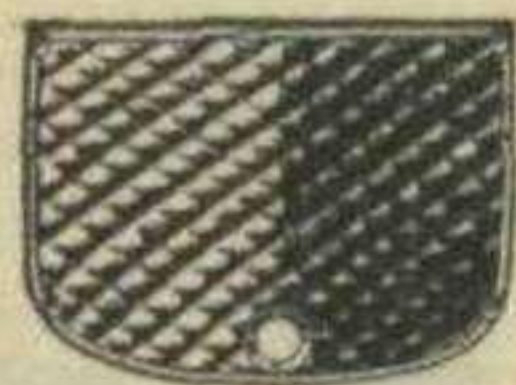
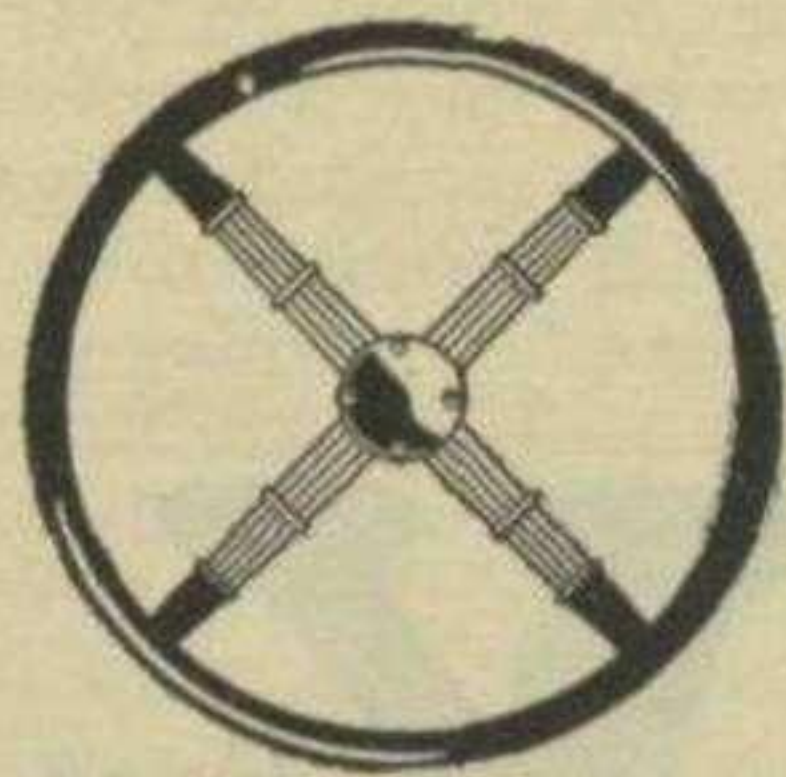
## The T.T.

Regulations for the 1933 Tourist Trophy Race at Belfast are now available from the R.A.C. The race will take place on September 2nd, over 35 laps of the 13 2/3 miles Ards Circuit. Copies of the regulations can be obtained from the secretary, R.A.C., Pall Mall, London, S.W.1.

## Hastings Rally Echo.

ALL competitors will have received a copy of the interesting booklet issued by the R.A.C. in connection with the Hastings Rally. It gives individual markings and times in the Acceleration and Braking, and Stop and Restart tests, and also the Coachwork Competition. It is possible, however, that extra copies may be required for passengers and crew of cars in the Rally, and these may be obtained from the Secretary, R.A.C., Pall Mall, London, S.W.1, price 6d.

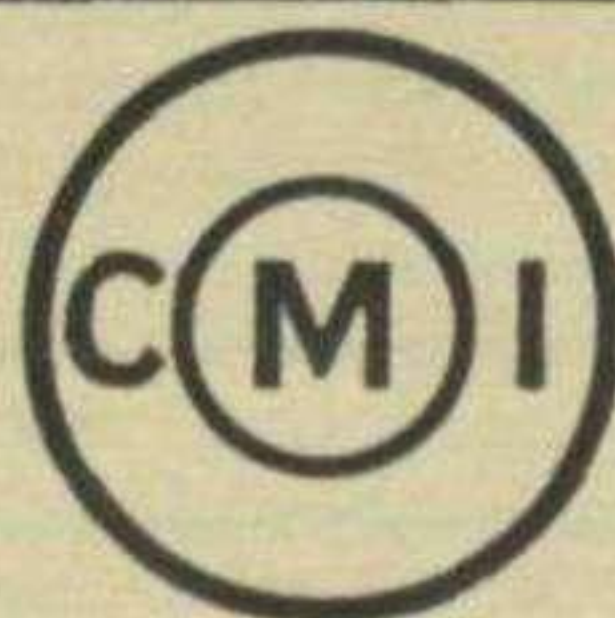
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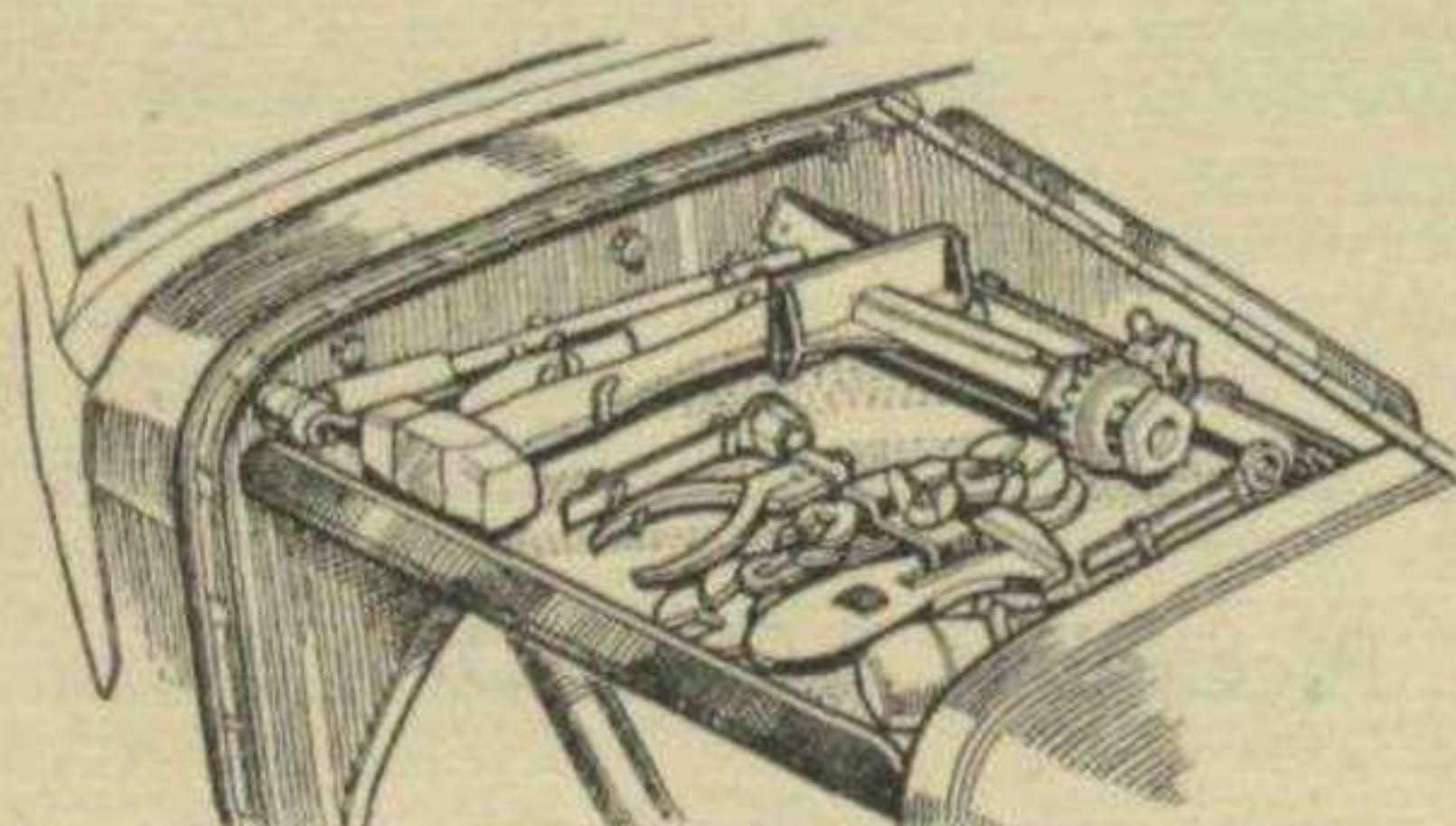
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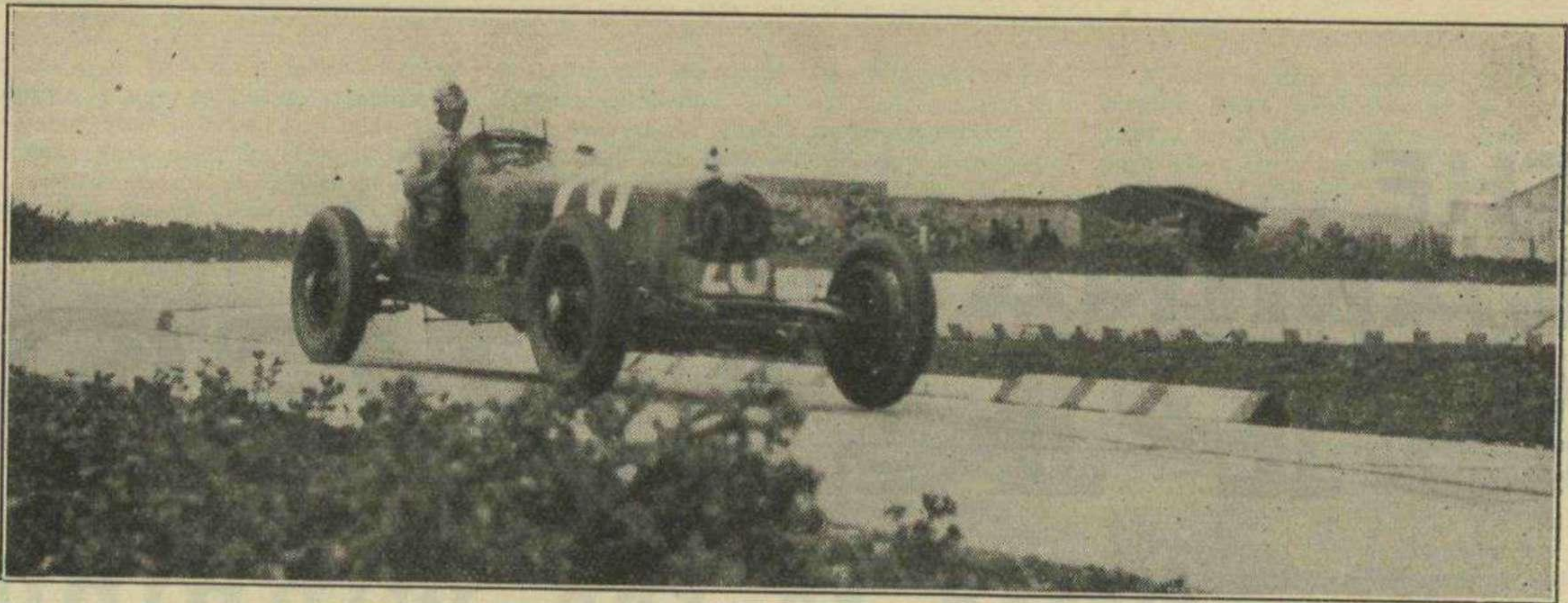
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# THE LAMINATED SPRINGS

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## NUVOLARI WINS AT TUNIS

TWO MEMBERS OF THE FERRARI STABLE, NUVOLARI AND BORZACCHINI, BOTH DRIVING ALFA ROMEOS, CROSS THE LINE WITH 1/5th OF A SECOND BETWEEN THEM.

**F**OR some years now the Grand Prix of Tunis, organised by the Automobile Club of Tunis, has attracted the *élite* of Continental racing-drivers, and the quality of the entry list for this year's race gave every indication that this high standard would be maintained.

Practice times showed that the race would be run at a very high speed, for Nuvolari, Varzi, Etancelin, Borzacchini and Fagioli all put in several laps at 144 k.p.h. Great interest was aroused by Nuvolari's Alfa, which was a 2.3 model enlarged to 2,650 c.c.—the same size as the "monoposto" cars last year. His team-mate from the Ferrari stable, Borzacchini, was at the wheel of a normal 2.3 litre Alfa Romeo, while Achille Varzi was driving a Bugatti of the same size. The Algerian driver, Marcel Lehoux, winner of the race in 1928, had trouble with his Bugatti in practice, so decided to fit a new set of eight pistons, working all night to do so.

Profiting by their experience of the past four races, the A.C. de Tunis have brought their organisation to a perfect pitch, and a particularly praiseworthy feature this year, which might well be copied by other organisers, was the press-stand, a sumptuous affair equipped in the very latest fashion.

The circuit of Carthage is one which gives great scope for the most difficult form of all motor-racing, namely, fast corners which can be taken almost flat out. On one of these Toselli came to grief in practice, inverting his Bugatti at high speed,

RACE HELD ON MARCH 26TH, 1933.

PREVIOUS WINNERS.

1928 Lehoux (Bugatti), 120 k.p.h.  
1929 Brilli-Peri (Alfa Romeo), 134 k.p.h.  
1931 Varzi (Bugatti), 138 k.p.h.  
1932 Varzi (Bugatti), 145 k.p.h.  
Run on Carthage circuit, 12 kilometres 714 metres.  
Length of race, 37 laps, or 470 kilometres, 418 metres.

ENTRANTS.

Alfa Romeo: Pietsch, Etancelin, Borzacchini, Nuvolari, Villars, Walthausen, Zanelli.  
Bugatti: Falchetto, Brunet, Czaikowski, Gaupillat, Joly, Lehoux, Toselli, Veyron, Varzi, Braillard, Moll.  
Maserati: Sommer, Fagioli, Premoli, Zehender.

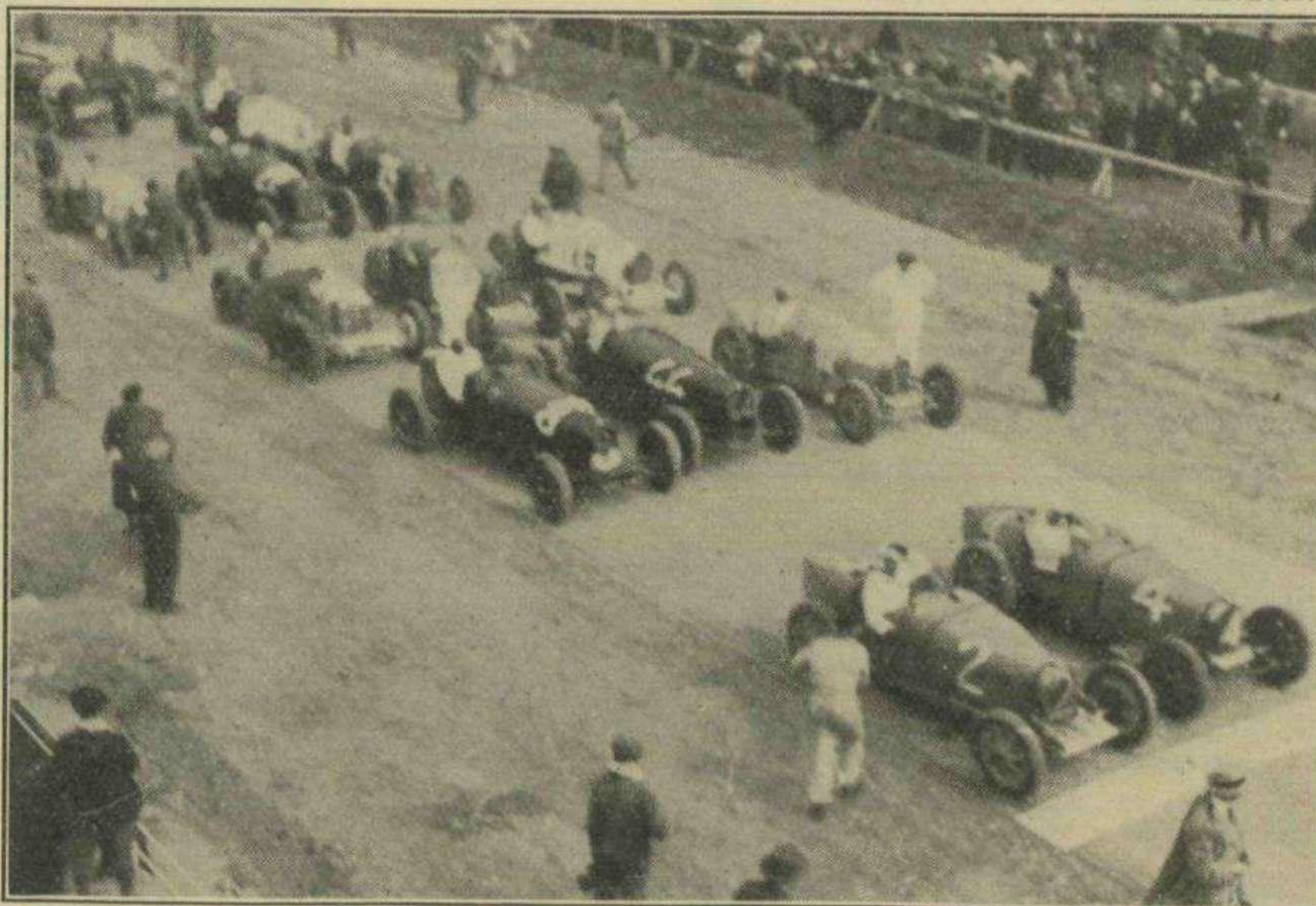
but luckily without injury to himself. Although the weather was merely dull at the start, the lowering clouds betokened a rain storm, and sure enough, after the race had been in progress for a short time, rain began to fall, and continued for the

rest of the race. A certain amount of dissatisfaction was caused by the order in which the cars were lined up, in threes, at the start. This was decided by lots, and resulted in Sommer and Etancelin being in the second row, Fagioli in the third, Nuvolari in the fourth, Borzacchini in the sixth, and Varzi in the seventh and last row.

With a terrific roar the group of cars leapt forward, but two stayed on the line, their drivers, Etancelin and Gaupillat, taking some minutes to get away. At the end of the first lap Borzacchini had gained the lead, in spite of his sixth-row starting position, and he was closely followed by Czaikowski (Bugatti), Moll (Bugatti), Nuvolari (Alfa Romeo) and Varzi (Bugatti). When they disappeared from sight Etancelin and Gaupillat at last managed to start, just as Premoli dashed past, and there immediately began a series of incidents which might have ended in disaster. Premoli seemed deter-

mined to keep ahead of the two Frenchmen, even if he *was* being out-classed by the rest of the field, so he constantly baulked them, causing them to brake violently in order to avoid being forced off the road.

Nuvolari soon passed Borzacchini, who tucked himself in behind the larger Alfa in accordance with team instructions. Varzi was expected to put up the sternest fight against the Alfa Romeos, and he assumed third place, a few seconds behind Borzacchini. Unluckily, there were several early retirements, among them being Sommer, with the very



One of the most thrilling sights in the world—a massed start. Our photograph shows the cars lined up before the Tunis Grand Prix.

## CONTINENTAL NOTES.

## RECORDS AT MONTLHERY.

After weeks of preparation, the Derby Special, as it is now called, was taken out by Mrs. Stewart on April 5th for an attack on the 1 mile flying start record in Class E, previously standing to the credit of the same car (but before its modifications at the Derby factory) at a speed of 136.26 m.p.h. The car proved to be in great form, and succeeded in setting up a new record in 26.11 seconds, at a speed of 137.85 m.p.h., and this has now been officially confirmed by the I.A.R.A.C.

Other records now officially confirmed are two lots of Citroen figures as follows:

## CLASS D. (UP TO 3,000 C.C.).

Citroen, 6 cyl., 2,722 c.c., driven by Boillot, Duray, Guyot, Haubourdin, Wagner and Bonnes, 3,000, 4,000, 5,000 and 10,000 miles, 4,000, 5,000 15,000 and 20,000 kilometres, 2 to 8 days, at speeds varying from 72.87 m.p.h., to 74.73 m.p.h.

**The Fiat Suspension.**

Following the appeal lodged by the Italian R.A.C. against the suspension of all Fiat cars all over the world in competitions, it now transpired that the cause of the bother was an unofficial trial by a firm in Spain. It looks now as though the matter will soon be adjusted for good.

**French G.P.**

Entries are already being handed in for the French G.P. to be held on Monthlery Track in June, among them being Earl Howe (Bugatti) and Guy Bouriat (Bugatti). Marcel Lehoux and G. E. T. Eyston have entered cars of unspecified make.

**Another "Stable."**

The latest group, or "stable" to be formed in Italy is the Campresoni, which will have Gherzi as its first-string driver. The cars so far collected are a 2.3 Bugatti once owned by Varzi, and a streamlined V.8 Ford.

Previous records held by Invicta and Citroen.

## CLASS F. (1,500 C.C.).

Citroen, 4 cyl., 1,454 c.c., driven by C. Marchand, L. Marchand, Fortin, Combettes, Présalé and de Bodecot, 3,000, 4,000 and 5,000 miles, 4,000, 5,000 and 10,000 kilometres, 2 to 5 days, at speeds varying from 61.68 m.p.h. to 61.88 m.p.h. Previous records held by Singer and Fiat.

In addition, a 4 cyl. Ford has taken a group of records in Class "C," all of which have been confirmed. They are as follows:

## CLASS C (UP TO 5,000 C.C.).

Ford, 4 cyl., 3,287 c.c., driven by C. Marchand, L. Marchand, Fortin, Combettes, Présalé, Vaillant, and Bertreaux. 5,000, 10,000 miles, 10,000, 15,000 and 20,000 kilometres, 3 days to 7 days, at speeds varying from 77.57 m.p.h. to 78.08 m.p.h. Previous

records held by Hotchkiss.

Finally, the 1 hour and 200 kilometre Class C records recently broken by Kaye Don and G. E. T. Eyston have now been confirmed.

At the time of going to press the 10 h.p. Citroen, sponsored by the Yacco Co., is still circling the track, and has now taken 52 records to date, having been travelling for 33 days and some 50,000 miles.

Plans are on foot to make an attempt on the Class D 24 hour record now held by Duff and Barnato on a Bentley at 95 m.p.h. The car to be used is a 20 h.p. Citroen Six, and will be driven by Marchand and Fortin. The attempt is being arranged by the Spidoline Co.

Kaye Don is preparing the 4.9 Bugatti for an attack on the World's One-Hour record, at present held by Eyston on the Panhard. The car has been sent to Molsheim for final tuning.

**The Thirteenth Criterium di Roma.**

Fastest time in the Criterium di Roma, the 9 mile hill-climb which opened the Italian season, was made by Quarantotti, on an Alfa Romeo, who averaged 61.68 m.p.h. Second was Castelbarco (Maserati), Ruesch (Alfa Romeo) was third, and fourth in the general classification came Count Lurani, on a new 1,100 c.c. Maserati.

**A Hill-Climb at Marseilles.**

The Paris-Nice Rally concluded with a timed ascent of the Boulevard Michelet, one kilometre in length, at Marseilles. There were two divisions, one for the Rally competitors, and another open to all comers. In the former fastest time was made by Dupuy, on a Bugatti, in 34 secs., who beat Foucret's Le Mans Mercedes-Benz by 4/5 second.

In the open class fastest time in the sports classes was put up by Rey (Bugatti 2 litre), in 32 seconds, beating Morand's larger Bugatti by 2/5 second. Finally

came the racing categories, with the usual crop of "Bugattisti." Fastest time of the day was naturally to be expected from the 3 litre class, and the honour finally went to Canin (Bugatti), with a time of 28 1/5 seconds. Count Czaikowsky (Bugatti) was second, in 30 secs., Falchetto (Bugatti) third in 32 seconds, while other good times were recorded by Trintignant (Bugatti), 33 2/5 secs., and Brailard (Bugatti) 34 secs.

**Speed Trials at Nice.**

Speed Trials were recently held at Nice over a course of 500 kilometres. Competitors had a rolling start of a further 500 kilometres, and fastest time of the day was made by Falchetto on a 2.3 Bugatti, who recorded a speed of roughly 104 m.p.h. Brailard and Canin, also on Bugattis, were second, 1/5 sec. slower, followed by Trintignant (Bugatti), Villars (Alfa Romeo), Zanelli (Alfa Romeo) and Tadini (Alfa Romeo).

**Grasse Hill-Climb.**

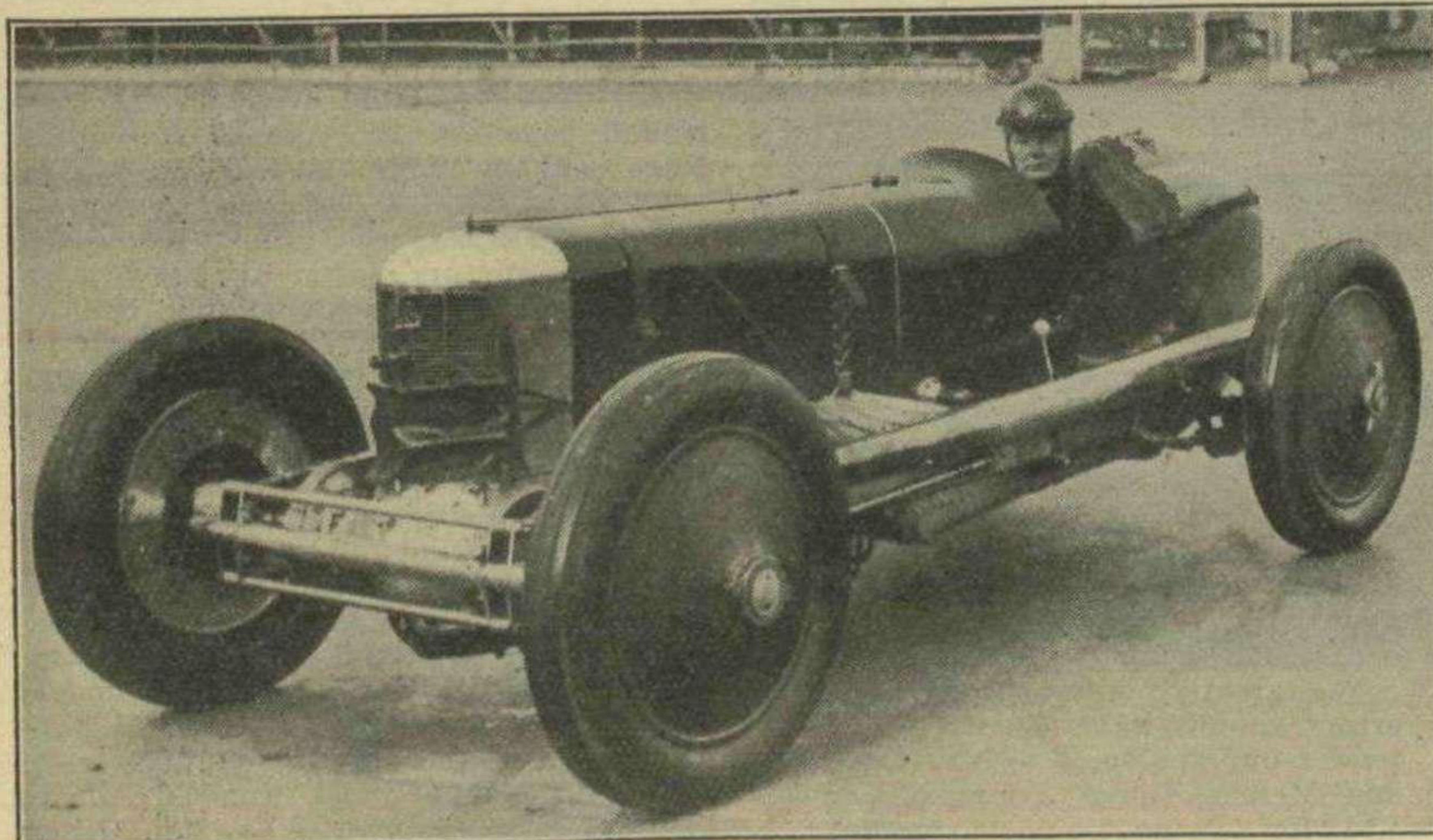
In a hill-climb held over a one-mile course at Grasse recently fastest time of the day was made by Morand on a 2.3 sports type Bugatti, in 1m. 5 3/5s., who beat Martinetti on a racing 1,100 c.c. Salmson by 1/5 sec.

**An Alfa recruit.**

Guy Moll, the brilliant young Algerian driver who created an excellent impression in the Marseilles G.P. last year, and the Pau G.P. in February, at the wheel of a Bugatti once owned by Marcel Lehoux, has just ordered a 2.3 litre Alfa Romeo, of which he will obtain delivery on May 15th.

**Two Cancellations.**

The race on the Montjuich circuit, in Spain, which was to have taken place on May 7th, and the Prix Royal of Rome, to have been held on May 28th, have been cancelled.



Mrs. Stewart and the Derby Special before going out to attack the 1 mile flying start record.

CONTINENTAL NOTES—*continued.***The Chanteloup Hill-Climb Revived.**

At one time the Chanteloup Hill-Climb was an event of some importance on the calendar, but of late years it has fallen into oblivion. An effort was made this year to revive the event, which, aided by magnificent weather, proved entirely successful. Fastest time of the day was made by Scaron, on a 6 cylinder Amilcar, who beat the old record held by "Sabipa" by 2 k.p.h. Second was Jacob Marcel, on a 2 litre Bugatti.

**La Turbie.**

In spite of fine weather conditions the record for the La Turbie hill-climb was not beaten on April 6th this year. The record stands to the credit of Wimille, who made it last year at the wheel of a 4.9 Bugatti. This year Wimille again made fastest time, but his 2.3 Alfa Romeo could not beat his last year's speed. Good times were put up by Zanelli (Alfa Romeo), Falchetto, Braillard and Trintignant (all on Bugattis). There were several minor mishaps, and one serious accident when a Bugatti driven by Wicky charged a wall, overturned, and seriously injured the driver.

**NUVOLARI WINS AT TUNIS—***(continued from page 334).*

fast new 3 litre single-seater Maserati, which sheared its magneto drive; Czaikowsky, with a broken oil pump drive; Fagioli, who made repeated pit stops for plugs and finally dropped out with Sommer's trouble; Lehoux, who fractured one of his new pistons; and then, to everyone's regret, Varzi, whose Bugatti developed transmission difficulties.

Etancelin, free of Premoli at last, made great efforts to catch up, and on Varzi's retirement, filled third place. His efforts were short-lived, however, for soon afterwards he stopped for good with a broken differential, and he was quickly joined by his fellow-sufferer at the hands of Premoli, Gaupillat, who was

**The International Trophy Race.**

EVERYTHING is now ready for the J.C.C. International Trophy Race to be held at Brooklands Track on May 6th. As has already been explained in MOTOR SPORT, the system of handicapping used will be of an entirely original character, utilising curves of varying severity to penalise the faster machines.

The start will take place at 2.30 p.m. the cars being sent away en masse from a point half way down the Finishing Straight. The length of the race will be 100 laps, each class of course having to cover a different mileage.

There are no limitations as to the type of car entered, except that it must be in racing trim, and any fuel may be used. Led by the generous gift of Sir William Morris in donating £500 for the winner, a good amount of prize money has been subscribed. Lord Wakefield has provided a trophy for the winner, Messrs. Joseph Lucas Ltd., have provided £100 for the entrant of the first British car, the Dunlop Rubber Co., Ltd. have awarded £100 to the entrant of the second car home, and the M.G. Car Co., Ltd., have put up a very fine trophy for the best team performance.

## RESULTS.

**Sports:**

- 1,100 c.c., Boucly (Salmson) 4m. 40s.
- 1,500 c.c., Marret (Bugatti), 4m. 22s.
- 2,000 c.c., Falchetto (Bugatti), 4m. 8 3/5s.
- 3,000 c.c., Walthausen (Alfa Romeo), 4m. 12 3/4s.
- 5,000 c.c., Mahé (Bugatti), 4m. 47s.
- 8,000 c.c., Foucret (Mercedes-Benz), 4m. 41s.

**Racing:**

- 750 c.c., Casadio (Mathis), 5m. 9 3/5s.
- 1,100 c.c., Chambost (Salmson), 4m. 4s.
- 2,000 c.c., Maag (Bugatti), 4m. 17 4/5s.
- 3,000 c.c., 1, Wimille (Alfa Romeo), 3m. 53 3/5s.; 2, Zanelli (Alfa Romeo), 3m. 55s.; 3, Falchetto (Bugatti) 3m. 58 2/5s.; 4, Braillard (Bugatti), 3m. 59 4/5s.; 5, Trintignant (Bugatti), 4m. 1 3/5s.; 6, de Villars (Alfa Romeo), 4m. 10 1/5s.
- 8,000 c.c., De Brémont (Mathis) 5m. 19s.

**The German G.P.**

The date of the German G.P. has been postponed from July 23rd to October 1st, and the course changed from the Nurburg Ring to the Avus Track, Berlin. The regulations are now available, and show that a "formule libre" has been adopted. This makes the race suitable for the suggested new Mercedes-Benz, and speculation is rife in Continental motoring circles as to whether they will be completed in time for the race in October.

Meanwhile, a very interesting piece of news has been announced by the Paris

forced to retire with a cracked sump.

So many retirements naturally detracted from the interest of the race, for the two leaders could afford to ease up—although their lap speed, in spite of the rain, sometimes went up to 149 k.p.h. ! A good scrap was waged between Zehender, Pietsch, Moll, Walthausen, and Falchetto, but the two flying "Ferrari" Alfas steadily increased their lead, and were certain winners.

A particularly good show was being put up by Toselli, after his crash in practice, while other drivers who were favourably praised were Zehender, Walthausen, Pietsch and Moll. Villars turned his Alfa over, but continued after a rest.

The rain continued to fall, which was

Among the many interesting entries so far received are, Earl Howe (M.G. Magnette), Sir H. Birkin (M.G. Magnette), Sir Malcolm Campbell (Sunbeam), K. Don (Bugatti), Count Czaikowski (Bugatti), Rose-Richards (Bugatti), G. E. T. Eyston ("Magic" Midget), a team of

newspaper "L'Auto," to the effect that the famous German engineer, Porsche, has designed a new 3 litre racing car for the firm of Horch. The car will have 16 cylinders, two blowers, independent wheel-suspension, 5 speed gear box, automatically adjustable brakes, and is expected to develop 320 h.p. The house of Horch has not raced since the Prince Henry Cup Race of pre-war days, and the team of drivers to handle the cars has already been announced as Prince Leiningen, Hans Stuck, and J. Sebastian, Caracciola's one-time reserve driver.

**The Tripoli G.P.**

The Grand Prix of Tripoli, which was to have taken place on March 19th, has been held over until May 7th, on an application made by the Royal Automobile Club of Italy.

**The Targa Florio.**

On May 7th will take place the world's most famous road race, the Targa Florio, in Sicily. Seven laps of the new 72 kilometre circuit will have to be covered, giving a total of 504 kilometres. The prize money amounts to 50,000 lire.

## RESULTS.

- 1. Nuvolari (Alfa Romeo, 2,650 c.c.), 3h. 29m. 15 2/5s. Average speed, 134.882 k.p.h.
- 2. Borzacchini (Alfa Romeo, 2,350 c.c.), 3h. 29m. 15 3/5s.
- 3. Zehender (Maserati), 3h. 41m. 13 2/5s.
- 4. Walthausen (Alfa Romeo), 3h. 41m. 16 2/5s.
- 5. Falchetto (Bugatti), 3h. 41m. 24s.
- 6. Toselli (Bugatti), 3h. 54m. 9 3/5s.
- 7. Pietsch (Alfa Romeo), 3h. 46m. 32 3/5s.
- 8. Zanelli (Alfa Romeo), 3h. 48m. 22 3/5s.
- 9. Moll (Bugatti), 1 kilometre behind.
- 10. Villars (Alfa Romeo), 1 lap behind.
- 11. Braillard (Bugatti), 2 laps behind.

three Austins entered by Sir Herbert Austin, and a team of "works" Rileys and M.G. Midgets.

**The Australian 200 Miles Race.**

The most important event on the Australian calendar, the annual 200 Miles Race held on Phillip Island, ended in a magnificent win for Thompson, on a new Brooklands Riley, who, although he came into the picture late, averaged 74.7 m.p.h. over the difficult 6½ mile circuit. There is always plenty of excitement in this race, and this year the most lurid incident occurred when Lowe (Lombard) and Disher (Salmson) piled up on a corner appropriately named "Heaven." Lowe went through a fence, but pulled his car back on to the road and continued. There was a tremendous amount of engine trouble, both before and during the race. Terditch, the popular Bugatti driver, was forced to retire, as were McGrath, Warren, and Junkas (Bugatti). A splendid performance was put up by Jennings, with an M.G. Magna, who finished third, behind Drake-Richmond's Bugatti. Other finishers were May (Austin), McKinney (Austin) and Lowe (Lombard).

## CORRECTION.

**W**E have been asked by Messrs. James Young & Co., Ltd., of Bromley, and Mr. S. Harris, to point out two errors in the caption of a photograph which appeared on page 290 of our April issue. Mr. Harris's name, through a typist's error, was given as "Hains," and his Rolls Royce car was described as having a Park Ward body, instead of one made by James Young, as, of course, it should have been.

We greatly regret that these errors should have occurred, and tender our apologies to Mr. Harris and Messrs. James Young & Co., Ltd., for any inconvenience we may have caused them.

## EASTER MONDAY AT BROOKLANDS

RECORD CROWD, SPLENDID ENTRY, AND NEW MOUNTAIN RECORDS BY WHITNEY STRAIGHT (MASERATI) AND T. A. S. O. MATHIESON (BUGATTI)

THE quality of the entry list alone was sufficient to guarantee the success of the Easter Monday Meeting at Brooklands, but the addition of glorious sunshine and a record crowd made the day one of the most enjoyable

still held his lead at the end of the first circuit, followed by G. K. Cox (Rover) and D. L. Briault (Wolseley Hornet), who had started level. The next group were closing up fast, however, C. G. H. Dunham (Alvis Speed Twenty) having gained a lead

The "Speed Twenty" was in fine fettle, however, and got home first at the excellent average speed of 92.23 m.p.h. Kirkaldy (Frazer Nash) was third.

### The Addelstone Senior Short Handicap.

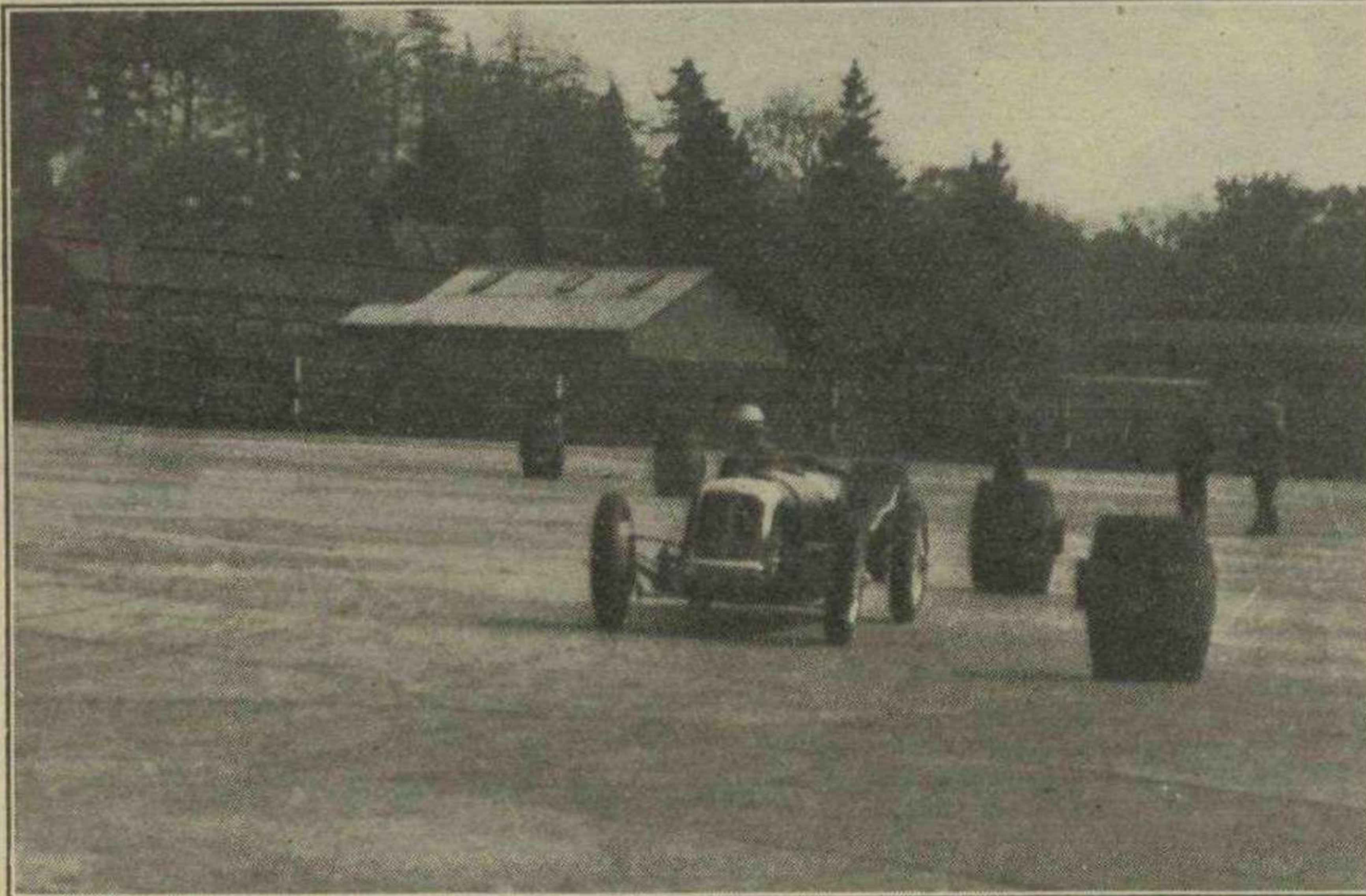
Distance: About 6½ miles.  
 1. R. Morgan (Invicta 4,467 c.c.), 36 secs.  
 2. A. H. L. Eccles (Bugatti 2,263 c.c.), 30 secs.  
 3. C. J. Turner (Bentley 4,398 c.c.), 18 secs.  
 Won by 60 yards at 99.62 m.p.h. 45 yards between 2nd and 3rd.

Dunham (Alvis), by virtue of his win in the first race, was put back to the 45 secs. mark, level with C. T. Delaney (Lea Francis) and H. G. Dobbs (Riley). Delaney made a wonderful getaway, but petered out at the end of a lap, giving Dobbs' white Riley the lead. As they came off the Members Banking for the second time Dobbs led, followed by R. Morgan (Invicta), A. H. L. Eccles (Bugatti), Dunham (Alvis), Delaney (Lea-Francis), going badly, and the scratch-man, C. J. Turner (Bentley), who went rather near the edge by the famous "bump," and raised a cloud of dust. On the last lap both Morgan and Eccles passed the Riley, whose driver had third place snatched from on the very finishing line by Turner's Bentley.

### The Addlestone Lightning Short Handicap.

Distance: About 6½ miles.  
 1. T. A. S. O. Mathieson (Bugatti 1,990 c.c. S.), 26 secs.  
 2. T. H. Wisdom (Leyland-Thomas 8,468 c.c.), 19 secs.  
 3. R. T. Horton (M.G. 747 c.c. S.), 26 secs.  
 Won by 300 yards at 111.9 m.p.h., ½ mile between 2nd and 3rd.

Three non-starters, Whitney Straight (Maserati), H. Widengren (O.M.), and R. J. Munday (Munday Special), reduced the field to five, made up of R. T. Horton (M.G.), T. A. S. O. Mathieson (Bugatti), J. Cumming (Maserati), T. H. Wisdom (Leyland Thomas), and Oliver Bertram (Delage), starting in that order. The first



The mountain record holder, Whitney Straight (Maserati), whose driving was the outstanding feature of the Easter Meeting.

we have ever spent at Weybridge. Sir Malcolm Campbell covered two laps of the outer circuit on "Bluebird," amid much smoke and flame; Whitney Straight provided the finest exhibition of driving ever seen on the Mountain Circuit when he raised the lap record to a speed of 78.29 m.p.h.; Mathieson set up a new Class E. Mountain record at 72.15 m.p.h., beating the previous figure by 3 m.p.h.; and Oliver Bertram made a successful *début* at the wheel of the 10 litre 12 cylinder Delage.

In the paddock, the loss of the "tote" was partially compensated for by the famous race-game, which was kept going without cessation for the whole afternoon. An "exhibit" which caused great interest was two of the racing M.G. Magnettes, travel stained from their triumphs in the Mille Miglia.

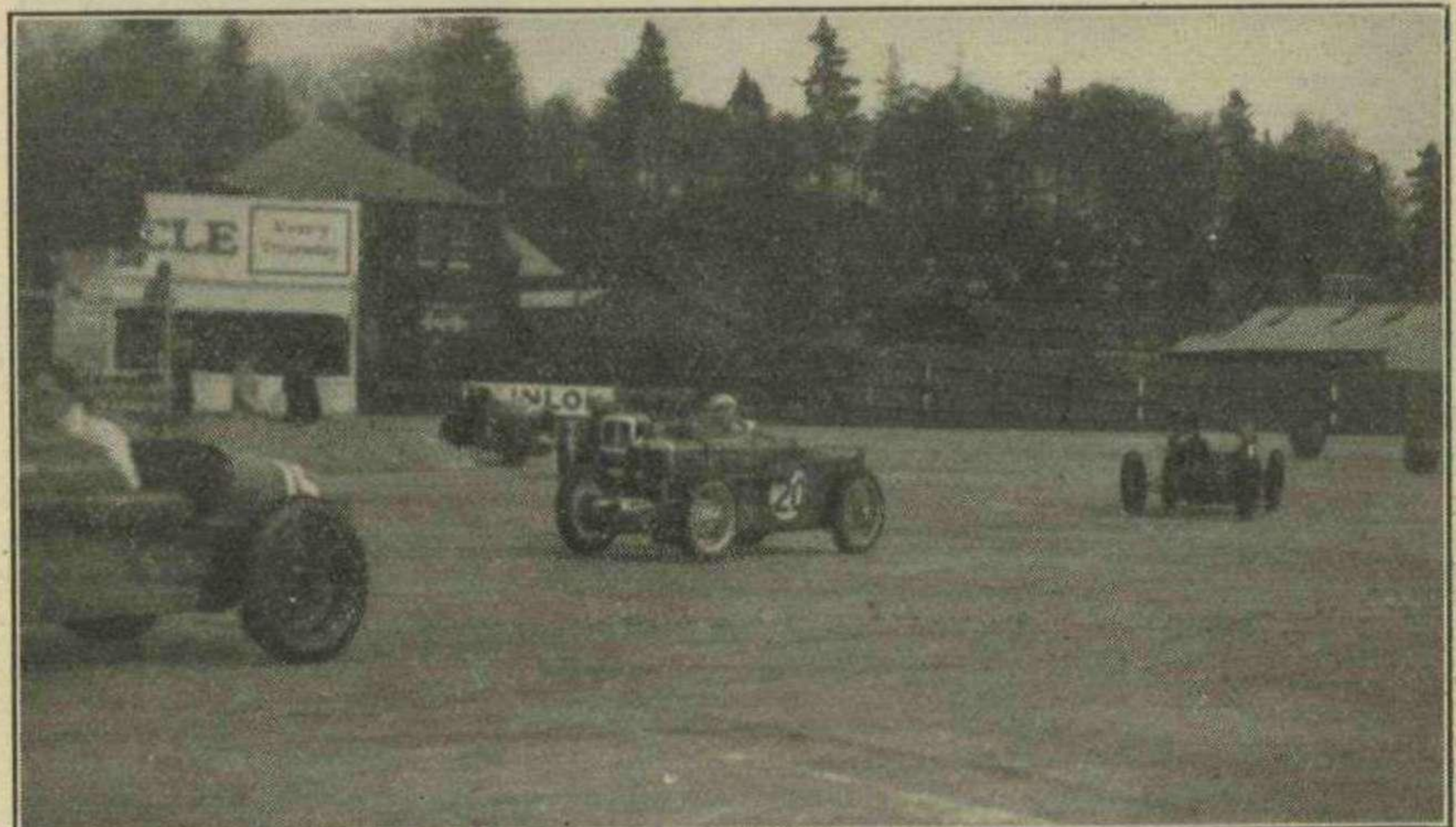
The new paddock entrance looked very neat and tidy, but the number of entrance gates provided—only two—proved quite inadequate, and caused many people to miss the first race, being the kind of thing apt to give new visitors to the Track a bad impression.

### The Addlestone Junior Short Handicap.

Distance: About 6½ miles.  
 1. C. G. H. Dunham (Alvis 2,511 c.c.), 27 secs.  
 2. J. H. Bartlett (Salmson 1,096 c.c. S.), 23 secs.  
 3. A. K. Kirkaldy (Frazer Nash 1,496 c.c.), 54 secs.  
 Won by 25 yards at 92.23 m.p.g. 60 yards between 2nd and 3rd.

A. K. Kirkaldy (Frazer Nash) and W. M. Couper (Austin) were the first to be sent away from the line, but Couper dropped out after covering half a lap. Kirkaldy

from the other starters off the same mark, G. P. H. Noble (Salmson) and M. P. Simpson (Riley). On the final lap it was obvious that the result would be closely contested, for Cox was overhauling Kirkaldy, Dunham was travelling very quickly, and J. H. Bartlett (Salmson) who had started 3 seconds later, was trying all he



J. Lemon Burton (Bugatti) being closely pursued by K. D. Evans (M.G.) and A. H. L. Eccles (Bugatti) who is swinging wide, while Whitney Straight (Maserati) and T. E. Rose-Richards (Bugatti) cut in close.

knew to gain on the Alvis. Coming off the banking Dunham led, and at the same time Bartlett passed Kirkaldy and Cox.

three cars got away together, Mathieson quickly taking the lead from Horton. The Bugatti forged ahead, its high pitched

## EASTER MONDAY AT BROOKLANDS—continued.

exhaust note sending shivers down the spines of those who like that sort of thing, being audible all round the track. Bertram's Delage sounded uneven as it came down the Railway Straight, although travelling very fast. By this time Wisdom had got into second place, but he could make no impression on Mathieson, who roared home first by 300 yards. Bertram passed Cumming, but could not catch Horton.

Mathieson's average speed was the fastest win of the day.

**The First Addlestone Mountain Handicap.**

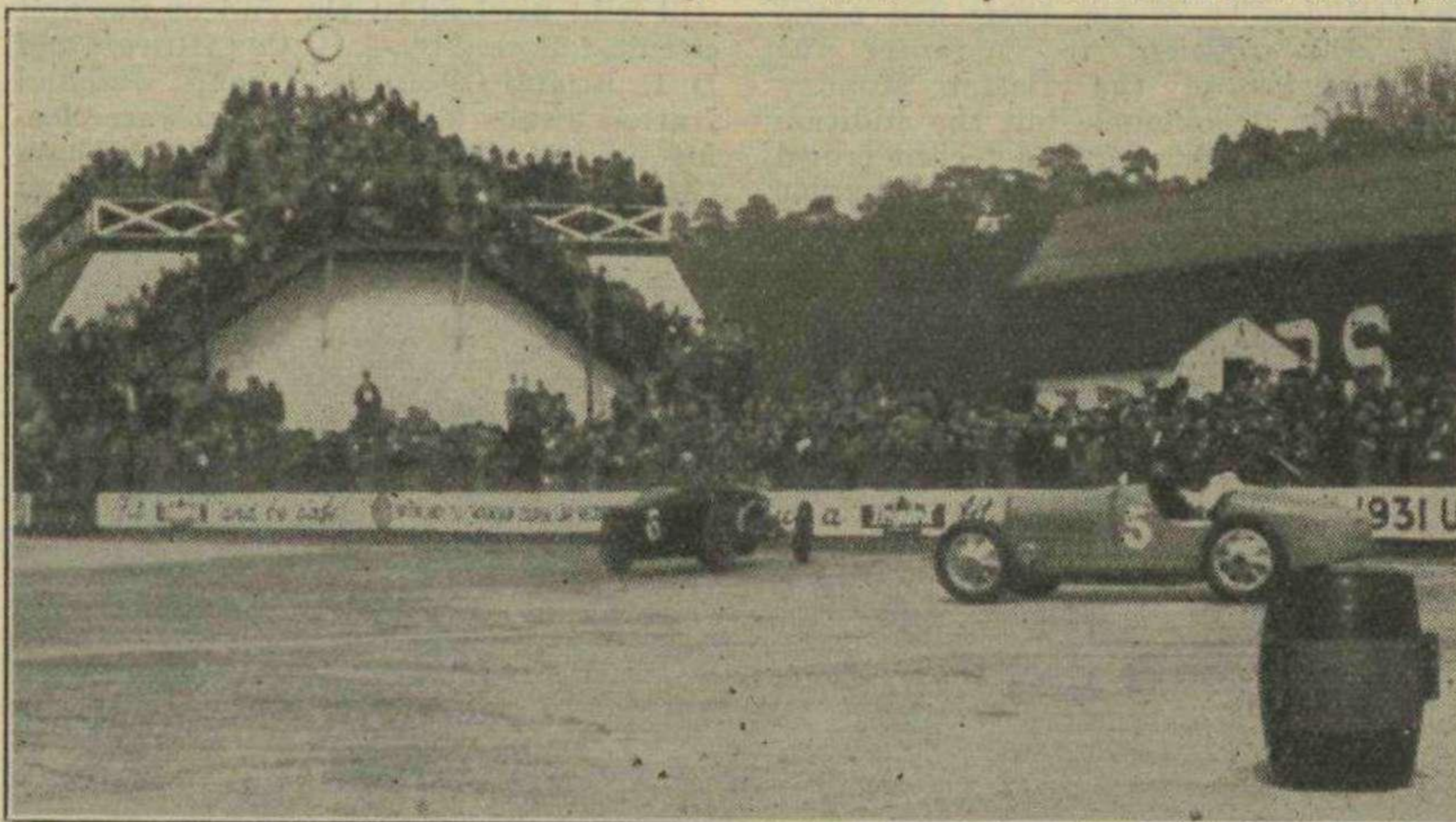
Distance: About 6 miles.

1. R. H. Eccles (Frazer Nash 1,496 c.c.), 1m. 15s.
  2. Whitney Straight (Maserati 2,514 c.c. S.), scratch.
  3. T. E. Rose-Richards (Bugatti 2,263 c.c. S.), 9s.
- Won by 300 yards at 61.04 m.p.h., 200 yards between 2nd and 3rd.

This race produced the thrilling spectacle of a Bugatti/Maserati duel between Mathieson and T. E. Rose-Richards, representing the first named, and Whitney Straight, the latter. R. H. Eccles (Frazer Nash) got ahead of his fellow early-starters after two laps, while a great battle was being waged by the back-markers. Straight had unofficially broken the lap record several times in practice on the previous Saturday, and it was confidently predicted that he would do so to-day. His driving was simply terrific, and the most polished display, combined with dash, that has ever been seen on the mountain circuit. He approached the Fork at very high speed, braked heavily, with the tail of the car doing its best to

Maserati tore up the Finishing Straight in pursuit of the Frazer Nash, which crossed the line with a lead of 300 yards. Straight had his reward, though, when it was announced that he had officially

Henken Widengren's squat little Amilcar was hot favourite for this race, especially as Wisdom's Leyland Thomas was put back from scratch to owe 5 secs. At the start P. J. Urlwin-Smith's old 22/90



Noel Corr (Bugatti) provided the crowd at the Fork with a hectic display. On this occasion his skid enabled T. A. S. O. Mathieson (Bugatti) to slip by.

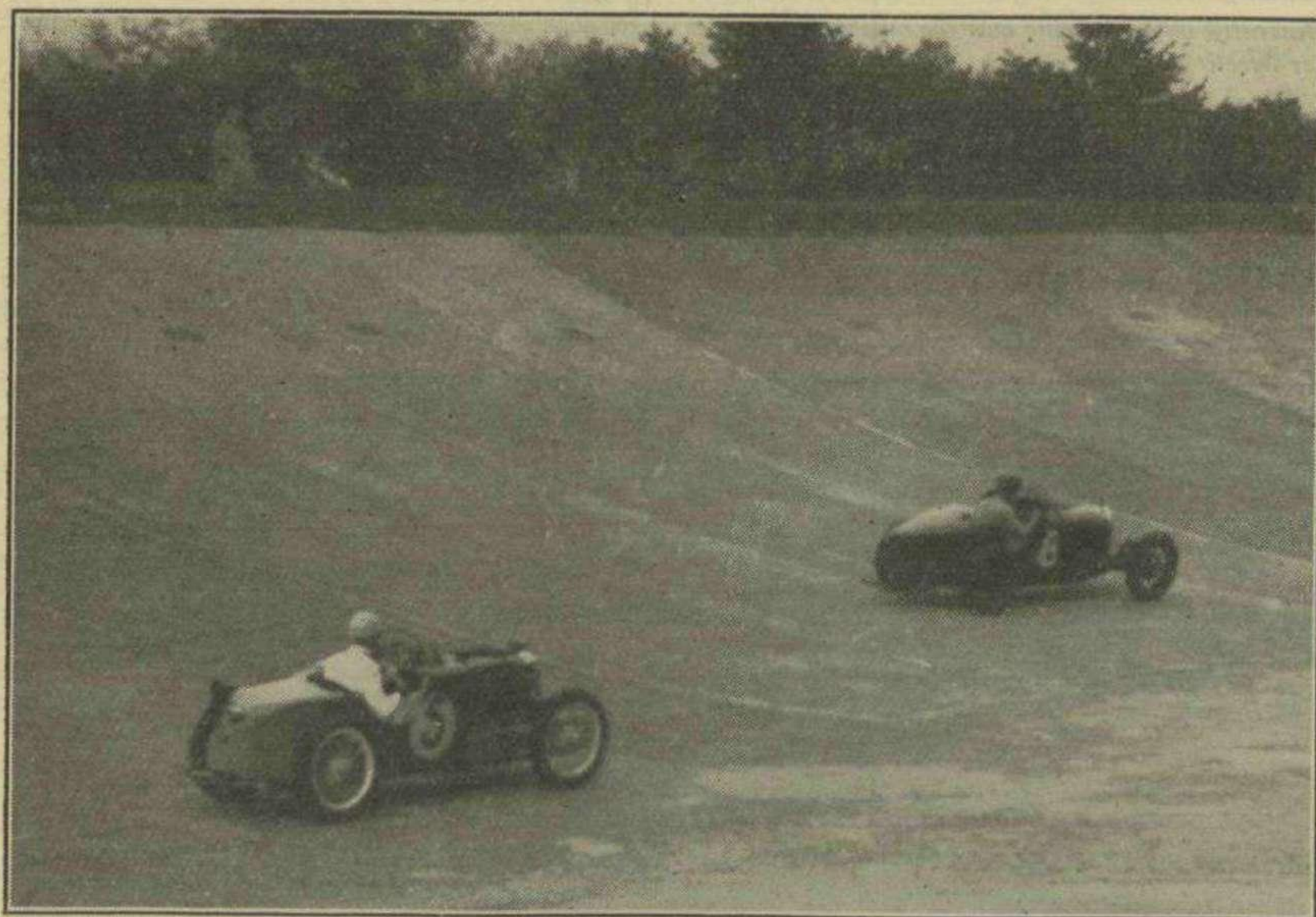
broken his own record of 54 secs. by 1/5th sec., at a speed of 78.29 m.p.h. Rose-Richards, handling his new double-camshaft Bugatti in its first race at Brooklands, did well to finish third.

T. A. S. O. Mathieson (Bugatti) who finished fourth, accomplished a fine feat

Alfa Romeo soon passed Briault's Wolseley Hornet and established a long lead. Gardner's Midget, which started next, developed trouble, so that at the end of the first lap the order was Urlwin Smith (Alfa Romeo), Briault (Hornet), Gardner (M.G.), J. H. Berger (Invicta), R. Morgan (Invicta), Widengren (Amilcar), C. J. Turner (Bentley) and Wisdom (Leyland Thomas). On the second lap the Leyland slowed on the Byfleet, and retired with a burnt-out clutch. Widengren's Amilcar, once owned by Miss Maconachie, was setting a great pace but did not seem to possess very good weight distribution, the front wheels lifting as the bumpy stretch of the Members Banking was traversed. Urlwin-Smith was still in the lead as the cars started their third lap, followed by Briault, Widengren, Morgan, Berger, Turner, and Gardner. Widengren caught and passed Urlwin-Smith coming off the Byfleet Banking, and looked an easy winner—until it was seen that Turner's Bentley was making a tremendous effort. As the two cars careered round the Members Banking the Bentley was closing up rapidly, and in the closest finish of the day, crossed the line first by 10 yards to score a well-deserved win at a speed of 110.4 m.p.h.

Then came the exhibition run by "Bluebird." As the car was pushed across the Paddock, a swirling rush of people followed it to the Track-gate. Sir Malcolm made an excellent speech, pointing out the impossibility of attaining a really high speed on the bumpy Brooklands track, and hoping that the crowd would not be disappointed. Villa and his men got to work with the auxiliary starting engine unit, and after the momentary scare of a small fire, the Rolls-Royce engine burst into life with a deep rumbling sound. Soon the car was away, flames and smoke belching from the exhaust ports. After a lap had been covered in this manner, to the accompaniment of a sound like a bad thunderstorm, Sir Mal-

Continued on next page



Getting away from the Member's Bridge corner. R. R. Pelham-Burn (Bugatti) with K. D. Evans (M.G.) close on his (w)heels.

get in front, and then took the turn in a long, accelerating slide. On the fourth lap he passed Mathieson and Rose-Richards, but Eccles (Frazer Nash) still held a comfortable lead. Coming down to the Fork for the last time Straight found himself behind a group of about six cars, all taking the corner wide, so he came up on the inside and entered the corner first. With spinning rear wheels the black

in setting up a new lap record for Class E during the race, his speed being 72.13 m.p.h. as against Shuttleworth's old record of 69.74 m.p.h.

**The Addlestone Senior Long Handicap.**

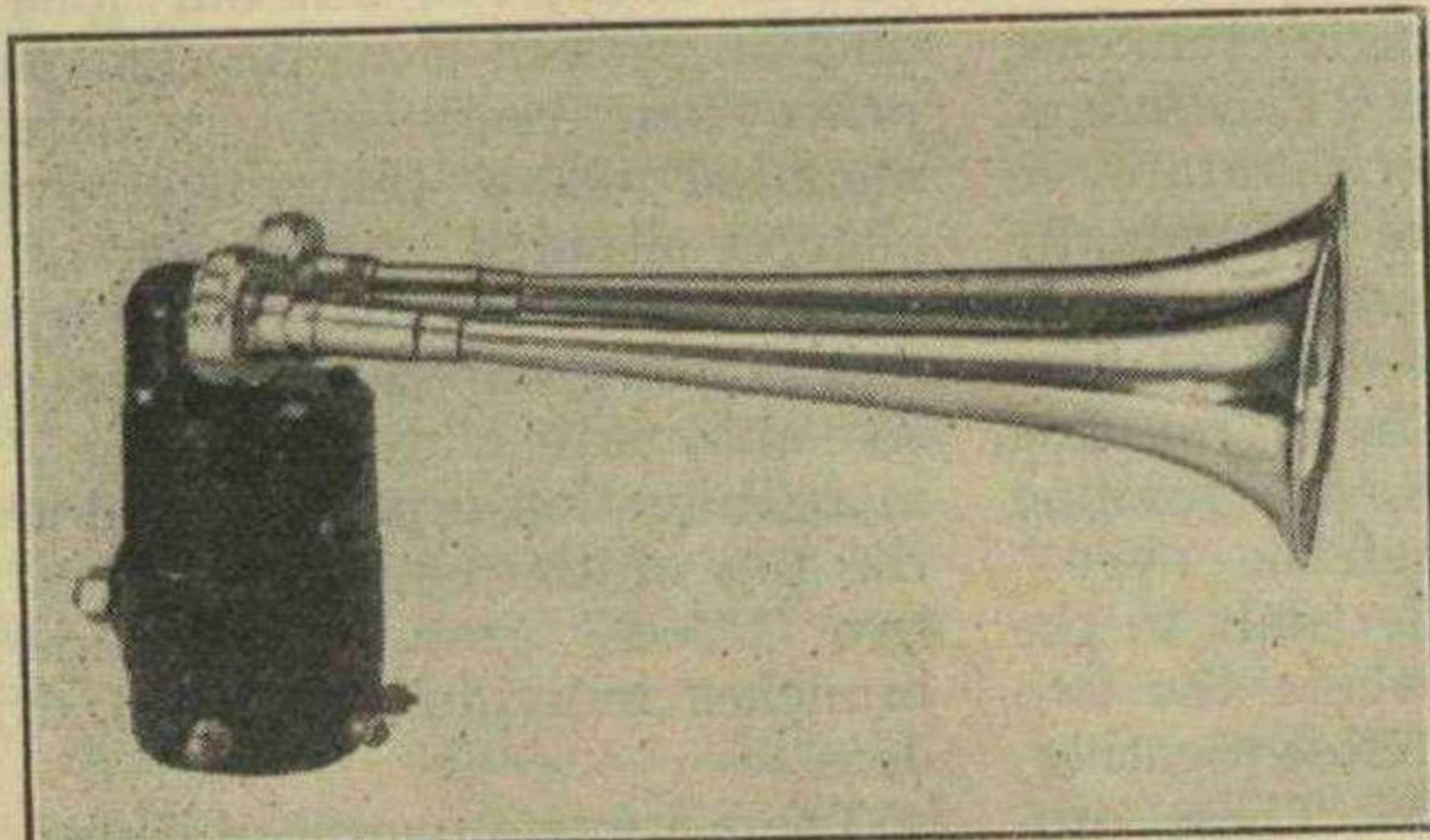
Distance: About 9 miles.

1. C. J. Turner (Bentley 4,398 c.c. S.), 9 secs.
  2. H. Widengren (Amilcar 1,093 c.c. S.), 21 secs.
  3. R. Morgan (Invicta 4,467 c.c.), 32 secs.
- Won by 10 yards at 110.43 m.p.h., 300 yards between 2nd and 3rd.



## NEW ACCESSORIES FOR THE SPORTS CAR.

**P**ROBABLY the most common fault among motorists who have just learnt to drive is an inclination to drive on the very crown of the road. This state of affairs can be largely remedied by the use of a really powerful horn, sufficiently loud to



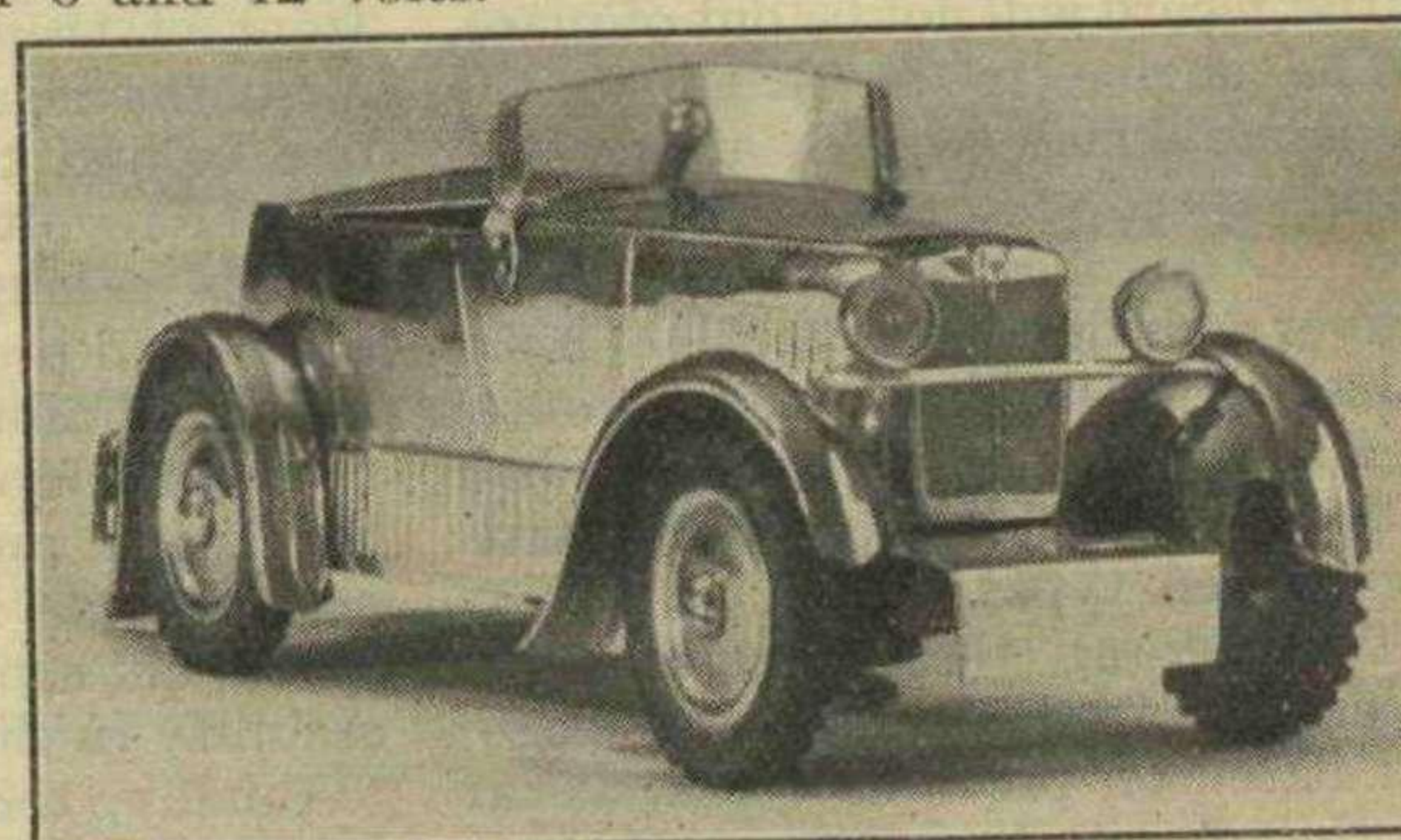
A really powerful horn; the twin-trumpet Sanor R.2., which sells at £9 : 15 : 0.

impinge on the consciousness of a slower driver some hundred yards or so ahead.

Such a horn is the new Sanor, recently introduced into this country by Messrs. C.H.S. Supplies Co., Ltd., of 32, Shaftesbury Avenue, London, W.1. There are two electric models, the "R" and the "R.2," the first being a single horn and the latter a twin-trumpet model. Similar construction is utilised for both types, the pumps and motors forming a single, compact unit which occupies a minimum of space. Great attention has been given to perfect balancing of the motors, and the Sanor horn possesses a great advantage in that the metallic diaphragm can be adjusted in order to vary the note. They are beautifully finished in black and chromium

plate, and at £9 15s. for the "R.2" and £6 15s. for the "R" models respectively, should be popular with all drivers of fast cars who want their machines to be as up-to-date as possible.

C.H.S. Supplies Co. also market two other interesting accessories for sports car owners. The first is the "Chess" combined fog and searchlight, which provides definitely safer driving conditions at night. By means of yellow segments in the reflector the light is slightly tinted, and being flat-topped and spreading across the road gives wonderful penetration in fog. For normal use the wide beam is ideal in winding lanes, giving almost round-the-corner illumination. The "Chess" lamp sells at three guineas, with chromium-plated finish and 5 in. ribbed lens. It weighs only 2lbs., and can be obtained for 6 and 12 volts.



An ideal gift for the sports car owner, the M.G. Midget cigarette lighter.

Finally, there is the M.G. Midget cigarette lighter, a very handsome replica of the famous little sports car, which forms an attractive ornament for the Clubroom and private house alike. The price of the Midget lighter is 45/-.

### EASTER MONDAY AT BROOKLANDS—continued from preceding page.

colm got into second gear, and the true note of the engine was heard. As the car came back into the paddock, renewed enthusiasm was heard on all sides for Sir Malcolm's almost incredible 272 m.p.h.

#### The Second Addlestone Mountain Handicap.

Distance: About 6 miles.

1. Whitney Straight (Maserati 2,514 c.c. S.), scratch.
2. J. Cummings (Maserati 2,494 c.c. S.), 23 secs.
3. T. E. Rose-Richards (Bugatti 2,263 c.c. S.), 9 secs.

Won by 70 yards at 74.95 m.p.h., 80 yards between 2nd and 3rd.

There were some interesting cars entered for this race which failed to materialise. Sir Malcolm Campbell had entered a 2.3 Alfa Romeo, W. E. Harker was down to drive his double-Austin-Seven Harker Special, and Allan Arnold should have turned out with "The Terror."

K. D. Evans (M.G.), starting level with R. R. Pelham-Burn (Bugatti), soon drew away from the rest of the field, and led for three laps. G. F. M. Colegrave was taking things quietly with his new M.G. Magnette, while the remainder of the cars gradually closed up behind. Burton (Bugatti), Colegrave (Magnette) and Pelham Burn (Bugatti) had a little competition in politeness on the second lap at the Members Bridge corner, all giving way to one another until they slowed down almost to a crawl. Noel Carr, hero of Southport and Shelsley, was making his first appearance on the mountain circuit,

but did not seem at all happy on the corners. On the second lap he nearly did a broadside at the top bend, apparently holding his car too low, and on the fourth lap, approaching the Fork level with Straight's Maserati, turned completely round. He finished off his "hat-trick" by doing another broadside at the Fork on an extra sixth lap.

Straight gradually overhauled the rest of the field, in spite of being rehandicapped to owe 5 secs., and eventually passed Cumming (Maserati) at the Fork to win a wonderful race by 70 yards. Rose-Richards, who had received 11 seconds from Straight, finished third.

#### The Addlestone Lightning Long Handicap.

Distance: About 9 miles.

1. J. H. Parsons (Alvis 1,513 c.c. S.), 2m. 11s.
2. W. M. Lloyd-Roberts (Talbot 2,276 c.c.), 1m. 34s.
3. R. T. Horton (M.G. 747 c.c. S.), 34s.

Won by 175 yards at 85.82 m.p.h., 400 yards between 2nd and 3rd.

In view of the fact that cars of such widely different speeds as J. G. Hutchieson's unsupercharged M.G. Midget and O. Bertram's 10 litre Delage had been selected for this race, the handicappers had a difficult task before them to ensure a close finish. As it was Hutchieson and J. H. Parsons (Alvis front-wheel-drive), had covered a whole lap before the Delage left the starting line. Parsons' car was going very steadily, and never looked like being caught, although Horton's Midget,

holding the track like a leech, managed to get into third place. Lloyd Roberts (Talbot) was second, but Bertram never got into the picture.

#### The Third Addlestone Mountain Handicap.

Distance: About 6 miles.

1. D. N. Letts (M.G. 747 c.c. S.), 14 secs.
2. Lt. Comdr. A. T. Grogan, R.N. (Frazer Nash 1,496 c.c. S.), 4 secs.
3. Marquis de Belleruche (Austin 749 c.c. S.), 14 secs.

Won by 300 yards at 64.02 m.p.h., 200 yards between 2nd and 3rd.

The last race of the day provided the spectacle of H. J. Aldington, driving an unsupercharged Frazer Nash, on the scratch mark against half a dozen blown machines which received starts varying from 4 to 14 seconds. P. J. Urlwin Smith led for two laps on his 22/90 h.p. Alfa Romeo, when D. N. Letts came by to take the lead, having outstripped W. A. Cuthbert (Riley), R. A. Yallop (blown Midget) and the Marquis de Belleruche (blown Austin), all of whom had started from the same mark. Aldington had difficulty with a sticking throttle, and overshot the Fork corner, as did Evans (M.G.), so it was left to Grogan to uphold the Frazer Nash colours, which he did to such purpose that he passed everyone except Letts, whose car was going splendidly. Belleruche, on his box-like Austin, drove well on the corners, and thoroughly deserved third place.

A first class meeting.

## THE NEW WORLD'S AIR RECORD.

ON April 10th the culmination of much research work on the part of the Italian High Speed Flight received its reward when Warrant Officer Agello set up a new world's air speed record at 423.77 m.p.h. An average of four runs of the measured course was taken, the fastest being at 430 m.p.h. Agello's machine was a Macchi-Castoldi 72, equipped with a Fiat A.S.6 engine of 2,800 h.p. The new record beats the previous figure attained by Flight Lieutenant Stainforth, of 407.5 m.p.h.

Some notes on the Fiat engine used in the record will not be out of place.

The engine to be fitted to the seaplane which would attack the world speed record had to fulfil several qualifications. It had to deliver considerably over 2,000 h.p.; it had to maintain as small a frontal area as possible and it naturally had to be a logical development of existing proved types.

To meet all these requirements, an engine of an entirely new design, but based on previous types, as far as the details are concerned, was evolved. This engine has 24 cylinders in two rows forming a 60°

"Vee" and a total capacity of over 50 litres. The cylinders are divided into two groups of 12 placed one in front of the other, the groups being mechanically independent. Each of the two groups has its own crankshaft but one single crankcase is used for the whole 24 cylinders. The crankshafts which rotate in opposite directions are individually coupled in the centre of the crankcase by spur-gear reducing units driving two airscrew shafts, rotating in opposite directions, one running within the other through the "Vee" of the front 12 cylinder unit to the front of the engine where the two airscrews are situated, close together, one behind the other. These propellers revolve at the same speed.

This arrangement of the crankshafts and propellers is the only one which eliminates, at any speed, reaction couple of the engine upon the plane and affords very great advantages, not only as regards speed, but especially in the matter of stability in flight and in taking off.

Finally, the air stream distorted by the first propeller is corrected by the second one and does not, therefore, carry the exhaust gasses

to the pilot, avoiding thus a very serious inconvenience usual in such high speed racing sea planes.

Each pair of 12 cylinders has its own cam shafts, water pump and pair of magnetos, but only one induction system is used. This comprises an eight-jet carburettor mounted on a centrifugal supercharger situated at the rear of the entire engine unit and driven by the rear motor group through a progressive automatic clutch coupling. The main induction pipe is carried along the top of the engine between the two "Vee" groups and feeds by branches individual pairs of cylinders.

There are two overhead camshafts per motor group driven by skew gear from the crankshaft, the drives being situated in the centre of the main engine unit. Four valves and two plugs are used per cylinder.

The two magnetos for the forward group are mounted above the airscrew shafts and below the supercharger for the rear group.

The engine develops 2,900 h.p. at 3,200 r.p.m. the weight of the engine being 2,045 lbs. giving a weight per b.h.p. of 0.706 lbs.

## THE PASSING OF A GREAT ENGINEER.

THE death of Sir Frederick Royce, Bart., who died on April 22nd, will be mourned by all those interested in motoring throughout the world. Born 70 years ago, Frederick Henry Royce rose from selling newspapers at the age of 10 to be the guiding light of a concern holding a unique position in the manufacture of aircraft engines and automobiles.

His first interest in engineering was aroused when he was apprenticed to the Great Northern Railway, but he soon turned his attention to electricity, and by the time he was

20 years of age was producing electrical machinery for a company of his own. There followed the manufacture of cranes, and then, quite as an experiment, the Royce car. From there it was but a step to the world-famous partnership of Rolls-Royce Ltd., for the Hon. C. S. Rolls saw the car and was immediately struck by its beautiful workmanship and quiet running.

Of later years the firm of Rolls-Royce has been equally famous for its aero-engines, most of which have been designed personally by Sir Frederick Royce. Right up to the

time of his death every modification to existing aero-engines and automobiles was finally approved by Sir Frederick at his home at West Wittering, Sussex.

No man has given greater service to his country's prestige than Sir Frederick Royce, the designer and manufacturer of a motor-car which will always be known as the World's Best Car. In aeronautical circles his name is held in equally high esteem, and his genius cannot fail to be an inspiration to posterity towards the ideal for which he strove—perfection in design and craftsmanship.

## THE G.A.P.A.N. DISPLAY AT BROOKLANDS.

THE Civil Air Display, now established as a regular London seasonal fixture, will be held this year at Brooklands on Saturday, 20th May. It will be opened by the Secretary of State for Air.

The Display is organised by the Guild of Air Pilots and Air Navigators in the foundation of which the

late Air-Vice-Marshal Sir Sefton Brancker took an active part becoming its first Master.

Royal Air Force assistance in the programme has been promised by the Air Ministry and the Display has the active support of manufacturing and operating firms throughout the country.

Sir Malcolm Campbell has expressed his intention of attending.

The proceeds of the Display are devoted to the Guild's Endowment Fund which was subscribed nearly three years ago by the Honorary Wardens of the Guild in order to give the Guild a 5 year period in which to establish its finances.

## WATER.

## THE BUMPING OF THE JOURNALISTS.

## A GLORIOUS, BUT UNEVEN RIDE IN THE THAMES ESTUARY.

"WELL, it's got to be got to Newhaven if it's humanly possible," said the boss. "But remember it's not your boat, so don't get it in a mess."

Below us, in the little dock at Eel Pie Island, Twickenham, lay a long blue hydrophane with a glittering 'Johnson 32' on the transome. A mechanic was gloating over the remote control that he had just fitted.

"Here's the customer's address," added the boss, "and don't forget to put in at a port where there is a railway, if it gets too rough. *Must* you take that guitar?"

In exactly twenty-seven minutes, the hum of the Johnson died down and the piermaster at Westminster helped one Cecil Wood into the boat. "No cushion?" grumbled Cecil, handing me a role that, I fear, had come into contact with our supply of Duckham's N.P.5.

Two, or three minutes elapsed before the Tower Bridge shot by and we started on our "blind" through the shipping.

The intermittant roar of the Johnson as the exhaust came out of the water over the various washes, was a delight to the ear. The leaping motion of the boat, too, caused a sensation that was unique.

"Oh, for a cushion," moaned Cecil, raising his body from the seat. Cecil isn't used to this.

Swerving slightly, we passed the Woolwich ferry, and the water gradually became more bumpy. Through the clouds of spray, Ford's Works could be distinguished on the

left, while ahead of us loomed Gravesend.

Here we donned our life jackets, a somewhat pessimistic routine, but an important one. The water now was quite rough and we became more and more wet.

"Keep the tap open," roared Cecil, forgetting his anatomy. "You haven't frightened me yet."

The tide, however, was against the wind, and as we approached the open sea the waves became unpleasant. Suddenly, the horizon disappeared, and what seemed like a ton of water crashed down upon us. We had run straight through a wave. "Hadehaven, is the nearest shelter," said Cecil in answer to my unspoken query.

Slowly we entered the haven and made fast to someone else's buoy.

Early in the morning the tide was in the opposite direction but the wind was just as strong. Away we went across the estuary and were soon in the shelter of the Medway.

The Medway Yacht Club at Rochester showed considerable interest in the boat and plied us with much beer. They seem to think that anyone who rides in these lively little craft must be in need of a stimulant. They still think so. (In case you should be calling there.)

After lunch we started off up the Medway for Maidstone. The river is narrow and rather shallow at half tide, so that considerable enjoyment could be gained by trying to take the bends flat out. The penalty of failure is, of course, a sheared pin. We sheared a pin.

I have always been of the opinion that a man's thoughts while he is knocking out pieces of broken shear pin with the wrong end of the pliers would be of interest to others, and was on the point of some lengthy discourse when a voice bade me watch out for my future welfare. A swan, that we had disturbed some minutes ago, was bearing down upon us with an evil look in his eye.

"You were driving," said Cecil pointedly. I took the paddle.

The difference in the size of a peaceful swan, and a swan in a bad temper is amazing. A mass of white feathers leapt out of the water and attempted to mount the engine. The war was on. After much brandishing of the paddle the swan retired, and watched the remainder of the proceedings from a safe distance.

With a new shear pin in position we soon reached the lock, which is just this side of Maidstone.

"We ain't supposed to let speed boats through," announced the master of ceremonies.

"Speed boats?" queried Cecil.

"Speed boat?" I echoed blankly.

"We haven't seen any speed boats."

"Oh," said the M.C., "then that ain't a speed boat?"

Cecil and I roared with laughter. Why, the idea was ridiculous. We proceeded through the lock.

The railway authorities at Maidstone are a sympathetic body. They thought that they could make a better show of the delivery than we could. We let 'em.

## WE HAVE A CHAT WITH MR. MILLET, OF JOHNSON OUT-BOARD MOTORS.

IT is not often that we have the pleasure of a visit from the sales manager of Johnson Motor Co. This shrewd and humorous American probably has more knowledge of the outboard situation than any other man.

He is convinced of the failure of

the big outboard motor and prophecies a run of popularity for a small high speed inboard outfit.

As those who know him will have guessed, he has not come over here for nothing. He has introduced a new and sensational motor to our market.

This is to be known as the Johnson Junior and will sell at £23. The cheapest twin-cylinder motor ever offered to the public.

We wish him a successful tour, for he is visiting the whole of Europe, but we don't agree with him about the big outboard motor.



Miss Nina Mae McKinney and "us."

## A FAMOUS LITTLE LADY HAS A RIDE WITH US— AND LIKES IT!

WE INTRODUCE  
MISS NINA MCKINNEY  
TO THE SPEED DINGHY

"MY boy" boomed the editor, "I want you to take this lady with you when you test the 'Vanadium 32.'" At first, judging from his serious mien, I thought that he had chosen Greta Garbo, over whom he is a little unbalanced, and who, of course, is far, far away. But his gravity, indicative of the great responsibility with which he was entrusting to me, referred instead to a different, albeit very charming lady, and he silently handed me a small newspaper photograph with the caption "Nina Mae McKinney."

You cannot, of course, just MAKE people go for rides in motor boats, so I asked the manager of the Leicester Square Theatre if he thought Miss McKinney would go. "Oh yes," he said, "she's

a good sport." And so she was.

Slowly we walked down the slope on to Westminster pier and it occurred to me that some sort of conversation would not be out of place, so I asked her what she thought of London policemen. She thinks they're elegant.

The size of the craft, however, seemed to come as a shock to her. She evidently expected it to be much larger, and it was only after some manoeuvring that we were able to lift her down to the boat at all.

I told her that there was no need to ride in the thing if she didn't feel like it; but, no, she wanted a ride. So the electric starter was switched on and the boat drew away from the pier. Once out in the river the release charger was moved over

and the boat leapt straight "onto the plane" and shot under Westminster Bridge.

It was a thousand pities that time would not permit of a longer run, for our friend was a perfect passenger. She is interested in the buildings of London, she understands that the boat must swerve occasionally to avoid driftwood, and she does not mind speed. Eventually, however, we motored slowly back to the pier and hoisted our guest aloft.

She seemed very impressed with the performance of the boat and enjoyed her ride immensely. Could she, she wondered, make a run down to the docks and back one Sunday?

Could she? Well; we are not making any engagements for Sundays until further notice.

## "THE VANADIUM 32"

A NEW INBOARD SPEED DINGHY OF EXCEPTIONAL PERFORMANCE.

NOT only was Miss Nina Mae McKinney impressed with the performance of the new "Vanadium 32." We were too.

This 15 ft. craft is of extremely interesting design and construction. The hull follows the form of the usual speed dinghy while the engine (a Johnson 32 with electric starting) is mounted inboard, just in front of the transom, and the cavitation plate is used to form the watertight

joint. This method of installation gives the boat exceptional silence without detracting in any way from the snappy performance of the outboard engine.

All the controls are mounted beside the steering wheel, giving the craft exceptional ease of control.

This craft has a top speed of about 37 m.p.h., and is remarkably seaworthy owing to the totally enclosed engine. The price is £79, which makes it by far

the cheapest inboard speed boat ever built either here or in any other country. And it does 37 m.p.h.

The Vanadium 32 can be seen and tried without obligation at Power Craft Services, The Dock, Eel Pie Island, Twickenham.

As usual, they will be pleased to answer any questions concerning this or other craft.

# Motor Sport Classified Advertisement Section

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## USED SPORTS CARS FOR SALE.

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

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

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

### ASTON-MARTIN

ASTON MARTIN distributors.

1933 Le Mans Type 2-seater, winner of Liverpool up R.A.C. Rally, never privately owned, negligible mileage; £445.

1933 Type International 4-seater, 8,000 miles, in new condition; £350.

1932 International 4-seater, one owner, 10-12,000 miles only, taxed year; £325.

WINTER GARDEN GARAGES, Pancras St., Tottenham Court Rd. Museum 4133 and 9895.

£285 1931 ASTON-MARTIN 12-80 h.p. saloon; exchanges. Write full particulars, c/o Box 77, MOTOR SPORT.

### AUSTIN

F.O.C.H., Austin 7, 1930 (late), 7 h.p. Boyd Carpenter "Special" super sports two-seater, all red, 2 solex carburettors, remote control, cycle type wings, spring spoke steering wheel, completely streamlined and specially built throughout, radiator stone guard, numerous extras, 76 m.p.h., carefully used, extraordinarily good condition. Referred to on page 287 MOTOR SPORT. Price 75 guineas. F.O.C.H. LTD., Exchanges, deferred, 3-5, Heath Street, N.W.3. Hampstead 2215-6.

Speed—Power—Efficiency

## "MARTLET" PISTONS

were fitted on the



**MAGNETTE CARS.  
ITALIAN  
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The Paddock, Brooklands Track.  
'Phone: Weybridge 489.

### BENTLEY

£295!!! A Bentley bargain of instant appeal to all sportsmen!—4½ litre close coupled saloon (1928), exceptionally comfortable seating accommodation for 4 passengers, luggage trunk, fitted with suitcase, 2 spare wheels, good tyres, special head lamps, an exceptionally good chassis, wonderful road performance, 80-85 m.p.h., low oil consumption; originally cost over £1,500. £295.—The London Car Exchange, Ltd., 62, Conduit St., Regent St., W.1. Regent 5131.

### DARRACQ

12-40 DARRACQ, 1928 genuine Weymann, 4 speeds, new tyres, self-jacking, mechanically perfect, 70 m.p.h. Box 79, c/o MOTOR SPORT.

£40 Sports Weymann saloon, 12-40 DARRACQ, 1927, most attractive lines, in excellent condition throughout, economical, fast, wire wheels, luggage trunk, full equipment, etc., good tyres, tax paid. Box 72, c/o MOTOR SPORT.

15-40 DARRACQ sports tourer, 4 speeds, low-pressure tyres, f.w.b., faultless mechanically, excellent condition, £40. Box 70 c/o MOTOR SPORT.

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## USED SPORTS CARS FOR SALE (continued).

### FRAZER NASH

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

1931 4½-litre 100 m.p.h. INVICTA special drop-head coupé by Lancefield, finished black and red, two spare wheels, just overhauled, excellent condition throughout and carries six months' guarantee, original price £1,150, now £600. See below.

1932 12 h.p. INVICTA open 4-seater, colour black, blue leather upholstery, recently completely overhauled and brought up to 1933 specification, six months' guarantee, £325. See below.

1932 12 h.p. INVICTA saloon, colour blue and black, brown leather upholstery, first-class condition throughout, £325.

THE INVICTA CARS (SALES) CO., 11, Albemarle St., London, W.1. 'Phone, Regent 2608.

### JOWETT

F.O.C.H., LTD. Jowett specialists, comprehensive selection of guaranteed second hand models always in stock, including, Below—

F.O.C.H. 1933, 7 h.p. Kestrel, long saloon de-luxe, fawn and maroon, moquette upholstery, one owner, run a few miles only, practically brand new condition throughout. Taxed. 155 guineas.

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F.O.C.H. 1930 (late) 2-litre Sportsman's coupé, brown, F.W.B., cycle-type wings, carefully used, exceptional condition. 59 gns.—3/5, Heath Street, N.W.3. Hampstead 2215/6. Open Sunday mornings.

ROVER Special Speed Model. Open 4-seater, special competition car, many spares. Laps at over 90 m.p.h.—Raymond Way, 19, Hamilton Mews, N.W.8. £215. Exchange. Cunningham 1086.

### SALMSON.

£95 1929 SALMSON, 10-40 h.p. grand sports 2-seater, o.h.v., dual-tone finished, unscratched, nearly 1931 condition, cost £300, accept £95, or exchange.—H.81, c/o MOTOR SPORT.

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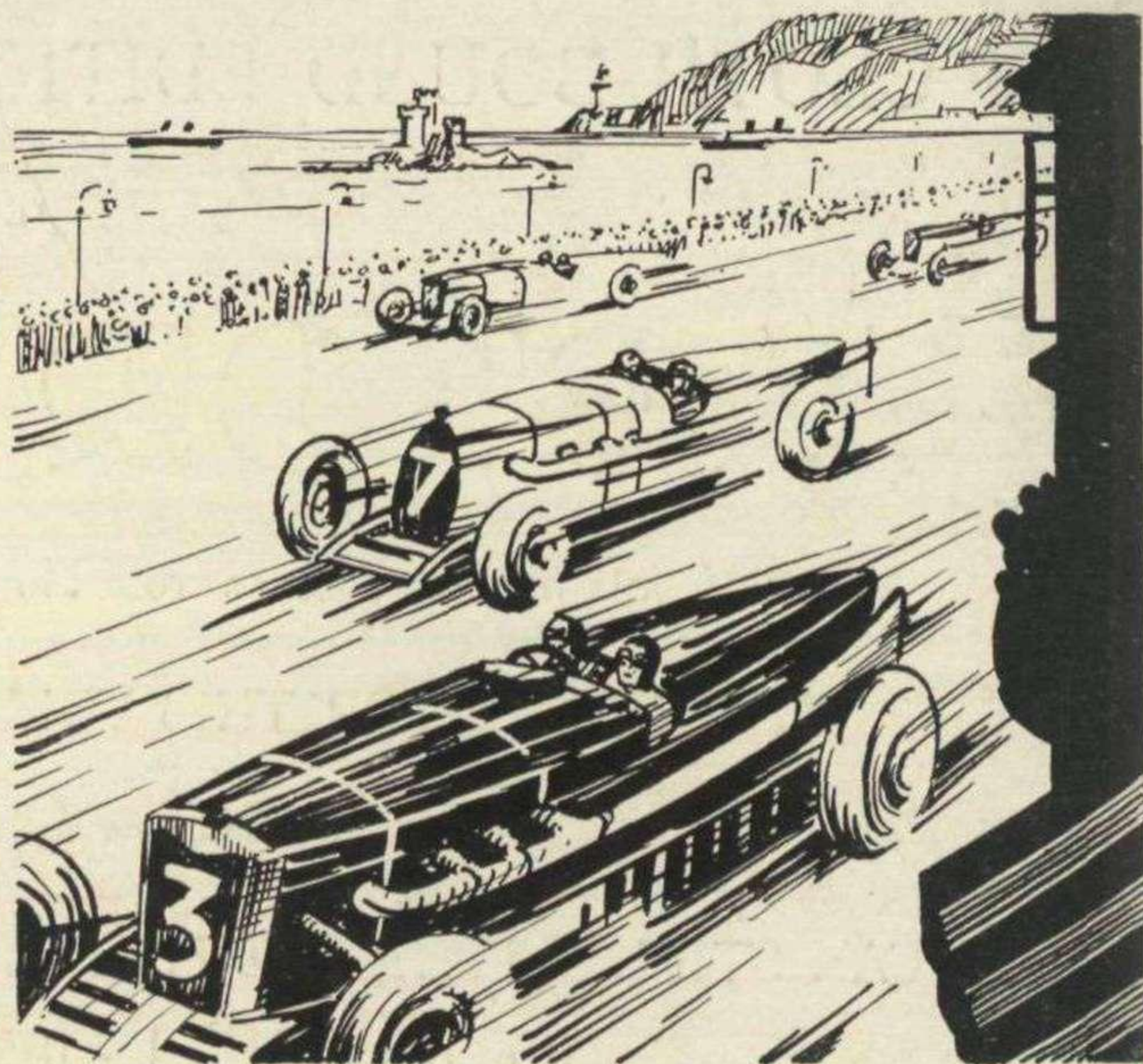
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