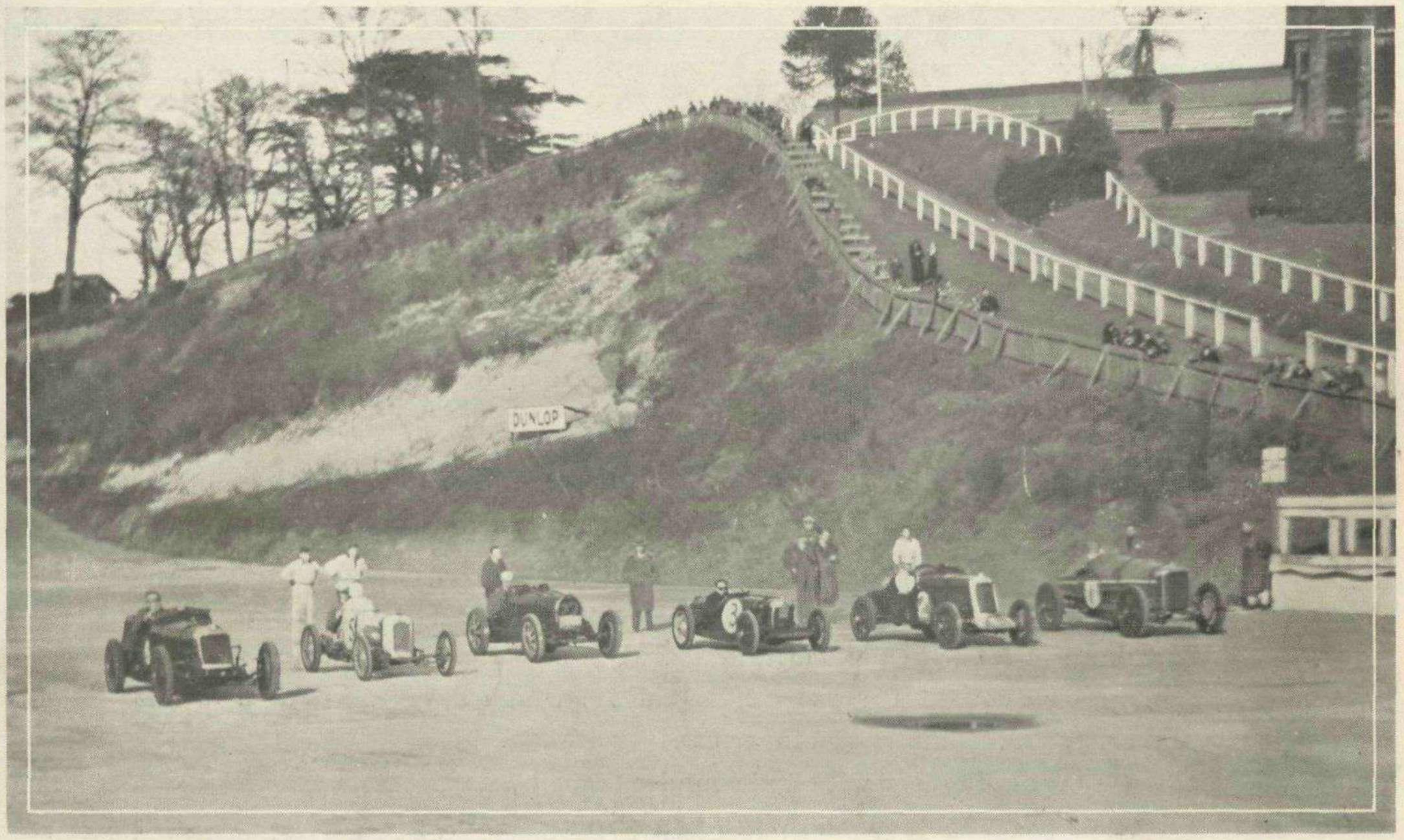
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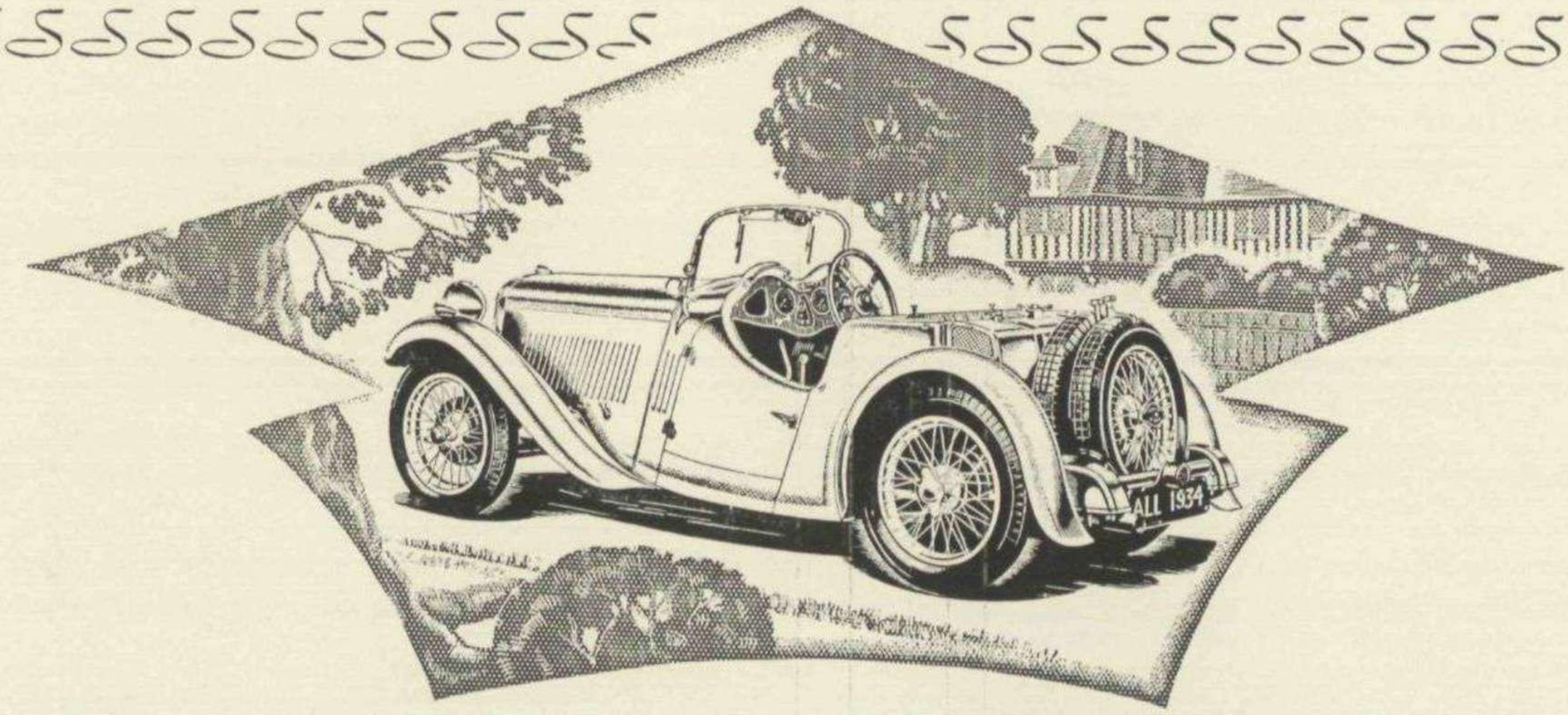
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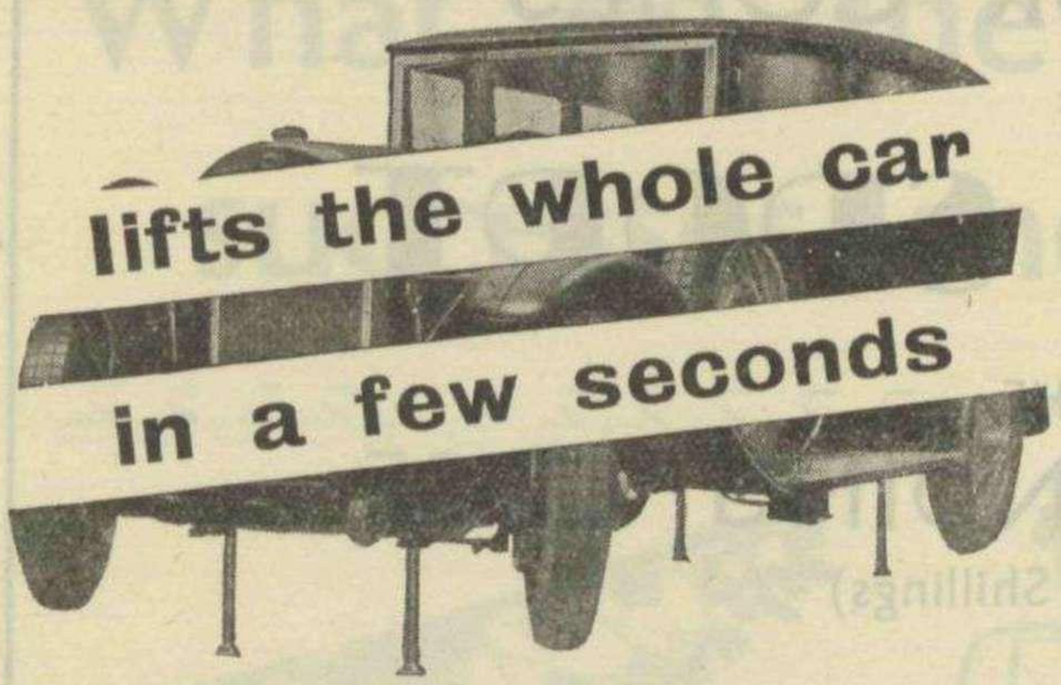
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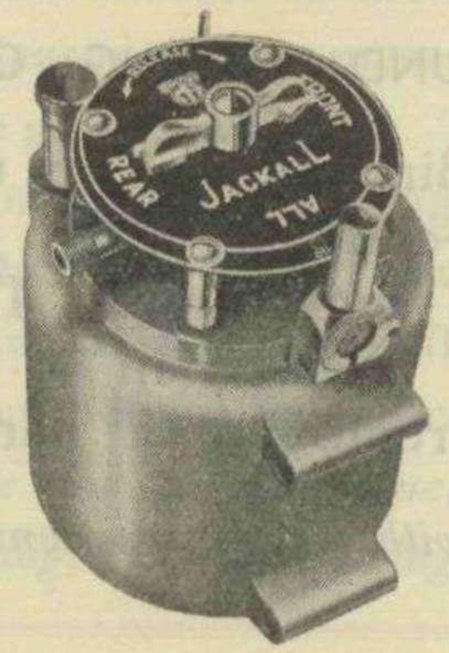
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EDITORIAL VIEWS

THE R.A.C. Rally, if it did not prove anything else, did at least show the enormous enthusiasm that motor sport arouses in this country. Even though so many of the entrants were of a "professional" character, this does not alter the fact, for the trade contingent were using the Rally to advertise the merits of their cars in competition—a certain sales point with the general public.

* * * * *

It seems a pity that this enthusiasm on the part of the public cannot find a road-racing outlet. A wonderful season is about to begin on the Continent, but England will still lack a real Grand Prix. For many reasons Brooklands fails to attract foreign entries of importance, and English manufacturers will certainly not build G.P. racing cars until they have a home course for experimental work.

* * * * *

Meanwhile the efforts of those who are trying to construct a road circuit in England receive scant encouragement. Rather does it take the form of opposition. The Brighton scheme has suffered particularly severely in this way, and the worthy citizens (at least some of them) have suddenly become conscious of the beauty of the derelict downs near Portslade.

* * *

There is no news of the Gopsall Park proposal, but the superb circuit planned at Ivinghoe is still likely to become a reality.

Not the least remarkable feature of all these schemes has been the lack of assistance forthcoming from motor racing personages whose names are household words. Their actual contributions towards British prestige are very different from what one would expect after hearing their speeches at Club dinners and public functions.

* * * * *

The system of measuring racing tracks such as Montlhéry by taking a line in the centre will have to receive some revision. The path taken by G. E. T. Eyston's Panhard et Levassor, for example, at the top of the banking, results in a greater distance being covered than is actually recorded. The Avus roadway, in spite of its sharp unbanked corners at each end, gives a more accurate and more easily obtainable record of a car's progress.

Unless the line is moved nearer the top of the banking, for high speed records, Montlhéry will lose its popularity.

* * * * *

The result of the Coppa d'oro della Duce will be a matter of great interest. To race for 4,000 miles round the varied roads of Italy and Sicily with standard cars is going to reveal the true worth of the competing vehicles. Smooth, straight autostradas will be just as likely to wreck engines as the rough mountain passes will be to break springs, chassis and coachwork.

Truly may the manufacturer be proud of any car which completes the Coppa d'oro della Duce course and finishes in a good position. Every facility is being given to British competitors, and we should like to see a large entry of our many sports models.

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Continental Notes and News

By

HAROLD NOCKOLDS

All Set for Monaco.

BY the time these lines are read the first Grand Prix race of the 1934 season will have been held at Monaco. This year's race is the sixth of the series, the previous winners being Williams (Bugatti), Dreyfus (Bugatti), Chiron (Bugatti), Nuvolari (Alfa Romeo) and Varzi (Bugatti). So far no driver has succeeded in winning the race twice, but of the makes Bugatti has won four out of the five that have been run.

The lap record stands to the credit of Achille Varzi (Bugatti) who covered a circuit in the 1933 race in the time of 1 min. 59 secs. The qualifying lap time, by the way, is 2 min. 12 secs. The length of the course is 3 kilometres 180, and 100 laps will give the race a total length of 318 kilometres.

The Monaco Grand Prix is reserved for invited drivers only, and the cars have to weigh not more than 750 kilograms, without water, petrol, oil, tyres and spare wheel. Either single or two seater bodies are allowed, having a minimum width of 850 mm. and a height of 250 mm.

The list of entrants is now available, and the Bugatti team are fairly certain starters. Robert Benoist, René Dreyfus and Jean Pierre Wimille will pilot the new 2.8 litre cars, while Pierre Veyron will drive one of last year's 2.3 litre veterans. Tazio Nuvolari is more or less certain to drive a "2.8," but he will be running as an independent.

It is a matter for regret that neither the Mercédès-Benz nor the Auto Union will take part in the race. The Scuderia Ferrari will turn up in full force, anxious to score an initial victory with fully tested cars against competitors running for the first time. Count Trossi, Varzi, Moll, Chiron and Lehoux will drive the Alfas from Modena, while Balestrero will handle a 2.6 litre two-seater on behalf of the San Georgio stable.

Etancelin and Zehender will appear with single seater Maseratis, and the same can be said for Whitney Straight and Earl Howe. Maseratis will also be driven by Taruffi and Siena. With so many unknown quantities in the field a guess at the winner is a hazardous business, but I should not be surprised to see a Ferrari Alfa-Romeo gain the day.

The Bouriat-Trinitignant Memorial.

The French followers of motor racing are always anxious to perpetuate the memory of racing motorists who are killed in the heat of battle, and monuments of many kinds can be found at the side of the French highways over which Grand Prix races are run.

The Automobile Club de Picardie et de l'Aisne have erected a monument which will be unveiled shortly, in memory of two popular French drivers who met their end last year. Louis Trintignant was killed while practising for the Picardie G.P. and Guy Bouriat had a fatal accident during the race itself.

The monument stands at a point where the grandstands are constructed every year, at the Mons-en-Chaussée corner. It takes the form of two pillars joined by a stone panel. Each pillar carries a pyramid on which is set a bronze bas-relief of the lamented drivers' features. The central panel carries the simple inscription "A.C.P.A. In memorium."

Caracciola's Progress.

There does not seem much hope of Rudolph Caracciola being seen in a Grand Prix race for two or three months yet. He has just made a very definite step forward, however, when he drove a car for the first time since his accident a year ago. He is still staying down at Lugano, and has not yet been able to give up the use of a stick while walking.

It will be good to see him at the wheel again.

The Ferrari Drivers in Training.

Although the cars at his disposal are of a type that first appeared two years ago, Signor Ferrari is confident that the single seater Alfas will be able to deal with the new opposition of Bugatti, Mercédès-Benz and Auto Union.

He is leaving nothing to chance, though, and the drivers are being put through plenty of training with the cars on the road used in the Parma-Poggio di Berceto hill climb. Some of the Alfas are being enlarged to 2.9 litres, by the way.

Louis Chiron has finished a holiday of two and a half months during which he has stayed in various winter sports centres in Switzerland and Austria. Davos was his longest stopping place. After a week in Paris he went down to Modena, and from thence to Monaco. He is already at home with the "monoposto," having driven one to victory in several races at the end of last season.

Marcel Lehoux was one of those who put in two days of intensive practice on the Parma-Poggio di Berceto hill. He was most enthusiastic about the handling of the *monoposto*, on his return to Paris. Then he spent a week or so in his native Algeria, before attending the rendezvous at Monaco for the great race.

Achille Varzi, Count Trossi and Guy Moll have all been training with the cars, so that the Scuderia Ferrari will be just as dangerous as ever in Grand Prix racing.

Champions only at Tripoli.

The organisers of the Tripoli G.P., which will be held on May 6th, are narrowing down their list of probable drivers to a select few. Some of the qualifications they name are very strict, but they allow a certain freedom by finishing up with a broad requirement that entrants must have been "placed" in an international race during the past five years. They start off by demanding drivers who have won a world championship, an International Grand Prix, or have held a world's record. Every National club has been asked for a list of worthy drivers, giving the records of each man in detail.

These requirements are satisfactorily met by the following English drivers: Earl Howe, the Hon. Brian Lewis, and George Eyston. The Tripoli authorities are quite rightly regarding Whitney Straight as an American entry. Eligible French drivers are Chiron, Lehoux, Etancelin, Robert Benoist, Williams, Divo, Sommer, Moll, Dreyfus and Wimille. A full Italian contingent can be expected, and I hear that a special single seater Maserati is being prepared at Bologna for Nuvolari to drive at Tripoli.

I have had many enquiries from readers as to where tickets can be obtained for the Tripoli Sweepstake, details of which



Although not in favour with the authorities as a racing circuit this year, the Monza Autodrome was used recently as a testing ground for the Auto Union "Porschewagen."

CONTINENTAL NOTES AND NEWS—continued.

appeared in these columns last month. I rang up the Italian Commercial Counsellor in London, but the reply was not exactly helpful.

Representing Maserati.

Only one driver has been definitely engaged by the Maserati factory, namely Freddie Zehender. His contract has been signed and sealed, and he will take part in all the big races this season. Taruffi may be signed up any day. This is not the limit of Maserati representation, however, for Etancelin has planned his usual full programme of races, running as an independent with his *monoposto* Maserati. He is to be seen often at Montlhéry, using both the track and road circuits, and will be trained to concert pitch for Monaco.

Then Nuvolari will also be driving a Maserati in a good many races, as an independent. Whitney Straight will be running several Maseratis, Earl Howe has one too, and the Grosch-Siena-Minozzi team have two at their disposal.

Siena and Company.

Eugenio Siena is an Italian driver of considerable merit who will be seen competing in most of the big races this year. He has joined forces with Giovanni Minozzi, Walter A. Grosch, Pedrazzini and Sofietti, and these drivers will run as a team. Their headquarters are at Como, and their " stable " consists of two single seater 3 litre Maseratis, two 2.6 litre 2 seater Alfa Romeos, a " Mille Miglia " 2.3 litre Alfa Romeo, and a single seater 1,100 c.c. Maserati.

Siena used to be head of the tuning shops in the Alfa Romeo factory, afterwards joining Ferrari. He has performed consistently well during the last few years, winning the 1932 Belgian 24 Hour Race in partnership with Brivio, leading the field for some distance in the 1932 Mille Miglia, and making the fastest time in the 1933 Kesselburg Hill Climb, all on Alfa Romeos. Minozzi has chiefly raced a 2 litre Bugatti, with which by good driving he has sometimes beaten modern 2.3 litre racing cars. Grosch raced last season with a 2 seater 2.3 litre Alfa Romeo, but has no successes to his credit so far. Pedrazzini and Sofietti are both keen Italian drivers who are well known in their native country.

The Scuderia Siena has come to an arrangement with the great Nuvolari whereby the latter will race under their colours in the Mille Miglia. He will be partnered by Siena, and these two should be favourites for the Italian classic on April 7th and 8th.

An Historic Occasion.

An event of importance to all students of automobile history was celebrated last month at the Berlin Motor Show, on the occasion of the Gottlieb Daimler centenary. Daimler was born on March 17th, 1834, and at the age of 50 invented the first internal combustion engine and the first motor-cycle.

An assembly of well known figures in the motor industry gathered together in the main entrance of the Hall in which the Exhibition takes place, where there is a bust of the famous Daimler. The life and work of the inventor were described by Herr Schippert, managing director of the Daimler-Mercèdes-Benz concern, and speeches were also made by Herr. Bradenburg, on behalf of the Minister of Communications and Commandant Hühnlein for the Automobile Corps. Then laurel wreaths were placed at the foot of the monument.

On the evening of the same day a most interesting item was broadcast from Stuttgart. To begin with a group of famous German racing drivers, among them Lautenschlager, Salzer and Sailer, told anecdotes of their exploits with Mercédès racing cars. Next came a description of Daimler's pioneer research work, which he carried out in collaboration with his friend Maybach in their small workshop at Cannstadt, persecuted by the police for making too much noise in the middle of the night! This work resulted in the first motor-cycle, and later the great race Paris-Rouen-Paris in 1894, covered in 5 hours 50 minutes.

Finally Herr Jellenik came to the microphone, and described how he gave the name of Mercédès to the cars made by Daimler, because that was his daughter's name!

Disagreement at Nimes.

Following on the abandonment of the Grands Prix of Pau, Tunis, Luxembourg and Monza comes the confirmation of the news that the Grand Prix de Nîmes will not take place. The race was booked on the International Calendar for May 21st, but financial difficulties have beset the organisers.

It is the usual procedure in organising a Grand Prix in or near a French town for the initial cost of preparing the circuit, erecting grandstands and providing appearance and prize money to be borne by three parties, to wit, the local Automobile Club, the Town Council, and the Association of Hotel and Shop-keepers. There is always the possibility of the gate-money covering all expenses, but even if there is an adverse balance this is more than met by increased trade during the week of the race.

At Nîmes exactly the same thing has happened as occurred at Pau. The Town Council unanimously agreed to renew their subsidy, and so did the Auto Moto Club du Gard, but the Commercial Association would not do likewise. Unfortunately the contribution of the latter group is essential, so there is nothing for it but to abandon the race.

The absence of the Grand Prix de Nîmes will inevitably result in increased entries for the Grands Prix des Frontières, de Casablanca, and Hungary.

A 10,000 kilo. German " Circus."

With the idea of demonstrating the reliability of German automobiles, and of displaying their " range " to other European countries, eleven cars set off recently on a 10,000 kilometre tour of Europe.

In order to attract as much attention as possible some well known drivers took part in the tour, notably Ernst Henne, the holder of the world's record on a motor cycle and member of the new Mercédès-Benz racing team, and Hans Burggaller the famous Bugatti driver.

The full list of cars and drivers was as follows: Henne (Mercédès-Benz), Kapler (Mercédès-Benz), Burggaller (Horch), Simons (D.K.W.), Frau Lerch (Hanomag), Haberlo (Hanomag), Von Guilleaume (Opel), Von Krohn (Opel), Bahr (Adler), Brenner (B.M.W.) and Niess Rohr).

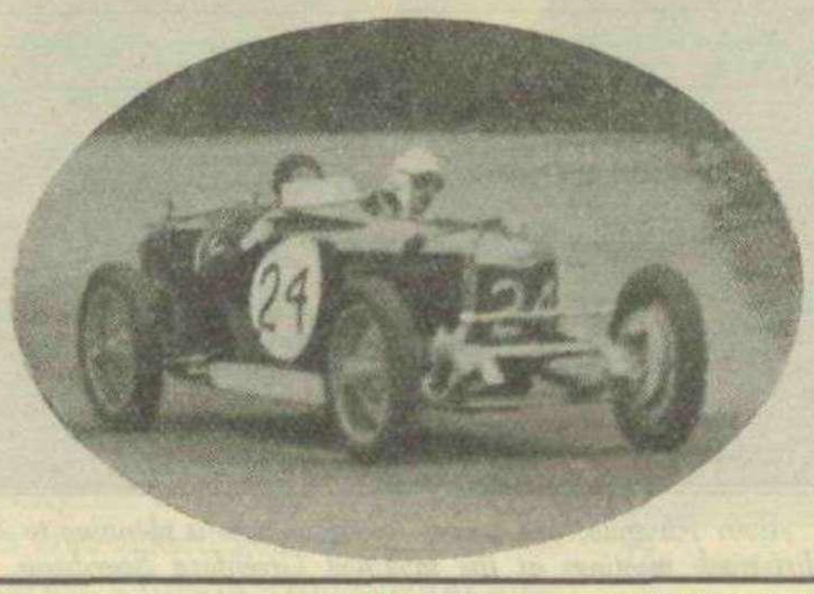
The " circus " started from Friebourg, and travelled in easy stages by way of Besançon, Lyons, Avignon, and then through Italy and Austria back to Germany.

(*Continued on page 282*)

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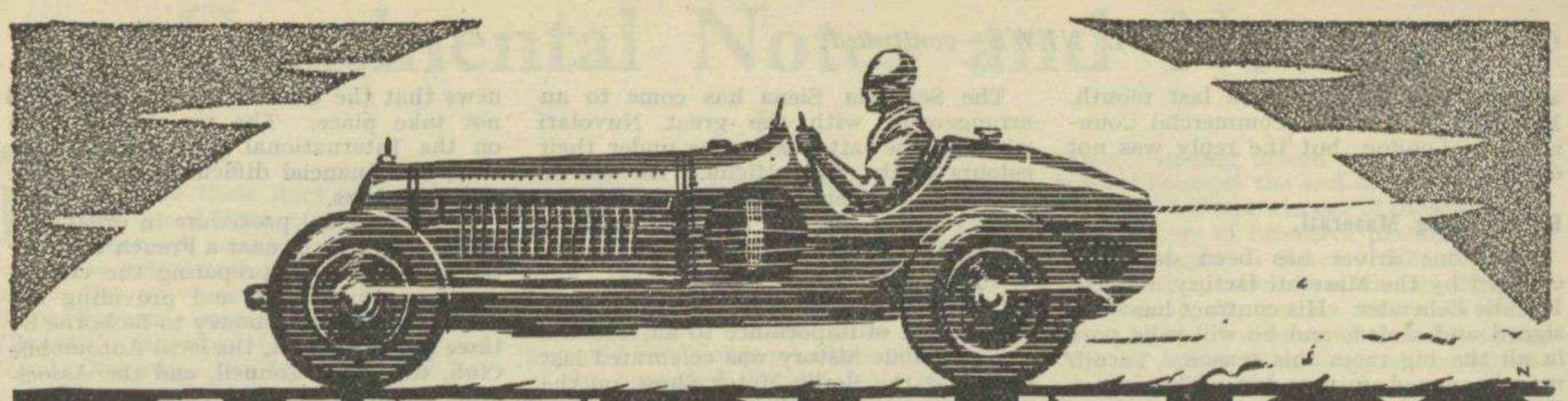
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RUMBLINGS

Races at Home.

THE regulations for the Isle of Man Races are now out and differ little from those in force last year except that mechanics will not be carried and single-seaters are eligible. Meanwhile the T.T. Races have been occupying the attention of the R.A.C. and have given rise to a considerable amount of controversy. Superchargers or no superchargers is the burning question.

Those in favour contend that superchargers are on the verge of a wider use for sports cars and even for fast touring, and it is an undoubted fact that at least three firms in the Midlands, not to speak of others in various parts of the country are experimenting with blown units. At the same time I doubt very much if any of them would be in a fit state to race this year. If firms such as Alvis, Lagonda and Singer, not to speak of Aston Martin and Frazer Nash could be induced to take part in the 1934 Ulster Race, by not allowing superchargers the R.A.C. would seem quite justified in trying the experiment.

Inside Knowledge.

The good old game of " Splitting the Alfa " continues. One firm who have looked inside are now confident that they too can build a straight-eight which will be a world-beater. Another designer confessed mournfully that he could never build a reliable engine with the big-end loading of the " 2.3 ", and that anyhow the Monopostos were certain to blow up this year if they were hard pressed. We shall see.

Culpa Mea.

I am afraid I caused rather a stir last month by announcing that Penn Hughes had secured a Monoposto 2.6 Alfa. In our hurried meeting I only had time to learn the engine size, and not to discover that it was a 2.3 Grand Prix car bored out to 2.6 litres. Chiron drove it last year.

Seeing Italy.

Penn Hughes is driving an Aston-Martin in the Mille Miglia, and the car is actually the one tested in MOTOR SPORT in August, 1932. An Indian driver, M. D. Pettit, has also entered an Aston, a 2-4 seater car, standard except for a second spare wheel. He has not driven before in any European competition but has done a good deal of fast driving round Bombay. Independent springing it appears is almost essential for these conditions, and he was undecided whether to buy a Dilambda Lancia or a 5 litre Mercédès to take back to India with him. Esson Scott, whose black two-litre Bugatti is not unknown at Brooklands is going to Italy as spare driver.

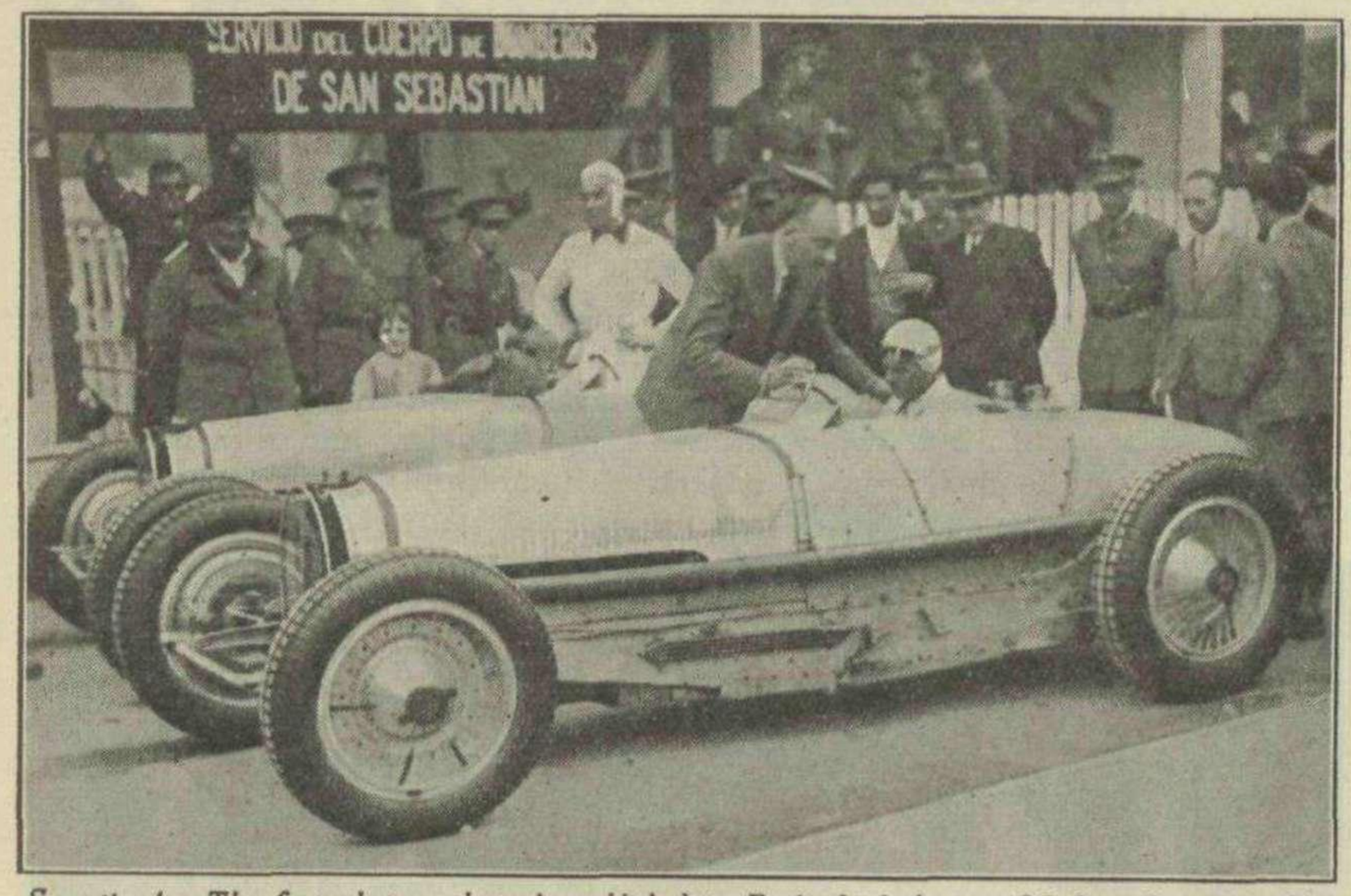
Cobb on the War-path.

Early in April John Cobb is due to appear at Montlhéry with the Napier-Railton in an attempt to break the World's 24 Hour Record. It stands at present, of course, to the credit of Jenkins and the Pierce Arrow at 117.82 m.p.h. The new Dunlop tyres specially designed for the Napier-Railton have come through their tests satisfactorily. They have a heavy task ahead of them, for the car is not really suitable for long distance records.



" Spike " Alvin Rhiando, the young American who is planning to hold car dirt-track meetings at the modified Greenford Speedway.

RUMBLINGS—continued.



Sensation! The first photograph to be published in England of the new 2.8 litre Bugatti. Here are Varzi and Dreyfus at the start of the 1933 San Sebastian Grand Prix.

Molsheim's Reply to the Formula.

The development of the 2.8 litre Bugatti, which is built under the 750 kg. rule, has been even more closely guarded than that of the earlier models, and the picture of the new car, which is the first one to be published in England is of particular interest.

As will be seen, it carries a two-seater body, and with its small radiator has something of the appearance of the straight-eight 1½ and two litre G.P. cars. Lowering the chassis has brought the crankshaft in line with the dumb-iron tie bar, and the engines are started with a handle at the side.

The cast aluminium wheels which have for so long been a feature of Bugatti racing cars are no longer used. In their place a special type of wire wheels are used in which the spokes are only used to maintain their shape. The brake drums are serrated, and are bolted on to the axles. The aluminium rims have similar internal serrations, through which the drive or the braking effect is transmitted to the tyres. The new wheels are each 10 lbs. lighter than the old type of similar dimensions.

—and Zschopau.

The Auto Union car with its cigar-shaped body and sixteen-cylinder engine carried behind the driver is another solution to the problem, and tests carried out on the Milan-Varese autostrada last January showed that it was capable of at least 155 m.p.h. The successful attack on the World's Hour Record is reported elsewhere in this number.

The engine capacity is 3,080 c.c., it has a five-speed gear-box, and the well-known Porsche torsion-rod suspension is used. The car is manufactured at Zschopau, near Dresden, in the D.K.W. factory.

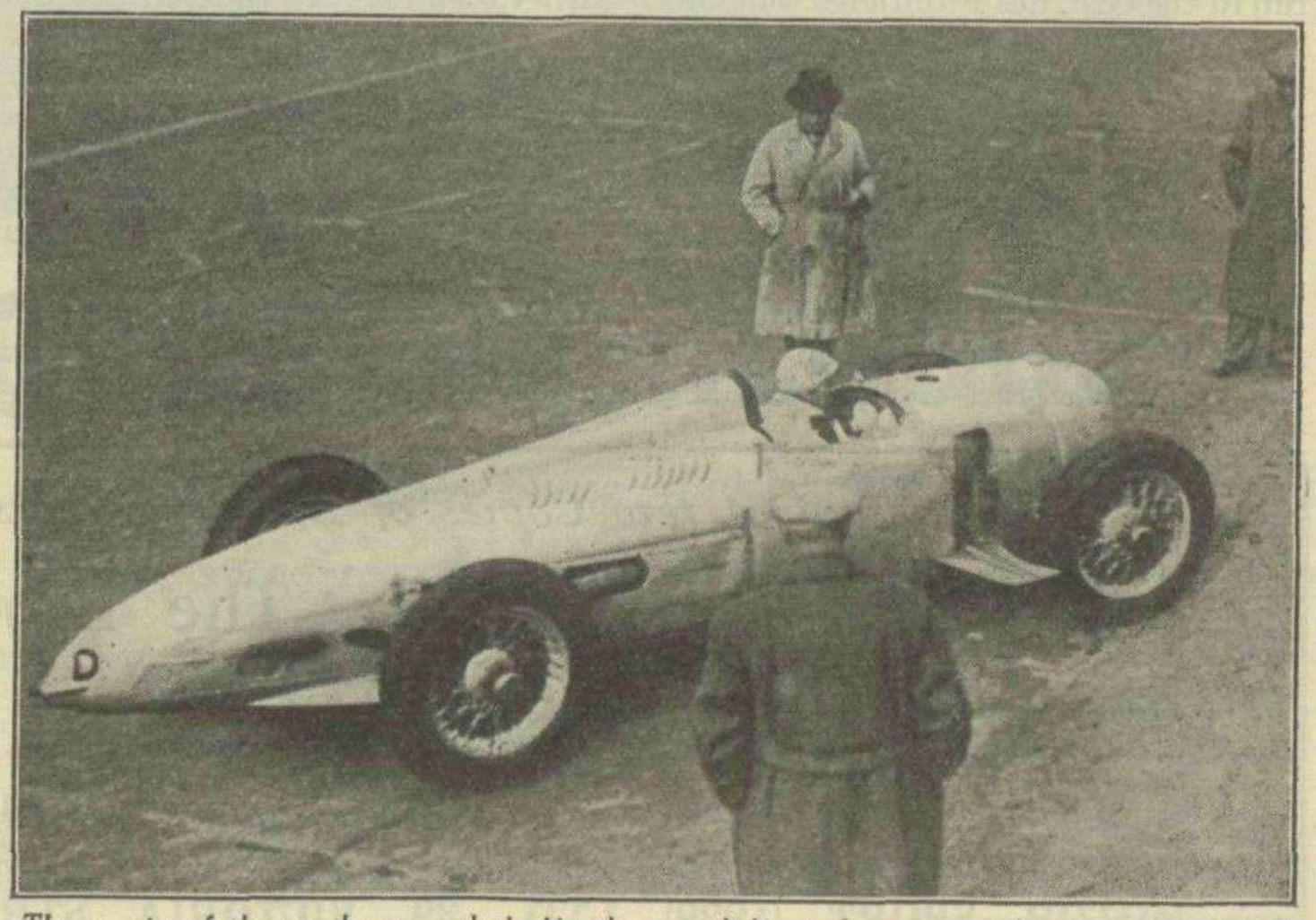
Follow My Leader.

One of the chief difficulties in maintaining a good average speed during the R.A.C. Rally is to negotiate a big city, like Bristol, for example, in the dead of night. There is no one about to ask the way, and policemen are few and far between. As soon as another car is sighted ahead one always assumes that the driver knows the way, and it is difficult to resist the temptation to follow along behind.

In one particularly bewildering city four or five cars made a procession behind a leader who had not the foggiest idea of the correct route. They arrived at across roads "roundabout," and the leader decided to make an extra circle in order to read the sign posts. In the end an astonished policeman came on the scene to find a string of cars, head to tail, steadily revolving in the hope that *someone* knew the right road!

Rally Complaints.

I heard a good deal of complaints down at Bournemouth about some of the rules governing the Rally. It certainly seems a little hard to be penalised for a faulty side-lamp bulb, a fault which is no indication of the car being of bad design or preparation. One driver tried his lights while waiting to enter the final control and found them all in working order. Then she drove about 200 yards into the Ramp Garage, where



The surprise of the month was undoubtably the remarkable performance of the Auto Union "P" in breaking the World's hour record at Avus.

RUMBLINGS—continued.

it was found that one of the side-lamp bulbs had blown !

Another bone of contention was that the Test 'B' precluded any but small cars winning the awards given for the cars gaining the highest marks, irrespective of class, from each control. There is a certain glamour about 'unlimited' awards, and the heavy brigade felt rather sore at being handicapped out of it. The only successful large car was a V8 Ford.

An English Bugatti Stable.

Had a visit from Mathieson in Mid-March, a day or so before he sailed on a convalescent trip to Jamaica and South America. His attack of diphtheria was a very severe one, but two months of sea voyage and sunshine of the West Indies will make him fit for a good season's racing.

He and Lindsay Eccles have got delivery of their new Bugattis. Eccles and Papworth went over to Molsheim, and brought the cars back.

Beyond knowing that they are two of the cars raced officially by the factory last year, their exact identity remains unknown. The "works" Bugattis always have the driver's name neatly painted on the scuttle, but their cars have been repainted.

They are confining their programme at the moment to the British Empire Trophy, the Isle of Man race and Dieppe. Mathieson has entered his old 2 litre Bugatti for the International Trophy, but the driver is at present undecided. Both of the new team may possibly run in the G.P. des Frontieres, but this is rather too near the Douglas race to be comfortable.

The 2.3 litre twin-camshart Bugattis were capable of fully extending, if not beating any of the 1933 Grand Prix racing cars with the exception of the *monoposto* Alfas. Varzi's wins at Monaco and Tripoli over 3 litre Maseratis and 2.6 litre *biposto* Alfas proved that.

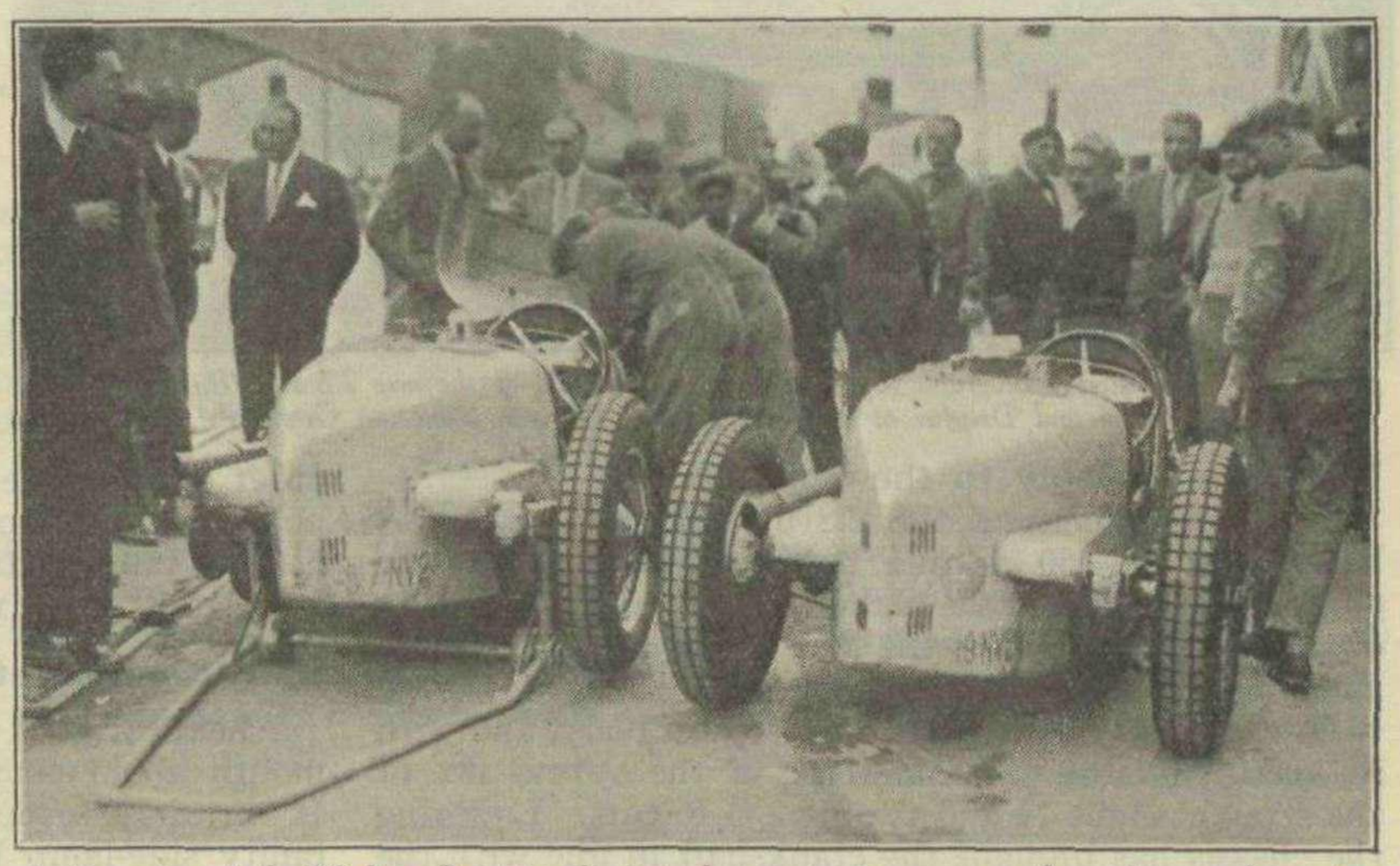
It will be very interesting to see how Mathieson and Eccles get on. Both of them are drivers of outstanding merit, who have graduated in the correct manner on a variety of machines including smaller and slower Bugattis. In both cases their driving is marked by a spirit of energy which is so often absent in Englishmen, and yet at the same time they retain the cool control necessary for a long race.

Here's the very best of luck to them !

An Italian Prodigy.

Most of us have one particular *marque* which we admire more than any other, and when two fellow enthusiasts meet superlatives are apt to fly thick and fast.

My own weakness is for Lancias, and I rather pride myself on the adjectives I can apply to the road holding and steering of these wonderful cars. But I met my match at Bournemouth in Noel Rees, whom I had always considered a 100% Alfa Romeo man.



Another view of the 2.8 litre Bugattis, showing the squat appearance and usual reversed quarter-elliptic springs.

While he was at Milan, taking delivery of his new 2.3 Alfa cabriolet, he used a Lancia "Augusta" for his local motoring, and he immediately became a tremendous admirer of this 4 cylinder 11.9 h.p. miracle. It will do an effortless 70 m.p.h. and handles on icy roads better than any car he has ever driven. In Italy it costs about £280. There is a possibility of a batch of six coming over to this country, fitted with special coachwork. Noel Rees is giving one to his son, and Brian Lewis will also probably have one.

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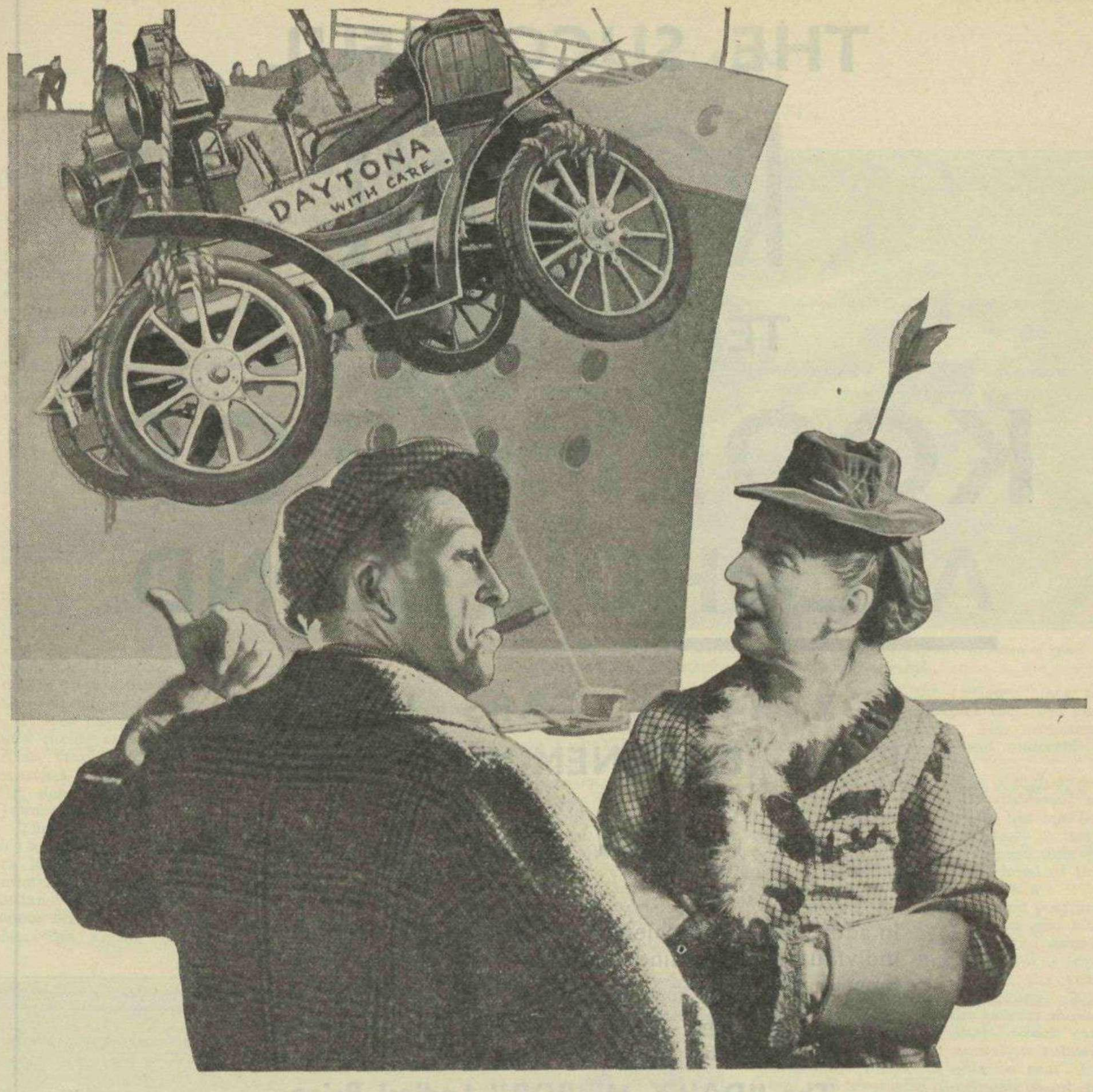
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Gordon Harker (left), at quayside, intrigues Nellie Wallace with his plans to smash 272 m.p.h. world's speed record at Daytona, U.S.A. "Look at her lovely lines!" said Mr. Harker, proudly (referring to car), "and remember I shall be running on Pratts High Test" — *Daily Tellacram.*

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Mr. H. W. Allingham (53) M.G.

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1934 RACING CARS

5.—THE 2.9 LITRE MERCÉDÈS—BENZ.

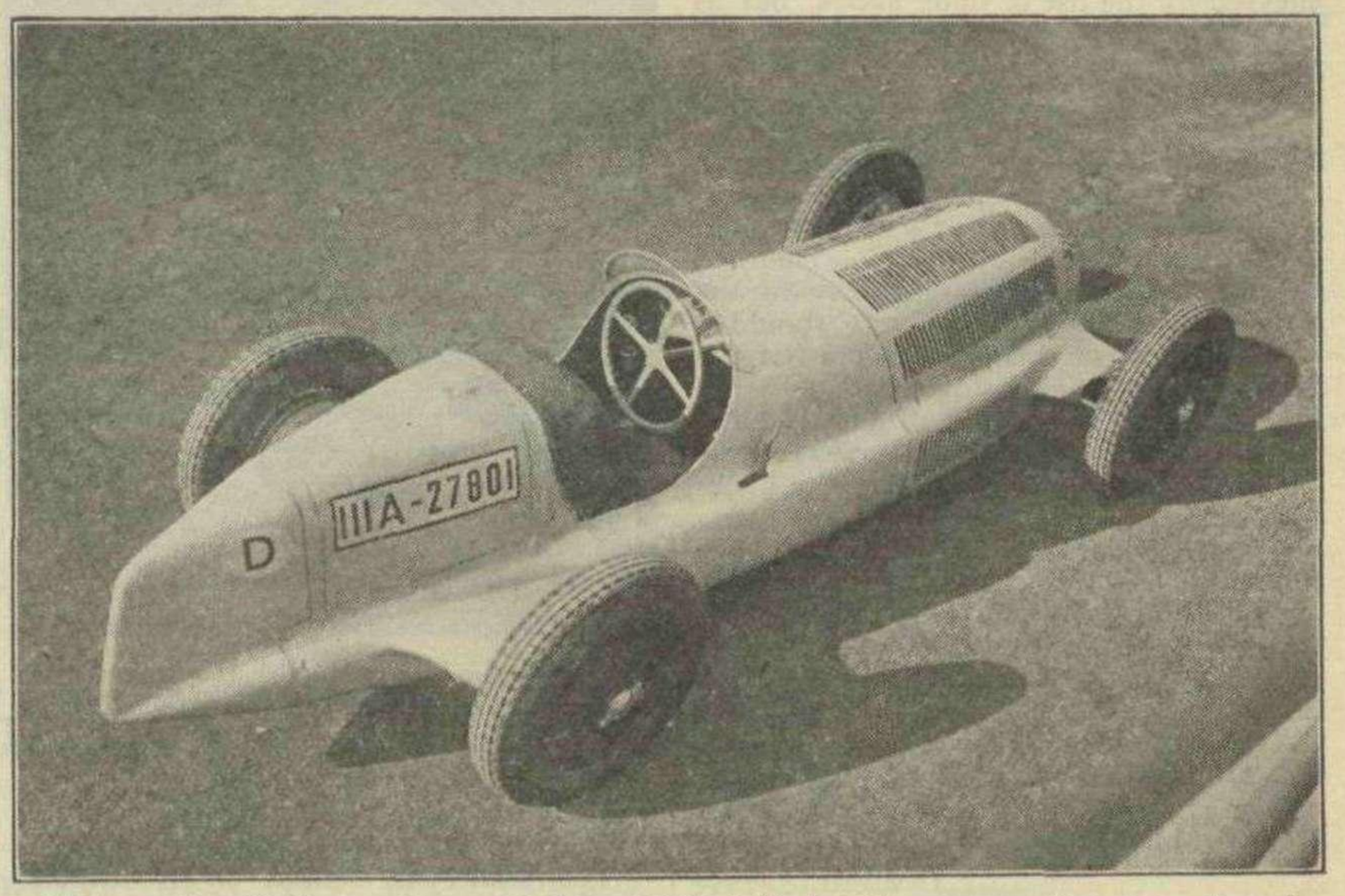
SINCE the early days of motoring the prestige of Germany in the racing world has been maintained by the Mercédès Company, and no one will forget thier successes in the French Grands Prix of 1908 and 1914. Their name, too, is associated with the early use of the supercharger, and the 1½ and two litre cars produced after the War were conspicuously successful.

The next stage of progress saw the building of the 36-220 and the 38-250 cars, probably the most impressive vehicles which have appeared in races since the War, and in the hands of Caracciola capable of marvels in spite of their weight. The astonishing development of the 2.3 Alfa Romeo and Bugatti cars, which were almost as fast and much easier to handle, proved too much for their bulkier rivals, and with the removal of " Caratch " to the Alfa camp, the huge white cars seemed to have disappeared from international races.

The engineers of Untertürkheim were not idle, however, and when the Draft Regulations for Grand Prix cars appeared in 1933, the Chairman of the Daimler-Benz Company, as it is called in Germany, was able to state that Mercédès was willing to produce Grand Prix cars within the 750 kg. limits.

It was expected that the first of the new racing cars would be tested on the Avus track last year, but further researches were called for, which prevented its debut until the middle of last January.

The Avus road was not yet free from ice and snow, so the car was taken down to Italy in a large motor lorry, and a number of trial runs were made on the Milan-Varese Autostrada. After attaining some high speeds, Alfred Neubauer, the Mercédes racing manager, pronounced himself satisfied, and the équipe returned to Germany forthwith.



The new Mercédès-Benz racing car, sleek, beautifully finished, and conveying an impression of speed in every line. A maximum of 170 m.p.h. is expected.

In the first announcement of the Mercédès racing cars it was said that there would be two models, one a 2.9 litre and a larger one of 3.8 litres. So far only details of the smaller one have appeared.

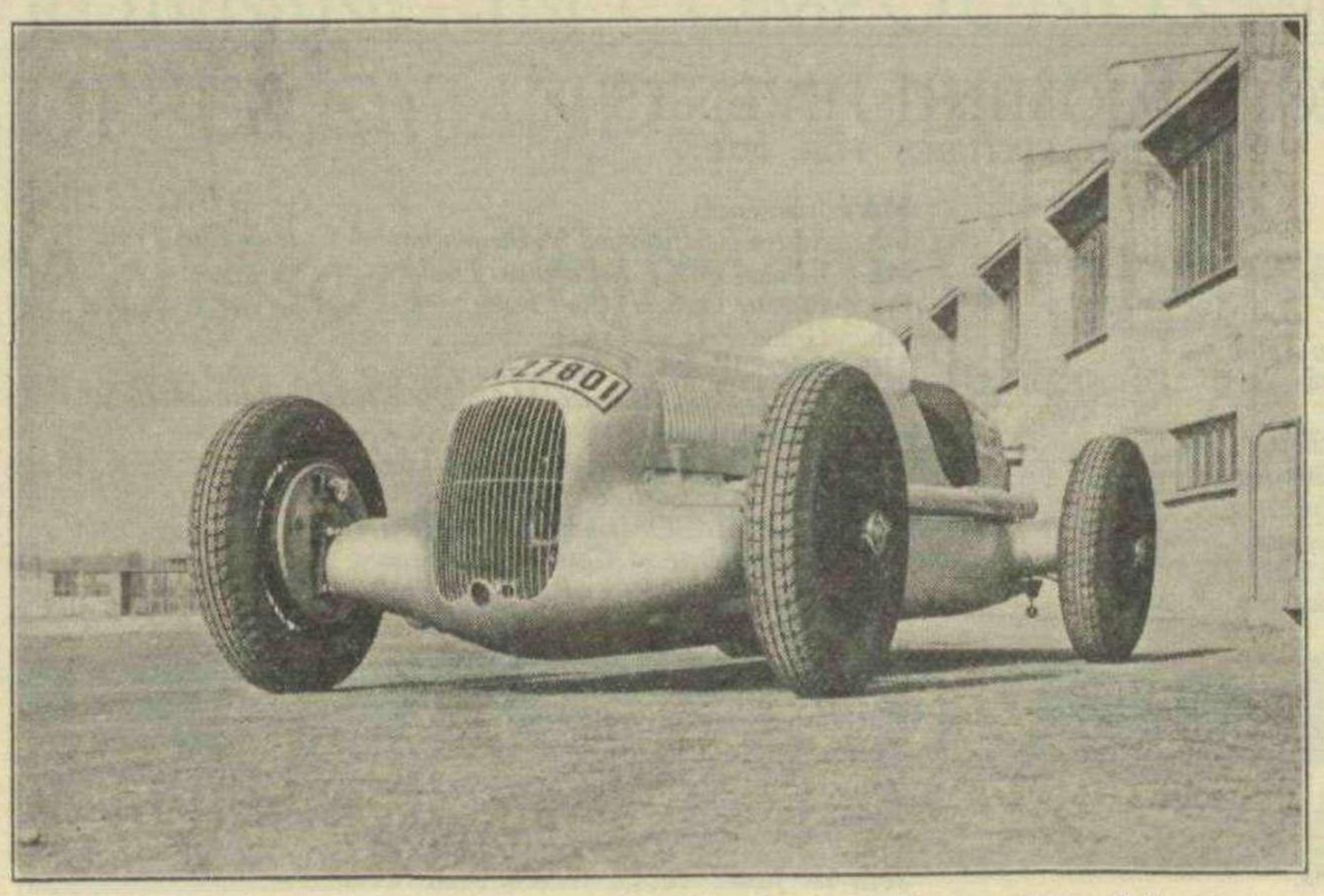
The engine is a 2.9 litre straight-eight unit with two overhead camshafts. A Roots-type blower permanently in engagement is fitted on the off-side, driven by gears, and these are also used to drive the camshafts. Engine cooling is always a serious problem on these high efficiency units, and a large port has been cut away in the middle of the radiator block to direct a stream of air over the front end of the cylinder block. The numerous louvres in the bonnet and undershield facilitate its escape.

Beyond saying that it is a high-speed unit, the makers make no statement of the maximum engine speeds, but spectators who saw the car on its tests in Italy report that the tearing exhaust note is even more stirring than the howl of the blower gears in the famous SSK's.

The clutch occupies its normal position at the rear of the engine, but the gear-box is combined with the differential casing at the back of the car. This unit is supported on the chassis, since the rear wheels are independently sprung. Not having to contend with the angular movement of the propellor shaft, which can therefore be carried in a shallow tunnel, the designer has been able to seat the driver on a level with the chassis members without the complication of splitting the final drive. The gear-lever is on the right of the driver.

The rear wheels are independently suspended with a single universal joint for each half shaft on the back axle casing, helical springs being used between chassis and axle. In the front each swivel pin is carried on two triangular links which allow the wheel to rise and fall in a vertical direction, and here too the load is carried on helical springs. Each wheel has its own steering arm, as is usual with independent front springing, and with the elimination of the track-rod, the makers report unusually good road holding on bumpy corners. The rear shock-absorbers are adjustable from the driving seat.

The brake-drums are heavily finned, with holes through the fins to aid cooling, and wind-scoops on the alloy back-plate contribute to this result. The brakes are hydraulically operated.



The front of the new Mercédès-Benz is a perfect example of enclosed streamlining. Independent springing and hydraulic brakes are features of the specification.

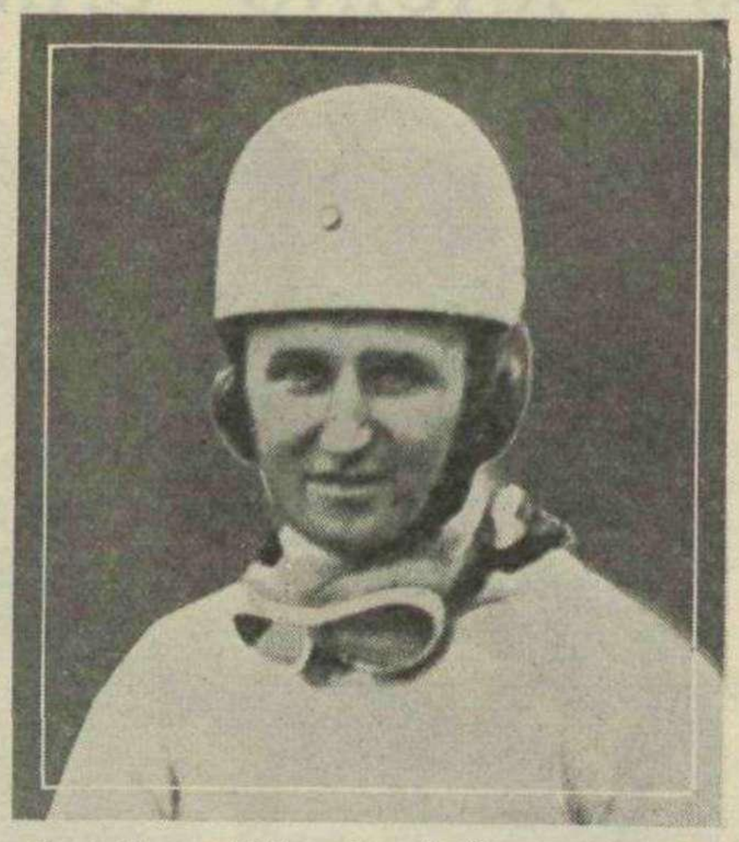
1934 RACING CARS—continued.

The chassis is low-slung, straight in front and upswept at the back. A considerable saving of weight has been effected by the use of light alloys, but as far as can be determined, the actual side members are steel.

The body, which is made of aluminium is a fine example of aero-dynamic design. The casing which covers the radiator and the front suspension is particularly smooth in outline, and gives the car something of the appearance of a Miller. There is actually only 4 inches clearance in the middle, reduced to about zero should a front tyre burst. The lower part of the body, covering the side-members is of greater width than the top part, and flows smoothly into the rear-axle fairing.

The fuel-tank is carried over the back-axle, which can be reached by removing the seat-cushion or detaching the back portion of the tail. It is notable that no attempt has been made to "fair" the driver's head. The overall height of the car is not more than 3ft. 6ins. or waist level.

The estimates of speed vary between 250-270 k.p.m. (155-175 m.p.h.). The cars may be seen at Monaco on Easter Monday, but the first real change of showing their speed will be in the French Grand Prix at Montlhéry on July 1st.



Ernst Henne will be making his first appearance in motor-racing as a member of the Mercédès-Benz team. He is better known as the holder of the world's speed record for motor cycles.

The team will consist of six drivers, Fagioli, Caracciola, Henne, Von Brauchitsch, Broschek and Bernet. It is thought that Fagioli will only drive until Caracciola has fully recovered from his accident.

The latter of course has been a Mercédès "ace" since 1923, when he gained a number of successes in German Hill-Climbs on a 1½ litre car. Up to 1931 when he joined the Alfa Romeo team he had won the German Grand Prix on three occasions, the Irish Grand Prix and the T.T. once, and again won the German Grand Prix in 1932 on the Italian car. In 1933 he went into partnership with Chiron but was injured in the practises for the Monaco Grand Prix and was unable to drive during the rest of the season.

Henne is the holder of the World's Speed Record on a B.M.W. motor-cycle. but 1934 will be his first season in a racing car. Von Brauchitsch, who is a film-star in private life, won the Avus Race and put up fastest time in the La Turbie Hill Climb in 1932. In 1933 he won the Kesselburg Hill Climb.

Broschek and Bernet are not widely known outside Germany. The former won his class at Nürburg in 1928 on a Horch, was second in the Eifel Race in 1930 on a 2.3 Bugatti and came second in the Lwow Grand Prix on a Mercédès in 1932. Bernet specialises in long-distance high-speed trials, usually driving a Wanderer. He won the Baden-Baden 96 hour trial in 1929, and the Garmitch Winter Trial, 72 hours, 36 hours and 96 hours, in 1930-31-32, so that the Italian 1,000 Miles Race would be quite a trifle after such performances.

On paper, at any rate, Fagioli and Caracciola are the only drivers who can compare with the cracks of the Ferrari stable, but if their cars are as good as they look, they should once more make Germany a serious factor in international Grand Prix racing. All eyes turn to Montlhéry.



Manfred von Brauchitsch has won many races and hill-climbs at the wheel of an "S.S.K. Merc." He will be a regular member of the team this year.



Rudolf Caracciola, the Mercédès first string, will not be fit for two or three months yet. He his still convalescing at Lugano.

FORTHCOMING EVENTS

MOTORING FIXTURES FOR 1934.

APRIL.

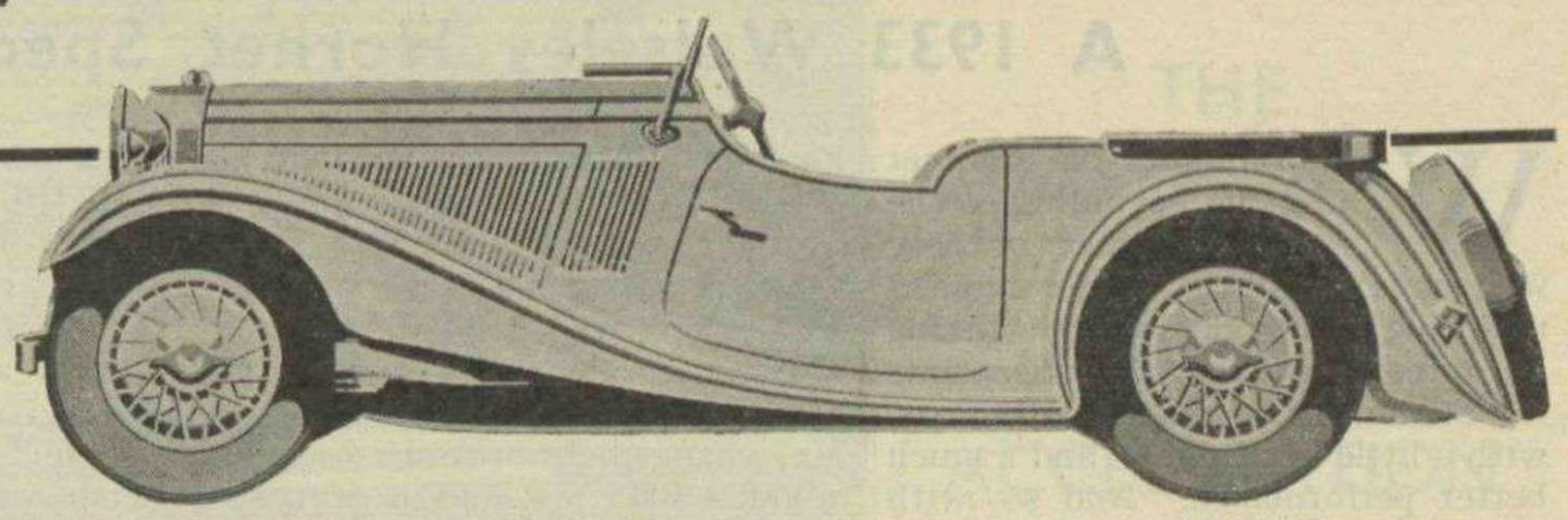
1st. *Bugatti Owners' Club Rally.*
2nd. *B.A.R.C. Easter Monday Meeting.*
2nd. *Grand Prix de Monaco.*
3rd. *Tawe District Motor Club Reliability Trial.*
7th. *Southport M.R.C. Sand Race Meeting.*
7th-8th. *Coupe des Mille Races, Italy.*
7th-8th. *Nottingham Tornado M.C. Reliability Trial.*
8th. *Horsforth and District M.C. Reliability Trial.*
8th. *Aston Stamford M.C. Reliability Trial.*
7th-8th. *Brighton and Hove M.C. Team Trial.*
14th. *North West London M.C. Lawrence Cup Trial.*
14th-15th. *Liverpool M.C. Reliability Trial.*
21st. *M.G. Car Club Reliability Trial.*
22nd. *Circuit d'Alessandria. Italy.*
28th. *J.C.C. International Trophy Race.*
29th. *J.C.C. North Wales Trial.*

MAY.

4-5th. *R.A.C. Caravan Rally.*
5th. *Southport M.R.C. Sand Race Meeting.*

MAY *(continued)*
5th. *Sutton Coldfield and N. Birmingham A.C. Inter Club Trial.*
5th. *Cemian M.C. Reliability Trial.*
6th. *Bugatti Owners' Club Rally.*
6th. *Grand Prix of Tripoli, Italy.*
11th-12th. *W.A.S.A. Reliability Trial.*
12th. *Derby and District M.C. (Prop.) Ltd. Race Meeting, Donington.*
12th. *Kent and Sussex Lewes Speed Trials.*
12th-13th. *J.C.C. Inter Centre Rally.*
18th-19th. *M.C.C. London-Edinburgh Trial.*
20th. *Grand Prix of Casablanca. France.*
20th-21st. *Grand Prix of Nimes. France.*
20th. *Grand Prix of Frontieres. Belgium.*
21st. *Grand Prix of Budapest.*
21st. *B.A.R.C. Whit Monday Meeting.*
21st-25th. *R.S.A.C. Rally.*
26th. *Bugatti Owners' Club Speed Trial.*
26th. *N.W. London M.C. Coventry Cup Trial.*
26th-31st. *Tour of Italy.*
30th. *500 Miles Race. Indianapolis.*
30th-1st June. *R.A.C. Isle of Man Races.*

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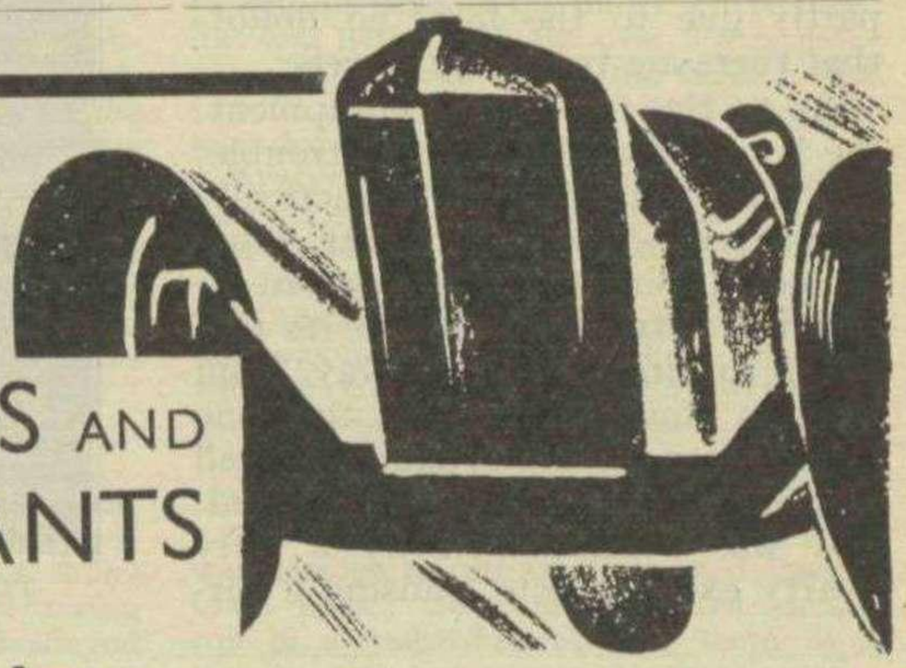
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TRYING A SECOND-HANDER

A 1933 Wolseley Hornet Special.

WITH thoughts of Summer and the beginning of the "Season" many of those who have spent the winter months motoring behind glass are now taking an interest in the advertisements for second hand open sports cars, with a little less comfort and a much better performance. And so, with this thought in our minds we paid a visit to the firm of E. C. Stearns & Co., of 16, Fulham Road, S.W.3, and found there a smart looking Hornet Special fitted with a Swallow 2-seater body. This car was accordingly placed at our disposal for a thorough test on the open road.

On looking at the speedometer we noticed that the mileage registered thereon was 8,465, and judging by the appearance of the bodywork, the small oil consumption and the general "feel" of the machine, we have no reason to doubt the accuracy of that figure. One thing which we particularly noticed was the exceptionally new condition of the tyres, partly due to the fact, no doubt, that there are two spare wheels.

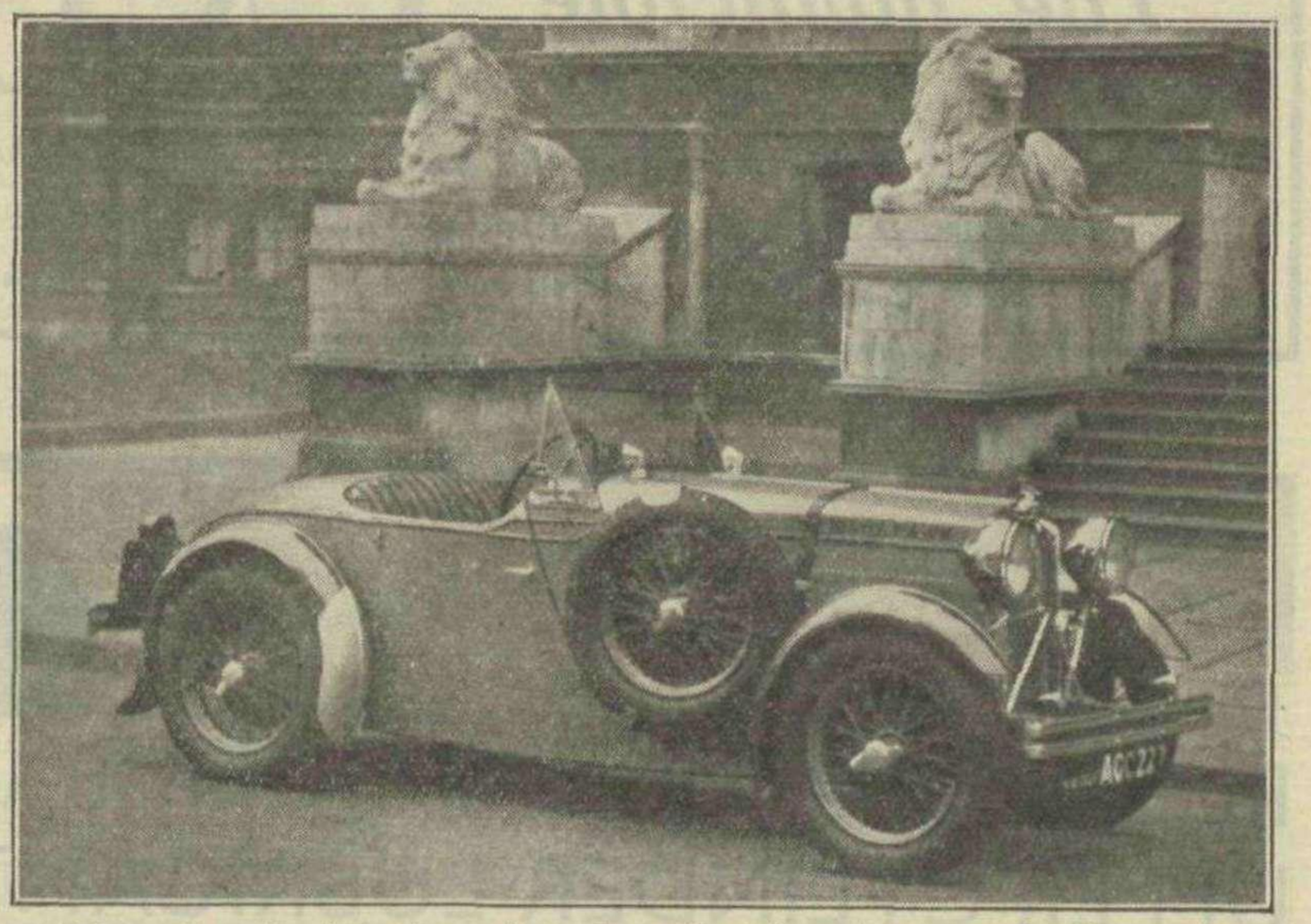
As to the rest of the equipment, the hood showed no sign of trouble, the side-curtains were practically unused, *all* the instruments functioned (even the thermometer!) and the battery was up to its job.

On driving the car away from Fulham Road we noticed that the acceleration in second gear was well up to the Hornet Special standard, and was accompanied by a very hearty exhaust note, causing a certain amount of attention in the presence of our friends in blue.

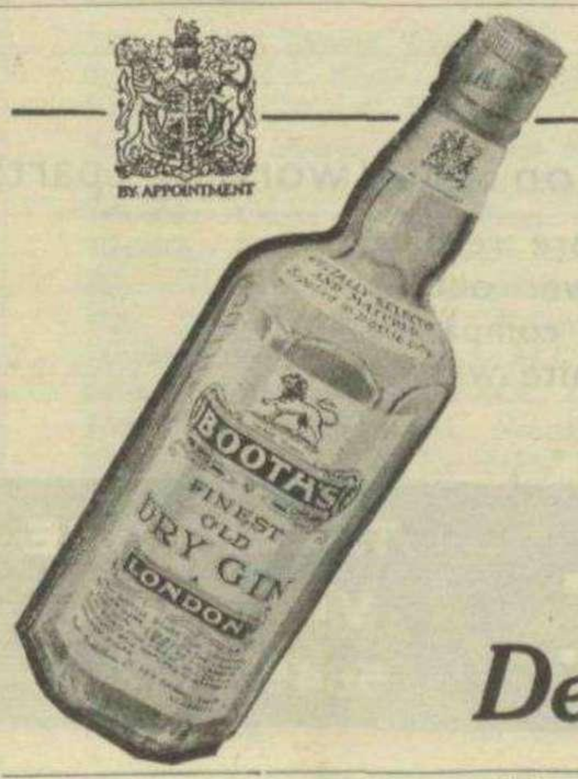
After placing suitcases in the space provided under the protection of the tail, we set off for the South Coast. At the first opportunity we got of trying the maximum speed we changed from 3rd to top at about 4,500 r.p.m. and in a very short space of time we obtained a speedometer reading of 75 m.p.h., which seemed to be rather optimistic. But while we are on the subject of maximum speed it would be as well to say that the speedometer needle could be pushed up to 80, which was an actual speed of 75 m.p.h. It was this which reminded us that we had forgotten to enquire the price. We did, however, remember that the original cost of the car when new was £255.

At about 4,700 r.p.m. there was a certain amount of valve bounce (which could be easily cured by fitting new valve springs) and for this reason we settled down to a cruising speed of about 62 m.p.h. On corners, both fast and slow, the car felt safe and was easy to control in a "slide."

On returning the car to Messrs. Stearns we learnt that the price was £165 and the firm would fit a set of new valve springs without charge.



The good coachwork condition of the Hornet Special can be seen in this photograph.

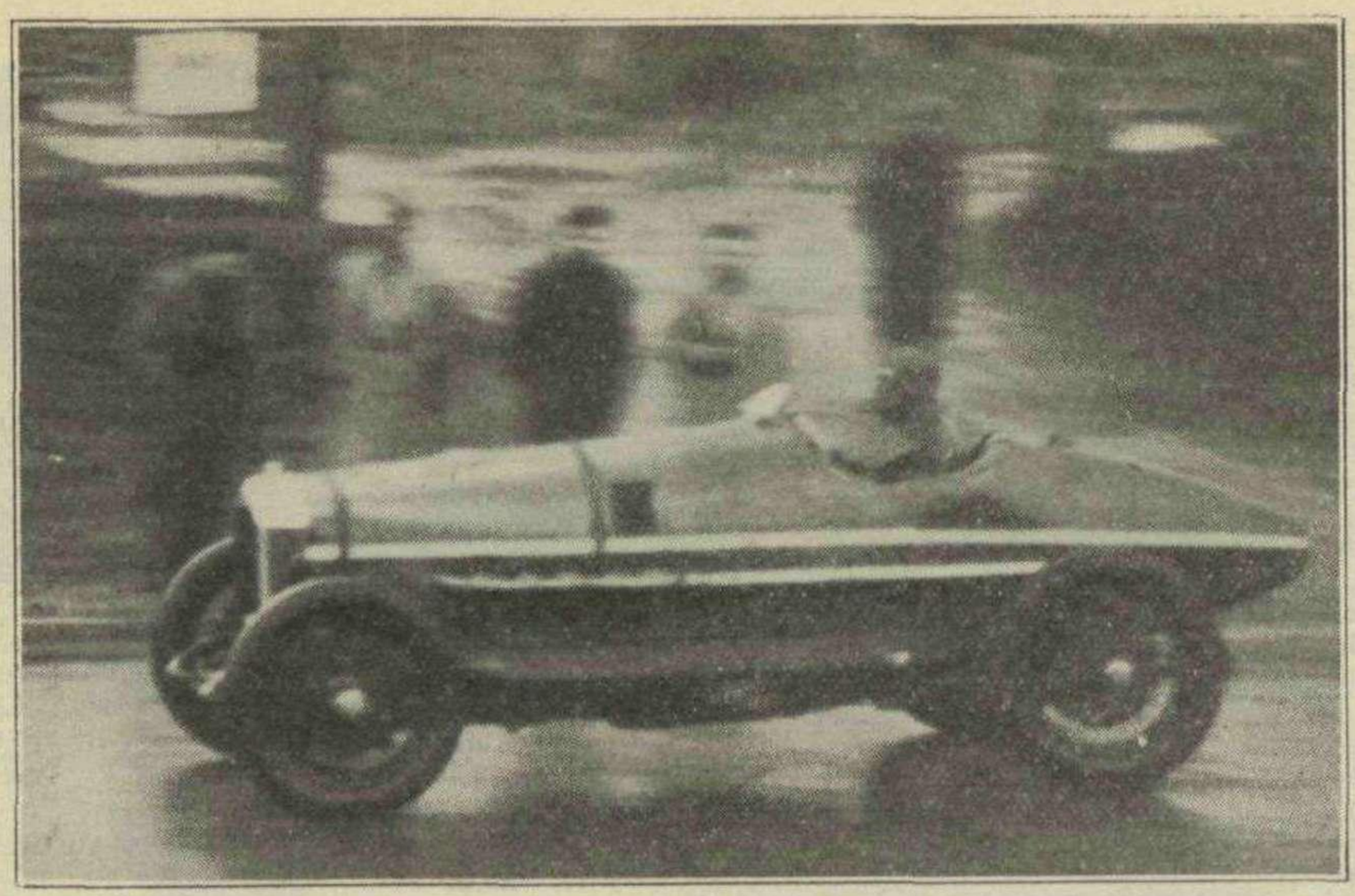


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Oliver Bertram's 10 litre Delage was rather surprisingly beaten by T. S. Fotherington's 2.3 litre Bugatti.

THE INTER-VARSITY ACCELERATION TEST

OXFORD Dons, we believe, take a pride in the fact that their town is the City of Dreaming Spires, and any mention of a "speed" event meets with proctorial disapproval. Since the section of the Eynsham By-Pass used this year for the Inter-Varsity meeting definitely included a down-hill section, "Hill-Climb" was not applicable, so the organisers were ingenious enough to hit on the title which appears in the heading. The O.U. Car Club is now defunct, but a new and purified body, the O.U. Motor Dirvers' Club is rising from its ashes and will be in full swing next term. The meeting was therefore organised and run by the C.U. Auto Club with their customary efficiency.

The course was a kilometre in length and perfectly straight. The start took place on a section which had been sanded, and a certain amount of skill was required to avoid wheel-spin when getting away. There was a bump when crossing one of the bridges in the middle of the course, but otherwise the surface was excellent for high speed. Electrical timing was used with a rolling start of 10 yards.

53 out of the 68 entries were cars and amongst them such well-known machines as Bertram's Delage, Nash's Anzani Nash and Fotheringham's Bugatti, converted once more into a "2.3."

Touring motor-cycles were sent off first, and best time was made by R. L. Doble on a Rudge. Fernihough knocked off 4 seconds on a racing 350 c.c. Excelsior, and on his 500 c.c. machine clocked 26.69 seconds. Malcolm Muir was slightly slower, and Darbishire, who has now graduated to a 980 Brough could only manage 28.1. There were no sidecars, and J. E. Breyer's rather touring Morgan was the only three-wheeler. He had rebuilt the petrol and oiling system only a few hours before, quite a usual occurrence before Inter-Varsity events.

The speeds of the touring cars seemed insignificant on the wide highway. Fraser (M.G. Magna) was best in the under 1,100 c.c. class, while Thorpe (Frazer Nash) made a snappy run in his class in 39.18 seconds. Bass's Speed Twenty Alvis was the best in its class, and beat H. C. Fairtlough, the former secretary of the C.U.A.C. and Commander Fowle, on Talbot 105's. Fowle had three if not four of these vehicles at his disposal, and with his fleet monopolised proceedings for a considerable time.

Ferguson (4½ litre Invicta) made a good run for Cambridge, but was just beaten by Richard Marker (4½ litre Bentley), with a time of 37.22 seconds. Dr. Benjafield (Railton Terraplane) beat this handsomely (35.88 seconds) while the Bentley, which had plug trouble, was slower on its next run.

The Unlimited Racing class followed and Oliver Bertram raised the record time to 28 seconds dead with a fine run. Fotheringham whose Bugatti sounded most warlike brought it down to 27.39 seconds. R. J. G. Nash on the "Spook" was slow, his car misfiring as though there were water in the fuel.

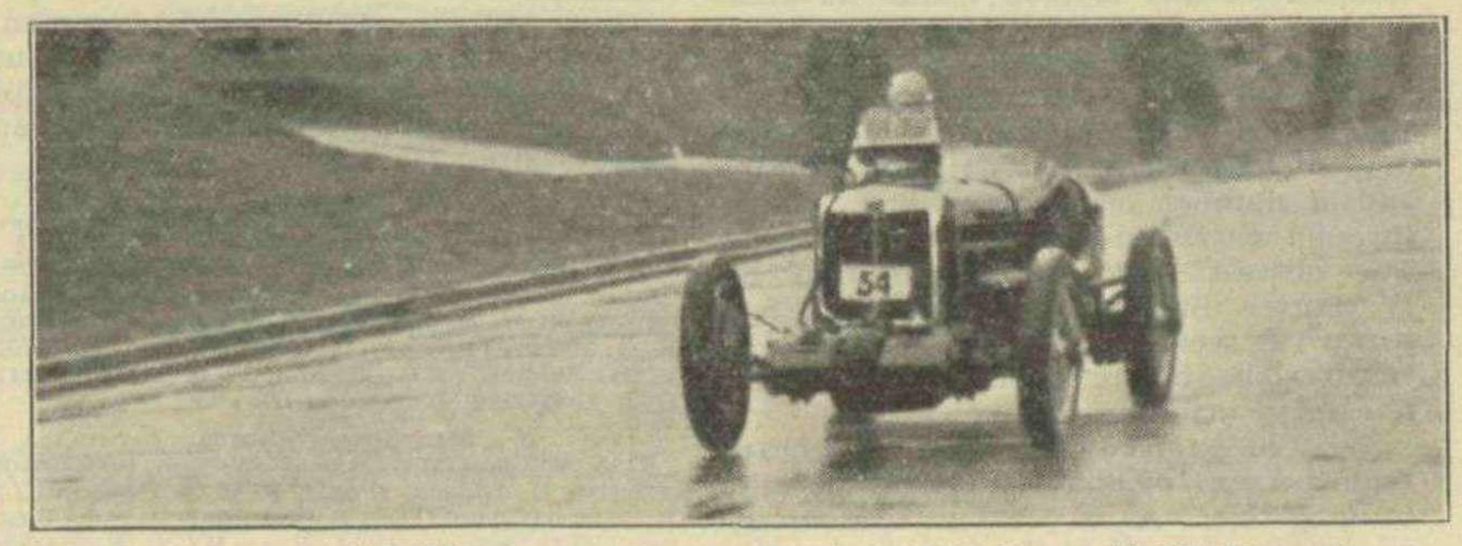
Returning to the smaller classes, Sumner on a blown Austin just bettered 40 seconds, faster than Dobson's Riley in the next class. Seaman was driving the Magnette which last year belonged to Whitney Straight but made a slow time. Sumner again appeared, this time on a G.N., but this car refused to "play." He had bought two of them a week before for £4, and this was the outcome of his efforts. A. Leitch drove a similar machine with an ear-shattering bark, and was more successful.

Jack Robinson on his well-known Brescia Bugatti waltzed about a good deal getting away, as his car was fitted with smooth track tyres. His time was 33.21 seconds.

Nash had another run, not much better than the first, while Fothringham repeated his time on the under 3 litre class, likewise Bertram in the over 3 litre category. The Duke of Grafton made a fast run in a stripped 36-220 Mercédès and recorded 33.19 seconds.

Everyone by this time was feeling hungry, so an hour's luncheon interval was declared. Unfortunately the clear sky had begun to cloud over, and by the time the first motor-cycles were sent off, rain was falling. Most of them got away without trouble, but Kim Collett, who gave a demonstration run on a very hot Norton and sidecar had some unpleasant moments in the first 50 yards.

The sky continued to cloud over, so it was decided to run the Unlimited Racing Class next. Bertram made his second run in a hailstorm into the teeth of a strong wind, but was only a fraction of a second slower than before, and Fotheringham actually clipped off quarter of a second under the same conditions.



Fastest time in the 1,100 c.c. racing class was made by R. J. B. Seaman (M.G. Magnette).

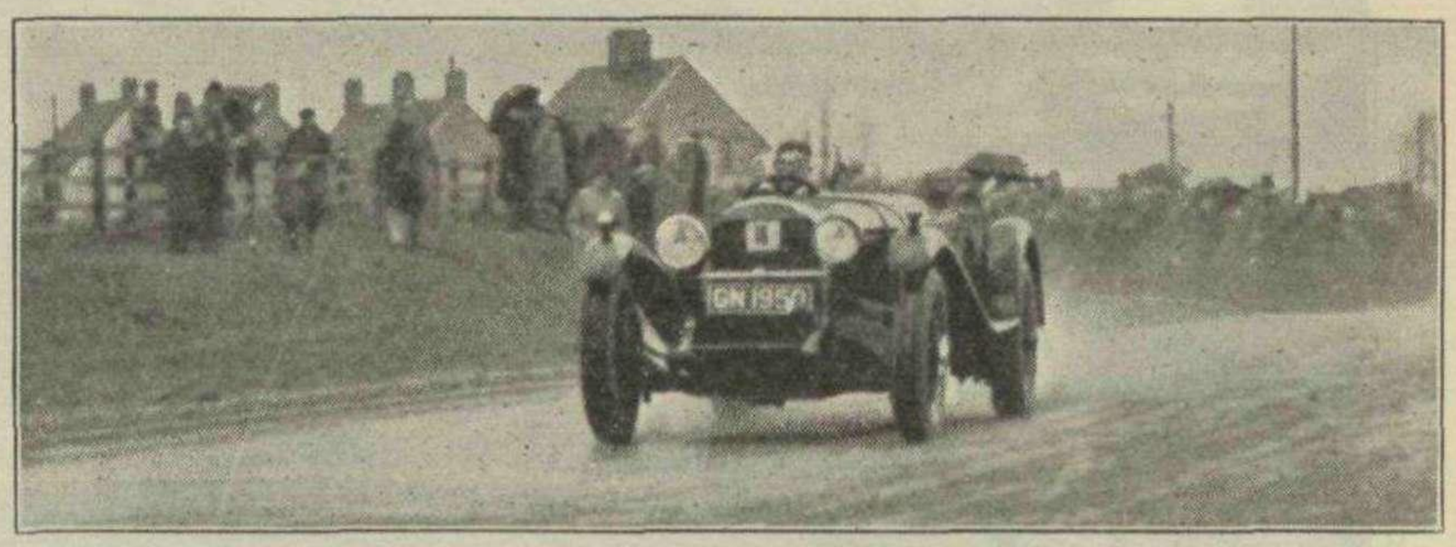
THE INTER-VARSITY ACCELERATION TEST—continued.

Nash by this time had got the " Spook " to behave and after a good start shot down the course with a terrific roar, foot hard down and back wheels snaking. His time was 29.2 seconds.

The weather then moderated, but the second runs showed little improvements on those already recorded. The principal alteration was Seaman's time of 34.33 seconds on the Magnette, which won him the 1,100 racing class.

An interesting car was the Gordon Bennett Napier car which ran in the Isle of Man in 1904, when it was driven by Clifford Earp. Mr. R. C. Blake, the owner, is a road engineer employed in the construction of the by-pass, and uses the old car regularly. It recorded 48.29 seconds on its second run or 46.6 m.p.h.

After a few further runs in which for instance, Fotheringham was seen at the wheel of a Railton Terraplane, the meeting ended. As may be imagined from the nature of the course, some fine speeds were put up, the best being Fotheringham (27.27 seconds=82.5 m.p.h.), Bertram (28.09 m.p.h.=80.03 m.p.h.) and R. J. G. Nash 29.02 seconds or 77.5 m.p.h.). Cambridge of course greatly outnumbered Oxford in the number and quality of their cars, and would have won the meeting easily if it had been run as the usual Inter-Varsity competition.



The Duke of Grafton's Mercédès-Benz at full speed, raising a cloud of spray.

RESULTS.

Touring Cars.

850 c.c. : C. H. G. Proctor (Austin) C. 55.59 sec.

851-1,100 c.c. : W. B. M. Fraser (M.G. Magna), C. 41.47 sec.

1,100-1,500 c.c. : T. A. W. Thorpe (Fraser Nash), C. 38.18 sec.

1,501-3,000 c.c. : E. W. Bass (Alvis Speed 20), C. 38.39 sec.

Over 3,000 c.c. : J. G. H. Ferguson (4½ litre Invicta), C. 36.06 sec.

Unlimited : J. D. Benjafield (4,010 c.c. Railton Terraplane), O. 35.88 sec.

Racing Cars.

850 c.c. : G. B. C. Sumner (Austin S.), O. 39.69 sec.

851-1,100 c.c. : R. J. B. Seaman (M.G. Magnette S.), C. 34.33 sec.

1,101-1,500 c.c. : R. J. G. Nash (Anzani-Nash, S.), C. 29.2 sec.

3,000 c.c. and unlimited : T. S. Fotheringham (Bugatti S.), C. 27.27 sec.

Over 3,000 c.c. : H. S. Bertram (Delage), C. 28.09 sec.

GOOD WEATHER FOR THE COLMORE TROPHY

FOR the first time the Colmore Trophy Trial this year was run as a completely separate event from the Colmore Cup Trial for motor-cycles. The start took place at the foot of Gypsy Lane—another novelty—and most of the competitors from London and the South spent the preceding night at Broadway, in reaching which they had to traverse fog-bound roads over the whole distance.

The deep ruts of the hill caused a good many failures, mostly among low sports cars with a small ground clearance. Although not actually stopping, many cars received a severe buffeting, and the hill resounded with the crashing of undershields, exhaust pipes and battery boxes against the unyielding ground. The fastest climbs seemed to be made by Henry Laird (McEvoy Hornet) and C. A. H. Cann (M.G. Magna).

An unusual test was held on the first section of Mile Lane. Starting on a line, competitors had to stop within an area marked by posts, and then, on being signalled by lights, had to accelerate for a certain distance in the time of 7 seconds. This little task was a good deal more difficult than the bare description sounds, and a number of people failed, either through wheelspin or excitement or both. The neatest performance was that of W. Porter (Singer), who recorded 4 5/3 secs. The second part of the hill was also troublesome, but most people coped with it satisfactorily.

On Old Stanway, the organisers arranged a sort of double acceleration and braking test. As is usual in trials nowadays Singers and M.G.'s fought for the honour of fastest time, and on this occasion the prize was divided between A. H. Langley (Singer) and C. A. H. Cann (M.G. Magna).

Kineton was inoffensive, but the timed test on Stancombe, in the middle of which cars had to stop and get away again, was a searching test of skill. Here M.G.'s made fastest time, the two best being H. R. Attwood and J. A. Bastock. R. A. Macdermid and A. H. Taylor were also very fast with M.G.'s.

Station Lane was merely the calm before the storm, to wit, Nailsworth Ladder. The " Ladder " is bad enough under ordinary conditions, but the " Sunbac " added to the discomfort of competitors by making them start on a slippery stretch nearer the steep gradient than the competitors liked. Clean ascents were made by a good many people, however, among the best being Mrs. Needham (Frazer Nash), W. B. M. Fraser (M.G. Magna) and J. H. Whittendale (Triumph).

Ham Mill, on Rodborough Common, was the last hill of a really stiff trial, but here the dry weather was on the side of the competitors, most of whom came up fairly easily.

RESULTS.

First-class Aards.

J. A. Bastock (M.G.), A. H. Taylor (M.G.), C. W. S. Crabbe (M.G.), H. M. Avery (Singer), C. C. Evans (M.G.), W. H. Haden (M.G.), K. Hutchison (Ford), K. G. Marsh (Triumph), H. Laird (McEvoy Special), E. H. Banfield (M.G. Magna), W. Porter (Singer), G. B. Goodman (Singer).

Second-class Awards.

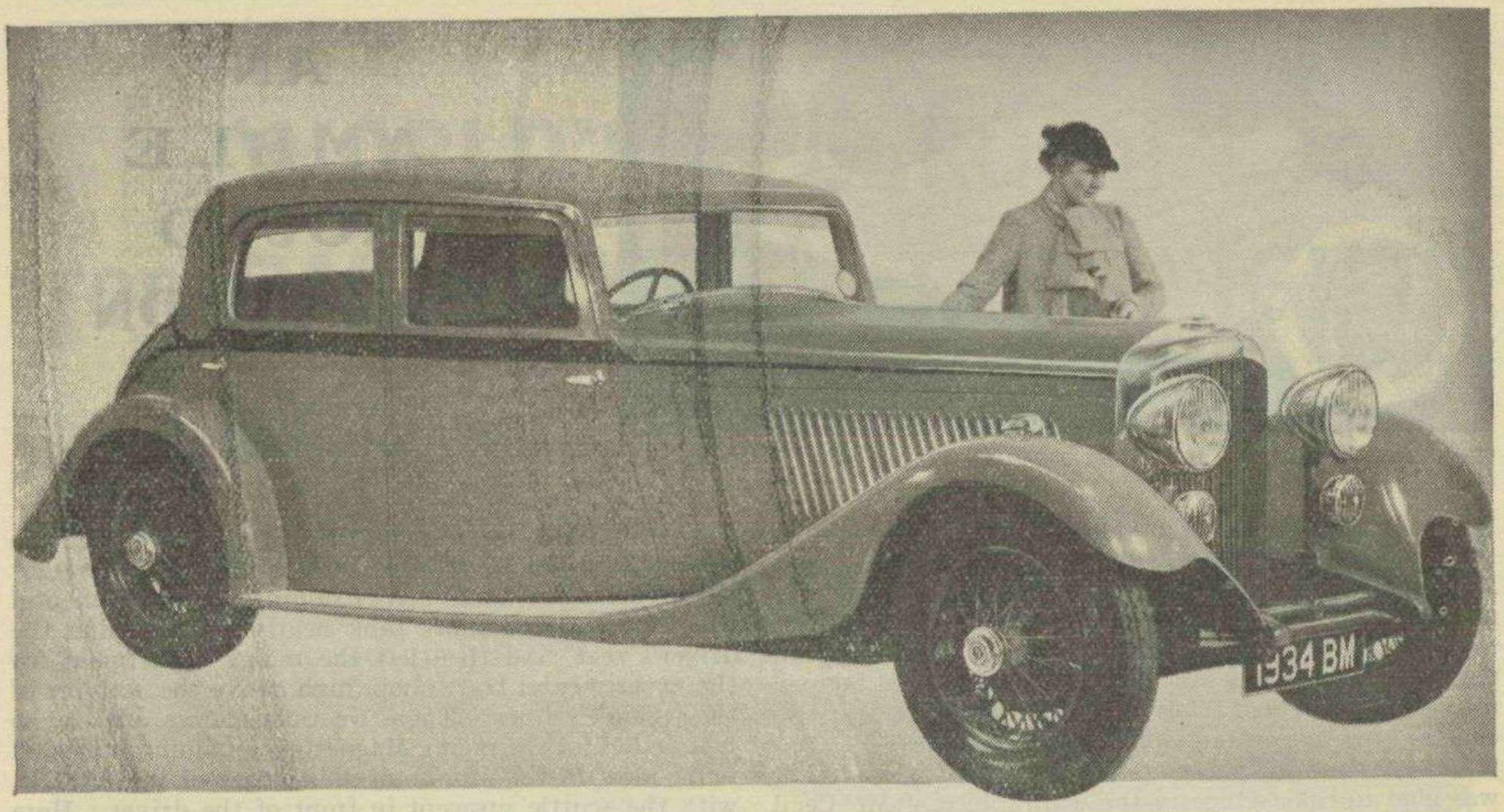
C. A. H. Cann (M.G. Magna), W. J. B. Richardson (Singer), H. Hillcoat (Ford), J. W. Wathes (M.G.), W. Mason (Clyno), J. D. Barnes (Singer), A. E. Cleghorn (M.G. Magna), G. J. Rea (M.G.), R. Parker (Singer), W. E. C. Greenleaf (Morris Minor), R. L. Bellamy (Triumph), L. Sandford (Singer), A. B. Langley (Singer), K. G. Cotton (Singer), M. G. Billingham (Singer), R. C. Tibbey (Singer), J. C. Elwes (Singer), C. H. Wagstaff (Lea-Francis), M. H. Lawson (Singer), G. H. Harrington (M.G.), J. R. H. Baker (Singer), H. J. Round (Singer), C. S. Parrott (Singer), R. J. Ashley (Singer), J. F. Beasley (Morris Minor), R. V. M. Barry (Morris Minor), M. D. England (Singer), B. S. Hill (Singer), Miss T. Clarke (Singer), A. H. Langley (Singer), Miss C. Labouchère (Singer), Miss D. B. M. Evans (M.G.), J. F. Kemp (M.G.), K. D. Evans (M.G.), S. Carr (Singer), Bernard Bray (M.G.), G. Clifton (Riley), W. G. Kidd (Singer), J. Tweedale (Frazer Nash), J. Stoate (Frazer Nash), G. F. Horan (M.G.), C. Beddow (Riley), Miss H. Astbury (Singer), A. E. Carr (Singer), L. E. C. Hall (Singer), F. R. G. Spikins (Singer), T. E. Price (Singer), J. Priestley, jun. (Avon Standard), J. H. Whittindale (Triumph), A. T. K. Debenham (Singer), G. H. N. Phillips (M.G.), N.A. Watkins (Frazer Nash).

Third-class Awards.

H. R. Attwood (M.G.), Miss G. M. Cannon (Singer), L. W. Cutler (Austin), A. W. F. Smith (M.G.), H. J. Ripley (Riley), H. R. Winnicott (M.G.), W. J. Goldsworthy (Singer), R. T. Gardner (Frazer Nash), J. L. Fraser (M.G.), R. S. Langford (Frazer Nash), W. B. M. Fraser (M.G. Magna), C. R. Pond (M.G.), Mrs. C. B. Scudamore (Singer), C. J. N. Hall (Triumph), R. J. W. Appleton (Riley), K. B. Steadman (M.G. Magna), A. K. Hunt (Wolseley Hornet), K. C. Delingpole (M.G. Magna), N. Roundhill (Singer), A. P. McGowran (Riley), J. L. Higgins (Frazer Nash), E. Blake (Triumph), E. W. Quero (Singer), R. Collins (Morris), T. H. P. Cain (Austin), D. Eastmond (Morris), S. W. Arthur (M.G.), E. R. Oliver (Clyno), S. A. Nicholls (Austin), A. J. V. Merriott (M.G. Magna), Mrs. A. Needham (Frazer Nash), W. E. C. Watkinson (Alpine Riley).

Completed Course, No Award.

F. I. Allen (M.G.), Miss E. V. Watson (M.G.), C. M. Davies (Austin), Lord Avebury (Ford), E. Dimond (M.G.), E. Pleasants (M.G.), L. Mills (Lea-Francis), R. K. Nicholson (M.G.), J. H. Summerfield (M.G. Magnette), E. G. J. Arnold (Ford), E. G. Jackson (M.G. Magna), Miss H. Whipp (Wolseley Hornet), W. S. Whittard (M.G.), Mrs. A. E. Moss (Marendaz Special), G. H. C. Goodban (M.G.), P. S. Smith (Alvis), J. E. de Blaquière (Austin), P. D. Worthington (M.G.), A. A. Rigby (M.G.), R. J. Richardson (Austin), Miss J. H. Lund (Austin), G. H. Goodson (Austin), S. H. Roe (Riley), H. G. Conway (Austin), H. B. Prestwich (M.G. Magna, I. F. Counell (M.G. Magna), A. J. Milburn (M.G.).



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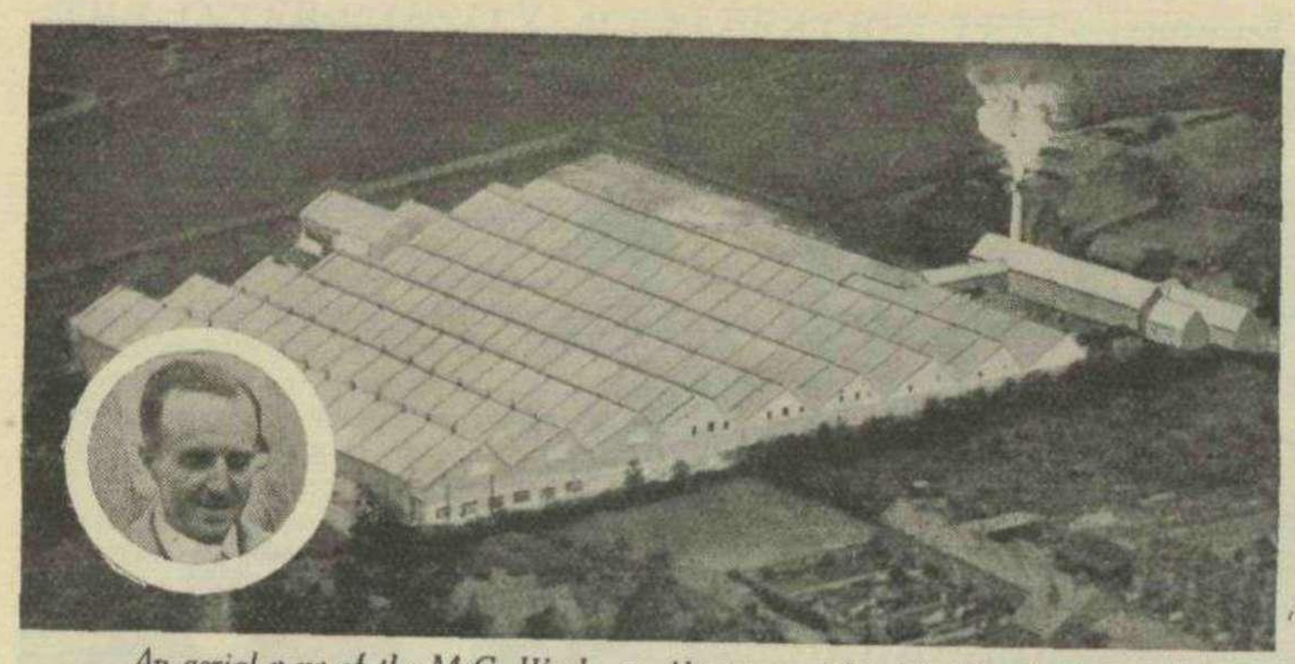
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"One's impression when seeing the new Bentley for the first time is that here we have an absolute thoroughbred" —Tatler

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An aerial view of the M.G. Works at Abington. (Circle) Mr. Cecil Kimber.

AN AMBLE ROUND ABINGDON

By
T. G. Moore.

I ALWAYS get a lot of pleasure in going round a motor factory, especially when I have the run of the experimental department and can poke my nose into the odd recesses in which the latest pride of the works is reposing. The M.G. works at Abingdon particularly takes my fancy since it is the largest factory in the world devoted solely to the manufacture of sports cars, and there is always something new to see.

After a none too pleasant run down from London, I was glad to take refuge in the warm office of Mr. Cecil Kimber, the managing director. What I needed, he said, was some of his hundred-year old sherry, a present from George Eyston, so off we went to his house nearby. The sherry went down with enjoyment, we found, and a Tauber record on Mr. Kimber's radiogramophone completely disperse the gloom.

Lunch finished, we returned to the factory. "What would you like to see first," I was asked. The racing workshop was the obvious place to go, and there we found Lord Howe's Magnettes, spotless and polished in their coats of green paint, being prepared for the Mille Miglia. It was found last year that the straight-through exhaust pipes, opening near the spare driver's ear inflicted a considerable mental strain, and the cars have therefore been fitted with Burgess silencers of rectangular section running from behind the engine almost to the back-axle. Another interesting point is a chassis-oiling system which feeds the king pins and other points in the steering mechanism. The system is automatically fed by a pendulum pump in a small oil tank on the dash.

Comfortable two-seater bodies similar to those used last year are again fitted, as it was felt that for a distance of a thousand miles over indifferent roads the well-being of the drivers is more important than the last word in acceleration. In the same way the increased power developed this year has made it possible to lower the engine compression slightly without detracting from the performance.

Hamilton's famous Midget was also in the racing shop, and was being prepared for a famous German racing driver. The Germans have always been keen on small-capacity cars, and a fast "baby-car" can bring in a very fair income from the numerous speed events held over there.

"The Midgets have become so fast," continued Mr. Kimber, "that 'Hammy' was about the only driver who could drive them flat out, so we have affected a further alteration in chassis lay-out. We have mounted the petrol tank in front of the rear axle, so that the steering will not be affected on a corner by the weight of the fuel in the tank." We examined the experimental chassis with its dummy tank neatly fitted behind the driver's seat, and then left the racing department for the experimental body shop, high above the activity of the assembly lines. There we came across one of the new bodies for the racing Magnettes, an aluminium shell built down to the minimum dimensions of the AIACR, with the scuttle upswept in front of the driver. Here again the petrol tank will be carried in front of the back axle and forms the outside of the body. The back end is faired off by a blunt tail. The first batch will be fitted to the cars of Kaye Don's team.

"Now you'd like to see George's car," so we dived between piles of experimental wings, templates of facia boards and the like to what was apparently a blank wall, only decorated with a notice in Italian "Keep Out." In the best traditions of the detective novels, however, a narrow passage revealed itself, and we were shown the Magic Magna in its lair.

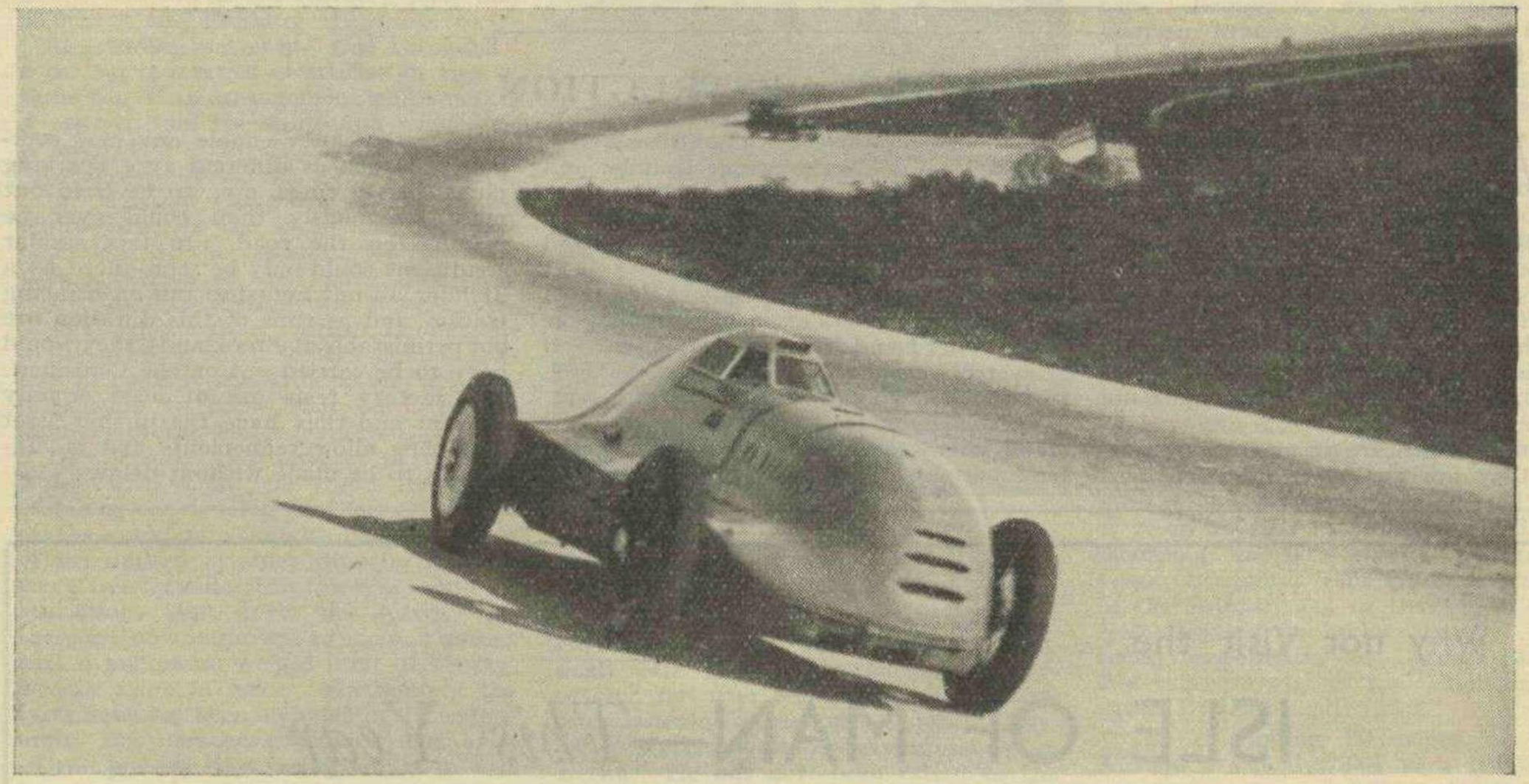
The car gave an extraordinary impression of lowness and stability, partly due to the unusual shape of the radiator block. The chassis is substantially the same as that of the new Magna series, while the engine is a blown 1,100 c.c. unit, but one of the chassis members has of course been out-swept at the back to clear the bevel casing. The offset transmission allows of a very low seating position, and the lower part of the steering wheel is cut away so as to clear the driver's legs. On the track only a small movement of the wheel is required. Hydraulic and friction shock absorbers are used on each axle, and the latter type on the rear have long arms like radius rods.

The body follows closely the lines and dimensions of the original one fitted to the Magic Midget and is being painted with horizontal lines of brown and orange, the M.G. colours. "I expect it will be christened the 'Flying Banana' or something like that," said Mr. Kimber dryly, "but we can bear that." The new car should be capable of something like 150 m.p.h., and might well attack the World's Hour Record, as tyres at least will cause no trouble. But fancy with an 1,100 c.c. engine!

Before we left the upper regions I had a look at the Magic Midget with the tiny single-seater body fitted to it when Denby drove it. From the outside it looked quite safe and harmless, but when I looked down into the cavern where the driver has to sit confronted with a

WORLD'S RECORD SPEED FOR TWO DAYS AND TWO NIGHTS

by Capt. G. E. T. Eyston



3 WORLD'S RECORDS

for 4,000 miles, 5,000 miles and 2 days were broken at over 94 m.p.h. by Capt. G. E. T. Eyston and Mr. A. Denly, driving a Hotchkiss at Montlhéry. In addition 12 International Class E records were broken: 2,000, 3,000, 4,000 and 5,000 kilometres, 1,000, 2,000, 3,000, 4,000 and 5,000 miles, 12 and 24 hours and 2 days.

(Subject to official confirmation.)

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"If there were a better oil I should use it." George Eyston

C. C. Wakefield & Co. Ltd., *All-British* Firm, Wakefield House, Cheapside, London, E.C.2

AN AMBLE ROUND ABINGDON—continued.

steering wheel the size of a cheese-plate, I mentally raised my hat to the brave little man who sits behind it.

The assembly-lines on the ground floor were not quite so busy as usual. "We have sent off the first batch of 'P' type Midgets," said 'C.K.', "and now we are preparing for the new season's Magnas." The new cars provide comfortable accommodation for two or four passengers and the extra weight is off-set by the 1,250 c.c. engine.

As we walked back to his office I asked 'C.K.' his opinion of the next line of progress in sports cars. "I am certain that supercharged cars will be widely used for fast touring," was the reply, "the J.3. Midget was a case in point, the only disadvantage in that case being that an unskillful driver might oil a plug in traffic. The new blowers get over that difficulty." Kimber practises what he preaches, and he showed me a Magna coupé being constructed for his own use, which was fitted as an experiment with a Roots-type supercharger and two carburetters.

The M.G. people are nothing if not abreast of the times, and I expect in a year's time we shall see some examples of the new supercharged touring cars. However, sufficient to the time is the success thereof, so after seeing Mr. Kimber firmly entrenched behind a pile of letters bearing stamps and post-marks from all sorts of outlandish places, I took my leave.

There seemed no doubt that the Sign of the Octagon would be in the ascendant for 1934.

TESTS TO DESTRUCTION

WHEN motor car design was less advanced than it is today, the most obvious way of proving what an engine would stand up to was to discover the point at which it would break down. For this reason the Daimler company some years ago instituted "destruction tests"; the unfortunate engine which was selected for the sacrifice was placed on an engine bed and run at 3,000 r.p.m. under full load for 21 hours non-stop.

Similar tests are in operation today, but they are no longer destructive, for wear or fracture is seldom discovered. Every week of the year one Daimler and one Lanchester engine are subjected to special "investigation" tests. Each is run all out for 21 hours, as in the old tests; of this time, three hours are spent in first gear, three in second, 14 in third and three quarters of an hour in top, the remainder being occupied by 15 minutes in reverse. The mileage equivalent is over 500, of which 420 miles are done in third gear.

Each engine is then completely stripped and microscopic examination is made of all parts. One great advantage of the tests is that they enable any new components, such as different type sparking plugs, piston rings, etc., to be tried out more strenuously than could ever be possible on the road. In fact similar conditions could only be reproduced by a 21 hour all out non-stop run on a racing track; and as runs of this duration are not permissable at Brooklands, they would have to be carried out on the Continent. The factory tests are at least equally efficient and they have the further asset that they allow refinements and modifications to be made without delay.

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A BOOK REVIEW.

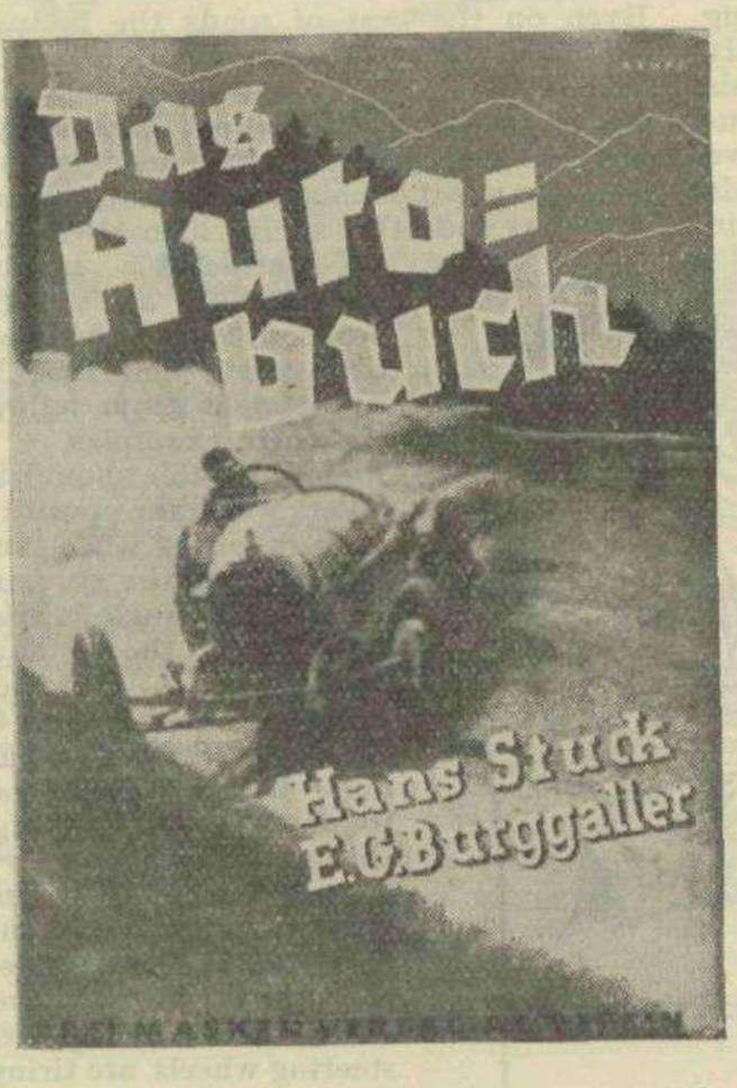
"Das Autobuch"

BY

HANS STUCK

and

E. G. BURGALLER.



A NUMBER of books have been published lately in England dealing with races, racing drivers and their careers. "Das Autobuch" is a review of motor sport in Germany, and covers in addition to racing such matters as reliability trials and what is termed "Kraftfahrgelandesport," which may be rendered as "cross-country racing." As the foreword points out, it is produced at a time when Herr Hitler and his government have given important encouragement to the motoring industry. Apart from that, however, motor racing has a tremendous following in Germany at the present time, and last year there were 200,000 spectators at the Avus Track, 100,000 at the Nurburg Ring and 50,000 at the Freiburg Hillclimb.

The reading matter in "Das Autobuch" is set out in a series of articles in two or three pages, an arrangement which makes it easy to find the subject in which one is interested. No English version is at present available.

Sir Malcolm Campbell, as the fastest motor-driver in the world, has the place of honour at the beginning of the book with a picture of the "Blue Bird" in course of construction and some details of her performance. Ernst Henne, the motor-cycle World's Record holder, tells how he came to record-breaking, and it is interesting to know that he is now a member of the Mercédès Team.

Dr. Porsche, the designer of the new Auto Union racing car traces the stages of racing car development from the days of the maximum weight limit to those of the limited cylinder capacity. There was a free formula after the War, and tyre limitations kept down the speeds, but these are now improved to such an extent that a maximum weight limit of 750 kg. is once more in force. Fortunately the tyres have not been included in the weight limit, Dr. Porsche continues, but even so the present day racing car is so fast that only picked drivers can handle them. His own suggestion is for a race in which the cheapest and fastest method of carrying a given weight from A to B wins. The "P" wagen costing some £7,000 is rather far removed from this ideal.

Unfortunately the book was published before any details of the "P" Wagen could be released, but there is a photograph of the Benz "Dropcar," a streamlined rear-engined car which was the forerunner of the present design. Dr. Porsche prophesies a considerable use of two-stroke engines during the coming year.

Burggaller's principal contribution is an article on racing practise in which the beginner is advised to perfect his driving in reliability trials and so forth, going through the sports car stage until he is fit to take the wheel of a "Rennwagen." Every detail, from the differing advantages of road and rail transport for racing cars, to the colour of plug points in an engine running on a weak mixture, are dealt with. This thoroughness is not surprising, for after being demobilised from Richthofen's famous air-squadron, Burgaller started a motor-driving school in Berlin. He has now been raised to the supreme height of an expert witness, as he remarks dryly, but he is too modest to discuss his racing successes.

As the winner of the European Hill Climb Championship in 1930, Hans Stuck is well qualified to write on "Corner-Technique." The successful driver, he says, must have a good eye, good training and needs plenty of practise. Every driver must develop his own style, as Stuck found after a series of spills when trying to emulate Masetti and Heuffer. "Snaky bends," may be often taken flat-out, "but not the first time," while sharp corners may be taken correctly either in a gradual sweep, or with an abrupt swing over of the wheel. These evolutions are illustrated with diagrams, and there are also some hints to spectators as where not to stand at a corner, remarks which speak of practical experience.

His most thrilling drive, it appears, was not during the course of a race, but a raid over the St. Bernard Pass to Turin to fetch some serum for a dying child. Caracciola remembers with some emotion averaging 55 m.p.h. over the mountain roads between Stuttgart and Munich to deliver a Mercédès to Herr Hitler.

Biographies of the leading German drivers form an interesting feature.

Caracciola, who in spite of his Italian surname was born in Germany, began his racing career on a Fafnir, but from 1923 has been employed by the Mercédès Company and a consistent winner on their cars. Leiningen, who belonged to a younger branch of his princely family emigrated to America and worked for a time at the Chrysler works, then with the money he earned in this way returned to Germany and bought a Bugatti.

His successes have gained him a place in the Auto Union team with Stuck and Sebastian. The latter, it will be remembered, drove the winning Mercédès with Caracciola in 1931.

Women drivers, racing managers, racing signals, the Nurburg Ring, the 2,000 kilometre drive, all these and many other subjects are dealt with individually. Short notes on all the world's racing drivers, and also "Our Dead," a chapter devoted to the many fine sportsmen who have lost their lives when engaged in the pursuit of their sport. Additional point is given to this by a black-edged inset recording the fatal day at Monza last year. In lighter vein are such subjects as the Superstitions of Drivers, in which Earl Howe's umbrella figures, varied racing experiences of German drivers, and the character of the "Meisters" as shown by their handwriting.

The concluding 90 pages of "Das Autobuch" is devoted to a list of the principal races and hill-climbs, in many cases accompanied by plans of the circuits. The usual list of World's Records is given, and finally the racing successes in international events of a number of German drivers. This latter part of the book is the more useful to English readers since it is printed in Latin type instead of the Gothic employed in the descriptive sections. The illustrations are well-produced and cover racing and motoring generally in all parts of the world.

"Das Autobuch" is published by Drei Masken Verlag, A.G., Berlin, N.24, Friedrichstrasse 129, and costs 4.80 marks (about eight shillings). It is a welcome addition to the motoring sportsman's bookshelf.

THE WORLD RECORD BOOK.

Speed Achievements of the Year.

"ACHIEVEMENTS of 1933," a fascinating record of world's successes in motoring and flying during last year, is now published. In graphic word and picture it tells the story of the world's land speed record and the world's longest, fastest and highest flights.

Pages of photographs, some of which appear exclusively in this book, illustrate the year's epic events in all parts of the world—the flight over Everest, Sir Malcolm Campbell's latest record at Daytona, and many other famous achievements.

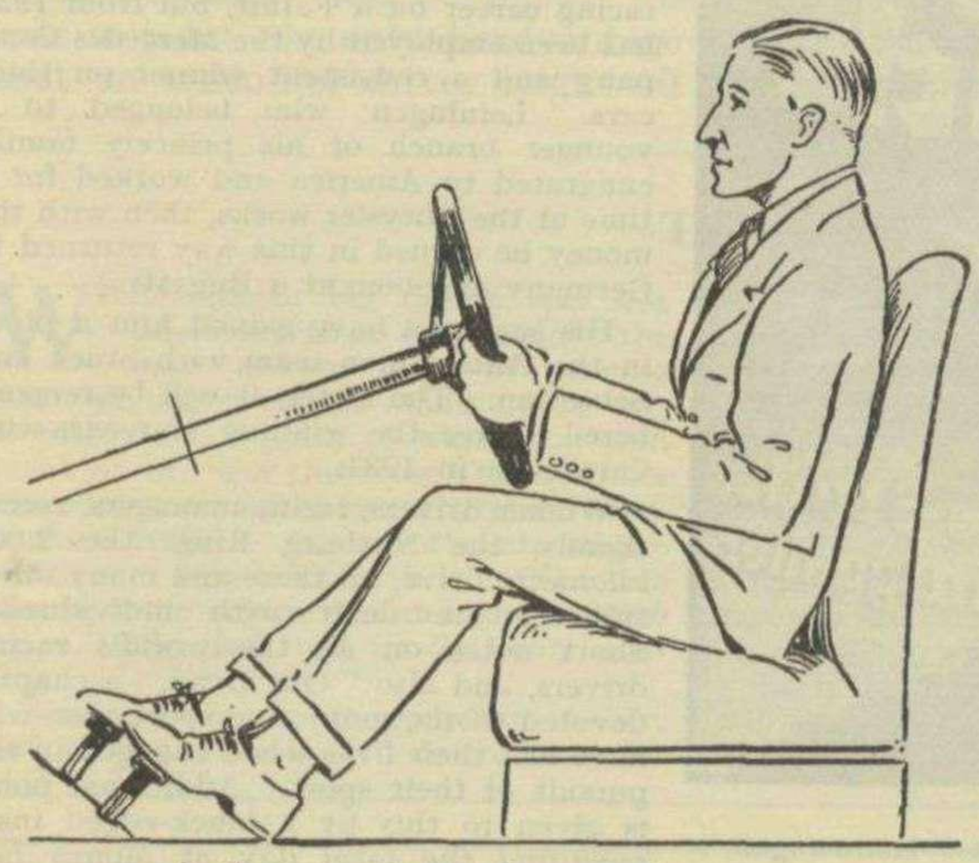
Among the famous record-breakers of 1933, whose exploits are described, are Sir Malcolm Campbell, George Eyston, John Cobb, Jim and Amy Mollison, and the Italian "ace" Agello, the world's fastest airman.

"Achievements of 1933" is obtainable post free on application to C. C. Wakefield & Co., Ltd., Wakefield House, Cheapside, London, E.C.2.

ANATOMY AND THE SPORTS CAR.

A Plea for more Comfortable Driving Positions.

THE pundits of the motor world are never tired of pointing out the progress which has been made in the design of pleasure vehicles during the past ten years. This is undoubtedly true as far as engine efficiency, chassis design and braking systems are concerned, but these developments have overshadowed to some extent the needs of the driver and his passengers. Certain physical exertion was needed to control cars such as the old 30-98 Vauxhall and the three litre Bentley, the premier sporting vehicles of the day, and consequently designers took care that the driver had plenty of room to get at his gear-lever and his brake, to lock over his steering wheel and also to see where he was going. The raising of the bonnet, the adoption of a low driving position and the ease of manipulation of the modern light sports car have brought with them problems which have not received their share of attention.



An illustration showing the correct driving position.

The smallest type of car such as the M.G. are usually free from annoying faults of driving position, since the occupants sit, as it were, outside the body, with their outside elbows over the side, while a short wheelbase prevents anything but an upright seat at the wheel. The worst offenders are cars developed from touring chassis, in which the only method of securing the fashionable low seating position is to place the occupants practically on the floor. This implies an upright seat-back so that the driver must sit with his legs stretched out horizontally in front with the greater part of the weight of the legs supported by the heels. This type of body is difficult to enter, puts an unpleasant strain on the legs and often causes an unpleasant cramp of the pit of the stomach after a long run.

Another fault of which ever high-class coachbuilders are guilty is to have the seat-back raked back at an excessive angle, so that one is compelled either to sit upright without proper support, or to loll back with loss of control and further discomfort of the central regions. Even on the best of roads the body is subjected to a certain amount of vibration, and if the stomach muscles are relaxed to allow the upper part of the body to swing back, one's food is subjected to a sort of channel-crossing motion. Nuvolari and other racing men always go to considerable trouble to obtain a vertical position, and the fast tourist will find that he will benefit from following their examples.

More trouble should be taken with the position of the steering wheel and the rake of the column. The best angle varies according to the distance from the wheel at which the driver is intended to sit and will require to be more upright the closer to it he sits. Large spring wheels have greatly increased driving comfort, since the shoulders remain fully open and the chest is unrestricted. High-placed steering wheels are tiring, for the weight of the arms hangs from the wrist instead of the shoulders, and one also gets restriction of blood flow which means cold hands. A short steering column is tiring for a tall driver, but in many cases the shaft may be lengthened without great difficulty.

Driving seats carried with their centres beyond the steering column seem unpractical, but one gets used to them quite quickly.

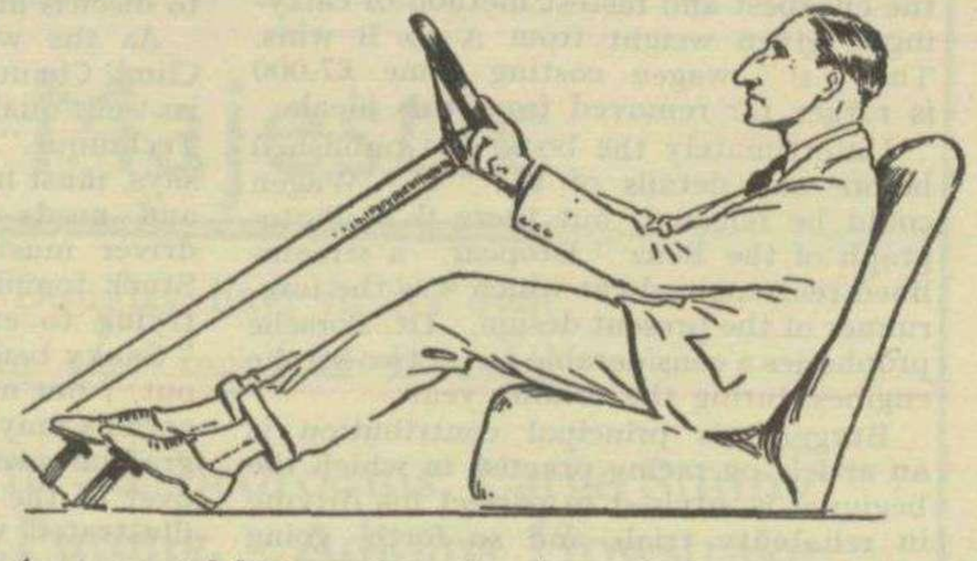
Body width is determined largely by the size of the chassis and the performance which the finished car is intended to have. On a narrow body the arm and shoulder must obviously project outside, while a wide one pays the penalty of increased wind-resistance, but on one or two cars I have driven lately the makers have struck a most unhappy medium, for my elbow remained firmly wedged between my side and the edge of the body and my right arm remained out of action till the end of the journey. More cutaway is needed for body sides, with a flap to allow the elbow to project, while much can be done on a closed car by fitting an armhole in the depth of the door.

Few points have greater bearing on driving comfort than the placing of the pedals and other controls, and one or all of the points are neglected on present-day cars. If possible the clutch and brake should be placed at such a height that the heel slides along the floor when the foot is moved up to them, while the ball of the foot should come in contact with the plate. The support of the floorboard is at any rate essential for a steady pressure on the accelerator pedal. The pedals should follow the same axis as that of the leg, but one of the most essential points is that from the normal seating position they should reach the bottom of their travel without the legs having to be straightened completely, or in the case of the throttle pedal without having to stretch the ankle muscles. There is nothing more tiring than trying to urge a car up to the maker's catalogue speed with the right foot extended as for ballet dancing.

Most people prefer the throttle pedal on the right, for in that position the body should be steadied by the right and left heels on either side of the steering column. "Should be" is deliberate, for in a number of cases I have found that owing to the steep angle at which the ramp board is set, only the toe can be rested on it, a fault which proves very tiring on a long journey. Even more annoying is a car on which there is not sufficient space for the left foot between the clutch pedal and the clutch housing and the gear-box.

Remote control gear-levers have in most cases done away with the need for groping in the "office," but brake levers are still all too often tucked away out of reach, with the sharp edge of the facia board ready to remove the knuckle of the unwary.

The craze for long and high bonnets combined with a low seating position means that on many cars the near-side and even the off-side mudguard is invisible, and precise manœuvring in traffic and in crowded garages is rendered unnecessarily hard. In a thick fog too the driver of the modern car is almost helpless, for he cannot see the kerb closer than ten to fifteen feet in front of the car, while lorry drivers and motor cyclists, who can see vertically downwards, continue to make steady progress. In their efforts to reduce frontal area, designers are bringing the bonnet lower than before, but with the driver still sitting down on



An exaggerated driving position when the seat-back is set at an excessive angle.

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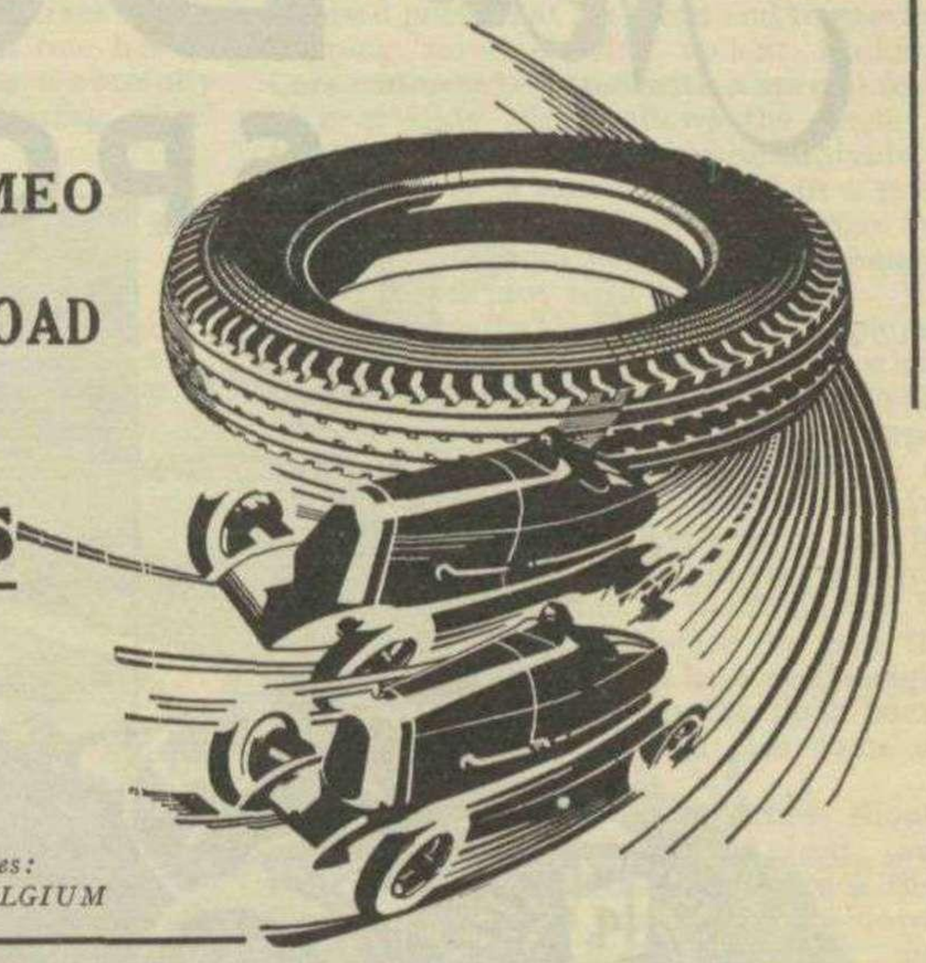
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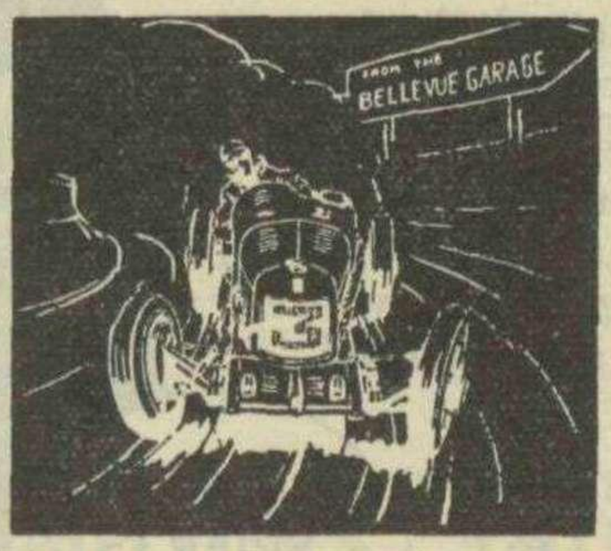
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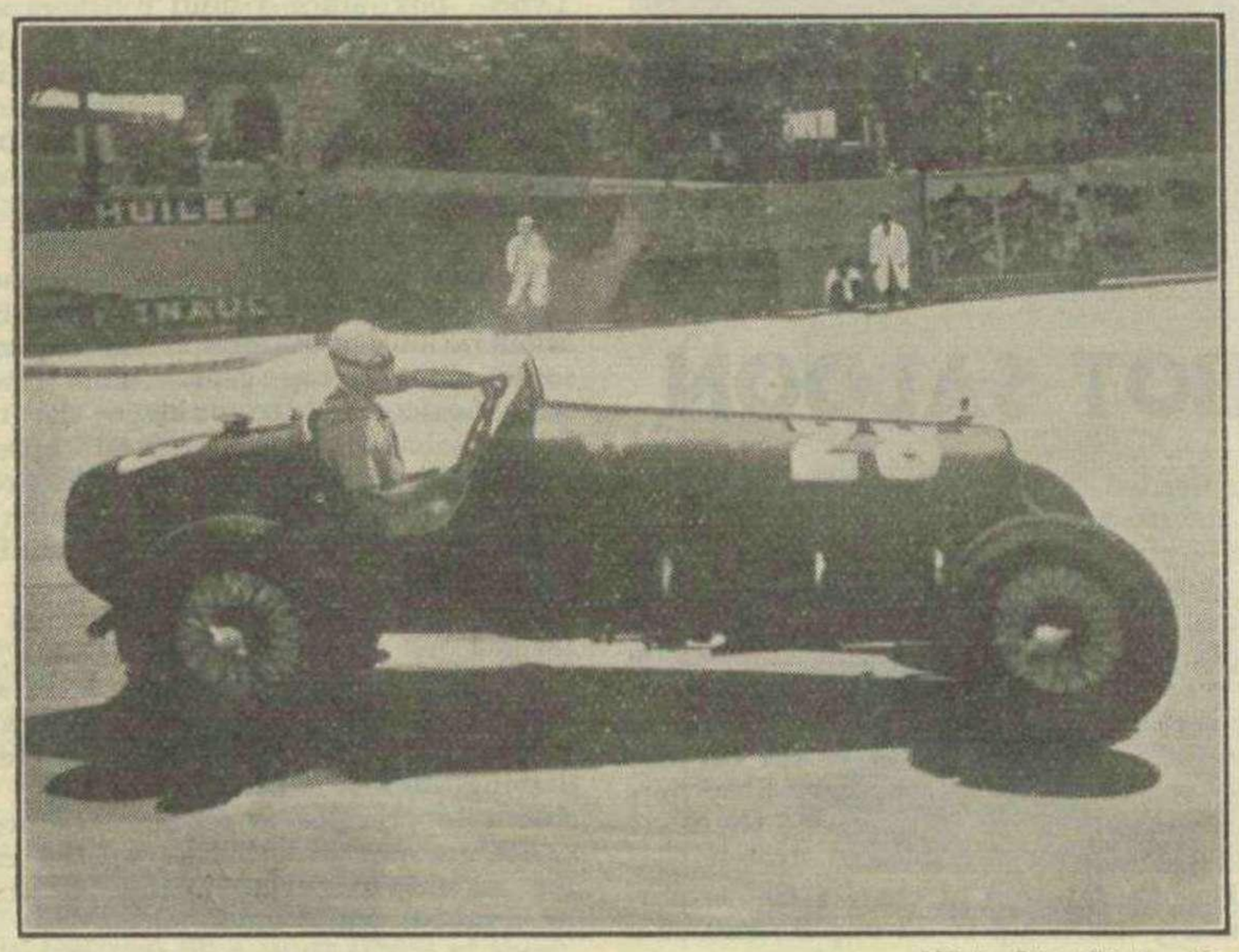
4H/105

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ANATOMY AND THE SPORTS CAR—continued.

the floorboards, his range of vision is not much extended.

Well-arranged windscreens are much rarer than they ought to be. For myself I still prefer the three panel affair as fitted to the three litre and 4½ litre Bentleys, in which one of the flaps can be opened for driving in fog. The single panel type no doubt gains in neatness, but coachbuilders are inclined to cut off those extra inches which mean clear vision without bending the neck. A wider field of vision could be obtained even with a narrow sheet of glass if it were brought nearer to the driver.



[*Motor Sport Photograph.*

T. Nuvolovi driving an Alfa-Romeo in last year's Monaco G.P. Note the driving position so as to obtain complete control over the car.

Another thing. Why are the screen pillars, especially of saloons, of a thickness worthy of an L.G.O.C. bus, and often further obstructed by a driving mirror mounted just in the most blind spot? The weight of a canvas hood or the roof of a saloon car should not need such massive supports. Sidescreens with a three inch opaque strip at the forward end are not conducive to clear vision either.

This catalogue of woes may well end on the question of upholstery. The air cushion has undoubted advantages on the sports car, for it absorbs those small vibrations which stiff springs and shock-absorbers fail to eliminate. On the other hand I have driven quite a number of cars which no alteration of tyre pressure and "shocker" adjustment seemed to stabilise, only to find that the uneasy feeling was caused by the rolling of the seat. The new Dunlop cellular filling overcomes this difficulty, but needs to be fairly deep. For shallow cushions a wider use should be made of those air-bags which either contain a number of tubes or the other type with large "holes" through them.

Every new car which one drives seems to have some snag to which one has to become acclimatised, such as a carefully concealed horn-button, a steering wheel where the gloved hand gets caught up on a switch, the back end of the scuttle or something equally stupid. All designers, I think, ought to be made to average at least 40 m.p.h. for 500 miles on each of their new productions to get a fair idea of their discomforts, and should be compelled to build cars which are not intended (a) for a double-jointed dwarf, (b) for a six foot driver with a body 18 inches long and no neck, and (c) for a Siegfeld Folly who never has to wear clothes heavier than a bathing costume, who are apparently the three types of person for whom the average sports car has been constructed.

Like the clever boy in "Eric, or Little by Little," my criticisms are not entirely destructive, and so I give my own idea of a comfortable driving position.

The back of the seat should be sloped back at not more than 10 degrees, and should be high enough to support the shoulders and shaped to engage in the small of the back. Pneumatic squabs do away with the necessity of making individual measurements. The seat cushion, which must be proof against rolling, slopes back at 10 degrees, and may have a raised portion at the front end to prevent slipping forward with violent braking. Cars can now be fitted with a special form of seat slide which allows the angle of tilt to be adjusted to suit the individual.

The driver is now supported in a position from which he can best control his car, and one from which sudden changes in speed will not tend to shift him. His legs, principally the left one, are employed to steady him, and to do this the whole foot must rest on the ramp board, with the foot bent at a natural angle. The upper and lower part of the legs should be at about 45 degrees to one another to give flexibility, and if the left foot is too far away when the right foot is properly placed for the pedals a block should be screwed to the front board to give the necessary support. The heel of the right foot gets its stability on the floor board and for preference should also come up against the ramp.

The boss of the steering wheel should be level with the centre of the chest, and the rim should be at a distance such that forearm and uppe4 arm both slope downwards, avoiding both stretching and cramp. Seated in this fashion, with a windscreen giving a wide field of view, and with controls so placed that no effort is needed to reach them, the driver passes from being merely the helmsman of a fast mechanism propelled by I.C.E., as the licensing authorities have it, and becomes one with his machine like the expert horseman and his mount.

How little these needs are appreciated was brought home to me the other day when I drove the experimental and afterwards the finished production of a famous firm. Everything was perfect in the experimental body, but driving the sales manager's pride and joy I found that one's feet fouled the steering column, the ramp board was too short for people with large feet, while the passenger's legs were in danger of being amputated by the facia board each time we went over a bump. Nobody drives his best on an uncomfortable car, and it is up to every owner to search out the weak points and to bring them to the attention of the manufacturer concerned. I don't guarantee, however, that the fault will be rectified on subsequent cars!

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Closely mounted headlamps are a Talbot feature. The direction-arrows can be seen at the bottom of the radiator shell.

THE "105" TALBOT SALOON

THERE is something rather stirring about the name "105 Talbot." It recalls the sight of those three silent speedy looking green cars driven by Brian Lewis, Rose-Richards and Saunders Davies, which made such an impression in the Double Twelve race at Brooklands at Ulster, and at Le Mans. Speed with silence is likewise the outstanding characteristic of the sports chassis, and makes it particularly suitable for closed coachwork.

The car we tested was fitted with a substantial and well-appointed saloon body, and with the flexible and lively engine combined to form a restful car for town work. On gaining the country the damping action of the hydraulic shock-absorbers, which is adjusted by a hand control on the steering column, was increased to give the necessary steadiness for fast touring, without making the suspension hard at low speeds. Up to 65 m.p.h. this adjustment was ideal, but for flat-out roadwork something more was needed. This was supplied by taking up the friction dampers half a turn. With this setting and the "ride control" at its softest the car dealt adequately with a ridged surface taken slowly, while at the opposite extreme, this comfortable saloon car could be swung round corners with the certainty of a racing car. The shock-absorber control opens or closes the by-pass valves in the Lucas shock-absorbers by means of a series of rods, and there are no pipes to leak or cables to stretch.

The acceleration of the "105" is particularly useful up to 72 m.p.h., and so a speed of seventy miles an hour can be maintained without effort, with a maximum on the level of 82. 86 was often reached on favourable slopes, with nothing more than a quiet hum from the engine. Under the circumstances extremely high averages can be put up without annoyance to the driver or to other road users, and, in fact, over the route usually included in our tests, the Talbot equalled the best time put up on any unsupereharged sports car.

The self-changing gear-box undoubtedly played a considerable part in maintaining the high average speed, and it is interesting to notice that even with a saloon body, and not taking the engine over 4,000 r.p.m. the acceleration figures are better throughout that those recorded in the road-test of the open car fitted with the manual box, which appeared in the November 1932 issue of MOTOR SPORT.

In silence the self-changiug and the manual boxes are very similar, that is to say, third in each case is inaudible, while there is a faint hum in second. This hum is also heard in neutral on the "Wilson-Type" box, since a fluid flywheel is not used, but is off-set by the quiet running of the engine itself. The pedal operation is heavier than that needed for a modern single-plate clutch, as it also has to engage the gears, but the take-up is smooth, and the pedal always returns to the same position whatever the gear engaged.

If the accelerator is kept depressed as the gears are changed up, phenomenal acceleration is obtained at the expense of some slip on top gear. This practice seems calculated to damage the transmission, and we contented ourselves during the test with releasing the accelerator as each gear was engaged, which gave a positive engagement with the minimum loss of time.

The "accelerating" gearbox, as it is termed by Messrs. Clement Talbot, is a valuable means of increasing a car's performance without any compensating harshness from the engine, while the driving interest is little diminished. Considerable practice is required before the exact amount of speeding up the engine for an imperceptible change down can be gauged, while emergencies may arise which demand a change down instead of the change up which has been preselected. The gears are selected by means of a lever and quadrant on the steering column. The quadrant has deep notches and the lever can be "felt" into to the one required without letting hold of the rim of the steering wheel.

Brief Specification.

Engine : Six cylinders 75 *mm. bore,* 112 *mm. stroke. Capacity* 2,969 *c.c. Tax* £21. *Push-rod overhead valves. Zenith downdraught carburetter. Coil ignition.*

Gearbox : Four speeds and reverse. Self-changing epicyclic. Ratios 4.36, 5.93, 8.24, *and* 14.83 *to* 1.

Brakes : Talbot front self-servo, cable operated. Rear normal internal expanding rod operated.

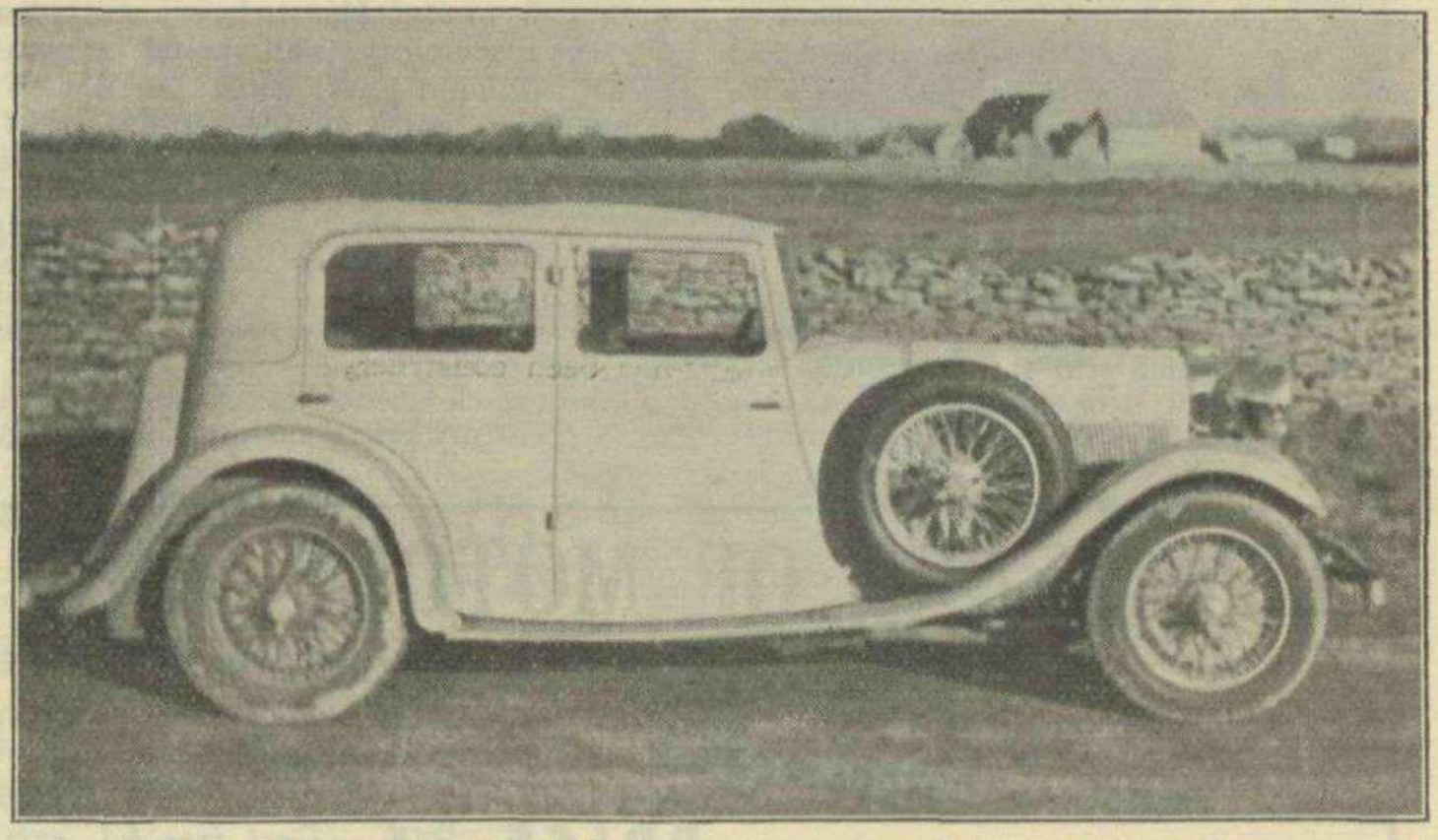
Suspension : Half elliptic in front. Quarter elliptic at rear.

Transmission : Torque tube. Spiral bevel rear axle.

Dimensions : Wheel base 9*ft.* 6*ins. Track* 4*ft.* 8*ins.*

Weight with sports saloon body : 34 *cwt.*

Price : £795.



High speed in comfort, the "105" Talbot saloon. Note the size of the brake-drums.

THE "105" TALBOT SALOON—continued.

Speed and acceleration are only half the battle. Unless the road-holding are equally outstanding these can only be used to the full on straight stretches. In the course of the test we found that this comfortable saloon could be taken round bends at a speed worthy of an open two seater, without a trace of roll, and was a car in fact that encouraged the driver to drive it as hard as he could whenever a suitable opportunity occurred. The chassis feels tremendously rigid, and the weight distribution must have been carefully studied.

The brakes were extremely powerful, and came into action steadily as the pedal was depressed. Unfortunately one of the front ones was out of adjustment and caused the car to swerve on full application. In spite of this the braking distance from 40 m.p.h. was 51 feet.

The steering was light, geared just right for quick recovery from a sharp corner, and was aided by a good caster action. The steering wheel had a thin rim set at a convenient angle, and the deep windscreen gives visibility equal to that of an open car. The gear-pedal and the accelerator were conveniently placed, but the gear control rod, which ran down the steering column, came rather near to the brake pedal.

Satisfactory as a touring car and safe when driven all-out it was natural that the "105" should excel in normal sports car use. Cruising at 70 m.p.h. the engine is running at half-throttle at 3,500 r.p.m. 4,500 r.p.m. which is reached without a trace of vibration, is the maximum on the gears, but at 4,000, which is a reasonable figure for ordinary driving, the speeds are 43 m.p.h. in second and 60 in third. Loss of speed on a corner or when held up by having to pass other vehicles is quickly restored by a short touch of third gear.

Powerful headlamps have always been a feature of Talbot sports cars, and those fitted to the "105" give a very long, though somewhat narrow beam which allows full speed to be maintained after dark. Two Desmo Safebeam lamps were fitted below the main ones, and were brought into operation when the dimming switch was moved. They gave a non-dazzling light, sufficient for driving safely at 60 m.p.h., and were also effective in fog.

Starting is effected by a dynamotor coupled on to the front end of the crank-shaft, and is therefore perfectly silent. The two twelve-volt batteries are coupled in series for starting, and turn the engine easily even after standing in the open all night. For lighting and ignition the batteries are used in parallel, to give the normal 12 volts. All wiring is enclosed in armoured casing, which protects it from external damage.

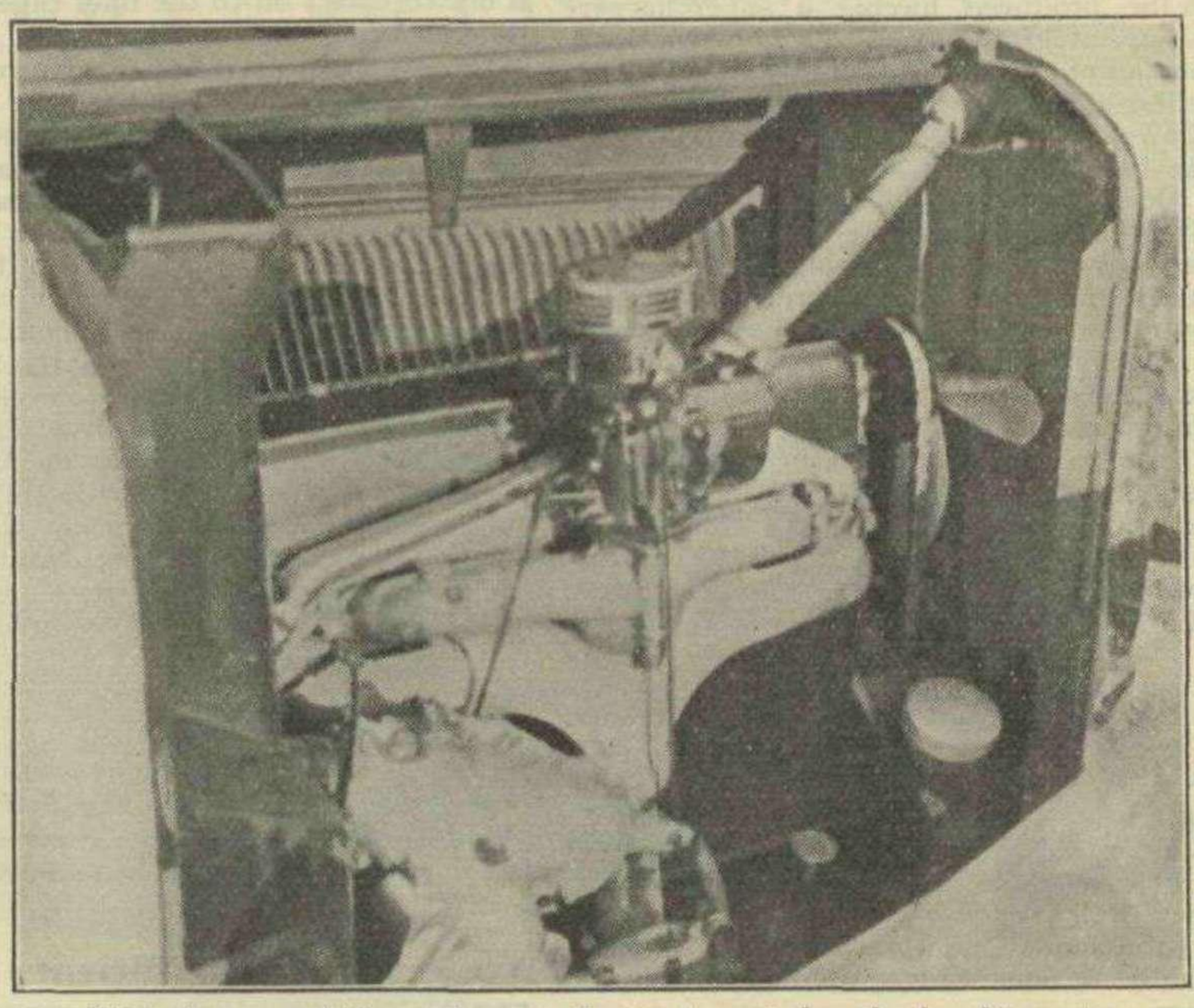
Original points of design occur throughout the chassis of the Talbot, and Mr. Roesch, the designer, has almost reached his ideal of a car which only needs filling with petrol, oil, and occasionally water. The external neatness of the engine is another outstanding feature.

The engine is a six-cylinder unit with overhead valves operated by very thin and light push-rods. The valves are arranged not in the usual single row, but with the inlets on one side of the centre line and the exhaust diagonally opposite on the other side. This cuts down the overall length of the engine, but necessitates the use of long exhaust rockers braced by a strut underneath. The pivots are ball-ended bolts which fit into cups in the rockers, and the clearances are adjusted by screwing the bolts through their supporting brackets and securing them with lock-nuts.

The cylinder-head is detachable, while the block and the upper half of the crank-case are in one. The crank-shaft has circular balancing webs and is machined from a solid billet. It is supported in seven plain bearings.

Delco coil ignition is used, with two contact breakers. An A.C. petrol pump driven from the camshaft supplies petrol from a 19½ gallon rear tank. A single downdraught Zenith carburetter is used and the induction pipe touches the exhaust manifold at its central point. Apart from the carburetter, the only external fitting on the off-side is the large oil-filler. Behind this is the handle of the chassis lubrication pump, which is spring loaded. Oil is pumped from here to the front axle pivots and other parts of the steering gear, the front-brake bushes, the steering box and even to the centre leaves of the road springs.

The radiator is mounted on the forward engine bearers, and a rigid pipe can therefore be used between the top of the engine and the radiator. The water pump is lubricated from the engine. Plated radiator shutters of handsome appearance are fitted, and the engine reaches its running temperature in a few minutes. The quick action radiator cap is particularly neat.



With clever manifolding, only one carburetter is required on the three litre engine.

No clutch is fitted, as the brake-bands in the self-changing gearbox are used for this purpose, but a resilient coupling serves to lessen the shock should a low gear be engaged abruptly.

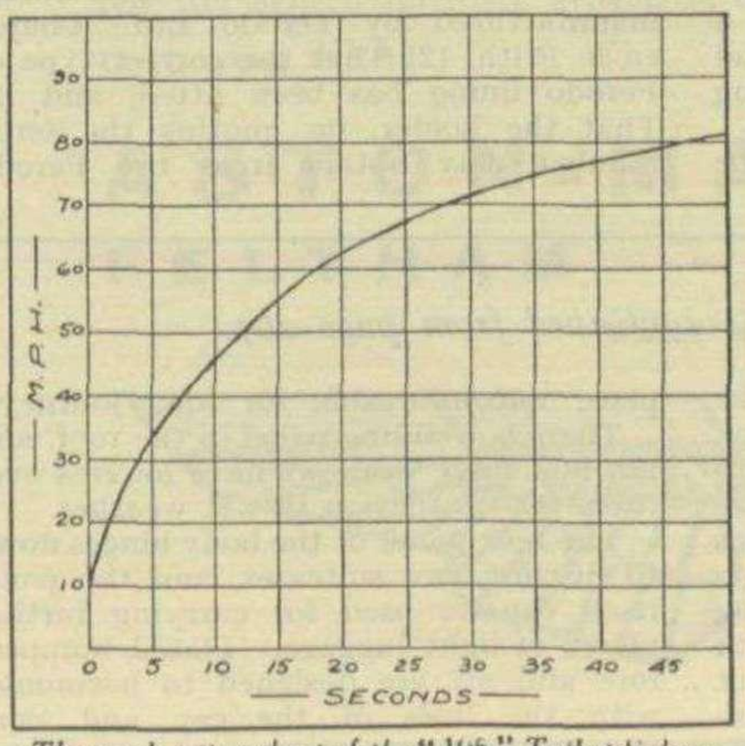
The gear-box is of the self-changing epicyclic type made under Wilson patents at the Talbot factory. It is supplied with oil from the engine, and is mounted in unit with it, and there is an auxiliary pump which circulates oil even when the car is allowed to coast down hill with a dead engine. The propellor shaft passes through a torque tube, with a universal joint at the front end, and spiral bevels are used for the final drive.

The chassis is slightly upswept in front and more so at the rear. The front springs are semi-elliptics, but quarter elliptics are used at the back. A pair of friction shock-absorbers and also a pair of Lucas hydraulic ones are used on each axle, the latter type controlled from the steering column.

16 inch ribbed aluminium brake-drums are used. The front brakes have a self-servo action and are operated by enclosed cables, a single rod and a cross-tube being used at the rear.

The body fitted was a comfortable and

Continued on page 268



The acceleration chart of the "105" Talbot Saloon.

A NEW SUPERCHARGING PATENT

A PATENT specification has recently been filed by Mr. C. T. Delaney, the well-known racing driver, relating to a new method of applying a supercharger to an engine.

Mr. Delaney is of the opinion that supercharging has now been proved to be a definite improvement for touring and sports cars. In addition, he considers that the time is now ripe for an engine to be produced having a supercharger as an integral part of its construction, instead of as a separate unit applied more or less as an after thought, in any position allowed for by the space available under the bonnet.

One advantage denied from such an integral supercharger is that it is unnecessary to build up a high gas pressure in the induction pipe in order to fill the cylinders adequately, as is the case when a lengthy passage has to be used from an external supercharger to the combustion chambers.

Briefly, Mr. Delaney's invention consists of incorporating in the cylinder head any supercharger of the type comprising a rotor, which carries a series of blades, rotating about a centre accentric to that of a sleeve adapted to rotate at the same speed as the rotor, the blades bearing on the inner surface of the sleeve. For a four-cylinder engine a four-bladed rotor is used, mounted horizontally. The sleeve of the supercharger is ported, and by driving the supercharger in timed sequence with the crankshaft, the sleeve is made to function as an inlet valve, each of the four sections of the rotor supplying the charge for one cylinder. The carburetter is bolted direct on to the inlet pipe of the supercharger.

In operation mixture is drawn into the space between the blades of the supercharger. As the rotor continues to rotate the charge is compressed, and when the piston is just about to commence its suction stroke the sleeve of the supercharger is so timed that a port in it starts to open by coming into register with an opening at the top of the combustion chamber. The compressd charge is thus delivered into the combustion chamber while the piston is making its downward stroke. When the piston has reached the bottom of its stroke the port in the sleeve closes by passing out of register with the opening in the top of the combustion chamber. The piston then rises and compresses the charge, which is fired by a sparking plug in the usual way, and the combustion chamber is scavenged by means of a normal exhaust valve.

In the event of the extremely high pressure of combustion in the cylinder being too much for the sleeve of the supercharger, Mr. Delaney has patented a modified arrangement in which the mixture is led from the port of the sleeve down a short pipe to a point in the side of the cylinder wall, below top-dead centre. The same operation takes place as the mixture is drawn into the combustion chamber, but as the piston on its compression stroke rises two-thirds of the way to top-dead-centre, it passes the inlet port in the cylinder wall and compresses the gas in an ordinary combustion chamber, thereby relieving the supercharger of excessive pressure. When the piston descends and uncovers the port once more, the ignited charge in the pipe leading to the supercharger is exposed to the flame of combustion in the cylinder and creates a second explosion which tends to increase the power of the engine, particularly at low speeds.

Mr. Delaney's address is c/o Messrs. L. T. Delaney & Sons, Ltd., 115-129, Carlton Vale, Maida Vale, London, N.W.6.

A Pocket Fixture List.

A LITTLE booklet which every reader of MOTOR SPORT would like to have has just been produced by the well known manufacturers of "Brooklands" equipment, Messrs. Frank Ashby & Sons Ltd., Stirchley, Birmingham.

The booklet is of a convenient size to fit into a waistcoat pocket, and contains 20 pages strongly bound with a thick art board cover. Its contents include a 12 months calendar, an International Fixture List giving dates, descriptions and venues of over 170 motoring events, including races, hill-climbs, speed trials and reliability trials; a table showing the first three finishers and average speeds for every important 1933 race on road and track, with a space under each for owners of the Booklet to insert the results and speeds of the corresponding 1934 events; a list of all drivers who have lapped Brooklands at over 120 m.p.h.; a selection of important speed records and some useful data relating to racing cars.

In fact this little booklet is just the thing everyone needs for reference purposes, and readers of MOTOR SPORT can obtain a copy by sending 3d. in stamps to Messrs. Frank Ashby & Sons Ltd., Stirchley, Birmingham.

Are your Brakes Efficient?

THERE is no doubt that many accidents could be avoided if the brakes of the cars concerned were working at anything like their utmost efficiency. There are two factors to be considered in ensuring that brakes can be depended upon in an emergency; by using linings of guaranteed quality, and by correct adjustment.

The first is easy to accomplish, for by specifying Ferodo brake linings when their brakes are relined motorists can now obtain the Ferodo 3 point Guarantee, which gives them the following advantages: (1) That their brakes have this day been fitted with Ferodo brake lining, manufactured by Ferodo Ltd., Chapel en le Frith, (2) That the correct type of Ferodo lining has been fitted, and (3) That the holder, on quoting the serial number may obtain from the Ferodo Company any advice he may require regarding his brakes.

The second necessity is correct adjustment. For checking the accuracy with which brakes have been adjusted the Ferodo braking chart "How Quickly Can You Pull Up?" will be found most useful. Varying degrees of brake efficiency are shown on a large chart, which can be obtained by MOTOR SPORT readers post free from Messrs. Ferodo, Sovereign Mills, Chapel-en-le-Frith, Derbyshire.

Speedometer Service.

IN order to provide service facilities for owners of Jaeger Speedometers all over the country, the British Jaeger Instruments Ltd. have arranged with Messrs. S. Smith & Sons (M.A.) Ltd. to make use of the latter company's depots.

Accordingly Jaeger Speedometer Service is now available at the following addresses of Messrs. S. Smith & Sons Ltd.: 26-23, Cox Street, Livery Street, Birmingham; 14a, Jackson's Row, Deansgate, Manchester; and 21, Drury Street, Glasgow.

THE "105" TALBOT SALOON—continued from page 267.

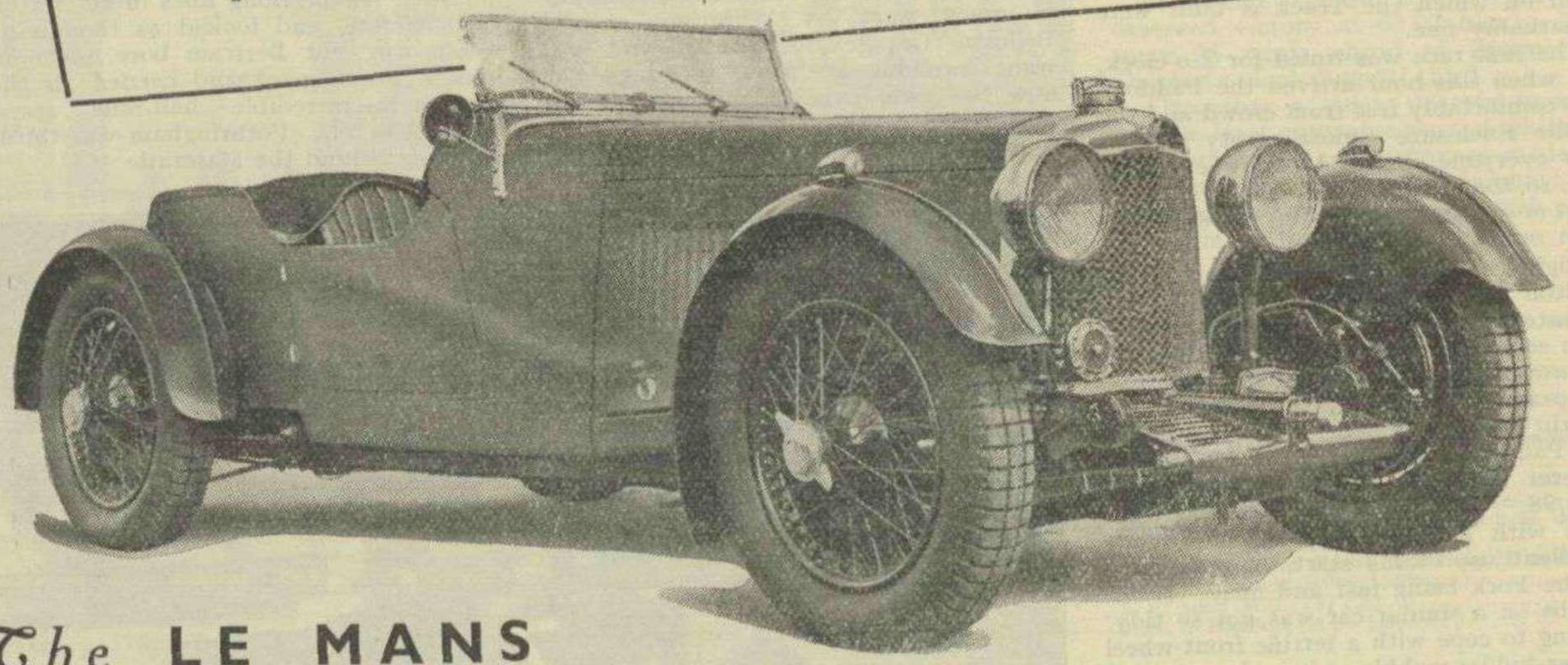
well-equipped four-door saloon. The front seats were restful and gave good support to legs and back, and owing to there being no gear-lever and to the hand brake being carried well forward, it was easy to get in and out. The rear seats were comfortable too, good leg-room being secured by wells in the floor. The back seat was wide enough for three people, but the shaft tunnel would make the centre place uncomfortable for long journeys.

There is a sliding panel in the roof, and the four large windows have louvres over them for ventilation in wet weather.

The rear panel of the body hinges down to disclose two suitcases, and the panel itself can be used for carrying further pieces of light luggage. Plated bumpers fore and aft are designed to harmonise with the lines of the car and contribute to the thoroughbred appearance.

From every aspect the "105" Talbot is a thoroughly satisfactory motor car, and in the sports saloon one has a car which comes very close to open-car performance while still affording full weather protection. In this form it costs £795. The address of the makers is Clement Talbot Ltd., Barlby Road, Ladbrook Grove, London, W.10.

★ THE MORE YOU KNOW ABOUT FINE CARS—THE MORE YOU APPRECIATE THE ASTON-MARTIN



The LE MANS 2/4 SEATER SPORTS MODEL

Is a true racing car, with a tip-top road performance, adapted for general sporting purposes, and not a touring or roadster car outwardly transformed by racing gadgets. The body provides comfortable seating for two, with convenient luggage, or additional passenger accommodation.

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POPES

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THE BROOKLANDS OPENING MEETING

A Programme of Sprints and Mountain Races. R. H. L. Eccles (Bugatti) and D. Bertram (Delage) both score "Doubles."

THE frosty weather having hindered the concrete repair work to the surface of Brooklands Track, the first B.A.R.C. Meeting took on the unusual form of a series of sprint events intermingled with the ever-popular Mountain races. The faulty part of the Track lay from the Members' Bridge to the beginning of the Railway Straight, where the start of the 2 mile sprints took place.

Brooklands is invariably blessed with fine weather, at any rate for B.A.R.C. Meetings, and March 3rd lived up to this tradition. The sun shone quite frequently, and the cloud formations over the flat plain on which the Track is built were remarkably fine.

The first race was timed for 2 o'clock, but when this hour arrived the Paddock was comfortably free from crowd and the Public Enclosure almost empty. However everyone seemed to know everyone else, so that the B.A.R.C. slogan of "the right crowd and no crowding" was indeed born out.

Eight cars lined up for the start of the Walton Junior Mountain Handicap, the absentees being D. L. Briault, who had been serving on the jury of the Rasputin "*cause celèbre*" and could not find time to practice; A. D. Anderson, whose Austin Seven was being worked upon in the Paddock; and Dr. R. A. Beaver, a sufferer from big end trouble with his "30/98." R. J. W. Appleton was limit man with a 4-seater Riley, and made excellent use of his start, his cornering at the Fork being fast and neat. H. G. Dobbs on a similar car was not so tidy, having to cope with a terrific front-wheel patter-judder-wobble when he applied his brakes.

On the second lap R. C. Vickers (Lea Francis) was in second place behind Appleton, with Dobbs, G. Shapley (Bugatti 2.3 litre 4 seater), K. W. Marten (M.G. Midget), J. Robinson (Brescia Bugatti), T. A. W. Thorpe (Frazer Nash) and G. Casswell, also on a Nash, in a roaring, gear-changing pack behind. Appleton still held his lead, but Martin fell right back to the tail of the procession through some rather inaccurate cornering at the Fork. On lap 4 Robinson was lying in a good position when he slid broadside at the Fork turn and sent one of the barrels marking the corner, rolling gaily across the Track. His trouble was a brake which tended to seize. Having stopped his engine he decided not to continue with the race.

Appleton still clung gamely to his lead, but right on the last lap he was caught by Vickers and Shapley, the latter just scraping home ahead of the Lea Francis to win by a length at 62 m.p.h. Right at the end Marten amused the handful of spectators at the Fork by nearly turning round, and promptly getting into a counter skid followed by several more deviations from the straight and narrow path.

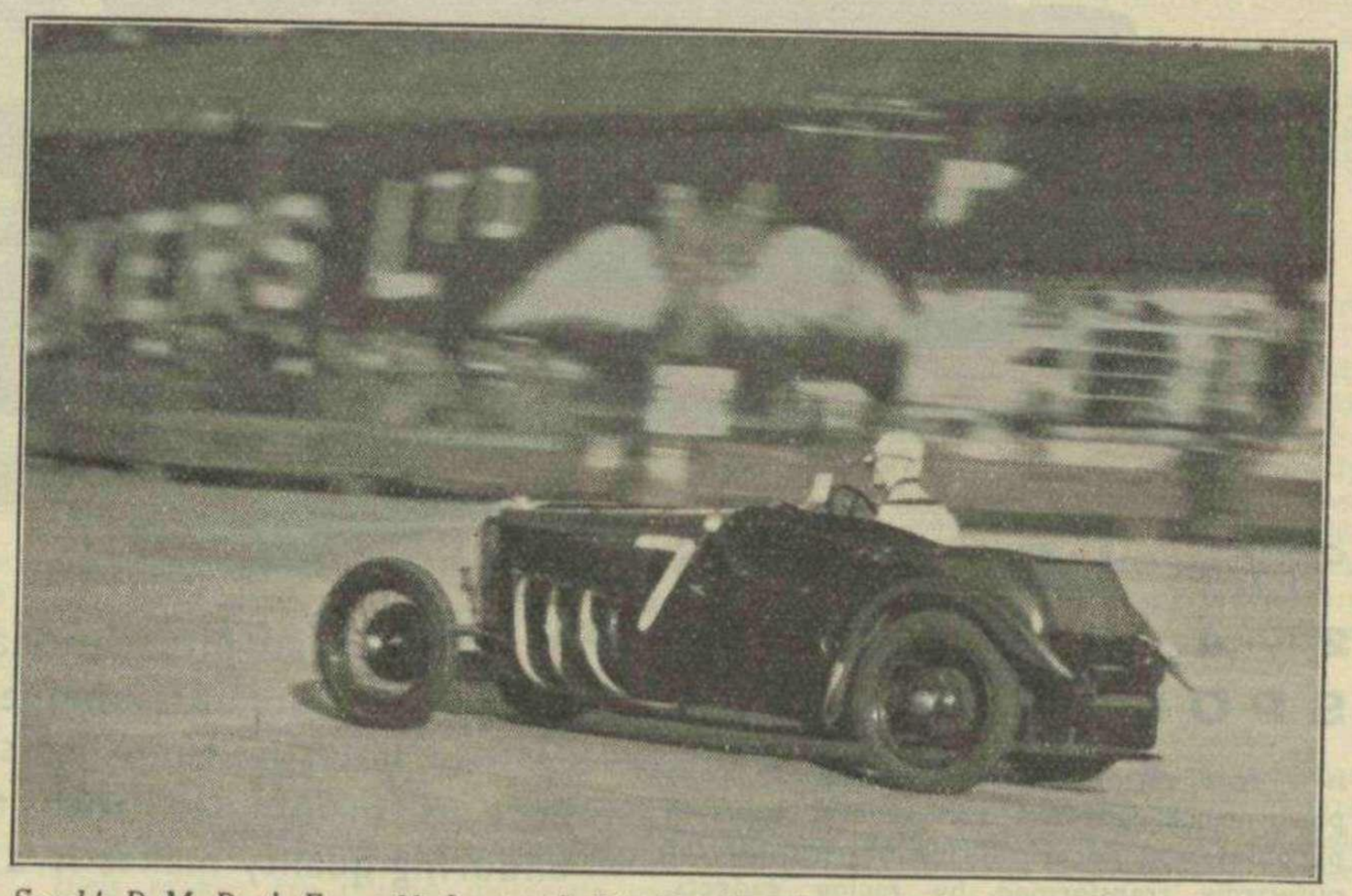
The second race was a 2 mile handicap, starting on the Railway Straight and finishing at the Fork. The programme scratch-man was a non-starter, T. H. Wisdom having entered by mistake instead of in the half-mile scratch races. The field got away in the following order: R. Morgan (Austin), Charles Follett (Alvis Firefly), D. N. Letts (M.G. Midget), C. T. Delaney (Lea Francis), C. G. H. Dunham (Alvis Speed Twenty) and C. T. Baker-Carr (Bentley 4½ litre). From the first there was only one car in it, Letts' Midget shooting ahead at a colossal pace, and winning at a speed of 92.78 m.p.h. in spite of cutting out before the finishing line. Follett was second and Delaney third. Letts' Midget has been the subject of much work by Wilkinson of the Bellevue Garage this winter, and will want watching at future meetings. It now has twin exhaust pipes, and twin rear-wheels for Mountain races.

Event three was another 2 mile handicap, Wisdom (Leyland Thomas) and A. Baron (Bugatti) being the only non-starters. The field was made up of two Magnas, a blown Midget, a Riley, the Abbott-Nash, and a Bentley. The result was a win by 200 yards for M. P. Simpson (Riley), followed by F. Allen (supercharged M.G. Midget) and H. L. Maddick (M.G. Magna).

These races lacked interest owing to their short length and the fact that they were run over that section of the track farthest away from the spectators.

The fourth race was paradoxically called "Half-Mile Scratch Race—Distance: About ½ mile." In view of the extraordinarily high speeds attained by the winning cars it would have saved a good deal of questioning and argument if they had been called "About Half-a-mile Scratch Races."

There were no non-starters, and the full field was as follows: R. F. Oats (Maserati 2,514 c.c.), R. G. J. Nash (Anzani-Nash), T. S. Fothringham (Bugatti 2,263 c.c.), F. W. Dixon (Riley), C. T. Delaney (Lea-Francis) and O. Bertram (Delage). Those who can derive instructive information from the level acceleration of various well-known cars found these sprints very interesting. The less serious spectator could not fail to enjoy the spectacle of a massed start. As it turned out, however, the start was hardly massed, for the Delage and the Bugatti, hesitated on the line, and the "Spook" did not rush away as one expects it to. Oats made about the best getaway, leaving long lines of rubber on the concrete, and looked as though he would win, but Bertram bore down on him at great speed and carried off the prize at the incredible "half-mile" speed of 91.84 m.p.h. Fothringham was third, 20 yards behind the Maserati.



Speed! D. M. Dent's Frazer Nash enters the Finishing Straight to take third place in the seventh Race.

There were only four starters in the fifth race, another of the "Half-Mile" events. The cars were lined up on the slope of the Finishing Straight, and raced to the finishing line at the Fork. The four protagonists were R. Morgan (Austin), Miss P. McOstrich (Talbot), A. Baron (Bugatti 3 litre), and Miss Margaret Allan (Bentley). The Austin "died" on the line, leaving the others to fight it out in the order of Bugatti, Talbot, Bentley, Baron's speed being 69.23 m.p.h.

The Mountain race which followed was a welcome diversion from the rather brief sprints. There were two re-handicaps, Donald Letts being knocked back 12 seconds and F. Allen six. The limit car was E. K. Rayson's Riley, which was supercharged with a blower taken off an old 33-180 Mercédès. Rayson held his lead right through until the run-in from the Fork to the Paddock, when he was "pipped on the post" by A. H. L. Eccles. The latter drove with tremendous

THE BROOKLANDS OPENING MEETING—continued.

spirit, and handled his Bugatti in masterly fashion. Donald Letts quite rightly took things easily, for his re-handicap required him to beat the 750 c.c. lap record on every lap in order to catch the limit-men! There was a good deal of cunning work executed at the Fork, Dixon and Letts on two occasions slipping by Eccles and Freeman (Salmson) by the simple



T. A. W. Thorpe (Frazer Nash), J. Robinson (Bugatti) and K. W. Marten (M.G.) rounding the Fork corner in the first race of the Brooklands season.

expedient of taking the corner close-in. P. L. Donkin (M.G. Magnette) had a distinct "moment" on the third lap at the Fork, while Dixon slid most impressively on the Members' Bridge corner. The cars looked very fine from the Fork, disappearing up the Finishing Straight in a cloud of dust. Eccles' speed was 69.74 m.p.h.

Two more 2 Mile Sprint Handicaps followed. In the first Eccles repeated his performance in the previous race by coming through from scratch to win at 98.36 m.p.h. The Bugatti looked very fast as it came off the Byfleet Banking and entered the old Finishing Straight, by which time it was 100 yards ahead of the second man, R. F. Oats (Maserati) who had also started from the scratch mark. Third place was taken by D. M. Dent (Frazer Nash).

Oats got his reward in the next race over the same course, but only by luck. H. G. Dobbs seemed to be a clear winner as the car left the Byfleet Banking, but he made the mistake of taking the outer circuit at the Fork, leaving Oats to gain first place at the very good speed of 96.72 m.p.h.

Once more the start was transferred to the Finishing Straight, for the Scratch Sprints. Bertram and Fothringham were again slow in reacting to the fall of the flag, with the result that Mrs. Petre, very self-possessed and on the *qui-vive*, thrust her unblown Bugatti to the head of affairs. But bigger and supercharged engines can atone for the most sluggish starts, and Bertram and Fothringham crossed the line side by side, about 100 yards ahead of Mrs. Petre.

In the Tenth Race, "About Half a Mile," Mrs. Petre was a clear winner, her getaway being perfect. M. P. Simpson (Riley) came home second, with Miss Joan Richmond bringing into third place the old 8 cylinder Ballot raced for many years by Jack Dunfee.

The meeting closed with a very good Mountain Race, called a "Senior," although there were only two cars of over 1½ litres capacity. Shapley, Dixon and Eccles were all rehandicapped by reason of previous successes. Dobbs was limit man, and on the second lap slewed right round at the Fork, effectively blocking the passage. Clive Gallop, who was the flag marshal at this point, effectively waved a blue flag with one hand and hauled the Riley out of the way with the other. The luckless Anderson completed one lap with his Austin and then retired.

Robinson (Brescia Bugatti) took the lead on the third lap, pursued by Shapley (Bugatti) and Casswell (Frazer Nash). Eccles and Dixon were struggling with their additional handicaps, and the task tempted the former to leave his cut-out point a little too late at the Fork, so that the Bugatti executed a "*tête-a-queue*" and overshot the corner backwards. Exit Eccles.

Dixon was driving with his usual dash, and seemed to have developed his Riley to a very high power-output. On one lap he made the only record of the meeting, when he set up a new figure for the 1,100 c.c. Mountain lap-record at 71.15. m.p.h. The previous holder was Whitney Straight, and the same M.G. Magnette on which he made the record was being driven in the race by its new owner, R. J. B. Seaman.

In the end Robinson scored a very well-deserved victory at 63.92 m.p.h., being some 75 yards ahead of Dixon, with Shapley's black Bugatti third.

Altogether a quiet, peaceful meeting, not the least enjoyable part of which was the renewal of acquaintances made last season, and the opportunity for much chat and gossip on racing prospects with people of similar enthusiasms.

RESULTS.

	H'cap. m. s.
Walton Junior Mountain Handicap (6 miles).	
1. G. Shapley (Bugatti, 2,263 c.c.)	0 5
2. H. C. Vickers (Lea-Francis, 1,496 c.c.) ...	0 15
3. R. J. W. Appleton (Riley, 1,089 c.c.) ...	0 25
Won at 62.85 m.p.h. by 1/5s.; 1 4/5s. between second and third.	
First Walton Sprint Handicap (2 miles).	
1. D. N. Letts (M.G., 747 c.c.)	0 15
2. C. Follett (Alvis, 1,496 c.c.)	0 18
3. C. T. Delaney (Lea-Francis, 1,496 c.c.) ...	0 12
Won at 92.78 m.p.g. by 6 1/5s.; 8 2/5s. between second and third.	
Second Wlton Sprint Haandicap (2 miles).	
1. M. P. Simpson (Riley, 1,089 c.c.)	0 13
2. F. Allen (M.G., 747 c.c.)	0 15
3. H. L. Maddick (M.G., 1,087 c.c.)	0 15
Won at 85.31 m.p.h. by 4 1/5s.; 3 2/5s. between second and third.	
First Walton Scratch Sprint (½ mile).	
1. O. Bertram (Delage, 10,688 c.c.).	
2. R. F. Oats (Maserati, 2,514 c.c.).	
3. T. S. Fothringham (Bugatti, 2,263 c.c.).	
Won at 91.84 m.p.h. by 1 1/5s.; 1 3/5s. between second and third.	



[*Motor Sport photographs*

Clive Gallop and H. G. Dobbs pull the latter's Riley out of the fairway in the nick of time, after he had skidded broadside on the Fork hairpin. The winner of the race, J. Robinson (Bugatti) is seen passing.

Continued on next page

AN ENJOYABLE "DAY IN THE HILLS"

THE Women's Automobile and Sports Association has the reputation of running really well organized trials. Their "Day in the Hills" was a particularly severe test of organizing prowess, for in addition to the reliability trial there was a speed trial afterwards in the grounds of the Howard Park Hotel, Tring. Four other clubs had been invited, and there were sixty-six entrants, but the Secretary, Mrs. Gould, planned everything so thoroughly that the whole programme was carried out to schedule.

The invited clubs were the Cambridge University, the North West London, the Mid-Surrey and the Great West Motor Clubs—truly a worthy opposition for the ladies to contend with.

Marlow Bottom was the first hill to be encountered after leaving the Crown Hotel, Marlow, and proved an early disappointment for five competitors, among them being G. May (Alvis) and Miss Astbury (Singer), Lady Iris Capell (Talbot), R. G. Day (Talbot "8") and D. F. Durward (Austin 10).

The well-known "Chilterns" High Rure and Shillingridge Wood followed, but the dry weather removed their power to stop all but a few of the competitors. Then came a "stop and restart" on the lane to Downley hill, where C. G. Fitt (M.G. Midget) made fastest time. Only 20 of the 66 drivers failed to cover the requisite distance in 6 seconds, but 8 managed to beat 5 seconds. There were Fitt, Richardson (Singer), Miss Watson (M.G.), E. A. Dicks (Morris Minor), Macdermid (M.G.) and Spikins (Singer).

The next hill, Crowell, should have been the *piece de resistance* of the whole trial, but conditions failed to approach anything like those obtaining during the 1932 Inter Varsity of ill remembrance. In an attempt to enliven matters the cars were started half way up, but even this expedient only caused Lady Iris Capell (Talbot 75), the two old Talbot Eights driven by Hardy and Day, and Stewart (Lancia) to fail. Honours for the fastest ascents probably fell to Miss Doreen Evans, (M.G. Midget), Mrs. Gripper (Frazer Nash) and W. B. M. Fraser (M.G. Magna).

After signing off at the Howard Park Hotel, the speed trial over a course of 400 yards was held, Messrs. L. G. Bachelier and Lionel Martin keeping a steady string of cars speeding along the drive in batches of a dozen. In view of the large number of M.G.'s and Singers present there was considerable rivalry for fastest time in the 1,100 c.c. category.

In spite of only having 850 c.c. at her disposal, Miss Evans proved her ability as a driver by heading the M.G. contingent, but her best time of 21.81 secs. just failed to beat the Singer leader, F. R. G. Spikins, whose time was 21.37 secs.

As it turned out these speeds were practically as fast as those made by the unlimited contingent, but Mrs. Gripper just managed to beat the Singer and M.G. by a fine run in 21 seconds dead. Thus the W.A.S.A. provided the winner of the speed trial, an event of great satisfaction to all members, and a complete disproval af any lingering doubts (if any) of the ability of the fair sex in motoring competitions.

Other good times were those of Mrs. Needham (Frazer Nash) in 22.2 secs., and Mrs. Gardner on a similar car with a time of 22.4 secs. A sporting gesture on the part of the Club was to give the trials observers a run up the course, and in this class E. Urlwin-Smith made fastest time of the day with his Invicta with a time of 19.8 secs.

SPEED TEST RESULTS.

Over 1,000 c.c.—Trophy presented by "The Daily Sketch": Mrs. Gripper (Frazer Nash), 21 sec.
Under 1,100 c.c.—Trophy presented by "The Autocar": F. R. G. Spikins (Singer), 21.37 sec.
Observers.—Tankard presented by Brian Twist, Esq.: E. Urlwin-Smith (Invicta), 19.8 sec.

TRIAL FIRST-CLASS AWARDS.

E. A. Dicks, Miss J. de Mattos, J. G. C. Bond, W. E. C. Greenleaf, H. G. Croxford (Morris Minors), Miss D. B. M. Evans, J. L. Fraser, C. G. Fitt, S. Townsend, Miss E. V. Watson, R. A. Macdermid (M.G. Midgets), W. B. M. Fraser, H. G. Macklin, Miss H. Astbury, E. G. S. Cook (M.G. Magnas), Miss D. L. Bean, A. T. K. Debenham, F. R. G. Spikins, F. A. Thatcher, R. L. Appleton C. V. Wells, Miss P. D. Goodban, W. J. B. Richardson, Miss M. Webb, Mrs. C. G. Scudamore (Singers), L. Audigier, Mrs. McKenzie, T. A. Law, Miss L. Hobbs (Rileys), Miss B. Daniell, Miss M. Allan, H. M. L. Williams (Wolseley Hornets), Mrs. R. J. Gardner, Mrs. A. Needham, Mrs. A. Gripper (Frazer Nashes), M. W. B. May (Alvis), C. Mann (Vale Special), G. T. Dicks (Morgan), G. Osborne (Triumph), L. F. Connell (Ballot), H. G. Conway (Austin), Mrs. Vaughan (Standard), C. G. H. Dunham (Hillman Minx), R. Yager (Talbot), T. A. Frazer (Amilcar), Miss B. Marshall (G.N.).

WHEN A CAR-LOCK IS ESSENTIAL

MOTOR sports-car owners will agree that the value of a really efficient lock lies not so much in foiling a thief as in preventing the car from being moved about under its own power in a garage or park. Sports cars often require a little skill in starting, and this only causes the meddlesome garage-hand to press the starter-button until the battery is nearly exhausted. It is not infrequently found that the coil is burnt out through the ignition being left switched on after the car has been moved. When the engine is at last started it is often "revved" up unmercifully, thereby negativing all the careful warming up of an intelligent owner.

One of the best locking devices we have ever inspected is the "Featherstone" Automatic Petrol-Ignition Lock. The first unique advantage possessed by the "Featherstone" is that the simple action of switching off the engine by means of a normal lever automatically locks the ignition and petrol. The key is only used to switch-on, not to lock the switch off, as is generally the case, when one often forgets to use it. Thus it is impossible to leave the car unprotected against unauthorised use, or theft.

To restart the car a Yale key is inserted in the lock, and a quarter turn brings back the switch-lever to the "on" position. The red warning light on the dashboard is operated by the lock, and two keys are provided.

The instrument is an attractive piece of work, and would be an ornament to the dashboard of any car. We inspected a dismantled model, and found that a very high standard of workmanship had been used throughout its construction.

We understand that the "Featherstone" lock has been thoroughly tested on different makes of cars during the past six months, with complete reliability and efficiency.

A useful arrangement has been made with the Yale and Towne Manufacturing Company to supply door-locks for saloon cars, which can be locked and unlocked by the same Yale key supplied with the Featherstone lock, for use on those occasions when luggage or parcels are left in the car. All the locks, of course, have different keys.

The Featherstone Automatic Petrol-Ignition lock can easily be fitted to any make of car, and sells ready for fitting at the low price of £1 17s. 6d. It is manufactured by Messrs. Allen, Rae & Co. Ltd., Thames House, Millbank, London, S.W.1.

THE BROOKLANDS OPENING MEETING—continued from preceding page.

Second Walton Scratch Sprint (½ mile).
1. A. Baron (Bugatti, 2,992 c.c.).
2. Miss McOstrich (Talbot, 2,276 c.c.).
3. Miss Allan (Bentley, 4,398 c.c.).
Won at 69.23 m.p.h. by 4 1/5s.; 2 3/5s. between second and third.

Walton Lightning Mountain Handicap (6 miles).
1. A. H. L. Eccles (Bugatti, 2,263 c.c.) ..... scr.
2. E. K. Rayson (Riley, 1,089 c.c.) 0 32
3. F. W. Dixon (Riley, 1,089 c.c.) 0 11
Won at 69.74 m.p.h. by 1 2/5s.; 1 3/5s. between second and third.

Third Walton Sprint Handicap (2 miles).
1. A. H. L. Eccles (Bugatti, 2,263 c.c.) ..... scr.
2. R. F. Oats (Maserati, 2,514 c.c.) ..... scr.
3. D. M. Dent (Frazer Nash, 1,496 c.c.) 0 18
Won at 98.36 m.p.h. by 3 1/5s.; 3 2/5s. between second and third.

Fourth Walton Sprint Handicap (2 miles).
1. R. F. Oats (Maserati, 2,514 c.c.) ..... scr.
2. F. K. Rayson (Riley, 1,089 c.c.) 0 12
3. R. Way (Rover, 2,565 c.c.) 0 15
Won at 96.77 m.p.h. by 3s.; 11s. between second and third.

Third Walton Scratch Sprint (½ mile).
1. O. Bertram (Delage, 10,688 c.c.).
2. T. S. Fothringham (Bugatti, 2,263 c.c.).
3. Mrs. K. Petre (Bugatti, 1,990 c.c.).
Won at 89.11 m.p.h. by 4s.; 8s. between second and third.

Fourth Walton Scratch Sprint (½ mile).
1. Mrs. K. Petre (Bugatti, 1,990 c.c.).
2. M. P. Simpson (Riley, 1,089 .cc.).
3. Miss J. M. Richmond (Ballot, 2,973 c.c.).
Won at 71.15 m.p.h. by 1 1/5s.; 2 1/5s. between second and third.

Walton Senior Mountain Handicap (6 miles).
1. L. Robinson (Bugatti, 1,496 c.c.) 0 32
2. F. W. Dixon (Riley, 1,089 c.c.) 0 11
3. G. Shapley (Bugatti, 2,263 c.c.) 0 37
Won at 63.82 m.p.h. by 14s.; 4s. between second and third.

THE THIRD R.A.C. RALLY

DIFFICULT CONDITIONS EXPERIENCED BY COMPETITORS FROM ALL STARTING CONTROLS, BUT 351 OUT OF 385 STARTERS ARRIVE AT BOURNEMOUTH. TWO CLASS WINS FOR ROVER AND ONE FOR SINGER. HIGHEST MARKS GAINED BY F. R. G SPIKINS (SINGER).

DURING the afternoon and evening of Tuesday, March 13th, 385 cars set out from London, Bath, Norwich, Leamington, Buxton, Harrogate, Liverpool, Newcastle and Glasgow to take part in the third R.A.C. Rally, the finishing point being Bournemouth. The itinerary from the starting controls was arranged so that a distance of approximately 1,000 miles had to be covered in every case.



J. Eason Gibson with the Essex Terraplane Six which he drove in the Rally.

There were conflicting rumours as to the weather conditions likely to be experienced *en route*, but as they varied from rain and floods to snow and ice, the competitors steeled themselves to deal with the worst. And so it proved. The North of England was swept by a blizzard that night, while a fierce gale raged over the Southern Counties, accompanied by a torrential rainfall.

The majority of the competitors successfully coped with these conditions, in spite of some difficulty in maintaining a good average speed over ice and snow-covered roads. A number of the London drivers, however, placed too much confidence in the route recommended by the R.A.C. with the result that some 80 miles beyond Harrogate they were faced with roads four feet deep in snow. Maurice Newnham, for example, carried on till his Triumph "Gloria" was resting on its running-boards, and had to reverse for a mile before he could turn round.

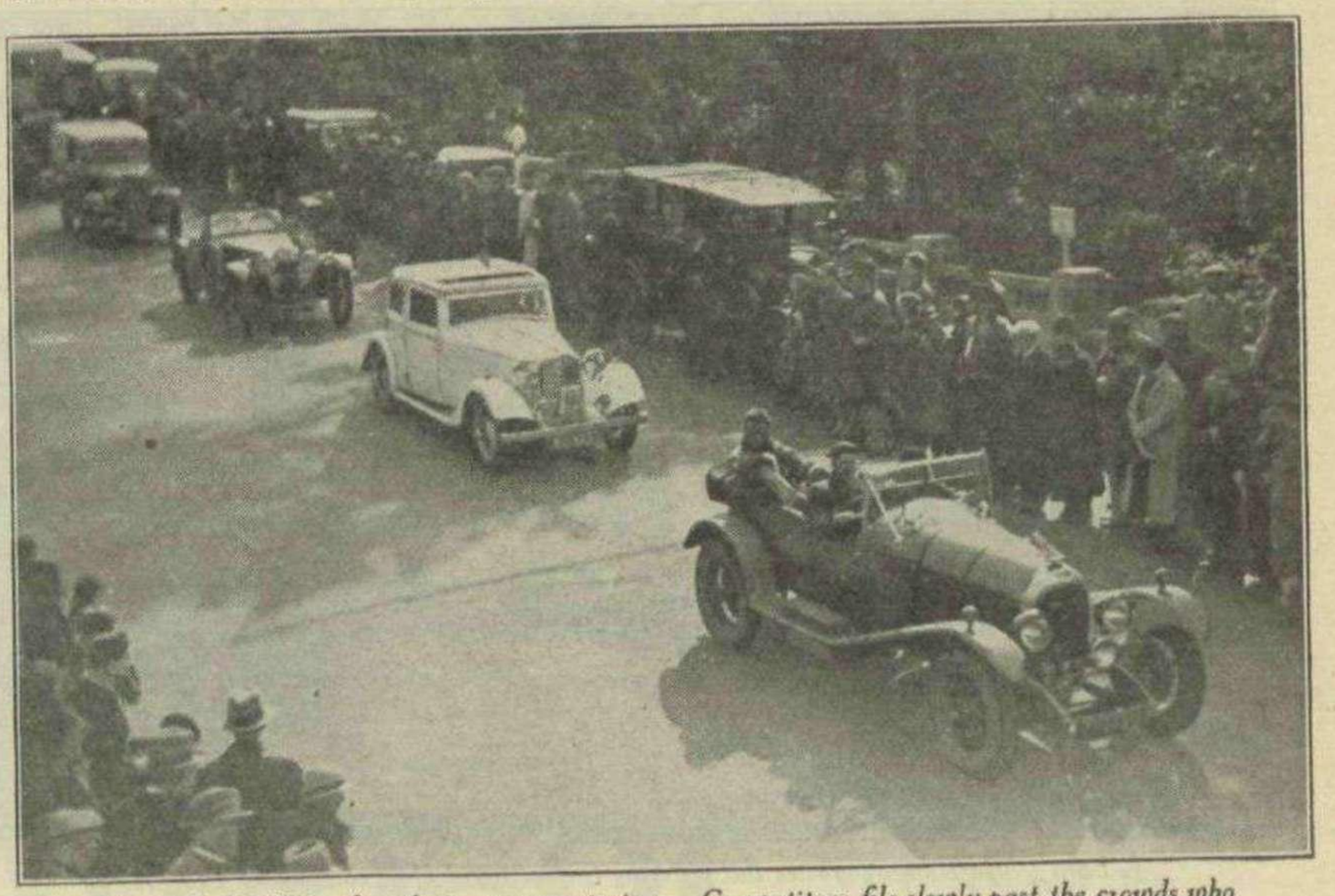
After a certain time had elapsed it occurred to the officials in charge to warn people of the danger ahead. But even then they allowed some drivers to carry on, instead of advising them to use the main road via Carlisle, and E. H. Mayer (22/90 Alfa Romeo) lost so much time through this that he was unable to reach Bournemouth within an hour of his scheduled time.

There was only one serious accident reported during the road section of the Rally, a great tribute to the high standard of driving and to the controllability of modern cars. A woman competitor had to swerve to avoid a sheep dog, and her car capsized. Both she and her passenger were removed to hospital but were not dangerously injured.

The fast stretch of road nearing Bournemouth from Torquay gave many competitors a chance to recover lost time, and a glorious sunny morning acted as a tonic on those who were feeling the strain of two nights and a day without sleep. Not counting the 15 non-arrivals, some of whom reached Bournemouth after their one hour time allowance had elapsed, only 15 competitors lost marks for being late. These were F. Gordon Crosby (S.S.1), A. J. D. Mackintosh (1926 Morris Cowley), R. A. Harding (S.S.1), J. D. Burton (Vauxhall), G. Readings (Essex Terraplane), Miss P. Deacon (Humber), L. Baynes (Wolseley 21), J. Eason Gibson (Essex Terraplane), Charles Follett (Alvis Speed 20), D. G. Evans (Singer), A. G. Throssell (Daimler), W. G. Thomas (A. E. W. Austin), J. H. Lowick (M.G.), Capt. J. P. Black (Standard) and K. N. Hutchinson (Ford V8).

Denis Evans had the misfortune to be held up twice in Bournemouth itself by traffic lights, which caused him to arrive at the control two minutes late! Many drivers, however, allowed themselves plenty of time on arrival, in order that their cars could be washed before driving them into the Ramp Garage to check in. The team of 12 h.p. Armstrong-Siddeleys, of differing body styles and painted all colours of the rainbow, followed this course and arrived looking as though they were being driven to the showrooms for display, so little did they show signs of the rough weather they had experienced.

On examination, only 10 cars were found to be defective in condition, and were accordingly penalised.



The end of 1,000 miles of strenuous motoring. Competitors file slowly past the crowds who assembled to see them finish at the Ramp Garage.

A large crowd had assembled at the entrance to the garage, and great interest was displayed at the variety of cars

THE THIRD R.A.C. RALLY—continued.

competing. Old cars were always given a cheer, especially W. T. Pitts' "Alfonso" Hispano Suiza and E. Hasel's pre-War Crossley. The R.A.C. organisation of parking the cars as they arrived was materially assisted by the design of Messrs. George Hartwell's Ramp Garage, which must be one of the finest and largest of its type in the country.

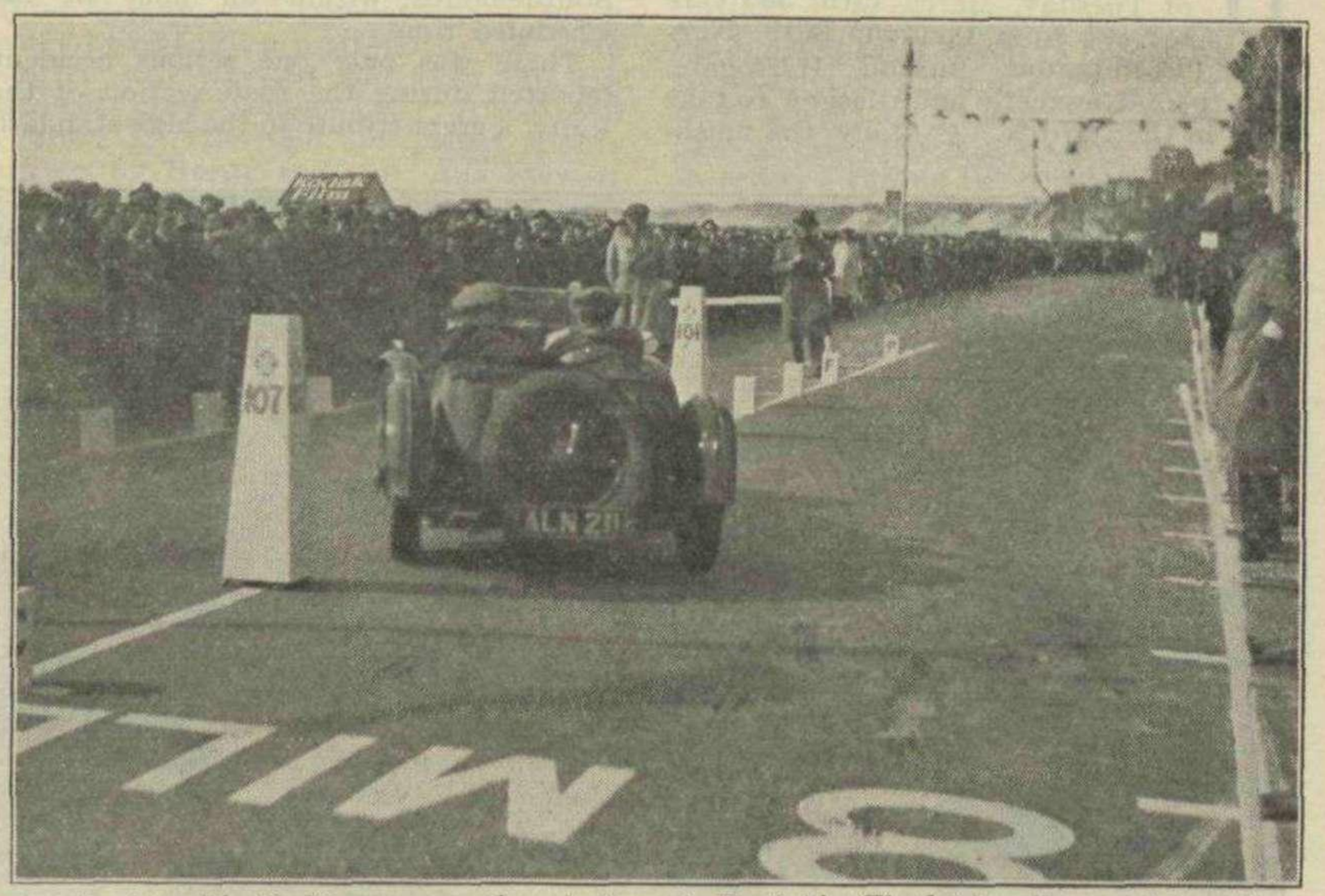
At last all the cars were stowed safely away, where they were to be kept until the eliminating tests took place on the following day. Meanwhile a hot bath and some sleep were the two chief concerns of the crews, but many turned out for the Reception and Tea given by the Mayor and Mayoress in Bournemouth's magnificent new Pavilion. At the same time the eagerly awaited details of the tests, which had been kept a secret, were revealed, causing much discussion and in some cases feelings of alarm.

Before leaving the Garage on Friday morning cars were tested for easy starting, and the following drivers lost marks over this test:—V. H. Heberlein (S.S.I), S. H. Newsome (Riley 9), W. T. Pitt (Hispano Suiza "Alfonso"), Mrs. M. Williams (Rover 12), J. Eason Gibson (Essex Terraplane 6), W. V. Cross (S.S.I) and J. P. Agnew (Talbot).

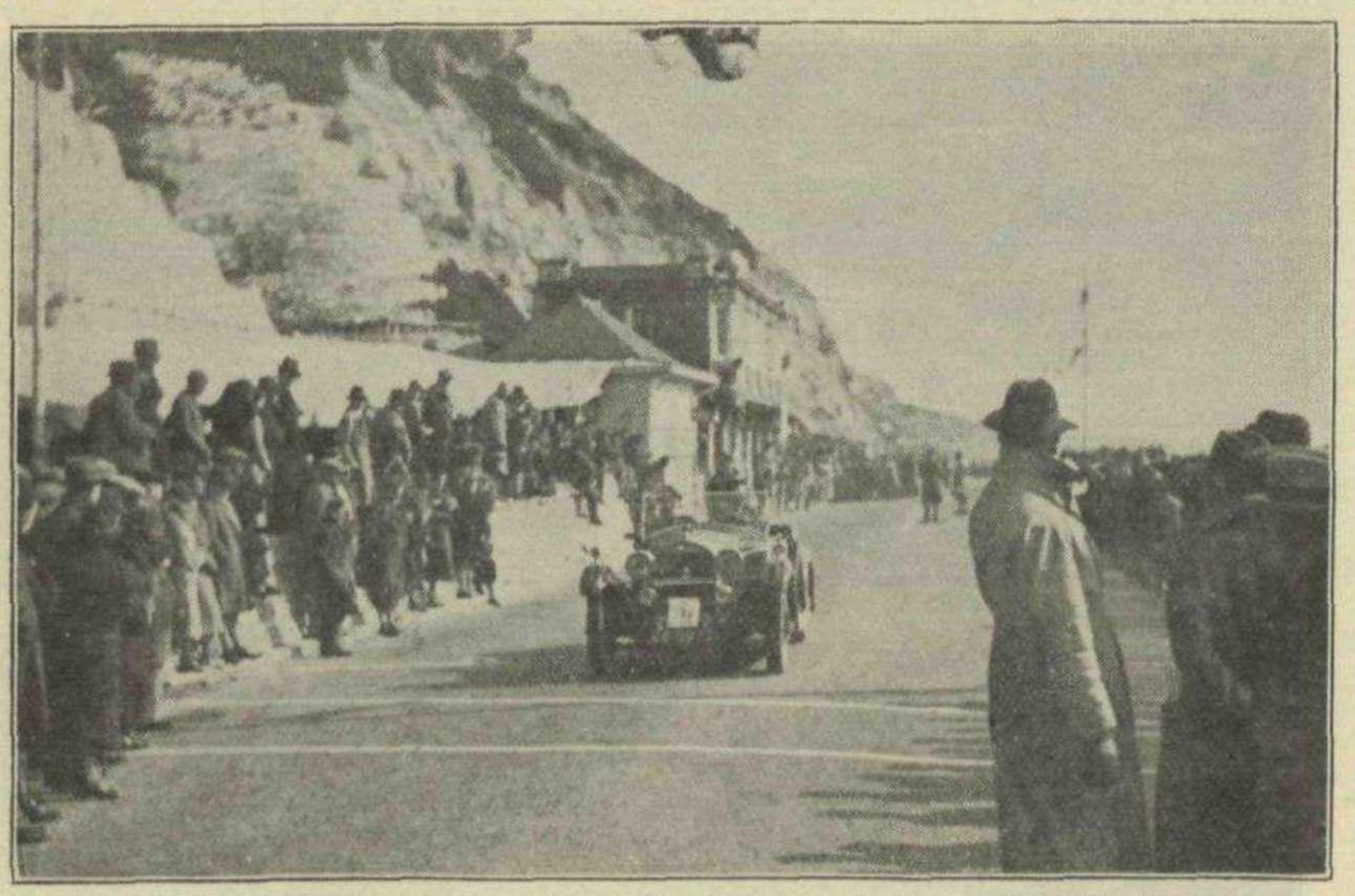
Test 'A' took place on the Undercliff Drive, and consisted of the following manœuvre. On being given the signal to start the drivers accelerated as fast as they could for about 100 yards to a point just beyond a gap in a row of barriers running parallel to their course. They then had to reverse through this gap, and accelerate to a line about 100 yards farther on, crossing this at speed. Test 'B' was held on a hill called Beacon Road. Here again the competitors were given a standing start, and had to negotiate an acute 'S' bend formed by barriers before reaching the top of the hill, with penalty marks for any barriers or marking posts which were dislodged.

It was the plan of the R.A.C. to run a duplicate course for Test 'A,' in order to deal with the 385 competitors as fast as possible, but an unexpected Spring tide sent waves right over the first one, and there was a delay of an hour and a half while the tide gradually receded. Before this was decided upon, however, H. W. Henshall (Alvis) received the full benefit of a particularly strong wave, which effectively drenched the magneto, and carburetter of his engine and prevented him from taking any further part in the proceedings.

Naturally enough the standard of driving varied tremendously. There was a lot of difference in the way in which people got off the mark on the fall of the flag, drivers of trials experience as a whole showing up well in this respect. Although there was no usual braking test this year, the brakes were tested to the full in pulling up beside the reversing gap. Some drivers, whether by design or accident it is difficult to say, threw their cars into a slight skid in braking, which left them pointing straight at the gap and saved a good deal of wheel-winding. A. R. Harrison (Rover) was an outstanding example of this method. One or two stopped their engines in locking their wheels, but hardly any were penalised for touching the marking posts and boxes on the road. The drivers of saloons were at a slight disadvantage in reversing, especially on those types with sliding windows which do not allow the driver to look outside the car.



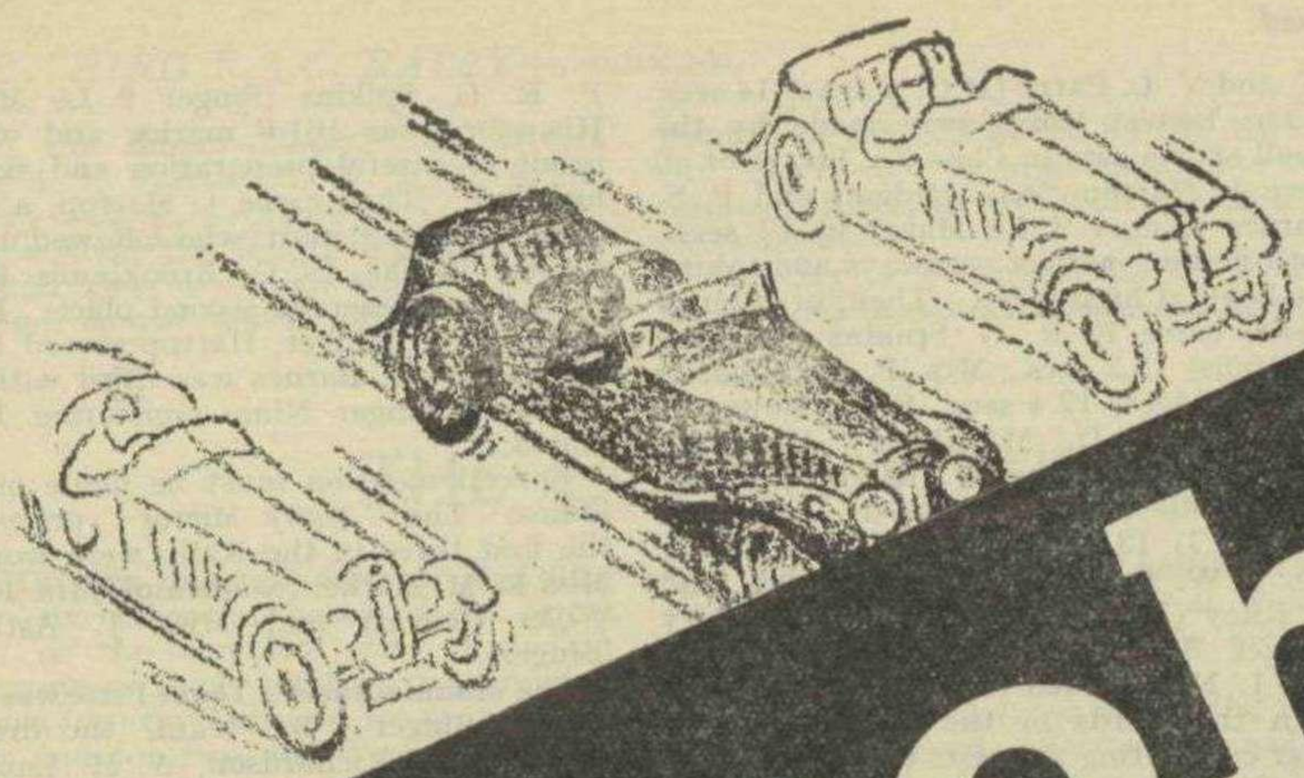
An Aston-Martin driver reverses through the gap in Test 'A.' The finishing line was obstructed by spectators, as can be seen here.



J. Flint (Alfa-Romeo) crosses the finishing line at speed after completing Test 'A.'

The fastest time of 26.2 secs. for this Test 'A' was made by the man who won Class 3 and who scored most marks in the Rally, namely F. R. G. Spikins (Singer Nine Le Mans). Next came the winner of Class I, T. D. Wynn-Weston (Rover 20) with a time of 26.3 secs., followed by S. B. Wilks (Rover 12) winner of Class 2, with 27 secs. Other good times in order of merit were H. Hillcoat (Ford V8), 27.6 secs., C. M. Anthony (Aston Martin) and J. Harrop (M.G. Midget) 27.8 secs., V. Riley (Riley 9) 28 secs., G. F. Searle (Rover 15) and M. L. Curtis (Ford V8), 28.2 secs., R. A. F. Page-Croft (Singer 9 Le Mans), C. B. Follett (Alvis 20) and L. J. Hollingsworth (Ford V8) 28.6 secs., J. G. Pigé-Leschellas (A.C.), A. H. Wilkinson (Riley 9), F. S. Barnes (Singer 9 Le Mans), V. Riley (Riley 9), F. C. Rolfe (Singer 9) and F. S. Barnes (Singer 9 Le Mans) 28.8 secs.

Test 'B,' on Beacon Road, gave rise to a good deal of argument among competitors as to its suitability for an eliminating test at the end of a 1,000 miles Rally. The road was rather narrow, so that the 'S' bend was very acute, and the kerbs were lined with small boxes



ALCOHOL FOR ACCELERATION

CLEVELAND DISCOL

THE NEW SPIRIT

THE NEW SPIRIT

BRITISH ALCOHOL BLEND

THE THIRD R.A.C. RALLY—continued.

which were easily touched, especially when drivers tried to pull over as far as possible before going into the bend. Or course a large car with a wheelbase of over 10 feet could not hope to be as fast as a small sports car of only 8 feet and correspondingly narrower track. Officially the Rally was being held in three distinct classes, so that the big cars were on a level with each other, but there was an attraction about the impressive awards for the cars scoring the greatest number of marks irrespective of class, which gave the drivers of large cars every cause for dissatisfaction.

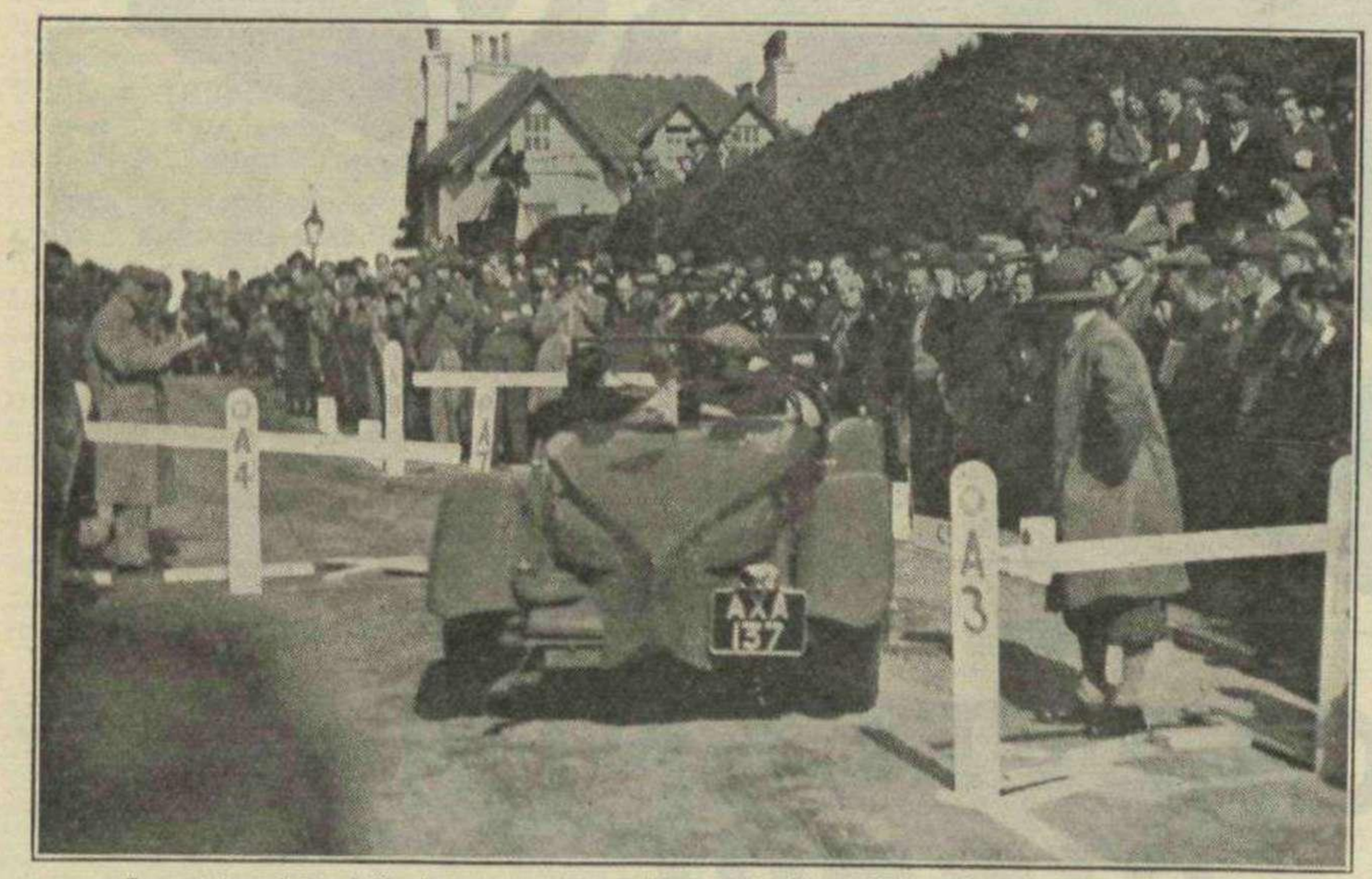
Varying degrees of skill were shown by the heavy brigade. C. J. Joyce, for example, was neat and fast with his beautifully finished Talbot 95 saloon, and the same could be said for W. A. Fitzgerald (Lagonda 4½ litre saloon). The fastest times in Class 1 were made by K. N. Hutchison (Ford V8) in 13.2 secs., T. D. Wynn-Weston (Rover 20) 13.4 secs., H. Hillcoat (Ford V8) 13.8 secs., and J. E. Scott (Talbot 105) 14 secs. Good performances were also made by N. Black (Essex Terraplane 8), W. M. Couper (Talbot 90), E. C. Harris (Alvis 17), J. D. Burton (Vauxhall "Hurlingham"), Charles Follett (Alvis Speed 20) and T. V. G. Selby (Chrysler) among others.

A good deal of damage to the boxes and posts was done by some competitors, notably by Col. A. H. Loughborough (Lanchester) who demolished all the boxes coming out of the bend and then crashed into the wall. Others we saw run amok were W. G. Whitford Hawke (Alvis 20) and the Hon. Brian Lewis (Alvis Speed 20).

The cars in Class 2 were much neater, and the fastest times were as follow: F. S. Barnes (Singer Le Mans 11) 12.2 secs., H. W. Allingham (M.G. Magnette) 12.4 secs., A. St. V. East (A.C. "Ace") 12.8 secs., C. F. Hurlock (A.C. "Ace") 13 secs., S. B. Wilks (Rover 12) 13.4 secs., D. H. Scribbans (Riley 12), A. G. Pointing (Riley 12), and C. M. Anthony (Aston Martin), Miss A. Gibson Watt (Riley 14) and V. L. Parry (M.G. Magna) 14 secs.

The fastest times were made by the small sports cars in Class 3. Finest of all were J. Harrop (M.G. Midget) and F. S. Barnes (Singer 9 Le Mans) in 12 secs., both making perfect getaways and taking the bend at high speed. Then, in order of merit, came F. R. G. Spikins (Singer 9 Le Mans) 12.2 secs., Mrs. P. H. Johnson (M.G. Midget) 12.4 secs., S. H. Newsome (Riley) and D. M. Healey (Triumph "Gloria") 12.8 secs., V. Riley (Riley 9), F. C. Rolfe (Singer 9) and N. A. Prince (Austin 7) 13 secs., M. C. Wilks (Rover 10), J. W. Bezzant (Ford 8 Special), and V. Riley (Riley 9) 13.4 secs., F. A. Airy (Singer 9), F. Leslie-Smith (Singer 9) and J. N. Marsden (Singer 9), 13.6 secs.

In the words of the immortal song, after completing the tests the competitors found "the rest of the day was their own"—until the Rally Ball that evening at the Pavilion. This proved to be a thoroughly enjoyable function, only spoilt when a doorkeeper took it into his head to close the passage into the bar at the early hour of 11.15 p.m. After half-an-hour's persuasion he relaxed his vigilance and all was well.



Some idea of the difficulty of negotiating the bend in Test 'B' is shown in this photograph. The car is the Earl of March's Speed Twenty Alvis.

During the evening the results were made known and turned out to be a triumph for the *marques* of Rover and Singer. T. D. Wynn-Weston (Rover 20) repeated his victory of last year in Class 1 with a total score of 160 marks, a very fine performance. He was followed by two V8 Fords, driven respectively by H. Hillcoat and M. L. Curtis, with scores of 158.6 and 156.8 marks.

In Class 2 another Rover was placed first, this time an open 4 seater 12 h.p. model drven by S. B. Willis. His score of 159.6 marks was just a shade better than the 159 marks gained by the second man, F. S. Barnes, on a Singer 11 h.p. who in turn was followed by C. F. Hurlock (A.C.) with 158.4 marks.

Class 3 provided the driver who scored the most marks in the whole Rally, F. R. G. Spikins (Singer 9 Le Mans). His score was 161.6 marks, and was a result of careful preparation and skillful handling. Then came J. Harrop, a newcomer to motor sport, who followed up his success in the J.C.C. Brooklands Rally with a well-deserved second place. Driving an M.G. Midget, Harrop scored 160.2 marks. F. S. Barnes was third with his Le Mans Singer Nine, registering 159.2 marks.

Special mention must be made of the ladies. The "Daily Mirror" prizes for the first three in the Rally were won by Miss R. M. Harker (Sunbeam), Mrs. K. E. Wilks (Rover) and Miss J. Astbury (Singer).

The Manufacturer's Team Prize was won by the Singer "B" team, the drivers being W. J. Richardson, A. H. Langley and J. D. Barnes. Singers were again successful in the Associated Club Team

PROVISIONAL LIST OF AWARDS.

Class 1.
1st, T. D. Wynn-Weston (Rover), 160 marks.
2nd, H. Hillcoat (Ford), 158 3/5 marks.
3rd, M. L. Curtis (Ford), 156 4/5 marks.
4th, N. Black (Hudson-Essex), 156 4/5 marks.
5th, J. B. Thompson (Ford), 156 marks.

Class 2.
1st, S. B. Wilks (Rover), 159 3/5 marks.
2nd, F. S. Barnes (Singer), 159 marks.
3rd, C. F. Hurlock (A.C.), 158 2/5 marks.
4th, C. M. Anthony (Aston-Martin), 158 1/5 marks.
5th, H. W. Allingham (M.G.), 156 3/5 marks.
6th, F. S. Barnes (Singer), 156 2/5 marks.
7th, N. E. Bracey (Wolseley Hgrnet), 156 marks.

Class 3.
1st, F. R. G. Spikins (Singer), 161 3/5 marks.
2nd, J. Harrop (M.G.), 160 1/5 marks.
3rd, F. S. Barnes (Singer), 159 1/5 marks.
4th, V. Riley (Riley), 159 marks.
5th, F. C. Rolfe (Singer), 158 1/5 marks.
6th, V. Riley (Riley), 157 4/5 marks.

"Daily Telegraph" Cup, London.
F. R. G. Spikins (Singer), 161 3/5 marks.

Norwich Trophy (Presented by Messrs. Delves Motors Ltd., Duff, Morgan and Vermont Ltd., Howes and Sons Ltd., Mann Egerton and Co. Ltd., Maudes of Norwich Ltd., and Norwich Motor Co. Ltd.).
M. L. Curtis (Ford), 156 4/5 marks.

"Midland Daily Telegraph" Trophy, Leamington.
F. S. Barnes (Singer), 159 1/5 marks.

"Bristol Evening World" Trophy, Bath.
F. S. Barnes (Singer), 159 marks.

"Manchester Daily Dispatch" Trophy Buxton.
J. Harrop (M.G.), 160 1/5 marks.

"Yorkshire Post Trophy," Harrogate
J. H. Stothert (Aston-Martin), 155 2/5 marks.

Liverpool Trophy, Liverpool.
A. H. Wilkinson (Riley), 157 1/5 marks.

"Newcastle Evening Chronicle" Trophy, Newcastle.
R. C. Tibbey (Singer), 153 3/5 marks.

Scottish "Daily Record" Trophy, Glasgow.
S. B. Wilks (Rover), 159 3/5 marks.

"Daily Mirror" Ladies' Prizes.
Class 1, Miss R. M. Harker (Sunbeam).
Class 2, Mrs. K. E. Wilks (Rover).
Class 3, Miss J. Astbury (Singer).

Manufacturers' Team Prize.
Singer and Company Ltd., "B" Team.—W. J. Richardson, A. H. Langley, J. D. Barnes.

Associated Club Team Prize.
The Singer Motor Club.—A. C. Westwood, W. M. D. Montgomery, R. C. Tibbey.

THE THIRD R.A.C. RALLY—continued.

Prize, the Singer Motor Club drivers being A. C. Westwood, W. M. D. Montgomery and R. C. Tibbey.

As a whole the R.A.C. organisation of the Rally was of a high order. Only at the end, in the matter of parading the winners of the coachwork on the Undercliff Drive, and in announcing the full results of the Rally to the Press, did mistakes occur.

The City of Bournemouth, led by the Mayor and Mayoress, did everything in their power to give a hearty and prolonged welcome to the competitors. In nearly all respects Bournemouth is a progressive and beautiful resort, and the new Pavilion is a building of which the citizens may be justly proud.

THE COACHWORK COMPETITION

THE cars this year were divided into six categories, based on the prices of the complete cars, including accessories. Each category was further divided into three classes, for open coachwork and for two and four-door closed bodies. Value for money is after all what most people look for, and the general public ought to have had a fine opportunity of comparing the various makes on this basis

The weather unfortunately was doubtful on Saturday morning, and so the judging took place in the Ramp Garage instead of being down on the Undercliff. The cars had to be there by 9, though judging did not begin until 10.30. A good number of people were waiting on the sea-front until one o'clock, but after being informed that the cars would not appear until the afternoon, a procession was actually organised half an hour later, with its own spectator, the picture-post-card vendor half-way along.

The eighteen class winners re-appeared again at 3 o'clock, but since the usual Saturday afternoon crowd of cars were passing each way along the narrow Undercliff, there was much confusion in arranging the prize-winners diagonally to one side of it. Considering that permission had been granted to close the road to the general public, there was no excuse for this mismanagement.

Turning to the actual competition, the first class embraced cars up to £200. These were several 8 h.p. Fords in the open class, of which the most notable were a red two-seater entered by J. W. Bezzant, and the blue one which has been seen in a number of trials driven by J. A. Driskell. The winner proved to be a Singer "9" which belonged to W. M. D. Montgomery. Singer "9" coupés figured largely in the (b) class and a grey Ford saloon entered by B. C. D. Macartney was interesting.

In the £350 class there were a selection of attractive-looking cars, notably a number of S.S.I.'s and two of the new Armstrong Siddeley "12's" with bodies on similar lines to the Alpine Tourers. An Avon Standard and a dark-blue two-seater Magnette both looked well, and the class contained two Rally winners, S. B. Wilks with a Rover and Spikins who had a Le Mans Singer. The award was given to Benjamin King who had a drop-head Light 20 Citroen.

Amongst the two-door closed cars we noticed an Austin 12-6 sports, a Vogue Humber Saloon finished in cream, and a dark red S.S. with a great display of badges, which proved the winner. The four-door class could not be expected to provide much of sporting interest, but Maurice Newnham's Triumph "Gloria" 6 was notable for the high polish of its engine. Dunham, well known at Brooklands with his Speed 20 Alvis, secured first prize in this category.

Opinions were divided about the lines of Curtis's V8 Ford, with its body ending in a vertical fin, but the engine development was interesting. A twin downdraft carburetter had been fitted, and this with a Scintilla magneto and aluminium cylinder heads had increased its speed some 10 m.p.h.

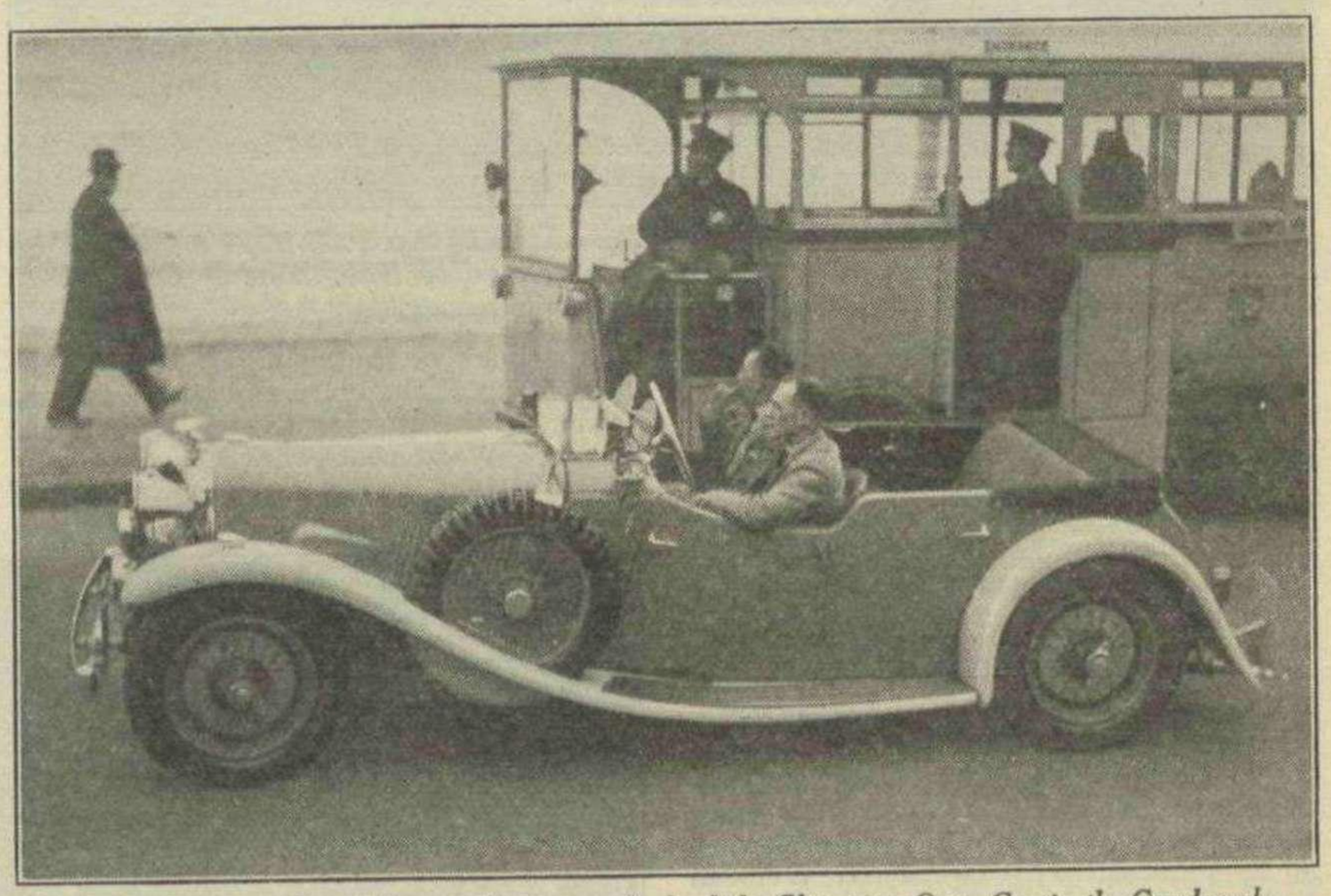
M. A. McEvoy had entered a supercharged B.S.A., fitted with a Zoller blower chain-driven from the front of the engine, and which carried an unusual two-four seater body.

Fairtlough's A.C. was neat and had well-balanced lines, while Searle's Speed 14 Rover was painted in a striking iridescent blue colour. The bodywork was notably roomy and well-upholstered, with a disappearing hood and the spare wheel neatly sunk into the tail. It won the class up to £500. A grey saloon with dark top and brown leather upholstery repeated the Rover success in the two-door class.

Four Aston-Martins were a notable feature of the next class, the most attractive being the black two-seater which belonged to F. A. Rhodes, and had a complete strip map of the route in a lighted holder on the steering column. W. M. Couper had a striking red Talbot and Tong's 4½ litre Lagondas, the "105" Talbots and the Speed 20 Alvises. Scott's Talbot had an unusual four-seater body, something on the lines of the racing team cars, in which the pointed tail was used to hold suitcases. The back seats of course were really meant to be occupied in this case, however, and the centre arm rest was used to hold the folded-up tonneau cover.

The Alvis entered by the Earl of March had a two-three seater dark blue body of particularly sporting lines. W. E. C. Watkinson's car had a four-seater body by Vanden Plas, equipped with three gallon spare oil-tanks under the bonnet and many other items useful on the continent, and with its dark green colouring thoroughly deserved its prize. Alvis and Vanden Plas also scored in the two-door class in which the Hon. Brian Lewis's "90" with innumerable accessories and gadgets for comfort on the road. First place was won by R. H. Gregory, whose Alvis Speed Twenty was finished with an Oxford Blue body with Cambridge blue wings. Major Douglas-Morris once again carried off an award with his Tickford bodied Invicta, and H. C. Berry's Armstrong "20" saloon, with a light-blue top and wings and silver body deserved its success in the 4-door class.

The pick of open sporting cars were shown in class 5a, and it must have been hard to differentiate between Eller's



R. H. Gregory's Speed Twenty Alvis was adjudged the Champion Open Car in the Coachwork Competition. It also won first prize in the Class for Open Cars costing not more than £700.

THE COACHWORK COMPETITION—continued.

car was the victor. This car was all black except for fine white lines on the bonnet louvres. The rear panel sloped down well clear of the rear passengers' heads, allowing a luggage compartment to be fitted into the body behind the seat, and the quarter lights obviated the shut-in effect often experienced in two-door saloons. C. J. Joyce was successful in the four-door class with the "95" Talbot which won the Monte Carlo coachwork competition, while in the same class were some striking cars on 4½ Lagonda and Siddeley Special chassis.



The most handsome four-door saloon in the Rally was the 25 h.p. Rolls-Royce entered and driven by Mr. W. M. Park. The coachwork was executed by Park, Ward & Co., Ltd., and was finished in pale green with beige moulding.

There were only three open cars in the class for cars over £1,000. Hal Hill's 40-50 Rolls Royce, a perfectly plain five-seater tourer was obviously some years old, but with its grey body and black wings was the acme of the continental touring car. Presland's 8 litre Bentley was impressive but rather heavy in appearance while Guy Warburton's well-preserved 30-98 Vauxhall with two-seater Wensom body was rather heavily handicapped by its age.

There were also only three cars in the two-door class, Miss Chieseman's straight-eight, 100 m.p.h. Delage, fitted experimentally with four carburetters, G. Wansborough's Siddeley Special with aerodynamic coachwork by Lancefield, and C. W. Ward's 3½ litre Bentley. The Siddeley Special had the typical solid frontal appearance of its type, with head lamps sunk into the wings, and the latter continued their unaltered shape past the bonnet, leaving a large compartment for luggage on either side of the engine. Suitcases were carried in the sloping tail. The streamline design gives an increase of six m.p.h. at the top end of the range.

Streamline tendencies were also to be noticed in C. W. Ward's 3½ litre Bentley, to give a new treatment of the two-door saloon. This very striking car was finished in beige with an olive-green waistline and wheels. The leather upholstery was also green. The back and front wings had modified fairings and the angle of the wind screen was matched by that of the sloping back panel. The panel was hinged at one side and swung back to reveal suitcases and tools in a series of lockers, while the spare wheel was carried in the back of the swinging panel. The high finish of the body and the restrained luxury of the interior fittings were typical of Park Ward coachwork.

In the four-door class D. P. Crossmans' 3½ litre Bentley saloon carried a straightforward body by H. J. Mulliner which attracted favourable attentions. Finished in black relieved with dark green it gave very comfortable accommodation for 4 people. The luggage was carried in a rear locker reached by a down-swinging panel.

The Park Ward entry in this class was a 25 h.p. Rolls-Royce finished in light green, with a chromium waistline and cream mouldings. The shallow arched roof and thin centre pillar gave the car a refreshingly light aspect, and the former swept down over the rear quarters to the tail locker as one flawless panel.

Running tools were carried in a locker alongside the chassis frame which was accessible when the near-side front door was opened. The lights in the front doors were divided into two, and by operating the door lifts to their full extent, the forward parts swung outwards acting as windscoops in hot weather.

COACHWORK COMPETITION RESULTS.

Class I.
(a) 1, W. M. D. Montgomery (Singer).
(b) 1, B. C. D. Macartney (Standard).
(c) 1, Miss S. H. Richards (Standard).

Class II.
(a) 1, Benjamin King (Citroen).
(b) 1, Major A. D. Carey (S.S.I.).
(c) 1, C. G. H. Dunham (Rover).

Class III.
(a) 1, G. F. Searle (Rover).
(b) 1, M. Tombs (Rover).
(c) 1, G. Graham (Talbot).

Class IV.
(a) R. H. Gregory (Alvis).
(b) Major D. E. M. Douglas Morris (Invicta).
(c) H. C. Berry (Armstrong Siddeley).

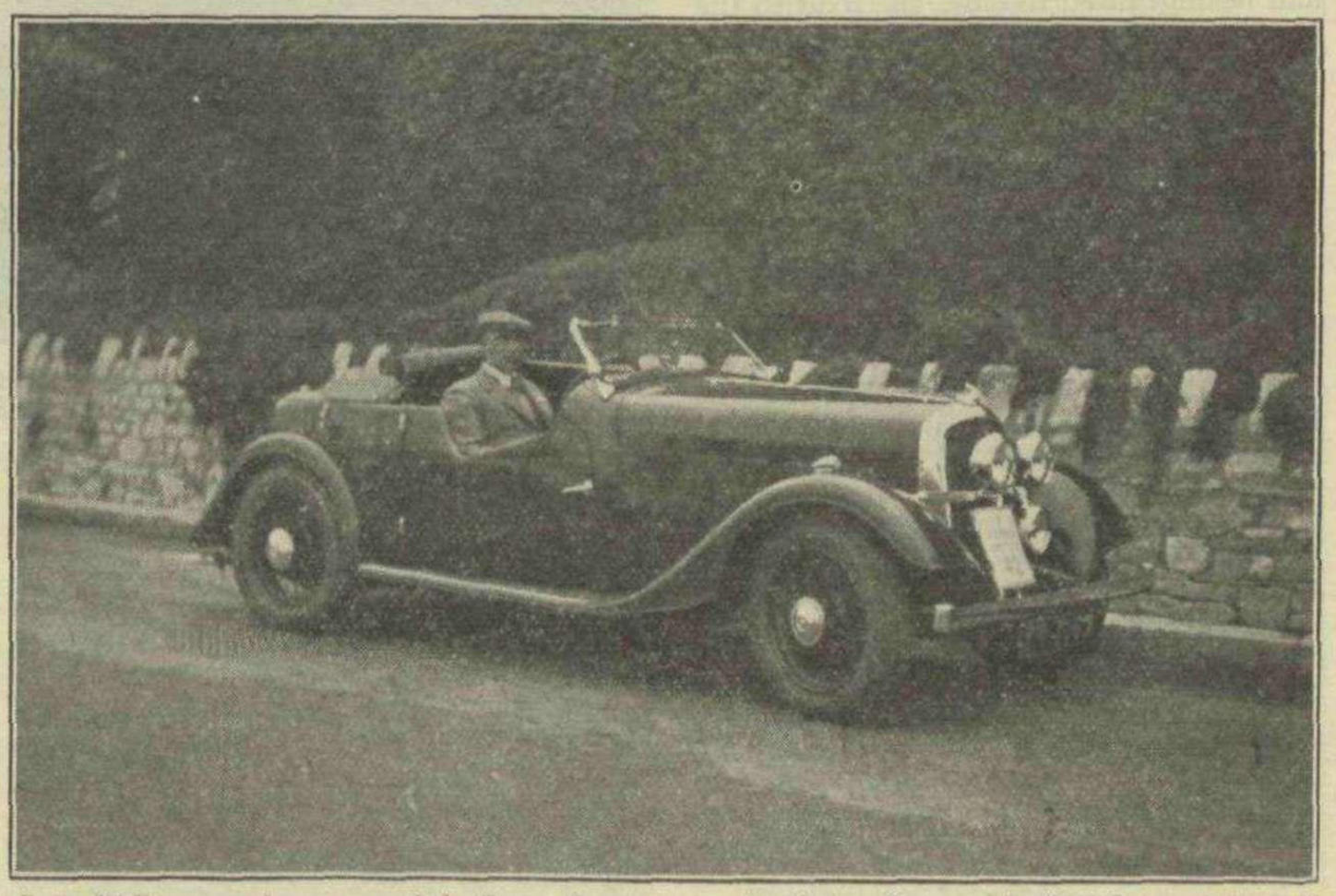
Class V.
(a) W. E. C. Watkinson (Alvis).
(b) Hon. Brian Lewis (Alvis).
(c) C. J. Joyce (Talbot).

Class VI.
(a) Hal Hill (Rolls Royce).
(b) C. W. Ward (Bentley).
(c) W. J. Park (Rolls Royce).

Best open car: R. H. Gregory (Alvis).
Best two-door car: C. W. Ward (Bentley).
Best four-door car: W. M. Park (Rolls Royce).

SYSTEM OF CLASSIFICATION.

(a) Open cars.
(b) Two door closed cars.
(c) Four door closed cars.



S. B. Wilks, general manager of the Rover Company, in the 12 h.p. Rover with which he won Class II.

The price classification is as follows:—

(1) Up to £200.
(2) £201 up to £350.
(3) £351 up to £500.
(4) £501 up to £700.
(5) £701 up to £1,000.
(6) Over £1,000.

Club News

N.W. LONDON M.C.

THE Annual Coventry Cup Trial will take place on Saturday, April 14th, over a 40 miles course of a semi-sporting nature in Kent. River Hill Garage, Sevenoaks, will be the starting point, and the first man will leave at 2.30 p.m. Two interesting tests have been arranged. The first is a Downhill Brake Test, which necessitates covering a distance of 60 feet of acceleration followed by 20 feet of braking—all in the shortest possible time. The second is an Uphill Acceleration Test, on similar lines. In addition to these, there will be a Restart Test on a suitable gradient, and the usual observed hills and sections.

An impressive array of awards is being offered to successful competitors. The best performance of the day will earn the Coventry Cup and Replica; the best Class performance will win the Whittingham Trophy and replica; and an excellent idea is that of awarding the Committee Cup to the best novice. Tankards spoons and medals will be given to finishers.

The entry fee is only 5s. and the Trial is only open to members of the Club.

The Lawrence Cup Trial will be run on May 26th. Further details will appear in these columns at a later date.

The March issue of the Club's "Gazette" is full of interest to members. There is a good account of the Colmore Trophy Trial as seen by a passenger in the Singer driven by C. V. Wells, the Club Secretary, and some notes on the forthcoming Coventry Cup Trials.

The name and address of the Hon. Secretary is Mr. C. V. Wells, 816, High Road, Tottenham, London.

THE LIGHT CAR CLUB.

The Half-Day Trial on March 3rd proved to be a great success. The course was about 40 miles in length, and was confined to the Kentish hills. Most of the hills were in good condition, owing to the prolonged dry weather. Rook's Hill, however, was a different proposition, and the soft leaf mould under the trees soon brought a good many people to a standstill. Another gradient called South Street Hill was none too easy, and Mrs. C. M. Needham (Frazer Nash) made probably the finest climb of the day. In a timed test, the best performance was made by F. A. Thatcher (Singer). The full results were as follow:

Silver Cup: R. L. Appleton (Singer).

First-Class Awards: F. A. Thatcher (Singer), E. Bax (Wolseley Hornet), A. J. K. Debenham (Singer), C. E. Wood (Morris), D. A. Loader (Singer), C. A. H. Cann (M.G. Magna).

THE YORKSHIRE SPORTS CAR CLUB.

New headquarters for the Club have been secured at "Avenue House," Woodhouse Lane, Leeds, premises which used to be occupied by the old Leeds Motor Club. This change is of great advantage to members, for the new headquarters contain Filling Station, Parking Ground, Dance Hall, Bar, Billiards Room, and Card Room, all of which are accessible to members without extra charge.

The first event on the Club's calendar will be held on April 8th, and is described as a "Freak Hill Climb and Stop and Restart Test" on a hill delightfully known as "Crack Pot." This will be followed on May 6th by a complicated half day Treasure Hunt, and on June 10th a Sporting Trial.

Altogether it can be seen that the Club is doing its utmost to provide entertainment both social and competitive for its members. The Hon. Secretary's name and address is Mr. W. H. Hudson, "Avenue House," Woodhouse Lane, Leeds.

THE LAGONDA CAR CLUB.

The opening Rally at Croydon Aerodrome attracted a good number of members and their friends. There was a competition for members covering the greatest distance to the Rally, and also a sealed test. After these had been decided, the party was conducted round the aerodrome buildings, and inspected the equipment necessary for the control of traffic at a busy airport.

Then seats were taken in the 38 passenger Imperial Airways Air-liner "Heracles," and for a half an hour the machine cruised over London, while afternoon tea was served with all the comfort of a terra-firma restaurant.

From 4 p.m. to 6.30 p.m. tea and dance music was provided in the Aerodrome Hotel, and the Rally closed with promises of renewed meetings during the season. The organisation was carried out in the usual effortless way by the Hon. Secretary, Mr. C. G. Vokes, whose address, by the way, is 95-97, Lower Richmond Road, Putney, London, S.W.15.

BUGATTI OWNERS' CLUB.

The opening Rally took place on Sunday, March 25th, at the Abbey Hotel, Malvern. Bugattis of all types, from near and far, assembled, and the ensuing discussions about the vitals and comparative performances of the products of Molsheim resulted in a very pleasant afternoon being spent.

Undeterred by the failure of their attempt to organise a visit to Molsheim last year, the Club is again inviting members to undertake the trip this summer, during the last fortnight of July. All enquiries should be addressed to the Hon. Secretary, Mr. E. L. Gilas, 2, Queen Street, Mayfair, London, W.1.

Incidentally, members are now able to obtain a new edition of that most useful Fixture List of the Club, which contains a full explanation of the rather complicated series of Bugattis produced since the beginning of Ettore's activities, together with their respective gear-ratios.

AUSTIN OWNERS' CLUB.

The first of the county-sections of the new Austin Owners' Club was inaugurated recently at Cheltenham, Gloucestershire being the honoured county. After a small dinner at the Queens Hotel, a dance was held at the Town Hall, at which about 600 people attended. The plans of the Club were outlined by Mr. H. Beresford Stevens, Editor of the "Austin Magazine," and Austin owners can look forward to such widely differing entertainments as reliability trials, Concours d'elegance, dances and lectures.

The annual subscription will be one guinea, and already the second section has been started in Worcestershire.

ROYAL SCOTTISH AUTOMOBILE CLUB.

The Regulations for the Scottish Motor Rally to take place on Monday to Friday, 21st to 25th May next, have just been issued by the Royal Scottish Automobile Club. The foreword to the Conditions points out that in order to secure greater equality among the Competitors and the routes traversed, all the starting points this year will be north of the Border, namely Grena Green, Edinburgh, Glasgow, and Perth, and the Itinerary will include Aberdeen, Inverness, the North-West Coast from Ullapool, and on to the extreme North at John O'Groats House, whence the journey will embrace Strathpeffer, Loch Ness, Glencoe and Inveraray. The start is to be made on Whit Monday forenoon and that night is to be spent in Aberdeen in the vicinity of which tests will be held on the Tuesday, and the journey resumed late on the Tuesday evening.

The Club point out that one of their ideas in organising this Rally is to popularise Scotland as a touring ground and the route has been carefully chosen from that point of view.

The Regulations for the 1934 Rally follow somewhat the same lines as those of former years but on this occasion the classification has been altered and the entrants will be divided into three classes as follows:—

Class 1. Cars with an Engine Capacity not exceeding 1,300 c.c.

Class 2. Cars with an Engine Capacity exceeding 1,300 c.c. but not 2,250 c.c.

Class 3. Cars with an Engine Capacity exceeding 2,250 c.c.

On an inspection of cars penalties will be imposed for defects or deficiencies as set out in the Conditions.

A Coachwork Competition is to take place as Glasgow, where the Rally finishes, on the forenoon of Friday, 25th May.

The Entry Fee for each car is 3 guineas and entries should be made with the Secretary of the Club, 163, West George Street,

CLUB NEWS—continued.

Glasgow, on or before 24th April, 1934, from whom meantime copies of the Regulations can be obtained.

WEST HANTS L.C.C.

The One Day Sporting Trial was held on Sunday, March 4th. Twenty-eight competitors started from the Pier Approach, Bournemouth, Colonel Jarrott being the Starter, a little gesture that was much appreciated by the drivers. A straight forward run was made to Bere Regis in Dorset, and then across country to "Watercress Gulch" which was observed and caused the downfall of H. Kirk (Austin) who approached this hill too slowly and failed through lack of revs. H. W. Burt (M.G. Magna), J. L. Tully with a similar car, and A. E. Hann with a J.2 Midget made very good climbs and so did R. J. P. Morley with his veteran A.C. A few miles further on a time check was taken at Broadmayne.

Knowle Lane was next tackled and only accounted for the failure of A. G. Harrocks (M.G. Midget). Lunch was taken at the Greyhound Hotel at Bridport and afterwards a fairly easy run to "Table Mountain." Here several competitors came to grief at the gully half way up, and amongst these were G. N. Ellis (Austin 7), R. Cook (M.G. Midget) and P. Simon with a similar car. Good climbs were made by J. L. Tully (M.G. Magna), H. W. Burt with a similar car and H. W. Corke (Austin 10) and F. D. Pickering (Ford 8). J. B. Chesshire with an M.G. J.2 with Brooklands equipment failed on the higher slopes. From here the route lay to Charmouth where another check was taken and then to "Fast and Furious" where, with the aid of a Field Telephone, a timed stop and restart and acceleration test was taken. Here the M.G.'s as a whole were very fast except J. K. Riley, whose early type M.G. coupé did not want to get away from the tapes at the stop and restart.

Then the course returned to Bridport where tea was taken.

RESULTS.

The Hartwell Cup for Best Performance: J. L. Tully (M.G. Magna).

First Class (Tankards): A. E. Hann (M.G. J2), H. W. Burt (M.G. Magna) and R. J. P. Morley (A.C.).

Silver Medals: E. N. Weight (M.G. Magnette), J. B. Chesshire, P. Simon and R. Cook (M.G. Midgets), J. M. Gossow (M.G. Magna), S. H. R. Clarke (M.G. Magna), G. S. Gilchrist (Wolseley), A. E. P. Hayward (Singer 10), J. C. West (Morris Minor), R. Manners (Riley); H. W. Corke (Austin 10), G. N. Ellis (Austin 7).

Bronze Medals: F. G. Gossow (Le Mans Singer), F. C. Livesey (Singer 10), F. S. Fairhurst (Ford 8), W. Hewitt (Austin 7), W. Hackson (Singer 14), L. G. Adams (Hillman 14).

No Awards: A. G. Harrocks, J. K. Riley (M.G. Midgets), W. J. Unwin (Riley) and M. De Las Rivas (Vauxhall).

Retired: H. Kirk (Austin 10).

ENFIELD & DISTRICT M.C.C.

A Club run to Devonshire has been arranged for Easter, the objective being either Torquay or Maidencoombe. The full contingent will leave the Market Square at 10.30 a.m. on March 30th.

SOUTH MIDLAND CENTRE A.C.U.

The "South Midland Review" for March contains a leading article which should be read widely. It sums up in a few words the whole position of cyclists and rear-lights, and we should like a copy of this paper to be read by every Member of Parliament.

Notes and news of the Clues in the Centre are reported in full.

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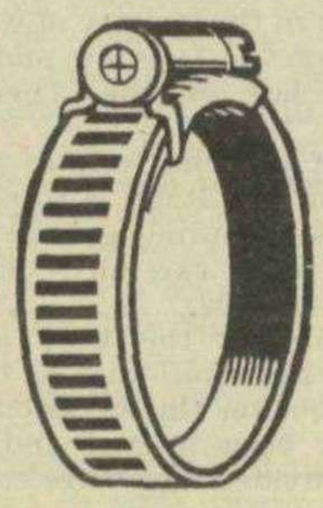
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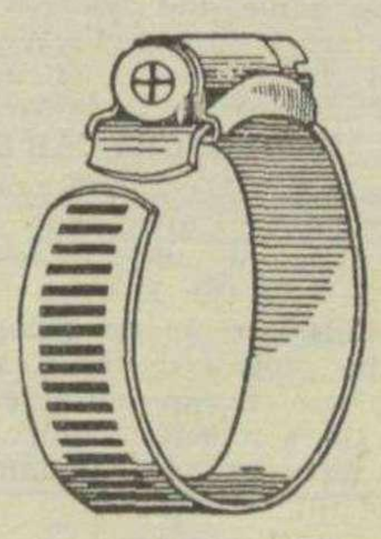
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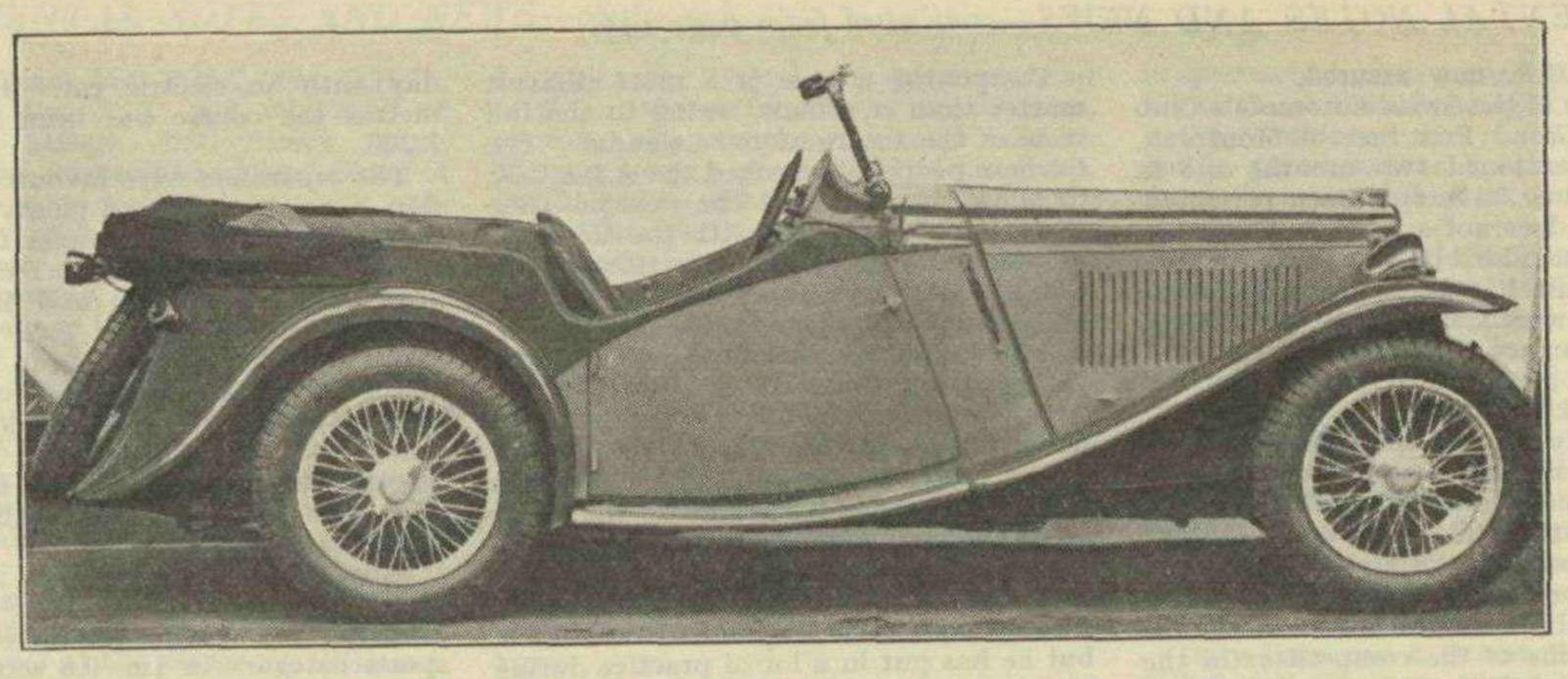
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A CHEAPER M.G. MAGNETTE

THE "N" TYPE WITH 1250 c.c. ENGINE

LAST year the M.G. range of small sixes included the 1,100 c.c. Magnette with a full four-seater body, and the Magna range with a similar engine in a small chassis. For 1934 the Magna range except for the Continental coupé has been discontinued and in its place is found the "N" Magnette series. A 1,250 c.c. engine is used and the chassis is large enough to give full accommodation for four people.

The engine is of course a six, with dimensions 57 mm. and 83 mm. The new-type cylinder-head with large water spaces and a heavier camshaft is used, and the oil filler is embodied in the cam-case. Twin S.U. carburetters are used, fed by an electric pump. The crankshaft has four bearings and a Tecalemit oil filter is included in the lubrication system. The engine is suspended on rubber at three points.

The clutch is a new single-plate type with laminated centre plate, and the twin-top 4 speed gear box has an improved gate with a reverse stop. The mounting of the mixture and slow-running controls has been improved.

A Hardy-Spicer balanced propeller-shaft with metal universal joints takes the drive to the three-quarter floating rear axle. A four-star differential is now used.

The chassis is upswept in the front and underslung at the rear, and braced with cross tubes of large section. The springs are also underslung, located in silentbloc bushes in front with the rear end sliding in trunnions. Hartford shock-absorbers are fitted in front and hydraulics, thermostatically controlled at the rear. The track is 3′ 9″ and the wheelbase 7′ 10″.

A new type of cam-gear steering mechanism is used. The brakes are cable-operated and operate in hardened 12 inch drums. The Rudge wheels are fitted with 18 by 4.75 Dunlop tyres.

Twelve-volt coil ignition is used, and the two six-volt batteries are carried on either side of the propeller shaft. Chromium-plated head and side lights are standard, also a fog lamp, and all main circuits have separate fuses.

A large rev.-counter with a speed scale for top gear is mounted in front of the driver, and other necessary instruments are mounted in a separate panel on the left. In the centre is the mileage indicator with trip and the ignition switch. A reserve petrol tap projects through the dash behind the steering wheel.

The body is mounted on rubber, the sides being carried on a special sub-frame parallel to the chassis members.

The four-seater body is of attractive appearance with graceful swept front wings and upswept scuttle. The doors are cut away to clear the elbows of the front passengers and are noticeably wide, considerably facilitating getting into the back and front seats. Traffic indicators are let into the scuttle.

The "N" type M.G. Magnette will be available as an open four-seater, as illustrated, at £335, while a smart two-seater costs £305.

A "Round the Houses" Race in Ireland.

ENCOURAGED by the success of their races in Phoenix Park, the Irish Motor Racing Club are going to hold a race in the town of Bray, Co. Wicklow, on Saturday, May 19th.

The Supplementary Regulations show that the race will be approximately 102 miles in length, or 32 laps of a circuit measuring 3 miles 354 yards. Cars will run in a clockwise direction, keeping to the right and passing on the left. Owing to the road being rather narrow in places, there will probably be two or three non-passing zones. Roughly speaking, the circuit contains four right-angle corners, two bends and two hairpins. There are gradients ranging from 1 in 50 to 1 in 15.

The race will be run on a handicap basis, but it has not yet been decided whether to use credit laps or time allowance or a combination of both. No mechanics will be carried, of course. In addition to a number of trophies, the following cash prizes have been donated: 1st, £50; 2nd, £25; 3rd, £15; 4th, £10. The entry fee is £6 per car (including £4 Insurance Premium) up to April 14th, and £8 per car up to April 28th.

Further particulars, together with entry forms, can be obtained from the Irish Motor Racing Club, Ltd., 54, Upper O'Connell Street, Dublin.

Easter Monday at Brooklands.

THE Easter Monday B.A.R.C. Meeting has this year been blessed with the adjective "International." At the time of writing, however, the foreign drivers who will provide the international element have not been announced.

The usual programme of Long, Short and "Mountain" Handicap races will be carried out, all being prefaced by the word "Ripley." Women drivers will be pleased to hear that they are allowed to act as a driver in one Short and/or one Long Handicap.

Racing will commence at 1 p.m., and the admission charges will be 5s. to the Public Enclosure, with a 10s. Transfer to the Paddock.

It is interesting to note that a new Rule has been included in the Racing Rules, and another has been altered. Here is the official wording of the Rules: "No. 33. A change of driver can only be permitted in exceptional circumstances by the stewards, and an application to change a driver must be made in writing to the Clerk of the course and must state the reason for which the application is made.

"No. 62. Cleanliness. The Clerk of the Course may prohibit any driver, mechanic or car from competing, the appearance of whom or which is unreasonably or habitually dirty or untidy."

Mercedes-Benz victory in Argentine G.P.

THE Grand Prix of Argentine took place on February 26th on the Rosario circuit near Buenos Aires. South American motor-races are generally over a long distance, and this event was no exception. The length of the race was 1,462 kilometres, and the winner was Karstulovic, driving a Mercédès-Benz, his time being 12h. 58m. 2s. Second came Ricardo Laru, on a Fiat, whose time was 12h. 10m. 30 2/3s. The race was marred by a terrible accident. A car driven by Blanco crashed into the crowd, killing four spectators and injuring fifteen others.

CONTINENTAL NOTES AND NEWS—continued from page 245.

The Swiss G.P. now assured.

The plans of the Swiss Automobile Club to hold a Grand Prix race at Montreux, which I mentioned two months ago in these columns, have now been perfected.

The race does not appear on the International Calendar, but in spite of this fact a permit has been granted by the A.I.A.C.R. which allows the Swiss Club to hold their race on June 3rd.

G.P. cars at La Turbie.

A few days before the Monaco Grand Prix draws the attention of Riviera motor-racing enthusiasts their appetites will be whetted by the Hill Climb at La Turbie. This event occupies an honoured position in the history of motor-racing, and the 1934 hill climb should see new records put up. Some of the competitors in the Monaco Grand Prix are using La Turbie Hill Climb as a sort of trial spin, among them being Count Trossi with his monoposto Alfa Romeo and René Dreyfus driving one of the new 2.8 litre Bugattis.

Bugatti Wins Kilometre Speed Trial.

On March 18th, during the Geneva Motor Show, a kilometre speed trial was arranged, using a stretch of hill at Saconnex. There were classes for touring, sports and racing cars, and good entries were received for all three. A Chrysler driven by O. Zwimpfer made the fastest touring time of 40.8 secs., and the fastest sports car was the big Mercédès-Benz driven by Frau Hedda Gradenwitz in 37.6 secs. The racing classes were won by Kessler's 1,100 c.c. Maserati, 35 secs.; Avondet's 1,500 c.c. Bugatti, 38.6 secs.; Maag's 2 litre Bugatti, 33 secs.; and Hug's 2.3 litre Bugatti, 28.4 secs. In the unlimited class Ruesch's Maserati was beaten by 1/5th second, while third man was Villars (Alfa Romeo) with a time of 31.6 secs.

Avus Grand Prix Postponed.

To their dismay the organisers of the Avus Grand Prix have found that they will not be able to complete their repair work of the road in time for the race on May 27th.



José Scaron, the Amilcar "works" driver, who made fastest time at the Chanteloup hill-climb.

Postponing a race is a more difficult matter than it sounds, owing to the full state of the International Calendar. The German people have asked the A.I.A.C.R. to allow them to hold the race on June 17th, but this clashes with the Le Mans 24 Hours Race, the Kesselburg Hill Climb, the Penya Rhin Grand Prix and the Pontedecimo-Giovi Hill Climb.

A new date for the Avus race has not yet been granted.

Benoist trains at Montlhery.

The return to Grand Prix racing is an event which adds materially to the interest of the forthcoming Grand Prix season. The famous French driver has not taken part in a race since 1928, when he drove an Alfa Romeo in the Belgian 24 Hours Race, but he has put in a lot of practice during March at Montlhéry, in preparation for his first race at Monaco on April 2nd.

He has been using a 2.3 litre Bugatti, and after four laps his speed was up to the standard of the drivers in the 1933 French Grand Prix.

The Consulting Committee at Peronne.

As announced in MOTOR SPORT some time ago, the Sporting Commission of the A.C.F. have set up a committee which is at the disposal of organisers of Grand Prix races. The idea is that there are a hundred and one items to be attended to in preparing a circuit for a race, and the omission of any of these vital points might have serious consequences. The committee is composed of men who know all there is to know about the business, and I hear that their first job has been to assist the organisers of the Picardie Grand Prix in putting the Peronne circuit into good shape.

Improvements to the Spa Circuit.

The difficult circuit of Spa-Francorchamps will be used twice this year by the R.A.C.B. On July 8th the 10 Hours Race will be held for sports cars, and on July 29th the Grand Prix of Belgium. For these two events the circuit is undergoing extensive improvements and alterations at the hands of the "*Services des Ponts et Chaussées belges.*"

In addition to surface improvements all round the course, the "*virage de Malmedy*" has been straightened, the "'*S*' *de Masta*" has been entirely eliminated, and a wider radius has been given to the "*virage Hollowell.*"

An Alfa changes hands.

Phillipe Etancelin's Alfa Romeo had a good season last year, winning the Grand Prix de la Marne, finishing second at Nîmes and in the French Grand Prix, and third at Pau. "Fifi" has now sold the car to the Swiss driver Villars, who raced last year in partnership with the late Baron de Waldthausen.

Scaron again wins the Chanteloup Hill Climb.

On March 18th the Chanteloup Hill Climb was organised by the A.C. de l'Ile de France for the eighth time since its revival in 1926. Actually speaking the climb was first used so long ago as 1898, when Jenatzy made fastest time of the day with an electric car. From 1,800 metres the course has been reduced to 1,200.

The organisers were favoured by a fine day, a good entry, and plenty of spectators. The battle for fastest time of the day was waged between the record-holder, José Scaron (Amilcar) and Benoit Falchetto (Alfa Romeo). Two runs were allowed, and Falchetto beat the record of 1m. 6/100 secs. on his first run. Scaron promptly regained it, only to lose it when Falchetto made his second run. But Scaron was the final winner, climbing in 58.4 secs. as against the Alfa driver's 58.8 secs.

Albert Perrot (Delahaye) made the fastest touring time in 1m. 6 secs., and Eric Lora (Bugatti) did likewise in the sports category in 1m. 0.8 secs.

The S.E.F.A.C. Nearing Completion.

Towards the end of April the new French racing car, known as the S.E.F.A.C. is likely to be ready for its first tests on the road.

The chassis is already finished, and is the work of Emile Petit assisted by M. Vareille. The engine is now being assembled, and it will be remembered that the design incorporates two parallel banks of four cylinders. The special steels used in the construction have been supplied by the firm of Aubier-Duval. Hiduminium R.R., the metal used so successfully in the Schneider Trophy Rolls-Royce engines, is also used in the S.E.F.A.C. engine and was obtained from the Debard concern.

The supercharger is claimed to be of an entirely new design and construction and no details are available. It is the work of Monsieur Petit, who has been in charge of the preparation of the car.

M.G. Success in the Qualifying Race for the Bol d'or.

In order to reduce the number of starters in the Bol d'Or Race itself, the organisers decided this year to hold an eliminating race on the 9 km. 181 Montlhéry road circuit. After 8 hours the first three 1,100 c.c. cars and the first two 750 c.c. cars would then be eligible to take part in the 1934 Bol d'Or Race at St. Germain.

The race was held on March 25th, starting at 8.30 a.m. There were 21 entrants in the 1,100 c.c. class, made up



Robert Benoist, once famous as a Delage driver, is returning to racing as a member of the Bugatti team.

CONTINENTAL NOTES AND NEWS—continued.

of five Amilcars, four B.N.C., two E.H.P., two A.V., two M.G. and one each of Chevallier, Lesage, Fiat, Biolay, Salmson, and one unspecified make. Some of these cars were machines specially constructed by their entrants and drivers.

There were only five 750 c.c. cars on the programme, two Rosengarts, a Peugeot, an M.G., and an unspecified make.

For the first few hours the order was Moysan (Amilcar), Manuel (B.N.C.) and Foultier (A.V.), but Marcel Goux (Rosengart) quickly found himself alone in the 750 c.c. class when Thiel, the only other starter, withdrew. Retirements increased as the day wore on, some being due to mechanical trouble and others to skids. Poulain crashed his Amilcar in a sensational manner at the *virage des Biscomes*, but was uninjured.

At half distance Manuel had passed Moysan and was in the lead. Balester (M.G.) had also passed the one-time leader, and was lying second. Near the end Moysan retired, and Balester slipped by Manuel to take first place, a position he held until the end of the race.

Balester's M.G. was an unblown 850 c.c. model which he uses every day on the road. He drove up from Orange for the race, returning the next day. He only made one stop of 1 min. 50 secs. during the whole 8 hours.

After the race the Clerk of the Course, Monsieur E. Mauve, decided to include the fourth and fifth finishers in the list of those who qualified for the race proper.

RESULTS.

1,100 c.c.
1. Balester (M.G.), 651 km. 386. 50.89 m.p.h.
2. Avenel (A.V.), 644 km. 196.
3. Manuel (B.N.C.), 642 km. 148.
4. Foultier (A.V.), 627 km. 326.
5. Lesage (Lesage), 517 km. 558.

750 c.c.
1. Goux (Rosengart), 524 km. 781.

The First Norwegian Grand Prix.

It is not without significance that following closely on the decision of the Swedish Automobile Club not to hold their usual Winter Grand Prix, came the news that the Norwegian authorities were going to run a similar race.

This took place on February 25th, too late for inclusion in our March issue. The course was at Lillehammer, on Lake Myjoen, having a total length of 10 kilometres per lap. Two car races were held, for sports and racing machines. A tremendous crowd of 15,000 spectators trekked to the lake on the day of the race, and many took up their stand in the grandstands on the lake, which were barges anchored there before the lake froze over last autumn.

The first event on the programme was for motor cycles, and then cars lined up for the racing class. There were only 5 starters, P. W. Widengren, Eugene Bjornstadt, and Paul Pietsch on 2 seater Alfa Romeos, the latter having a 2.6 litre engine, and K. G. Sundsted and J. E. Isberg on Bugattis. A sixth car actually came to the line, but failed to get away.

On the fall of the flag P. W. Widengren took the lead, but Pietsch was delayed by mechanical trouble on the very first lap. Widengren was never seriously threatened, and finished the 150 kilometres in 1 hr. 19 mins. 39 secs., ten minutes ahead of J. E. Isberg (Bugatti), 1 hr. 29 mins. 19 secs., who was the only other finisher. Pietsch made a great effort to catch up, but he had to retire before the end.

For the sports car race which followed Paul Jacot (Vauxhall) was a favourite. Jacot will be remembered by Brooklands *habitués* where he used to race a 30/98 Vauxhall. There were two other English cars entered, a Triumph and an M.G., both of which did well considering their small engine size. The sports car class had the following result :

1. A. Johansen (Ford 4 cyl.), 1h. 41m. 49s.
2. O. Andersen (Ford V8), 1h. 43m. 48s.
3. K. Breiset (Ford V8), 2h.
4. C. R. Haseler (Triumph), 2h. 6m. 49s.
5. G. Larsen (M.G.), 2h. 10m. 32s.

The two leading cars used Englebert tyres.

The Paris-St. Raphael Rally.

There was only one English competitor in the Paris-St. Raphel Rally, an event for women drivers only, namely Miss Riddell, who drove a supercharged M.G. Magnette. With this car Miss Riddell took second place in the general classification of the Rally behind Mme. Lubuc-Tamé, on a Hotchkiss. She also won her class in the Rally ; won her class in the acceleration, braking and manœuvring test ; won the 12 h.p. sports class in the coachwork competition, and made fastest time of all the competitors in the Pougues-les-Eaux hill-climb and the 500 metres acceleration test. Altogether very satisfactory.

An M.G. Midget was driven by the Comtesse Moy, who was similarly successful in her class.

Von Stuck Takes the World's Hour Record.

It is not often that a car designed and constructed for road racing makes its first appearance as a record breaker, but such has been the case with the new Auto-Union car, " Porschewagen," or more simply "P."

After being tested at Avus, and then at Monza, the first car to be constructed was sent back to Berlin. There, on March 6th, it set up a new World's Hour Record, in the presence of the ex-Crown Prince Willie. Hans Von Stuck was the driver, and in one hour he covered a distance of 134.608 miles, as against the 133.01 miles recorded by the previous holder, G. E. T. Eyston (Panhard et Levassor).

Two other world's records fell during the course of the run, the 100 miles at 134.46 m.p.h. (previous record, Eyston 132.98 m.p.h.) and the 200 kilometres (previous record, Eyston 133.04 m.p.h.).

The Avus track is an unusual one on which to break records of this short distance, for the corners at each end demand heavy braking and a slow speed in order to round them safely. On the other hand the two 6 mile straights allow tremendously high speeds to be attained, and the Auto Union must have reached approximately 165 m.p.h. on these stretches.

A certain amount of trouble was experienced with those present while the attempt was taking place. People could not resist the temptation to step forward to get a good view of the car every time it approached, with a consequent narrowing of the available passage. They could not be convinced that a 165 m.p.h. projectile places rather a severe strain on human reactions when it comes to getting out of its way.

It is certain that this performance of the Auto Union before its first race has given other Grand Prix entrants a good deal to think about. In speed, braking and acceleration it seems to leave nothing to be desired. There remains only road holding, a quality in which it has been suggested the car would not compare well with its orthodox rivals. The low centre of gravity, however, and more even weight distribution are more likely to give an improvement in this respect than otherwise.

Only time and a Grand Prix race will tell, but if the Auto Union handles well, then it is tempting to prophecy sweeping victories for it throughout the season.

Now for the Mille Miglia.

The 8th Coppa Mille Miglia, or Italian Thousand Miles Race, will take place on April 8th, starting from Brescia.

Sports cars only are eligible, and there will be classes for cars of 1,100 c.c., 1,500 c.c., 2,000 c.c., 3,000 c.c. and unlimited capacity. The coachwork must have at least two seats, and two drivers per car are essential.

The prize money is liberal, 150,000 lira in all, and there is a splendid team prize in the form of a bronze statue.

There is no limit to the distance one driver may be in charge of the car, but drivers may not be replaced en route. Photographs of the named drivers have to be carried on the car.

The M.G. team of Magnettes will be out to repeat their success of last year in the 1,100 c.c. class, and they have every chance of doing so. They will have stern opposition, however, in the form of 1,100 c.c. Maseratis, one of which will be entered officially by the factory.

Of the bigger cars there will be as usual a preponderance of Alfa Romeos. The Scuderia Ferrari will enter six, and, as I have already indicated, Nuvolari and Siena will form a team from the Siena stable which will be difficult to beat.

116 m.p.h. with a Diesel.

When George Eyston set up a new " record " for Diesel-engined cars last October, at 103.5 m.p.h., it was obvious that the car could exceed this speed by a good margin, given fine weather conditions.

Last month the A.E.C. Fuel Oil Safety Special was taken over to Montlhéry, and in the presence of a large number of interested spectators, representing military and civil departments of France, Germany and Switzerland, covered a flying kilometre at a speed of approximately 116 m.p.h., a mile at the same speed, while for 5 miles and 5 kilometres the car was only a little slower.

Castrol fuel and lubricating oil played their essential part in this remarkable performance, and it is interesting to note that the consumption of fuel which costs less than one-third the price of high grade petrol, worked out at the rate of 30 miles per gallon.

CONTINENTAL NOTES AND NEWS—continued.

The Race Round Italy.

Preparations are being steadily completed to ensure the greatest possible success for the first Race Round Italy, or Coppa d'oro del Duce.

The Italian Club are doing everything in their power for the comfort of British competitors. A hotel in Rome is being specially reserved for their use, and an English speaking staff will be in attendance to provide English creature comforts such as whisky, or ham and eggs. Close to the hotel in question is the starting and finishing point of the race, the Littorio Autodrome. Free garage accommodation will be provided for British competitors, together with facilities for carrying out last minute work on their cars.

Rooms will be reserved by the R.A.C. of Italy for all competitors at the end of the first two stages of the three-day race, namely Reggio, Calabria and Milan. Drivers and crew will be driven to the hotels after their cars have been placed in the military-guarded parks.

Here are some figures and details about the race. The first stage measures 1,843 kilometres, the second 2,184 kilometres and the third 2,013 kilometres, making a total of 6,040 kilometres, or about 3,775 miles. At the end cars will cover two complete laps of the Littorio Speedway. Only unsupercharged cars are allowed to enter, and over 100 specimens of the model entered must have been sold by April 15th, 1934. The following parts and dimensions must be absolutely standard: Cylinder block, number of cylinders, bore and stroke, valves, materials and weight of pistons, connecting rods and crankshaft, shape of cylinder head and compression ratio, number and type of carburetters, exhaust manifold, fuel feed, lubrication, ignition, cooling, suspension, clutch, gearbox, brakes, and total weight of car.

Only the lighting system and tank capacity may be altered. Engines must be started by means of the self-starter after every control, under penalty of a five minute handicap on each stage. Classes will be held for cars of 1,100 c.c., 1,500 c.c., 2,000 c.c., 3,000 c.c. and unlimited engine capacity. Second drivers can be replaced at the end of controls, but ballast has to be taken on board directly the departing driver leaves the car. The total prize money amounts to 500,000 liras.

The new 2.3 litre Alfa Romeo "Six" will be making its first competitive appearance in the race. Lancia has already entered two cars, and Bianchi three 1,500 c.c. models. There will be a large entry from Germany, including Mercédès-Benz and Auto Union, and several English manufacturers are thinking of entering.

Eyston-Denly-Hotchkiss.

Some useful records in Class E were put up last year by Eyston, Denly and Vasselle, driving a 4 cylinder 2 litre Hotchkiss at Montlhéry. On that occasion their speed for 500 miles, 1,000 kilometres and 6 hours was just over 101 m.p.h.

Last month it was decided to go for longer records, among them the World's 48 Hours Record, held by Chinetti, Pesato and Zehender with a 1,750 c.c. 6 cyl. Alfa Romeo at 94.40 m.p.h. The Hotchkiss, it may be remembered, carries a beautifully streamlined body with enclosed cockpit. The front of the car is completely enclosed, and the headlights are set in an aperture at the foot of the cooling louvres which supply the radiator with a stream of air.

Weather conditions could not have been better when the car set off at 9.50 a.m. in the morning of March 7th. The sun shone, there was little wind, and the concrete was dry. Eyston and Denly took it in turns to drive, while Eldridge and Marchand supervised the pit arrangements both as to time schedule and replenishments.

It was not until the car had been running for 10 hours that the first record fell. This was the 1,000 miles, at 99.07 m.p.h. And so through a perfect starlit but very cold night the Hotchkiss continued its run, records falling at intervals. The next day the weather was still fine, followed by an intensely cold night, but at about 6 a.m. the next morning rain began to fall, and continued until the end of the record run, early in the afternoon.

Congratulations are due to Eyston and Denly on a very fine feat, for three drivers are more usual on an attack of this length. The Hotchkiss ran like clockwork at a steady 4,000 r.p.m. Not a single adjustment nor replacement was made throughout, beyond the usual refilling.

The full list of records is as follows:

World's Records.

4,000 miles, 95.76 m.p.h. (Alfa Romeo, 93.97).
5,000 miles, 94.73 m.p.h. (Voisin, 91.17).
2 days, 95.36 m.p.h. (Alfa Romeo, 94.40).

International Class E. Records.

2,000 kilos, 98.33 m.p.h. (Alfa Romeo, 94.98).
3,000 kilos, 97.76 m.p.h. (Alfa Romeo, 95.89).
4,000 kilos, 96.88 m.p.h. (Alfa Romeo, 93.75).
5,000 kilos, 96.67 m.p.h. (Alfa Romeo, 93.84).
1,000 miles, 99.07 m.p.h. (Hotchkiss, 97.40).
2,000 miles, 97.75 m.p.h. (Alfa Romeo, 96.04).
3,000 milds, 96.69 m.p.h. (Alfa Romeo, 93.34).
4,000 miles, 95.76 m.p.h. (Alfa Romeo, 93.97).
5,000 miles, 94.73 m.p.h. (A.C., 78.13).
12 hours, 98.29 m.p.h. (Alfa Romeo, 96.96).
24 hours, 97.70 m.p.h. (Alfa Romeo, 95.88).
2 days, 95.36 m.p.h. (Alfa Romeo, 94.40).

Castrol oil, Dunlop tyres, and Ferodo brake linings were used on the Hotchkiss.

A Jersey Hill-climb.

IT is not generally known in England that motor sport is very popular in Jersey, C.I. The leading club is the Jersey M.C. and L.C.C., and on March 8th they held a hill climb which attracted most of the sports cars in the island.

The hill was a very sporting one, including five very sharp hairpin bends, and having a steep average gradient. Electrical timing was used, and flag marshals ensured a clear course for each competitor. In the class for 1,100 c.c. cars fastest time was made by R. Sangan on a Vale Special, the full results being as follow:

1,100 c.c.

1. R. Sangan (Vale Special), 1m. 13.8s.
2. F. N. Foster (M.G. Midget), 1m. 16.8s.
3. G. Devitt (Singer Nine), 1m. 17.6s.
4. E. Pead (Morris Minor), 1m. 20.4s.

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NEAR STEAMER AND RAILWAY STATION

NEWS FROM THE U.S.A.

By

Our American Correspondent

T. MERIWETHER-SMITH

Stubblefield Wins Gilmore Gold Cup Road Race.

ROAD racing in California, absent for over 17 years, returned to Los Angeles on February 18th and was accorded an enthusiastic welcome by an attendance estimated at above 80,000 at the first annual Gilmore Gold Cup Classic.

This race was run over a 250-mile distance, 131 laps of an intricate, winding, exceedingly rough course. The circuit measures slightly less than 2 miles, and is of hard packed dirt surface. Entries were limited to stock cars of less than 300 cubic inches.

There were thirty-five machines entered in the race, with such famous veteran drivers as Louis Meyer, Tony Gulotta, Jules Ellingboe, Cliff Bergere, Lou Moore, Peter De Paolo, Fred Frame, Ralph Hepburn, Ray Lampkin, and Babe Stapp named to pilot the stock cars. Ford, Plymouth, Rockne, Chevrolet, Studebaker, Chrysler, De Soto, and Terraplane machines were included in the entry lists.

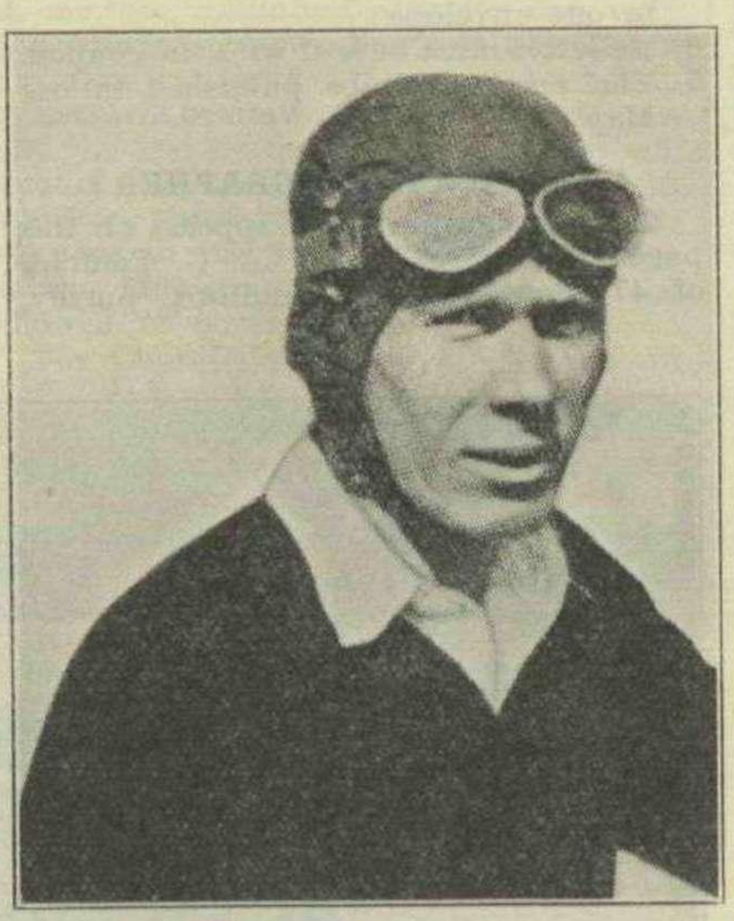
Hartwell "Stubby" Stubblefield, Los Angeles youthful veteran, was the winner of the spectacular race, driving a Ford V-8, but only after a terrific struggle with Al Gordon, Riverside Hebrew crack, and 1933 Pacific Southwest Champion. Stubblefield averaged 63 m.p.h. over the rough, rutted course, featured by many dangerous curves.

Young Rex Mays, in a Ford V-8, showed the fastest time in the qualifying trials, and was awarded the pole position for the start, with Al Gordon, Sam Palmer and Fred Frame next in line. Mays got away in the lead, and continued to set a fast pace, driving at a terrific speed, but very carefully. On the 17th lap Mays was forced to the pits with a punctured tyre, and Gordon shot his Ford V-8 into the lead.

Al Reinke, a youngster in a Ford, took the lead on the 33rd circuit as Gordon went to the pits for petrol. Reinke was forced in for the same purpose three laps later, and Gordon returned to the front position, with Stubblefield only a half-lap behind. From this point until the finish of the gruelling race, Gordon and Stubblefield waged one of the most spectacular battles for victory in the history of American racing. Only a half lap or less apart they drove with bitter determination, and consummate skill, taking no foolish chances, but getting every ounce of speed from their mounts on the short straights. Stubblefield won the race only because his pit crew was able to save seconds in petrol refilling, and because he showed a bit more skill in negotiating the hair-pin bends.

Gordon was flagged the winner, but a re-check of the tape proved Stubblefield had not been credited with a lap, and so the handsome Los Angeles driver was awarded the gold cup and the cash award. Peter De Paolo, 1925 Indianapolis winner, and champion American driver in 1925 and 1927, returned to racing after an absence of six years, and carried off third position in a brilliant bit of driving.

There were two accidents during the race, neither of which involved a fatality. Chet Gardner, in a Ford, turned a somersault when his right front wheel collapsed while travelling at nearly 85 m.p.h. Bob Hahn lost control of his Rockne and crashed off the course into the ploughed ground circling one of the bends, where his machine flipped over. Neither driver was badly hurt, though Gardner's mechanic suffered a broken pelvis.



The late Ernie Triplett.

Louis Meyer, Indianapolis winner in 1928 and 1933, was fourth, coming from far back in the field, and at one time looked like a possible winner. Among the non-starters was Jules Ellingboe, nationally famous driver ten and twelve years ago, Tony Gulotta, famous captain of the Studebaker works team, and "Sprouts" Elder, internationally known motorcycle crack. "Babe" Stapp, entered in the race, was ruled out by physicians because he had not sufficiently recovered from injuries sustained last year.

Summary: 1st, H. W. Stubblefield (Ford V-8); 2nd, Al Gordon (Ford V-8); 3rd, Peter De Paolo (Ford V-8); 4th, Louie Meyer (Ford V-8); 5th, Rex Mays (Ford V-8); 6th, Ted Horn (Ford V-8); 7th, "Frenchy" La Horgue (Ford V-8); 8th, George Connor (Ford V-8); 9th, Al Reinke (Ford V-8); 10th, "Swede" Smith (Ford V-8). Forced out of race or not in money position: Ernie Triplett (Ford V-8); Sam Palmer (Ford V-8); Herb Balmer (Chevrolet); Mel Kenealy (Ford V-8); Ralph Hepburn (Chrysler); Kelly Petillo (Ford V-8); Louie Tomei (Ford V-8); Chet Gardner (Ford V-8); Cliff Bergere (Ford V-8); Lou Moore (Ford V-8); William Cantlon (Ford V-8); Fred Frame (Ford V-8); Eddie Meyer (Ford V-8); Wilbur Shaw (Ford V-8); Chet Gardner (Ford V-8); E. C. Woodford (Plymouth); Bob Hahn (Rockne); Winner's average, 62.367 m.p.h.

Ernie Triplett Killed.

Ernie Triplett, 27 year old Belvedere, California driver, one of the most popular race drivers in the nation, was almost instantly killed early in March at El Centro, California, in a pile-up of four racing cars. Triplett was the hero of many a speedway crash, and winner of scores of major races in this country.

A stalled car, driven by an inexperienced driver was responsible for the accident. "Swede" Smith, roaring into the home straight of the dirt track lost control of his car after doging the stalled car and turned over against the outside railings. His mechanic ran across the course to aid in dragging Smith from beneath the overturned car. Flashing into the straight in a hard fight for the lead, Triplett and Al Gordon, almost abreast, were unable to see the mechanic until nearly upon him. Triplett whipped his machine to the right, hit the mechanic, skidded, and locked wheels with Gordon's speedster. Triplett's car broke loose, and turned end over end, throwing the ill-fated driver high into the air at the edge of the course. Gordon also overturned, but was able to walk away from the course. Triplett died in a hospital soon after the wreck, as did Smith. Gordon was awarded the race, which was declared ended at the time of the wreck.

Around the States.

The Studebaker Sales Corporation, of South Bend, Indiana, has announced that racing engines for use in the Indianapolis race and other Championship events are obtainable at their factory at $750 each. This motor is almost exactly the same as the power-plant that carried five Studebakers to sensational placings in the 1933 Indianapolis race. The engine is the Studebaker "President," 8-cylinder in line type, with 4 downdraft Stromberg carburetters. A magneto to eliminate the battery is installed, and a new water pump. A higher compression ratio is obtained with a new high compression head. The motors are of 250-cubic inch displacement, and develop around 150 horsepower, non-supercharged. One of the streamlined models used in the 1933 race was said to have attained 145 miles per hour on the straights. They are known to have a top speed of better than 150 miles per hour.

* * *

Al Gordon, according to press reports, will soon retire from Pacific Coast competition, to go on a tour in the interests of the Ford V-8 machine.

* * *

Bill Cummings, sensational Indianapolis crack, is not driving in early season races, but will be at the wheel in the 500 mile race, it is understood.

What Do You Know About Cars?

REPORT ON PROBLEM No. 9.

THE picture which formed the subject of this competition last month gave more difficulty to competitors than we expected. Either it is that Brooklands spectators of a decade ago no longer take an interest in motor racing, or else they have short memories, for the car in the photograph was a regular competitor at Weybridge ten years ago.

The Wolseley Viper (for such is the answer) was raced by Kaye Don and Capt. A. G. Miller, and it was shown in the Paddock at Brooklands. It was when driving this car at over 100 m.p.h. up the Finishing Straight, that Kaye Don found that his brakes had failed. He slowed up, however, by grazing the sandy cliff at the foot of the Members' Hill.

The first correct solution opened on the morning of March 15th was that submitted by:

Mr. David Rice,
41, Sherbourne Road,
Blackpool, Lancs.

to whom we have sent a cheque for one guinea.

Only 18% of the entries were correct. An extraordinary range of solutions were sent in, some of the competitors failing to realise the huge size of the car in the photograph. Here are the cars that were suggested, in the order of popularity: Bentley, Chitty-Chitty-Bang-Bang (I. or II.), Miller, Peugeot, Crossley, Leyland Eight, Bianchi, Duesenberg, Opel, Mors, Jowett, A.C., G.N. and Alvis.

PROBLEM No. 10.

The rules for Problem No. 10 are as follows:

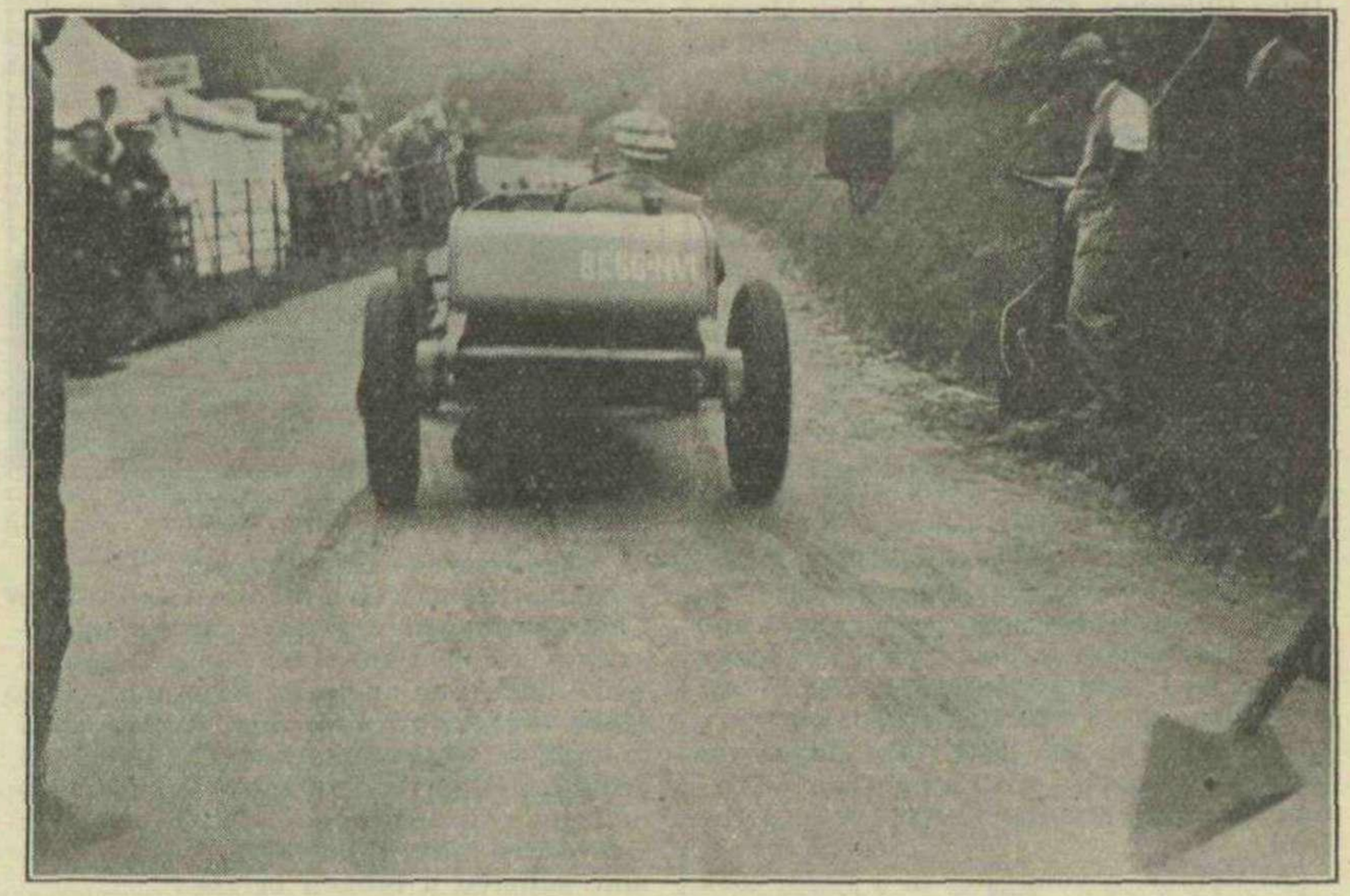
1. Cut out the coupon on the inside back cover, fill in your name and address and solution in block letters, and send it to us in a sealed envelope marked "Competition."
2. Any alterations on the coupon will automatically disqualify the entrant.
3. The Editor's decision is final.
4. Entries must reach this office, 39, Victoria Street, London, S.W.1, not later than the first post, April 15th, and a prize of one guinea will be awarded to the sender of the first correct solution opened on that day.
5. More than one coupon may be included in one envelope.
6. No letter must be sent with the coupon.
7. The results will be published in our May issue.

ARE YOU A PHOTOGRAPHER?

The photograph which appears on this page was sent in by Mr. A. G. Penfold, of 47, South Road, Guildford, Surrey, to whom we have sent a cheque for half a guinea.

Most followers of motor-racing are keen photographers, and have a collection of photographs they have taken at various events, or of sports and racing cars which are seldom seen. Look through your collection, and if you think you have any pictures that would puzzle other readers, send them along. The only condition is that the photograph must be the handwork of the sender. All those not used will be returned if a stamped addressed envelope is included.

Get that album out now, and send your photographs to The Editor, MOTOR SPORT, 39, Victoria Street, London, S.W.1.



Problem No. 10. What is the name of this racing car?

WONDERFUL FIELD FOR THE INTERNATIONAL TROPHY.

ALTHOUGH the entry list at single fees does not close until the 31st of this month, and at double fees on April 12th, a very imposing list of cars has been entered for the J.C.C. International Trophy race on April 28th. No official list is yet available but the following drivers have already filed their entry forms: Group I, Sir M. Campbell (Sunbeam), Whitney Straight (3 litre *monoposto* Maserati), the Hon. Brian Lewis (3 litre Maserati), Kaye Don (2.3 litre Alfa Romeo), Abecassis (Alfa Romeo), J. R. Cobb (2.3 litre Alfa Romeo), T. A. S. O. Mathieson (2.3 litre Bugatti), and T. E. Rose-Richards (2.3 litre Bugatti). There are also rumours of another *monoposto* Maserati, while Earl Howe will drive his 2.3 litre Bugatti if he is unable to bring back his M.G. Magnette in time from Italy.

In Group 2 the entry list is composed exclusively of M.G. Magnettes, entered by G. E. T. Eyston (3 cars, one of them the single seater), E. R. Hall, Earl Howe, Kaye Don (team of three), G. F. Manby-Colegrave, C. Penn Hughes, Roy Eccles (two cars), H. C. Hamilton and R. T. Horton. This class should provide internecine strife of the most fierce character, and will be worth going to Brooklands to see, apart from the rest of the race.

Group 3 provides some curious contrasts and demonstrates the amazing increase in speed obtained from small cars in recent years. Here is the list so far: F. W. Dixon (two Rileys), R. T. Horton (single seater M.G. Midget), T. V. G. Selby (2 litre Bugatti), R. O. Shuttleworth (2 litre Bugatti), A. H. L. Eccles (2 litre Bugatti), T. A. S. O. Mathieson (2 litre Bugatti), R. J. W. Appleton (Appleton Special).

Owners of 2 litre Bugattis have decided that they stand a good chance of success in the race, and much frenzied work is now in progress. Most of the old 2 litre G.P. Bugattis were unblown, but those fitted with this component are now being rapidly deprived of it.

A. N. Spottiswode may enter the car of this type he raced several years ago.

The Appleton Special consists broadly speaking of a Riley Nine engine in a Maserati chassis, 1,100 c.c. type.

One of the best fields ever assembled for a big Brooklands race, and as the price of admission will only be 3s. 6d., a good crowd should turn up. They will miss a fine spectacle if they do not, especially as there will be a magnificent massed start.

New Bentley Director.

WE are informed by Messrs. Bentley Motors (1931) Ltd., that Capt. Woolf Barnato has been elected a Director. Capt. Barnato was, of course, Chairman of the old Bentley Company, and has had a distinguished motor racing career at Le Mans, Brooklands and elsewhere.

Messrs. Bentley Motors are desirous of emphasising that this appointment does not indicate any change in the policy of the Company not to engage in motor-racing.

HERE AND THERE

The Southport Season Opens.

DISAPPOINTMENT seemed to be the keynote of the first race-meeting on Southport sands, held on March 10th. To begin with Jack Field was down on the programme to give a demonstration run on the "Silver Bullet," but the bad conditions ruled this out and what spectators there were did not even have a glimpse of the car. Then the rain kept the usual crowd away, and finally the entry was a very poor one.

As usual a very long programme of events was arranged, but owing to the paucity of competitors, the afternoon consisted of a series of races of varying lengths generally fought out by the same cars. M.G., Austin, Bugatti and Bentley victories were recorded in the Straight Mile races, and a five-mile race resulted in a win for Field's single seater Bugatti, with T. Simister (M.G. Midget) some way behind.

A David and Goliath touch was given to the Nine Mile sports car race, the two starters being T. M. Tomlinson (M.G. Midget) and W. Esplen (4½ litre Bentley). The larger car naturally won, but the runner-up was awarded first place in the 850 c.c. class!

The two 11 mile races were not exciting, and the hardy spectators contented themselves with the hope that the 25 mile race would be worth watching. Seven cars started, but Field's Bugatti did not last long and some of the others fell by the wayside.

Straight Mile Events.—850 c.c., C. D. Parish (Austin); 850 c.c. and 1,500 c.c. sports, J. M. Tomlinson (M.G.); 1,100 c.c. and 1,500 c.c., T. Simister (M.G.); 2,000 c.c., F. Allen (M.G.); 3,000 c.c., J. Field (Bugatti); Unlimited c.c., P. Stephenson (Austin); Unlimited c.c. sports, W. Esplen (4-litre Bentley).

Three-mile, Five-mile and 11-mile Races.—850 c.c., 1,100 c.c. and 1,500 c.c., T. Simister (M.G.); 3,000 c.c. and Unlimited c.c., J. Field (Bugatti).

Nine-mile Races.—850 c.c., J. M. Tomlinson (M.G.); Unlimited c.c., W. Esplen (Bentley).

25-mile Race.—1, P. Stephenson (Austin Seven); 2, C. D. Parish (Austin Seven); 3, T. K. Hunter (Bugatti).

The "Motor Sport" Correspondence Club.

IN the February issue of Motor Sport we published a letter from Mr. Lewis E. Miles, of 4, High Street, Fordington, Dorchester, suggesting the formation of a Motor Sport Correspondence Club.

Mr. Miles now informs us that this idea has received a widespread response from fellow enthusiasts in England, Scotland and Ireland, and new members are joining every day.

The Club has the purpose in view of giving followers of motor-racing, who are often alone in their hobby, a chance of coming in contact with others of a similar taste. Another function of the Club is to assist those who keep a personal motor racing history to fill in gaps either with information or photographs. Finally, several members have donated motor racing books for the purpose of a library, and this is now in full circulation. Overseas members will find the Club a great boon.

In order to give the Club organiser an opportunity of keeping in touch with members a regular section of our "Club News" page is being reserved specially for this purpose every month. Look out for future announcements!

The Dieppe Programme.

AS already announced in Motor Sport, the Circuit de Deippe will take a different form this year. Instead of two classes being run simultaneously in one race, unlimited capacity cars only will compete in two heats of one hour's duration each and a final of two hours.

Lots will be drawn for starting positions, and the first six finishers in each heat will qualify to take part in the final. In addition, the drivers who makes the fastest laps in the heats, whether they are in the first six finishers or not, will be allowed to enter the final.

The Circuit de Dieppe will be run on July 22nd, and the day's programme will be as follows: 9.30 a.m., First Heat for cars; 11 a.m., Second Heat for cars; 1 p.m., motor-cycle race; 3 o'clock, Final for cars. A wonderful day's sport.

For the benefit of those who have never been to the Dieppe Meeting the following particulars may be useful. A second class week end ticket from Victoria to Dieppe can be obtained for about £2 10s. By motoring to Newhaven the fare can be reduced a good deal. Accommodation is cheap and comfortable, and Dieppe is a pleasant combination of seaside resort and French country town. And there is a Casino.

The circuit is about two miles from the town, and there are plenty of buses to and from the course. A party will find a taxi cheap. The grandstands face the pits and are placed immediately after the Maison Blanche hairpin bend. Foot passengers can also reach the famous *Esses de St. Aubyn*, and the *virage du Val Gosset*, a sharp corner at the end of the 'straight leg.'

The whole trip need only occupy a normal week end, leaving Victoria at about 10 o'clock on Saturday morning and catching the midnight boat from Dieppe on Sunday night. Those unfortunates who cannot get off on Saturday morning can go over on the 10.15 boat from Newhaven, but this method, although cheaper, is rather tiring.

New Shock Absorber Control.

RESEARCH work is always being carried on at the Derby works of Rolls-Royce Ltd. with a view to perfecting the various functions of the modern car. The latest device which has reached a stage when it can be incorporated on current productions is a new controllable semi-automatic damper system to the road springs. This is now standardised on the 40/50 h.p. Phantom II. model chassis.

The new device is claimed to provide a solution to a problem which has puzzled engineers for many years, i.e., to provide a suspension system which can deal equally smoothly with fast and low speeds, and with varying loads. It comprises the usual hydraulic shock absorbers, to which has been added a patented governor system that augments the load on the damper as the speed of the car increases. In order to cope with varying loads which may be carried, a finger-operated control on the top of the steering column can increase the rate of damping throughout the complete automatic range in ten different stages.

The range of the new Rolls-Royce control is sufficient to enable the car suspension to be adapted to any road condition such as may be found either in England or on the Continent.

The Australian Grand Prix.

THE Australian 200 Miles Grand Prix was held on Phillip Island, Victoria, on March 19th, in the presence of a crowd estimated at 10,000 people.

The results was a victory on handicap for R. Lea Wright, driving a Singer Nine. Second place was taken by W. B. Thompson with his K.3 racing M.G. Magnette, at a speed of 77.8 m.p.h., the fastest in the race. Thompson also made the best lap speed at 83 m.p.h. Third came J. Clements on an M.G. Midget, with M.G.'s also occupying 4th and 6th places. All these cars used Castrol.

In another recent Australian sporting event, the Canterbury Automobile Association Big Reliability and Petrol Trial on March 3rd, sweeping successes were recorded by Singer Nines, in the face of competition from a field of 47 which included all the prominent British and American makes. In the Private Owners' class Singers were first and second; in the Ladies' Class Singers were first and third; in the Open Class they were first, second and third; and finally Singers won the Team Prize.

A Handy Map.

A USEFUL booklet has been recently produced by Messrs. Alexander Duckham & Co. Ltd., manufacturers of Adcol N.P. Oils. It contains a 20 page Bartholomew map of England, Scotland and Wales, the scale being 16 miles to an inch. For touring or long distance runs the map is ideal, for it is of a convenient size to be handled easily in an open car.

The book also contains a Guide to the most economical and efficient lubrication of the petrol engine, with particular reference to Duckham's N.P. oils.

A number of copies of this book are obtainable by Motor Sport readers, on application to the Publicity Manager, Messrs. Alexander Duckham & Co. Ltd., 16, Cannon Street, London, E.C.4.

Ruesch wins at Titisee.

The race meeting on the frozen lake Titisee, near Fribourg in the Black Forest, was a great success. A circuit of 15 kilometres was used, and fastest time was made by the young Swiss driver, Hans Ruesch, with a sports-type Alfa-Romeo. His average speed of 53 m.p.h. was better than any of the racing cars present.

Our apologies!

IT has been pointed out to us that several errors occurred in the Frazer Nash advertisement in our last month's issue, and we would like to say that these were entirely printer's errors and were not attributable to Messrs. A. F. N. Ltd. Sorry!

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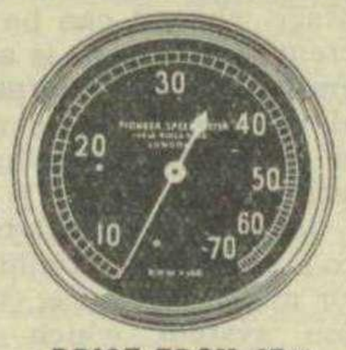
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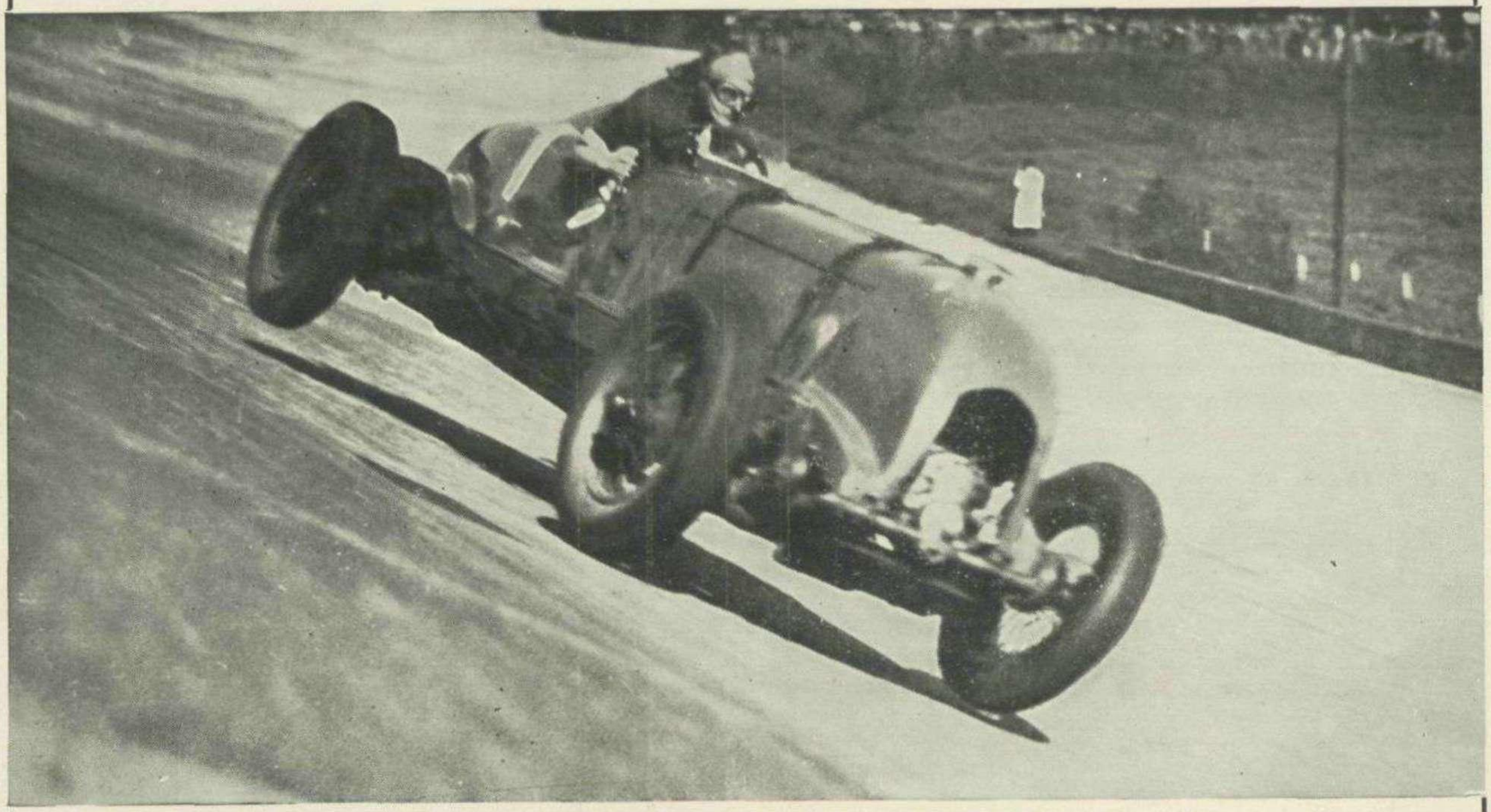
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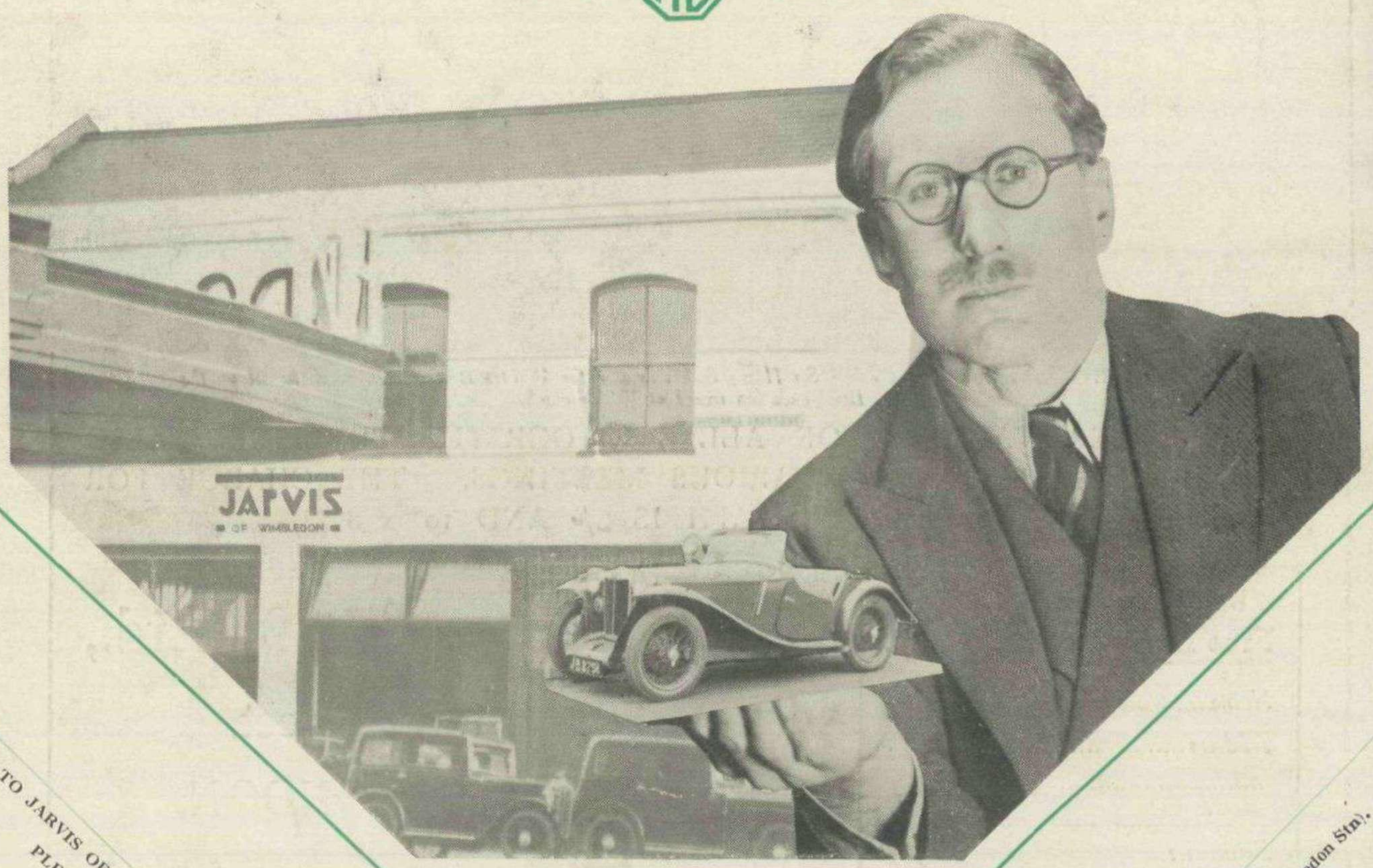
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