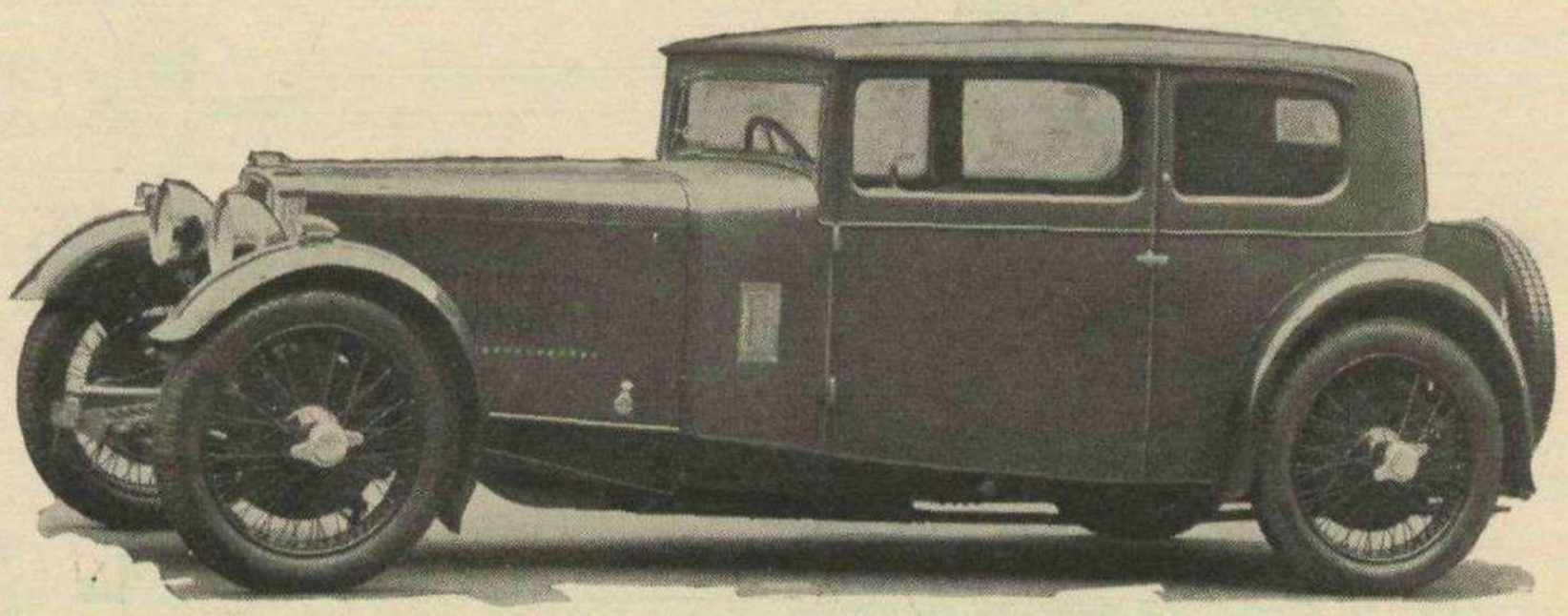
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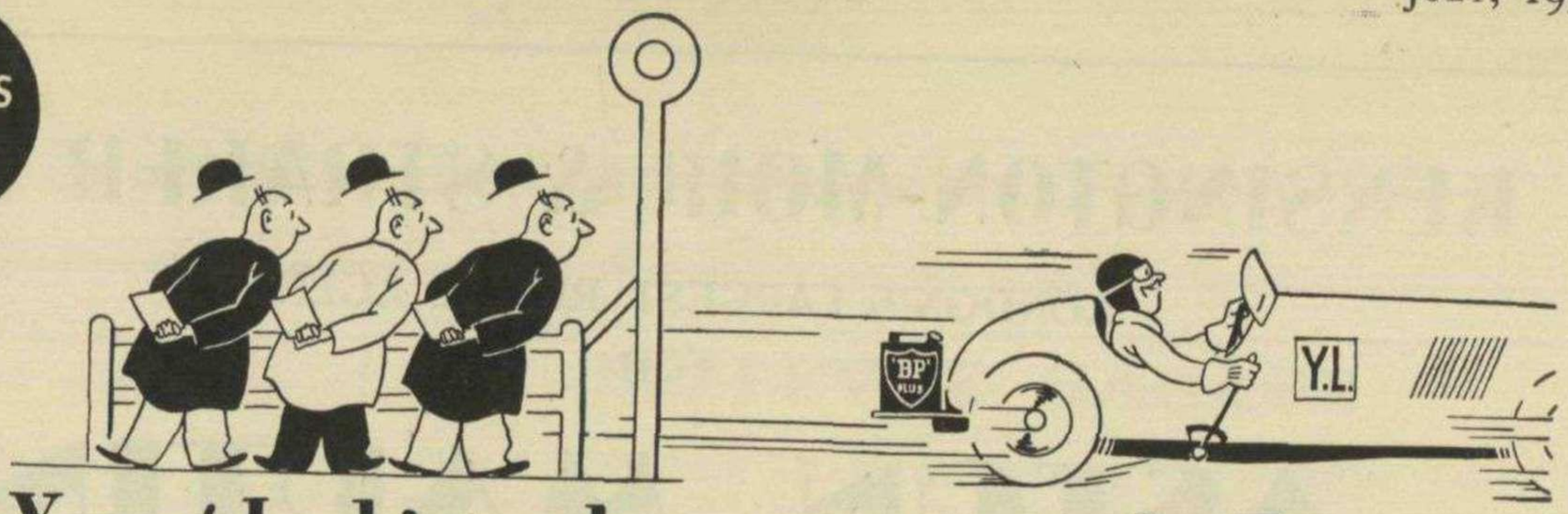
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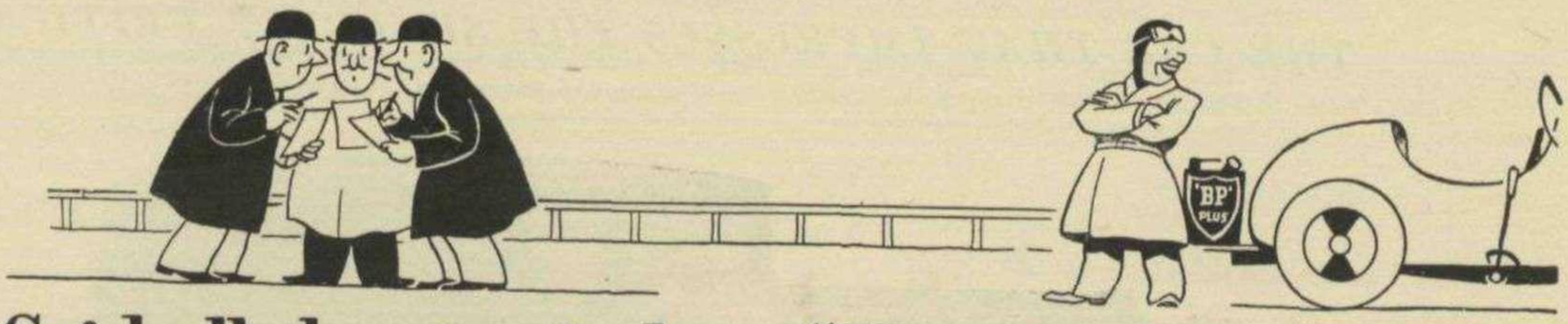
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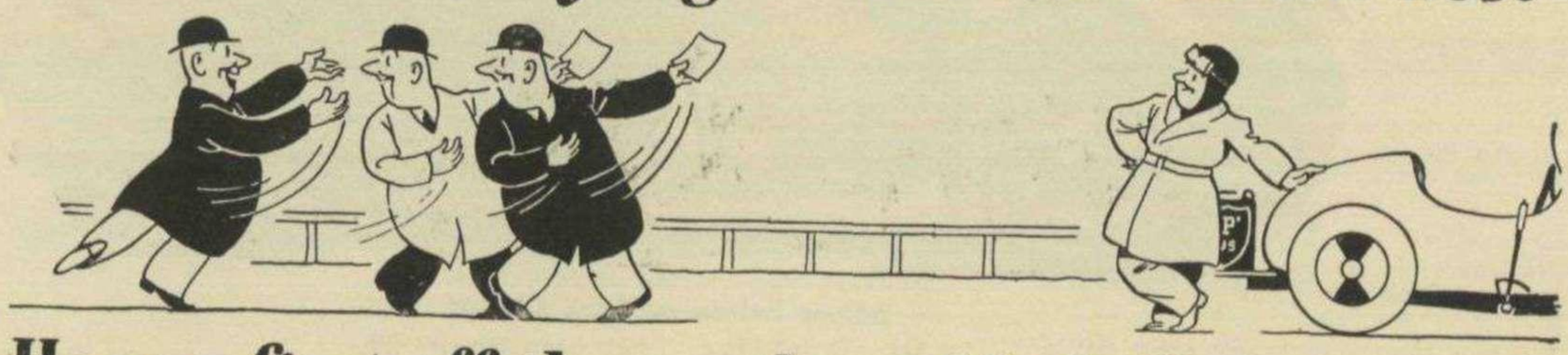
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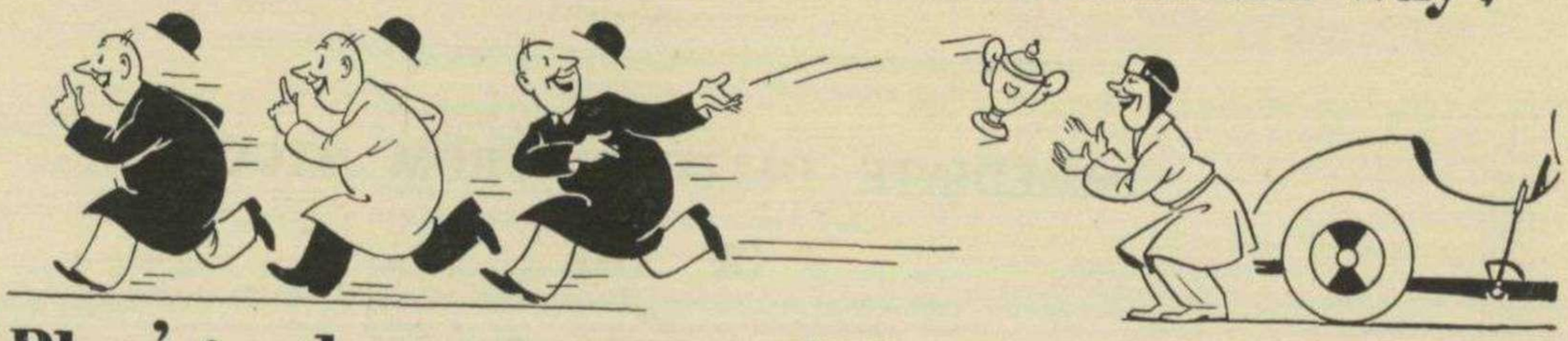
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SUBSCRIPTION RATE 8/- PER ANN. POST PAID
Published 1st Month

MOTOR SPORT

INCORPORATING THE BROOKLANDS GAZETTE

JOINT EDITORS { *GRENVILLE G. O. MANTON.* / *W. S. BRAIDWOOD, B.A. (Mech. Sc.) Cantab.*

Editorial, Publishing & Advertising Offices
39, VICTORIA STREET, LONDON, S.W.1
Telephone: Victoria 5218.

The Way of Things

THE A.C.U. Tourist Trophy races, run last month over the famous I.O.M. circuit, may be ranked among the finest events in the whole range of motor sport. A large number of motorists whose interest is normally confined to car events, watch the results and progress of these races with the greatest keenness.

In addition to their merits as a sporting event there are many lessons which could be learnt from them and applied to car racing in this country, but which seem to be lost sight of. The fact that the British motorcycle is supreme throughout the world is very largely the result of these races, and the fierce competition between rival makes which they inspire. Continental motorists regard them much as keen followers of the sport in this country regard the Targa Florio—that is as the supreme test of both machine and driver. This is because there is no other race of like severity or importance anywhere in Europe.

All this goes to show the vital importance in the development of a racing machine, be it car or motorcycle, of having a race over a real driver's course, where consummate skill in handling has to be backed up by a perfection of steering, braking, balance, and finally, performance, which can never be approached, or even required, in an easier, though possibly faster, type of course.

The great freedom from irksome regulations which our motorcycle designers enjoy, far from creating freak types of no use for ordinary work, has steadily made more similar the sporting machine sold to the public and its racing prototype.

The parallel state of affairs in the car world gives a like result, except that in this case we are not the country which produces the winning machines. They are produced by those countries which have races on the most difficult circuits, where driving skill is of paramount importance, and where no driver, however skilful, can hope to succeed on a car of which the control, balance, and performance, are in any way faulty.

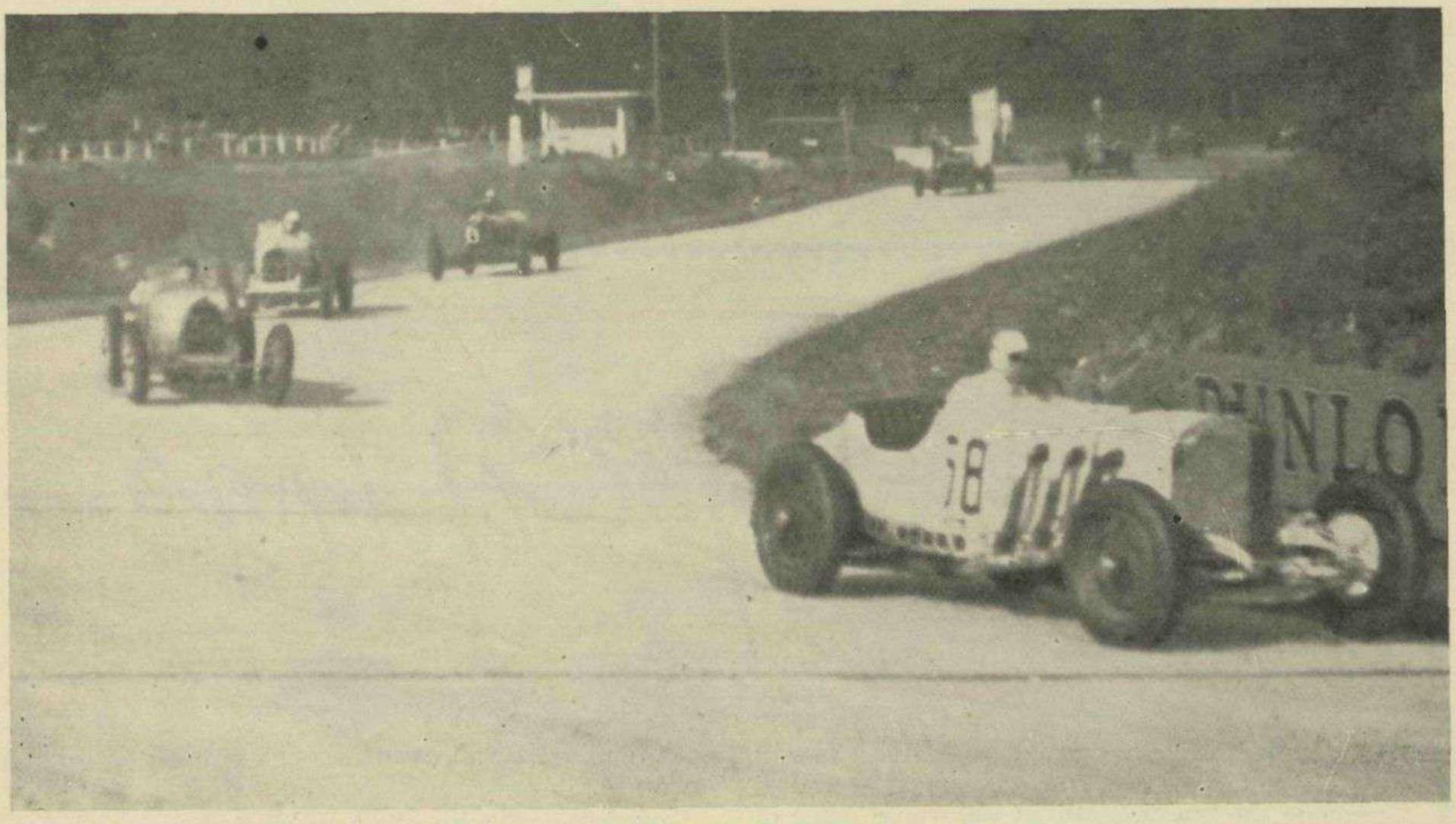
The recent successes of Earl Howe and Birkin have shown that we have good drivers, while in the recent French Grand Prix for racing cars, Brian Lewis and W. B. Scott also showed themselves equal to their continental rivals in driving prowess. Until we have in these islands more races over a *driver's circuit*, these and other British drivers are unlikely to be tempted to give up their continental mounts for those which we could, and would, develop.

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THE GRAND PRIX OF THE A.C.F.

BUGATTI FIRST—ALFA-ROMEO SECOND—MASERATIS THIRD AND FOURTH.



LOUIS CHIRON and Achille Varzi, driving together on one of the new 2,300 c.c. Bugatti racing cars, won the sixteenth Grand Prix of the Automobile Club de France, which was first held at le Mans 25 years ago. The race this year was held on the road circuit at Montlhéry, on Sunday, 21st June, and was a 10-hour event for unlimited racing cars. Guiseppe Campari and Borzacchini on a 2½-litre Alfa-Romeo were second, and Biondetti and Parenti on a Maserati third. Twelve finished out of twenty-three starters.

The original 30 entries were reduced to 23 by the absence, among others, of André Boillot, Brisson and Kaye Don. The starters consisted in the first place of the official teams, three Bugattis driven by Chiron, Varzi, Divo, Bouriat, Williams and Conelli; three Alfa-Romeos driven by Campari, Borzacchini, Minoïa, Zehender, Nuvolari and Minozzi; and three Maseratis driven by Ernesto Maserati, Fagioli, Dreyfus, Ghersi, Biondetti and Parenti; with the semi-official Mercédès driven by Caracciola and Merz. In addition, private entries included another Mercédès driven by Ivanowski and Stoffel; half a dozen more Bugattis driven by d'Arnoux and Max Fourny, Wimille and Gaupillat, Lord Howe and B. E. Lewis, Eminente and Bourlier, Grimaldi and Bourgait and Lehoux and Etancelin; another Maserati driven by H. R. S. Birkin and G. E. T. Eyston; another Alfa-Romeo of the 1,750 c.c. type driven by Pésato and Felix; three 1,500 c.c. 1927 G.P. Delages driven by Robert Sénéchal and Fiettet, Scott and Payne, and R. D. Williams and Richards; a Sunbeam of 1925 G.P. type driven by Dunfee and Appleyard; and a Peugeot driven by Ferrant and Louis Rigal.

THE GRAND PRIX OF THE A.C.F.

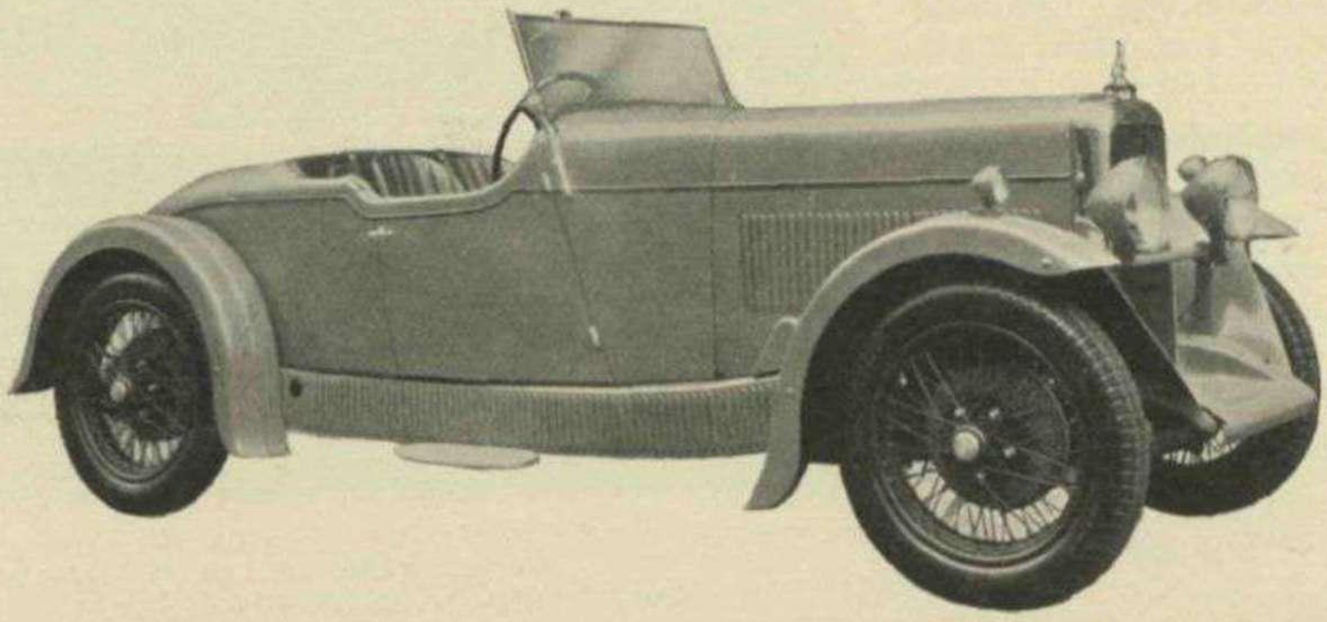
1. Chiron and Varzi (Bugatti), 1,258 km. 820. Average 75.51 m.p.h.
2. Campari and Borzacchini (Alfa-Romeo), 1,215 km. 122.
3. Biondetti and Parenti (Maserati), 1,187 km. 535.
4. Birkin and Eyston (Maserati), 1,185 km. 763.
5. Senéchal and Fiettet (Delage), 1,142 km. 558.
6. Minoïa and Zehender (Alfa-Romeo), 1,126 km. 167.
7. Divo and Bouriat (Bugatti), 1,125 km.
8. Dreyfus and Ghersi (Maserati), 1,108 km. 279.
9. Ferrant and Rigal (Peugeot), 1,070 km. 508.
10. Pesato and Felix (Alfa-Romeo), 1,056 km. 538.
11. Nuvolari and Minozzi (Alfa-Romeo), 1,050 km.
12. Howe and Lewis (Bugatti), 975 km. 938.

The start was given at 8 a.m., and we expected to see a Bugatti or an Alfa-Romeo complete the opening lap first. Instead, as a surprise the leader was Fagioli on the Maserati and the others in order were Dreyfus (Maserati), Chiron (Bugatti), Williams (Bugatti), Lehoux (Bugatti), Divo (Bugatti), Campari (Alfa-Romeo), and Caracciola (Mercédes). For three laps Fagioli led, and then on the fourth Chiron passed him and took the lead. On the seventh lap, however, Fagioli regained it, and on the twelfth proceeded to break the lap record at

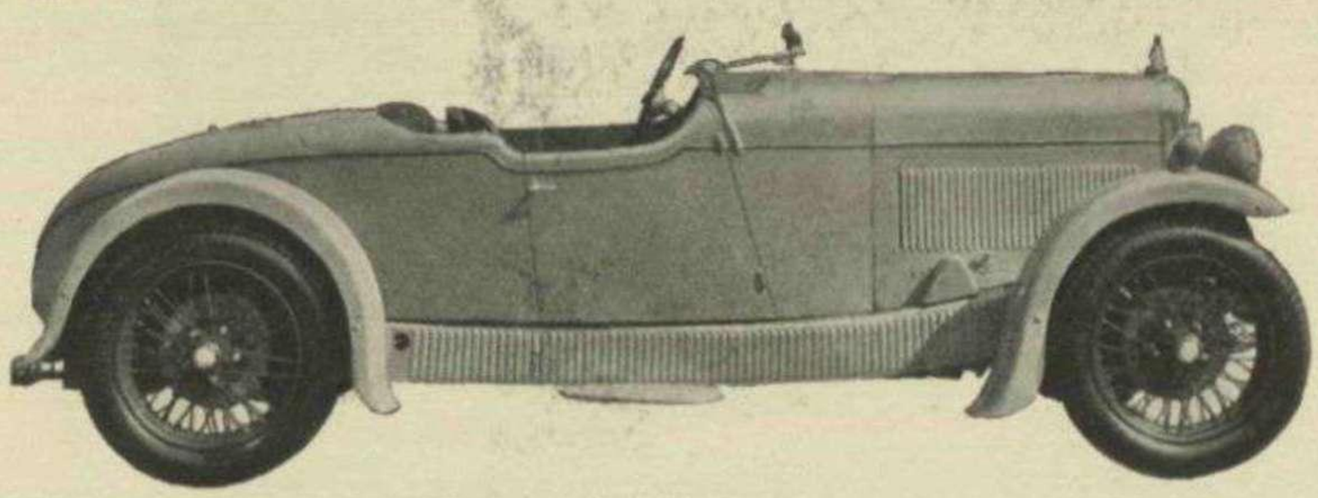
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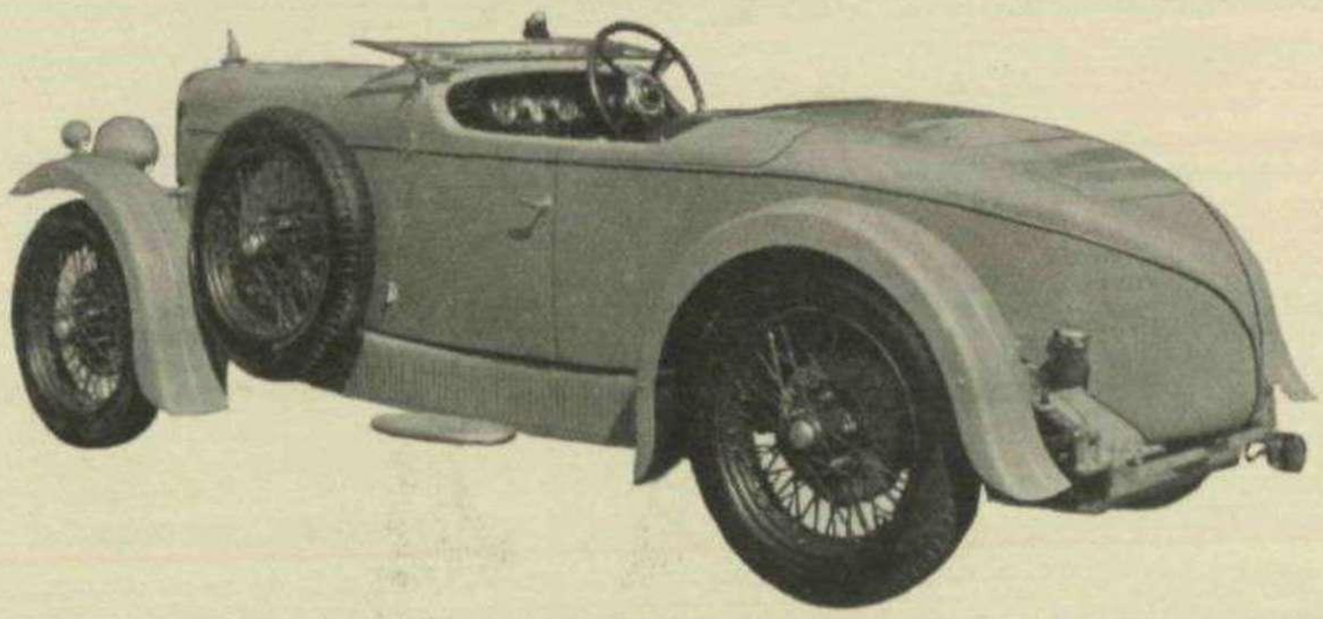
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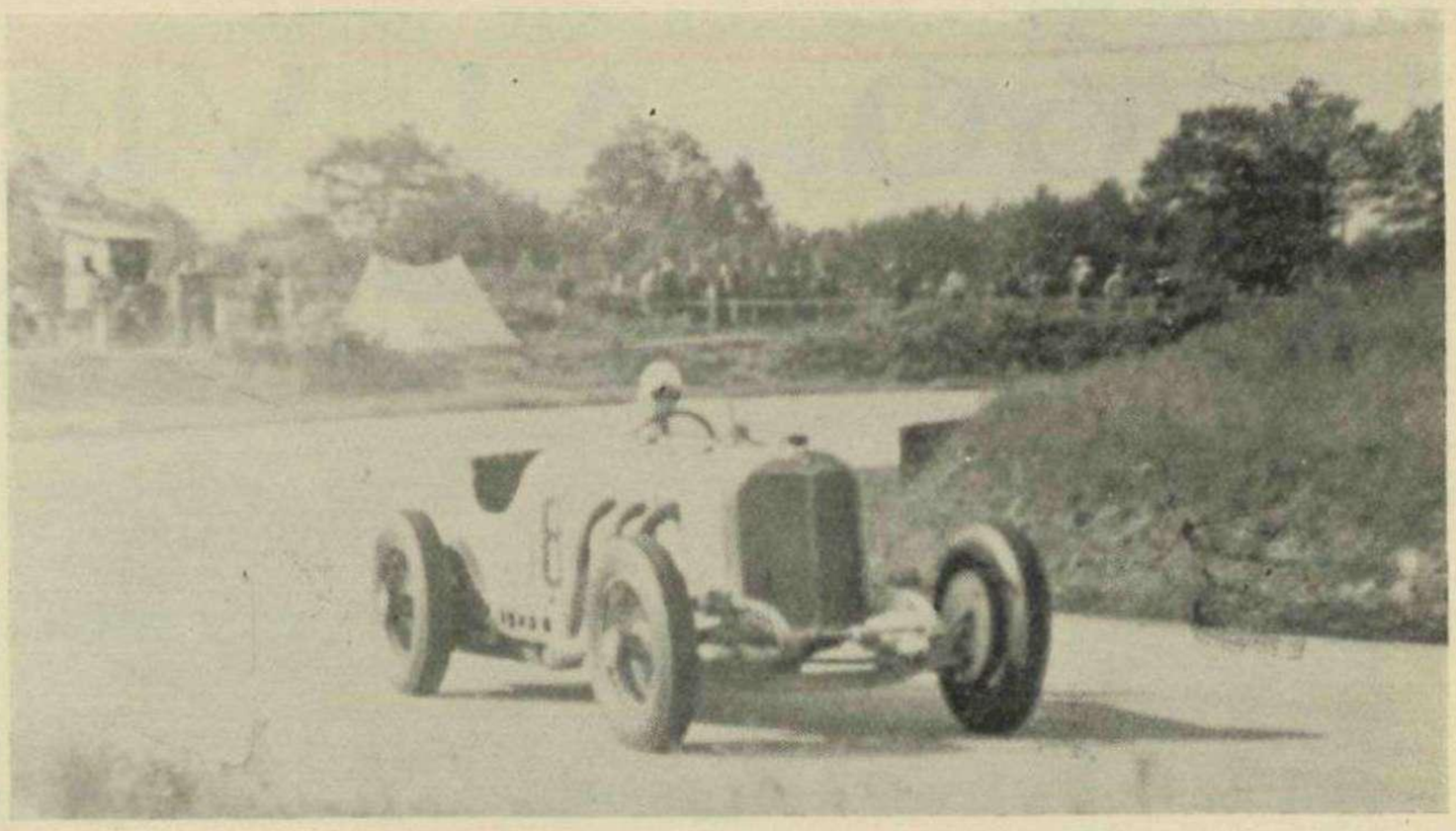
THE SPORTS CAR SPECIALISTS

THE GRAND PRIX OF THE A.C.F.—continued.

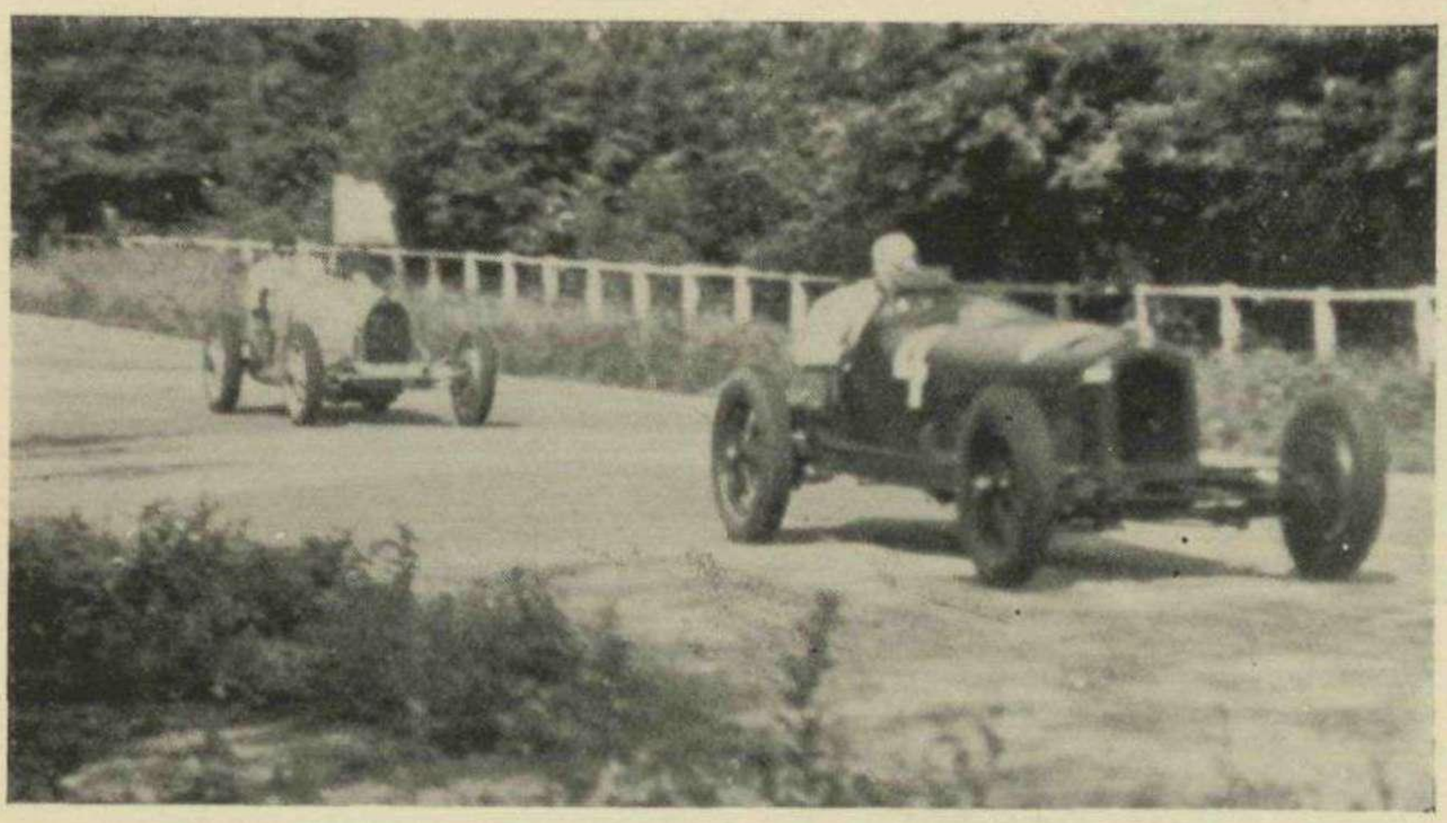
85.5 m.p.h. At the end of the first hour the order was as follows :—

1. Fagiola (Maserati), 133 km. 194.
2. Chiron (Bugatti), 132 km. 900.
3. Dreyfus (Maserati), 130 km. 882.
4. Divo (Bugatti), 130 km. 576.
5. Williams (Bugatti), 130 km. 310.
6. Lehoux (Bugatti).
7. Campari (Alfa-Romeo).

Dunfee's Sunbeam had fallen out on the first lap with a broken universal joint, and on the thirteenth lap Ivanowski's Mercédès retired near the Conard bends with supercharger trouble, and was quickly followed by Lehoux's Bugatti. This last withdrawal let Campari's Alfa-Romeo up into sixth place, and it was now closely followed by its two companions of the official team.



Caracciola (Mercedes) on the hairpin before Ferme du Faye.



Minoia's Alfa-Romeo leading a "Bug" on the straight before the track section of the course.

Soon after covering 150 kilometres, Chiron passed Fagioli and captured the lead for Bugatti, which he was never to lose again. At the end of the second hour practically all the cars came in to refuel and to change tyres, but the order of the leaders was unchanged. It was announced, however, that Scott's Delage had retired. During the fourth hour E. Maserati on Fagioli's Maserati fell steadily back, and Minozzi on the Alfa-Romeo made a great spurt. At the end of the fourth lap the order was as follows :

1. Chiron and Varzi (Bugatti), 526 km. 806.
2. Dreyfus and Ghersi (Maserati), 518 km. 386.
3. Divo and Bouriat (Bugatti), 515 km. 876.
4. Nuvolari and Minozzi (Alfa-Romeo) 515 km. 482
5. Williams and Conelli (Bugatti) 511 km. 797.
6. Campari and Borzacchini Alfa-Romeo).

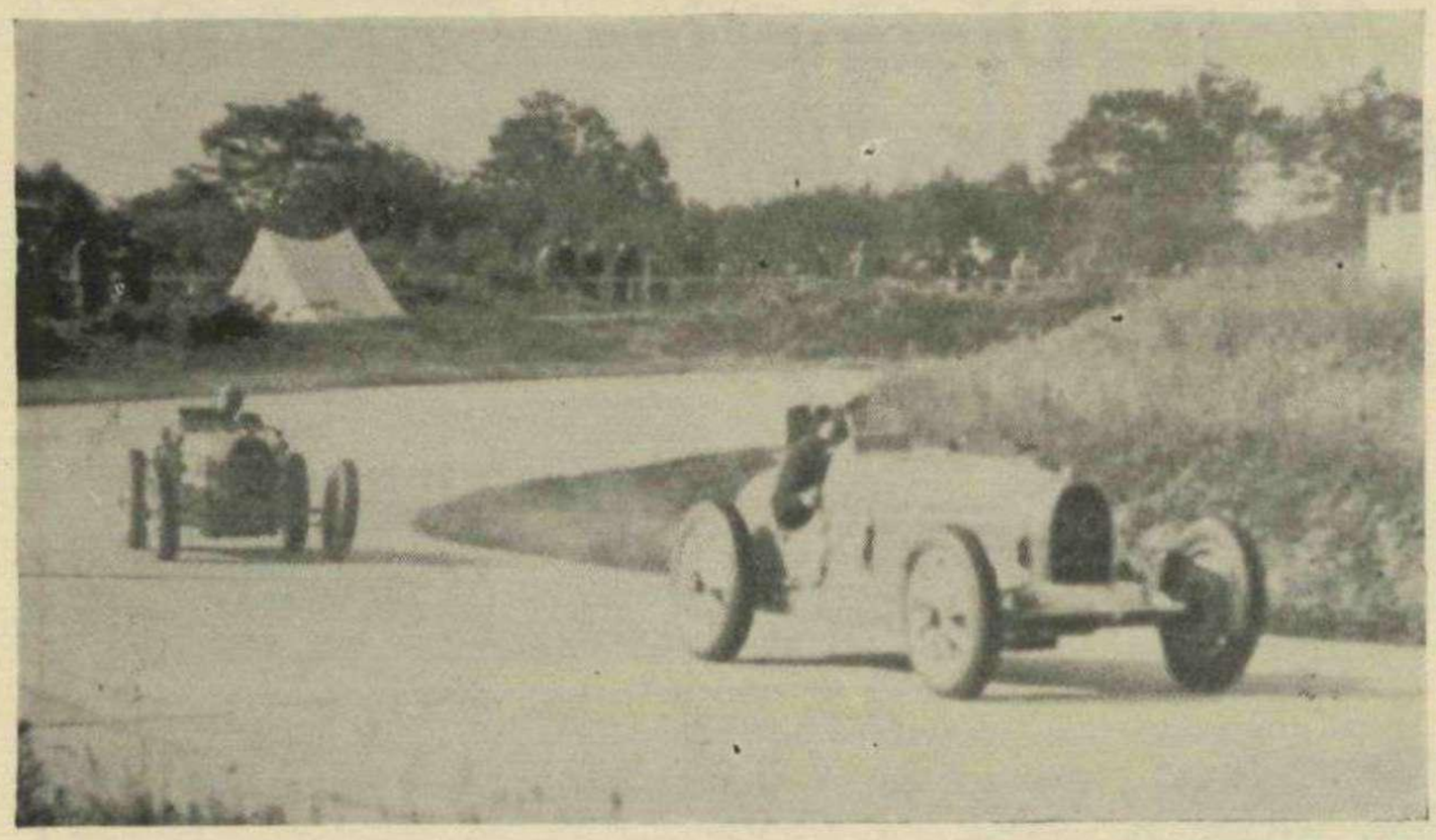
During the fifth hour Dreyfus' Maserati fell steadily back to sixth position, and Nuvolari's Alfa-Romeo passed Divo's Bugatti and became second. The issue, however, was confused by stops for replenishments, and shortly afterwards the three official Bugattis were in the first three places. At about this time Caracciola's Mercédès retired,



[*Motor Sport Photographs.*

At Lacets de Couard. Ferrant (Peugeot) followed by Chiron and his winning Bugatti.

THE GRAND PRIX OF THE A.C.F.—continued.



Above: Two Bugattis screaming round the hairpin near Ferme du Faye. Centre: The Franco-Italian victors of the race taken before the start. Are they discussing their chances?

like Ivanowski's, with supercharger trouble, and a little later Fagioli's Maserati was also withdrawn. After five hours' running, half way through the race, the order was as follows:—

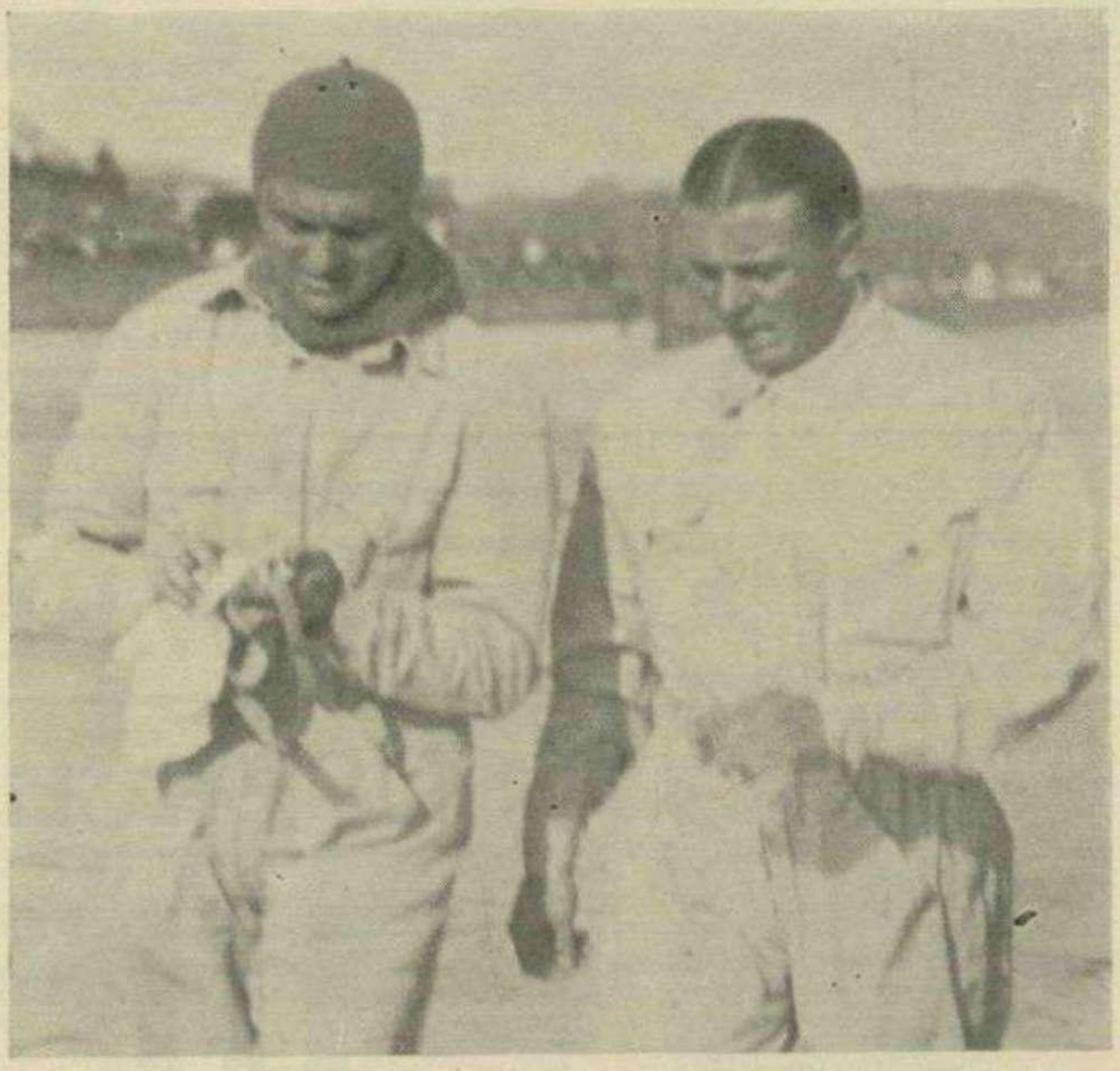
1. Chiron and Varzi (Bugatti), 651 km. 889.
2. Divo and Bouriat (Bugatti), 639 km. 660.
3. Dreyfus and Ghersi (Maserati), 635 km. 635.
4. Williams and Conelli (Bugatti) 634 km. 846.
5. Nuvolari and Minozzi (Alfa-Romeo), 612 km. 680.
6. Minoïa and Zehender (Alfa-Romeo).

During the sixth hour the Bugatti and the Alfa-Romeo both passed the Maserati, and the Bugatti team was again in the first three places. During the seventh hour, however, the Bugatti driven by Williams and Conelli fell out, and was quickly followed by the three privately owned Bugattis driven by Grimaldi and Borgait, Eminente and Bourlier, and d'Arnoux and Fourny. Nuvolari's Alfa thus became third, but shortly afterwards it made a prolonged stop at the pits and fell back a long way. As compensation, however, the Campari-Borzacchini team was creeping up, and at the end of the eighth hour the order was as follows:—

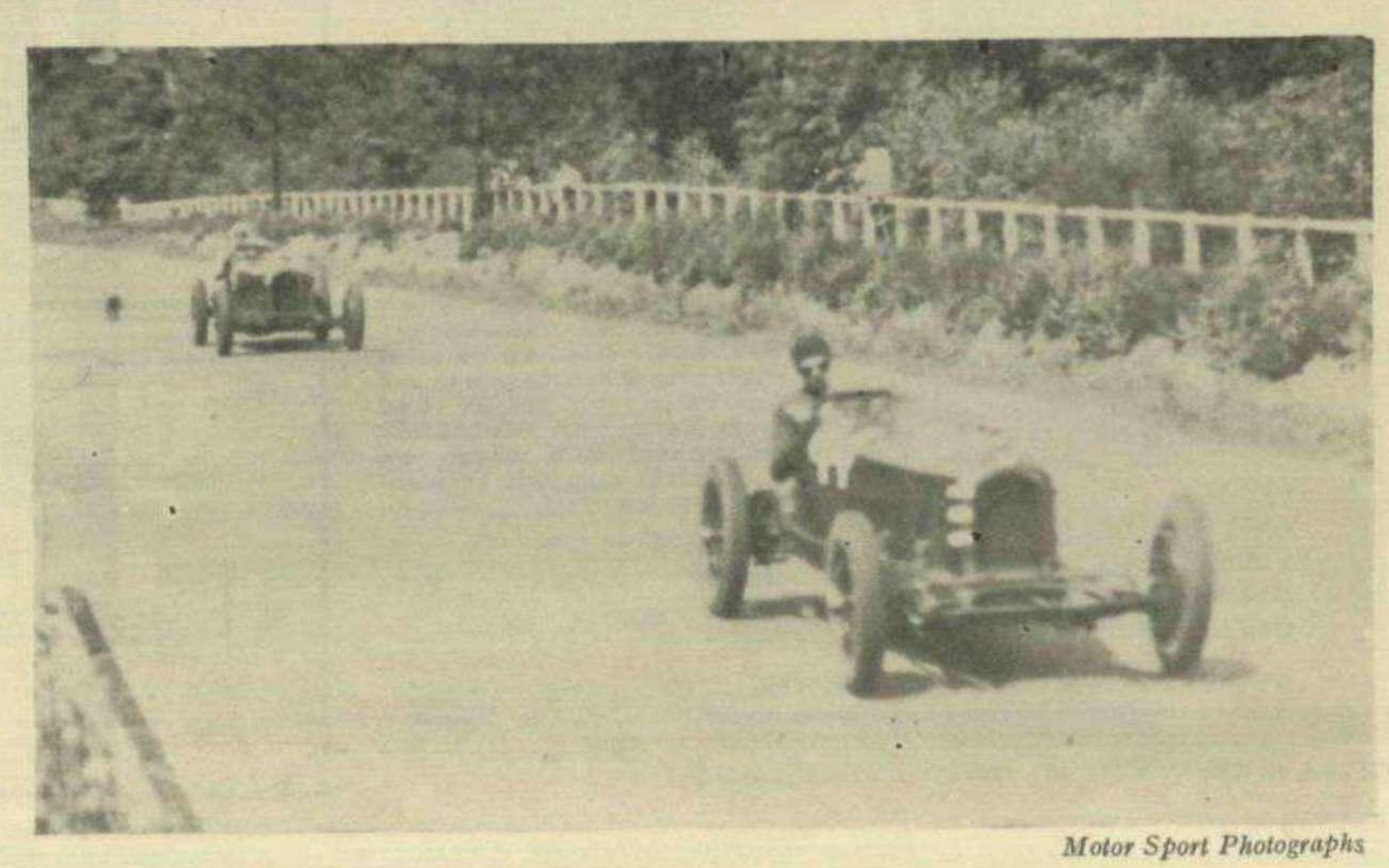
1. Chiron and Varzi (Bugatti), 1,025 km. 632.
2. Divo and Bouriat (Bugatti), 1,016 km. 474.
3. Campari and Borzacchini (Alfa-Romeo), 963 km. 204.
4. Birkin and Eyston (Maserati), 963 km. 034
5. Nuvolari and Minozzi (Alfa-Romeo), 958 km. 992.
6. Biondetti and Parenti (Maserati).

During the ninth hour there was no great change in the order, but 40 minutes from the end Divo's Bugatti failed to reappear and its withdrawal was announced. This let Campari's Alfa-Romeo up into second place, but there was no catching the Bugatti, now driven by Varzi, which finally received the yellow flag of victory amid much applause.

Public interest in the race was enormous, and, held under almost ideal weather conditions, it proved to be one of the best events so far run off this season. One very noticeable feature was the large number of visitors from other countries amongst the spectators including a large contingent from England.



Below: Nuvolari (Alfa-Romeo) leading his team-mate Minoia on the straight before the track section.



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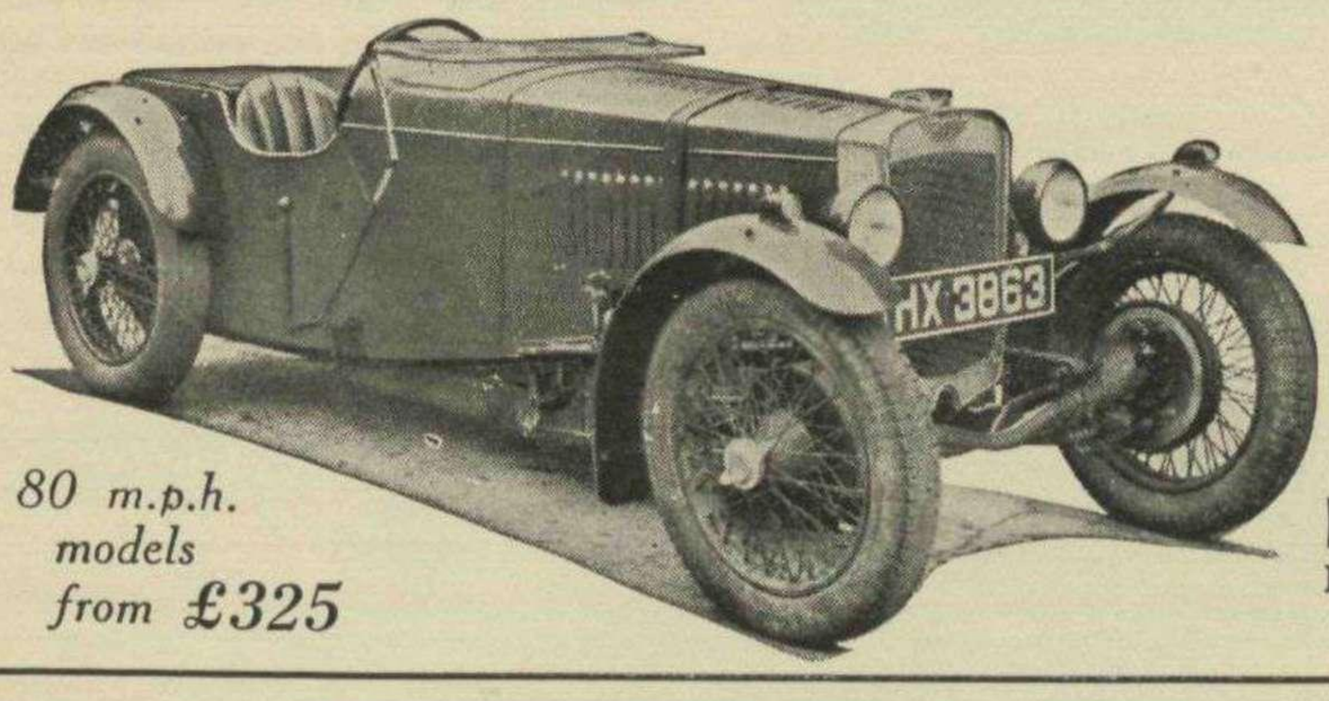
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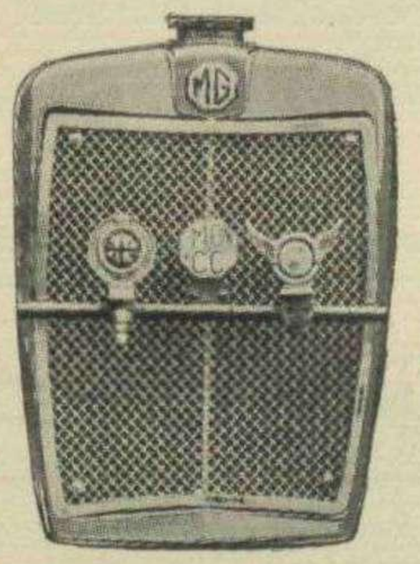
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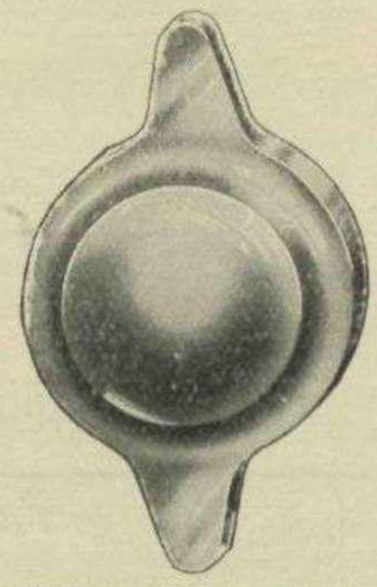
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Rumblings



I SUPPOSE that the day will come, in some distant millenium, when all the cars for a race will be ready in plenty of time, but it seems unlikely. It is certainly not current practice, and I don't suppose it ever will be, as it is not always so good when the cars are ready in time. For one thing, it gives people too long to break things, and so cause more last minute work. The Irish Grand Prix gave a few examples of frantic efforts to get things ready, the winner being one of the shining examples.

At the end of practice, Norman Black's M.G. Midget, for no apparent reason, seized up its gear-box, all the more surprising on a model which has not had any trouble before in this department, so a new box arrived by air and was fitted in time. In very good time, too, judging by his performance in the event itself.

The Maseratis had their due share of rebuilding to be got through, and unfortunately could not all be got ready in time. However, Campari and Eyston made up for it by doing their stuff in a most exhilarating manner on those that were ready. Even so, it was only Birkin's very sporting action in lending Campari some very essential bits that enabled us to see the wonderful scrap that ensued.

It was certainly a pity that some date which was freer of other events could not have been found, and so encouraged a bigger entry, but that could not be helped, and the race was generally admitted to be the best for years.

At the very jolly dinner given afterwards to the drivers and others connected with the race everyone was most emphatic that they simply *must* come back to Phœnix Park next year.

Of course, it still remains to be seen whether the organisers will see their way to running the race next year, as although everyone over there is very keen indeed that it should be run, it must be remembered that such affairs cost money, and this year's figures (marred somewhat by the weather) will have to be carefully considered first. The organisation was absolutely first-rate, and the competitors were given a great time, and made to feel that Ireland was really glad to see them.

I don't know offhand who first thought of the score board used in this race, but it is certainly the finest method of indicating the progress of a handicap race that has ever been, and someone deserves a special award for thinking of it.

Sir Henry Birkin seems to have hit on a winner now all right, and when he followed up his Irish success by cleaning up at Le Mans with Earl Howe, those who have been wondering where are the great English drivers, if any, will have had the question effectively enough answered. There are a good few more of our drivers who could keep up with the best if they were on suitable cars, but until we have more opportunity of real road racing in these islands, there is little chance of us turning out an English "Bug" or "Alfa."

British Makers and Racing.

It is not that we cannot build cars over here, but simply that manufacturers are not going to go in for building something for which there will be no demand in this country. Some of our sports cars, as opposed to racing vehicles, are as good as anything made anywhere, and the performance of cars like the Talbot at Le Mans show what can be done.

However, Talbots, Aston-Martins, and so on, are not racing cars, in the sense that the new 2,300 c.c. double overhead camshaft Bugatti is a racer, and, what is more they were never intended to be. Therefore, there is nothing to be gained by comparing one with the other, as they are different types for different purposes.

Most readers of MOTOR SPORT will have more use for the sports car than the full racer, and when they want to race on the Continent and elsewhere, then let them follow in the footsteps of Earl Howe and Sir Henry Birkin and buy a pukka racing car—and let them be even half as successful and they will be doing very well.

It was a pity that the Bugattis had to withdraw, as their speed was terrific, and they looked like keeping in front. Tyre trouble dogged them, however, and also caused Rost's unfortunate crash.

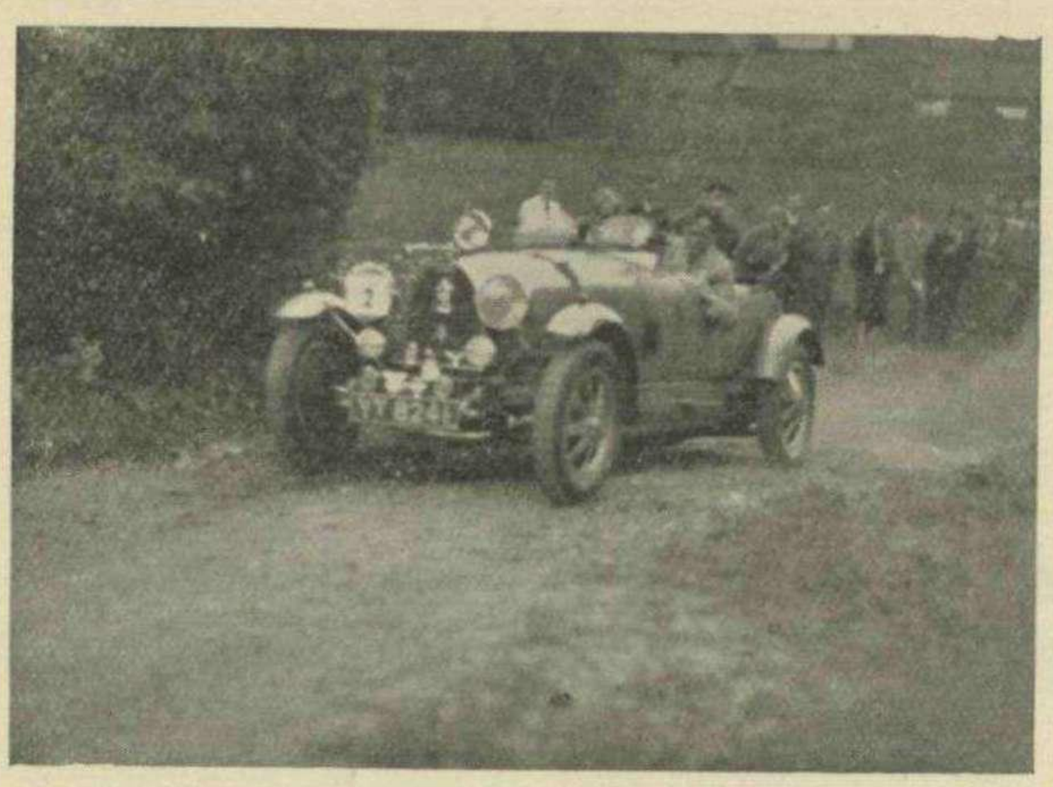
They revenged themselves effectively in the French Grand Prix with the 2,300 c.c. car, however, having changed over to Dunlop tyres, and they had no further trouble in this department.

There has been a lot of argument lately about handicaps, and I am very glad to see that the new handicaps for the B.R.D.C.'s 500 miles race has been revised in such a way as to make it extremely likely that the fastest car will win.

Everyone has the greatest respect for the speeds put up by the small cars of to-day, but it always seems wrong to me that the absolute winner of a big race should be any but the fastest car in that race.

B

RUMBLINGS—continued.



A competitor in the Bugatti Club's Hill Climb which was successfully held at Chalfont St. Peter recently.

The right idea seems to be that which prevails at Le Mans, where the big event is the Grand Prix d'Endurance, with the Rudge-Whitworth Cup, which is the handicap event, taking second place.

By the time these words appear it will be almost too late to enter for Shelsley, but most people will have entered by now, and we ought to have a really good afternoon's sport. Let's hope that the weather will be better than the Amateur climb last year. One thing we can be sure of, that is the efficiency of the M.A.C. organisation, so, wet or fine, everyone should go to Shelsley Walsh on the 11th of this month.

The Inter-Club meeting at Brooklands on June 20th was a very cheery affair, and as so often happens at comparatively informal events, produced as good or better racing than the more important affairs. Purdy on the Thomas-Special won a race at 111 m.p.h., Aldington won another on an unblown Frazer Nash at 88 m.p.h., while the Relay Race—won by the Basingstoke Club—and the hill climb gave variety to the entertainment. Another race produced a particularly good scrap between Munday's Vauxhall and Field's Invicta.

The winners were as follows :—

THE RACING SHORT HANDICAP.—1, J. H. L. Bartlett, 1,090 c.c. Salmson (S), 55 secs. ; 2, A. H. L. Eccles, 1,990 c.c. Bugatti, 36 secs. ; 3, C. G. M. Boote, 1,083 c.c. Riley, 1 min. 25 secs.—THE SPORTS SHORT HANDICAP.—1, A. B. Gilbert, 749 c.c. Austin (S), 1 min. ; 2, V. S. Balls, 2,276 c.c. Talbot, 43 secs. ; 3, G. L. Baker, 5,954 c.c. Minerva, 1 min. 11 secs.—THE RACING LONG HANDICAP.—1, H. W. Purdy, 1,493 c.c. Thomas Special (S), 10 secs. ; 2, C. G. M. Boote, 1,083 c.c. Riley, 1 min. 53 secs. ; 3, R. J. Munday, 2,976 c.c. Sunbeam, 1 min. 14 secs.—THE NOVICES' HANDICAP.—1, J. L. Dalrymple, 4,275 c.c. Chrysler, 6 secs. ; 2, A. W. Smith, 3,498 c.c. Humber, 22 secs. ; 3, A. C. Fairtlough, 749 c.c. Austin, 1 min. 48 secs.—THE SPORTS LONG HANDICAP.—1, R. J. Munday, 4,310 c.c. Vauxhall, owes 5 secs. ; 2, G. L. Baker, 5,954 c.c. Minerva, 1 min. 38 secs. ; 3, A. B. Gilbert, 2,276 c.c. Talbot, 52 secs.—THE FIVE-LAP HANDICAP.—1, H. J. Aldington, 1,496 c.c. Frazer-Nash, 1 min. 40 secs. ; 2, P. Fotheringham Parker, 1,991 c.c. Alvis, 1 min. 20 secs. ; 3, G. L. Baker, 5,954 c.c. Minerva, 2 mins. 32 secs.—THE TEAM RELAY HANDICAP.—1, Basingstoke M.C. and L.C.C., 26 secs. ; 2, Brighton and Hove M.C., 23 secs. ; 3, Junior Car Club, scr.—HILL-CLIMB.—1, C. H. Livesey, 1,271 c.c. Wolseley, 11 3-5 secs. ; 2, J. L. Dalrymple, 4,275 c.c. Chrysler, 12 secs. ; 3, R. E. L. Featherstonhaugh, 1,271 c.c. Wolseley, 13 secs.—SPECIAL HANDICAP.—1, J. Bennett, 2,565 c.c. Rover, 16 secs. ; 2, R. S. L. Boote, 1,954 c.c. Lagonda, 28 secs. ; 3, R. S. C. Beresford, 3,740 c.c. Fiat, 6 secs.

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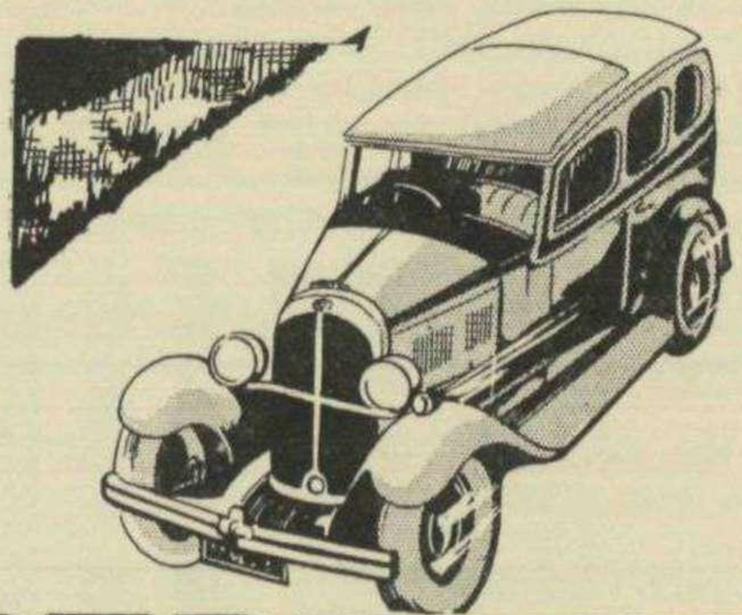
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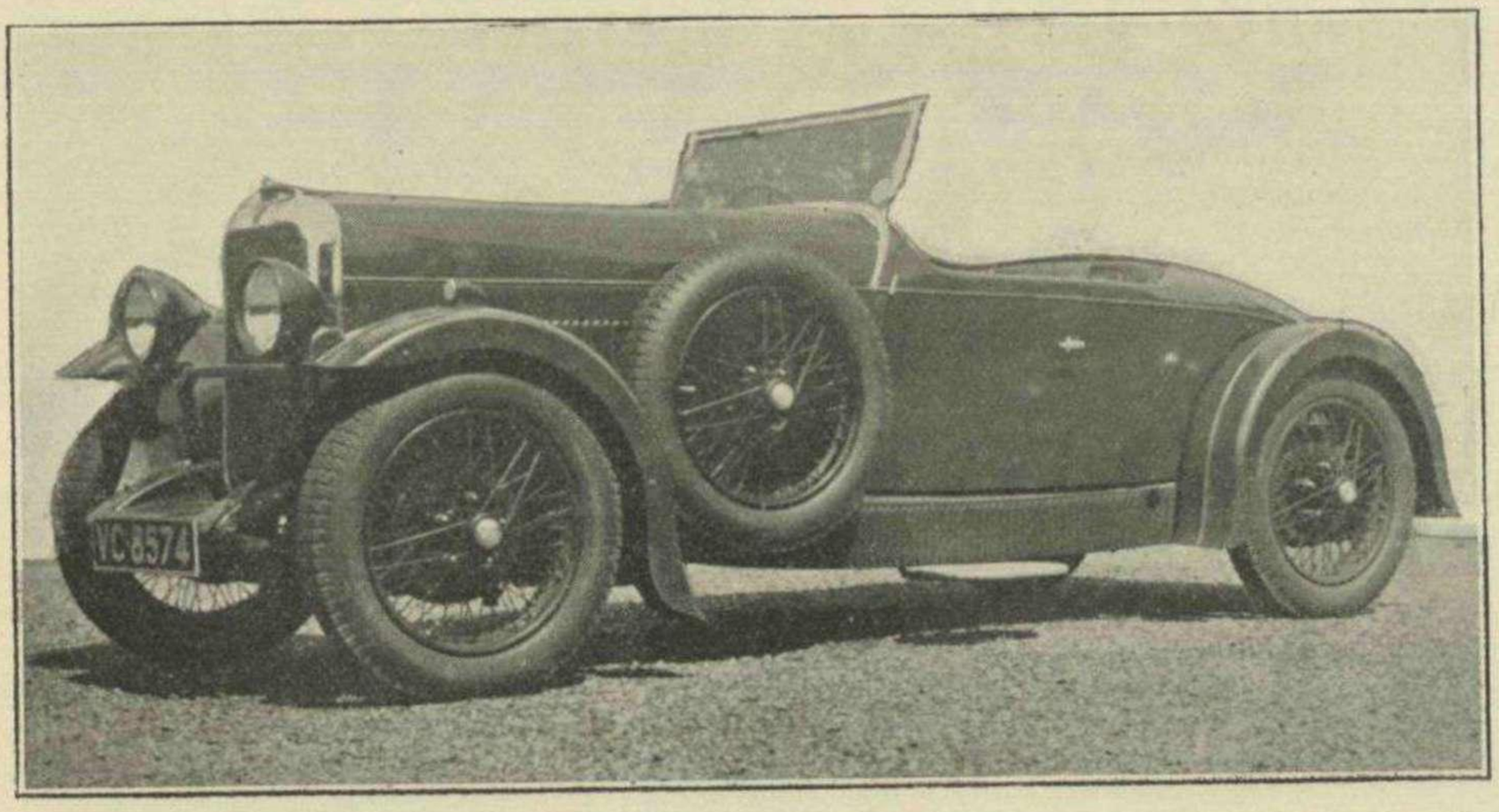
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THE 12-60 SPORTS ALVIS

HIGH PERFORMANCE FOUR-CYLINDER MODEL REINTRODUCED BY THE WELL KNOWN COVENTRY FIRM



[*Motor Sport photograph*]

The latest type Alvis—the new "12-60" which will appeal to many sports enthusiasts.

WHEN a sports car firm has built up a particularly enviable reputation for a certain model, one is always very sorry to see it dropped from its list. Such was the case with the Alvis concern and the famous 1½-litre 4-cylinder sports model of some five years ago, which enjoyed such remarkable and well deserved popularity. Most of our readers will remember and many will have owned, one of the old aluminium bodied 12-50 h.p. Alvis models of that time, which had some outstanding performances to its credit.

The First Famous Four.

One of the most famous of these was the winning of the 1924 200 miles race with a slightly modified standard model against some very special racing cars. The race started with a terrific burst of speed from the new supercharged Fiats. These, however, proved unable to stand the pace they had set, and retired, to give place to C. M. Harvey on the Alvis at over 94 m.p.h.

A very extraordinary feature of this run, which has always stuck in the writer's memory, is the fact that at this speed the car averaged 24 m.p.g. of fuel for the distance, showing how little freak tuning had been employed, and how efficient the engine actually was. In the hands of many private owners, notably Dykes and Macdonald, this car continued to win many events, and was famous for its reliability, and the fact that the car you could buy was definitely the same in stamina and performance with the models which appeared so successfully on the track and at other meetings.

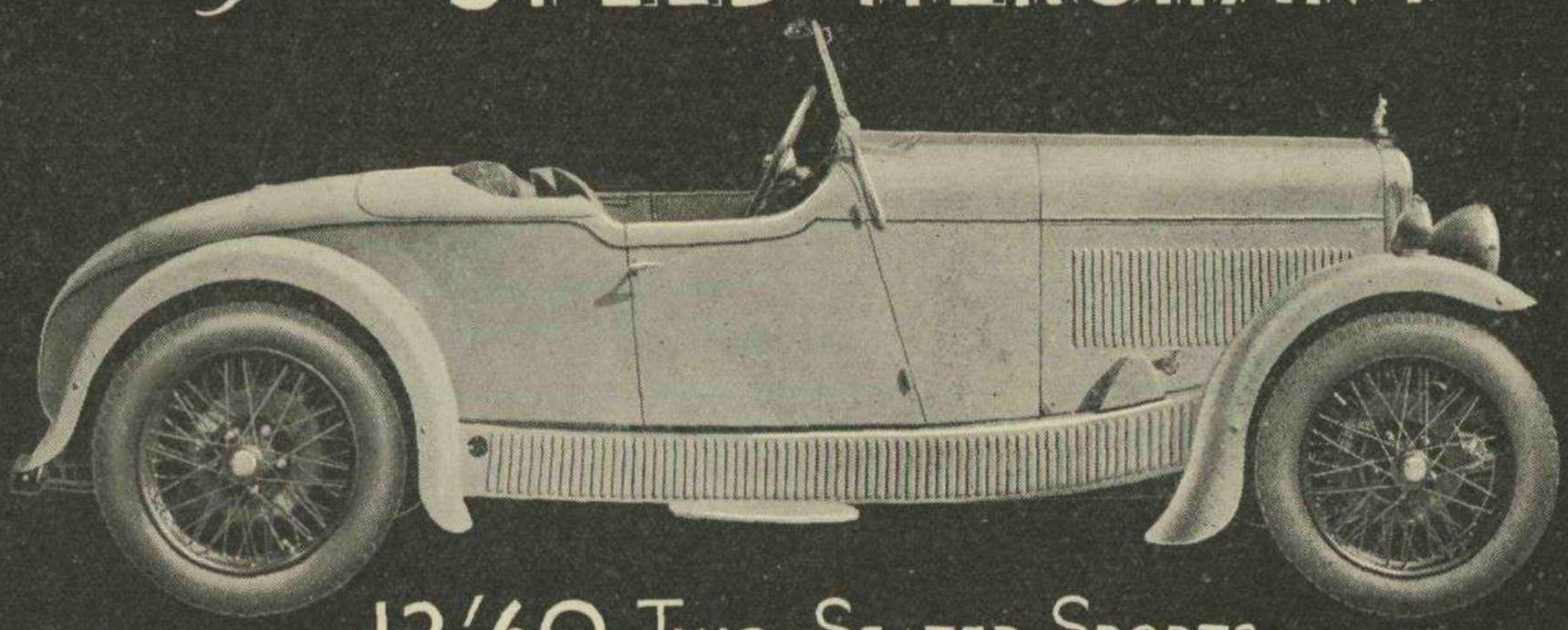
However, fashion is fickle, or perhaps it would be fairer to say that new developments in the motoring world could not be lost sight of, and the clamour on all sides was for at least a six-cylinder engine. So Alvis, who always believe, not only in keeping abreast of the times, but of experimenting well in advance of them, set down to produce the now famous Silver Eagle series of sixes. This engine is of approximately 2-litres capacity, and has a remarkable performance, as we were able to prove for ourselves by taking over a well worn and hard used works car of this type for a test some time ago.

However, pleased as we were with this excellent car, which, incidentally, failed to show any signs of its violent existence, we could never forget that very excellent 4-cylinder model on which we had had many wonderful runs. One particular "blind" which always sticks in the writer's memory as a legacy of a violent and misspent past was a particular occasion on which it was vitally essential to travel to the Midlands from Brooklands to fetch some spares on the eve of a 200-mile motorcycle race. No train would bring them in time, so in the grim small hours of the morning of the race, a certain 12-50 Alvis, the property of a trusting friend, was taken over, and we set out with our foot hard down. The fact that the parts were duly collected from the appointed rendezvous at Wolverhampton and transported back to the track in time to be fitted and tested for a start at midday, will explain one reason for our great respect for the Alvis, and also for the fact that our passenger on that occasion will never forget the run!

This is beside the point, though, but great was our joy when at last year's show a 4-cylinder Alvis, bearing many resemblances to its famous ancestor, appeared once more. We were disappointed that it was only shown in touring form, and promptly made enquiries as to the possibilities of a sports model being produced. We were told that such was far from unlikely, but that its introduction would depend on the demand.

Why they should have been so modest it is hard to see, but sure enough, the demand became too insistent to be ignored, and the result was the 12-60 model, an example of which was recently placed at our disposal to do our worst with and report what we thought of it.

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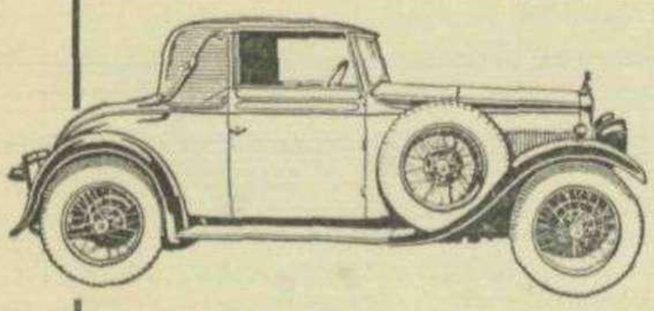
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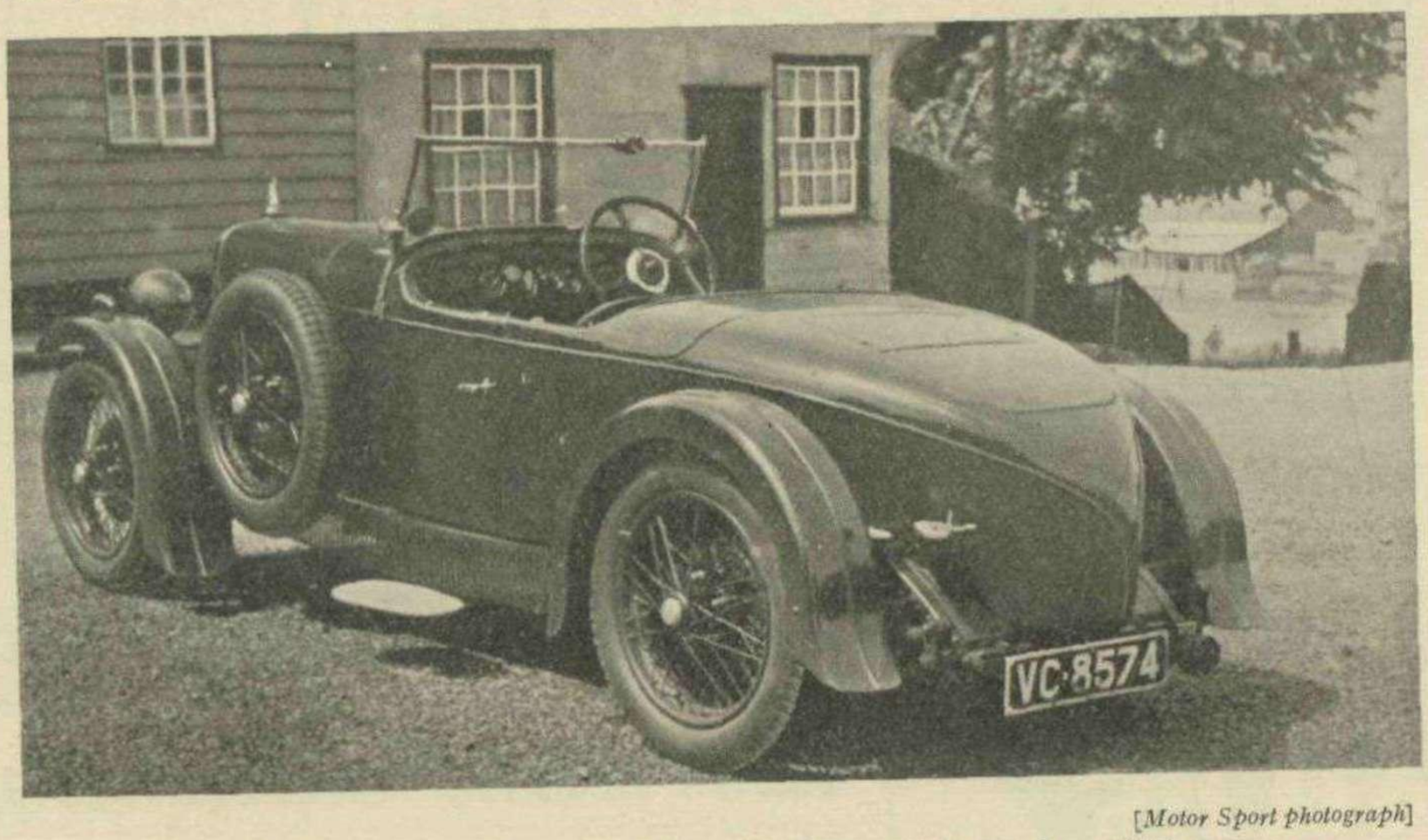
ALVIS

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H.P.

THE 12-60 SPORTS ALVIS—continued.

To say we were impressed would be to put things mildly, and would be too vague to be of much interest so we will endeavour to analyse our opinion in as critical a frame of mind as possible. In the matter of technical details the keynote is a simplicity and freedom from fancy points of design, which is a great relief to the owner who makes a point of seeing to the welfare of his vehicle. The resemblances to the old model are evident, and it is this fact that inspires such confidence in its reliability and long wearing properties.



[*Motor Sport photograph*]

A three-quarter rear view of the 12-60 Alvis, showing the clean and graceful lines.

In the past few years, however, a great deal of important detail research has taken place in thc world of sports and racing cars, and Alvis have been well to the fore in this particular respect. The result is that the latest model incorporates many features which constitute a great improvement. The power of the engine has been increased by small details which have avoided the necessity of having it at all rough when highly tuned. The engine is extremely smooth down to the lowest speeds, largely due no doubt to the fact that a crankshaft damper is fitted at the front end to eliminate any chance of torsional vibration. Although the ignition control requires reasonably intelligent handling to get the best out of the engine, there is little tendency to pinking, and the car can be driven in a thoroughly touring manner, if one is feeling lazy.

On the other hand, it responds at once to the sort of driving that a sports car expects to get, and the engine shows a wonderful capacity for revs and good acceleration. The gearbox is really quiet on the lower ratios, giving only that smooth subdued hum which tells of first-class workmanship and robust design. The maximum speeds were 45 m.p.h. in second, 65 m.p.h. in third, and 76 m.p.h in top. This was the speed on the level without any aid of wind or gradient, but on several occasions we touched just on 80 m.p.h. when conditions were more favourable. The comfort and steadiness at these speeds were excellent, and control was light and positive. The car has in no way been skimped to reduce weight, and the very neat looking body is every bit as good as it looks in construction, and incorporates some very cunning features.

One which we cannot pass without mention is the concealed hood.

A sports car needs a fully protective and easily erected hood as much as any other vehicle, but the normal type does rather spoil the lines of a body of this type. On the other hand, hoods which have to be dug out of the boot and erected like Meccano are an abomination, and we were pleased to find that the actual device in question was even easier to put up than the normal unconcealed variety, owing to the fact that hood envelopes and straps are abolished by the simple hinged-panel which encloses the whole affair when not in use.

Hoods are, as a rule, of minor interest, but this one so impressed us that it must be referred to, and it was typical of the way the car is thought out all round. A prolonged high average speed on twisty and hilly roads can be maintained, without effort on the part of the car or driver, and the clutch stop enables very quick changes up to be made if required.

The brakes require a certain amount of pressure to operate, but are powerful and smooth. The silence of the car as a whole is a great aid to pleasant travel, while an encouragement to cover big mileages lies in the truly remarkable petrol consumption. By no means a small car, and capable of nearly 80 m.p.h., it is rather a striking tribute to the efficiency of the design that it will do well over 30 m.p.g. even when driven really hard. This was a genuine surprise to us, and a great attraction to the man who covers big distances.

In our efforts to upset the car's behaviour by violent cornering we failed, and there is no tendency to roll at any speed. When cornering at the absolute limit of adhesion, there does seem, however, to be a certain slightly dead feeling about the steering, which has, however, ample caster action in normal use. This might be due to the proportion of weight on the front axle, but is more likely to be a question of attention to shock absorbers or tyre pressures, which naturally require slightly abnormal settings for such unusually hectic treatment as that to which we subjected it.

The car as a whole is a very sound proposition and as suitable for the sober and useful occasions of life as well as the more violent and exhilarating, and we parted with it with genuine regret. At the price of £410 for such a high-class job, fitted out in detail regardless of cost, it should appeal to a large market, of old and new Alvis owners.



Mr. T. G. John,

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ALVIS

says—

"We *recommend only Castrol . . . the most efficient lubricant obtainable*"



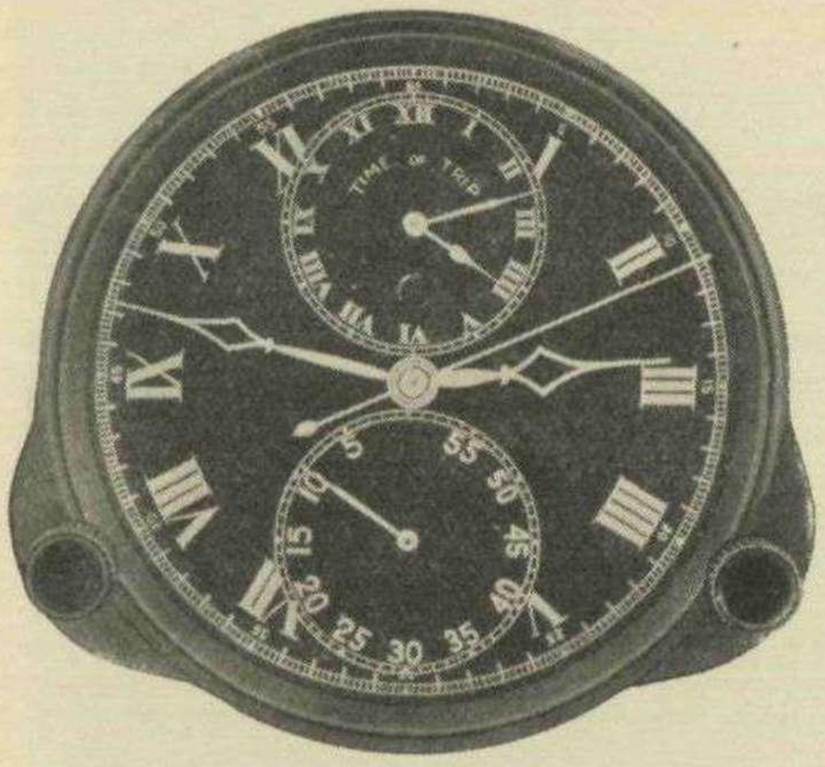
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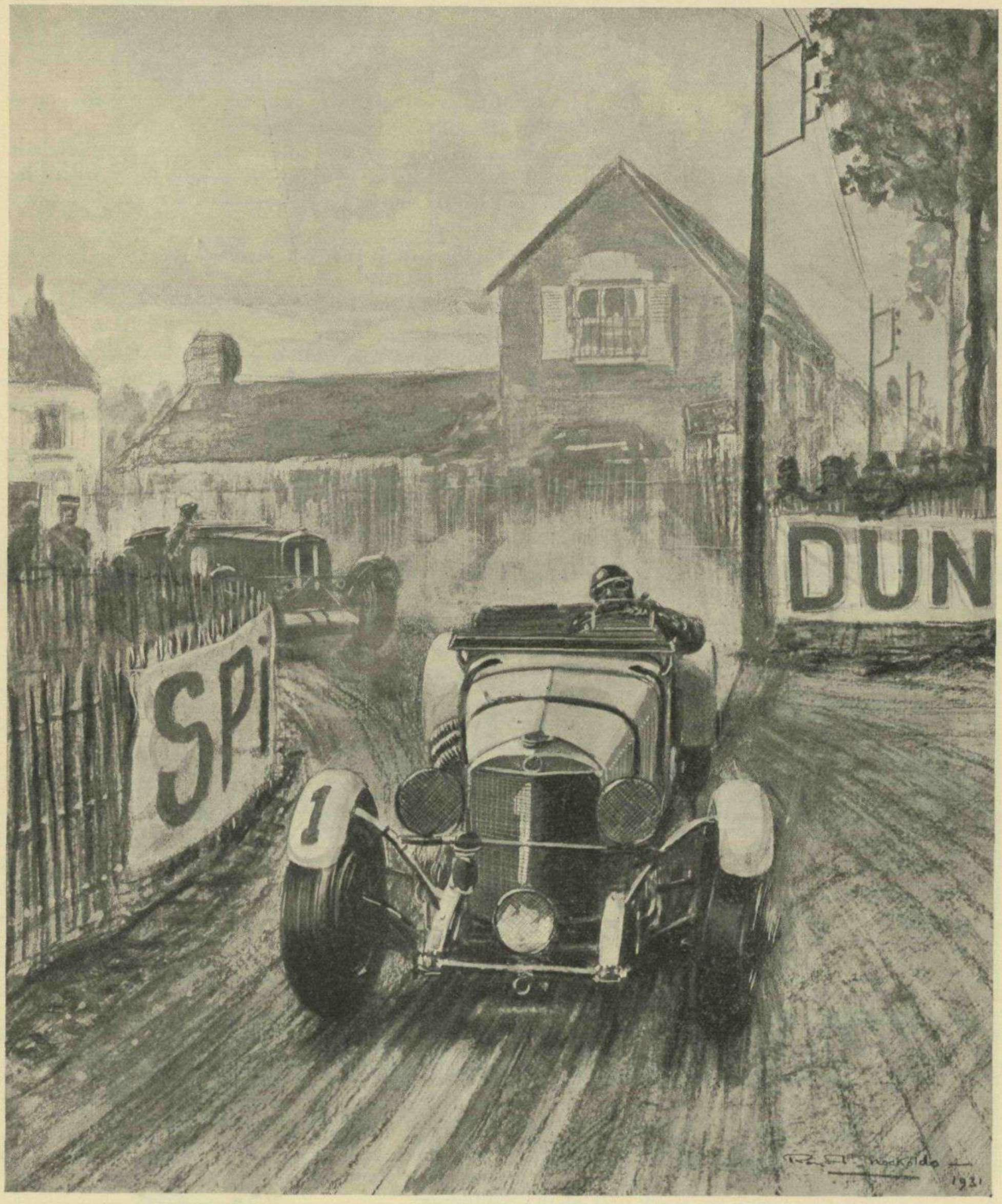
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VIRAGE EMOTIONNANT!



A sketch by our artist showing Ivanowski taking the Mercedes round the second Pontlieu corner during the great French race, the Grand Prix d'Endurance. *A full report appears on page* 449.

The Italian Grand Prix.



GUISEPPE CAMPARI and Tazio Nuvolari driving together on one of the new 2½-litre straight-eight Alfa-Romeos won the Italian Grand Prix which was run at Monza on Sunday, 24th May. Second place was captured by another Alfa-Romeo of the same type driven by the veteran Minoia and Borzacchini, with Albert Divo and Guy Bouriat on one of the new Bugattis third. In the 1,500 c.c. class Ruggeri and Balestrero were first on one of the old 1927 Grand Prix straight-eight Talbots, just beating Pirola and Lurani on a 6-cylinder Alfa-Romeo.

The Italian Grand Prix, as the result of being moved forward from September to the 24th May, was the first of the three national Grands Prix, which this year will all count for various important prizes, the others being the French Grand Prix on 21st June and the Belgian Grand Prix in July. The difficulty in recent years has been to find a formula for these races which is acceptable to manufacturers. For long the races were run under the limited capacity regulations, and when this limitation seemed to have been used until manufacturers had tired of it, an attempt was made to run the races on a limited fuel consumption basis. This formula, however, proved no more popular than its predecessor, and it looked as if the Grands Prix were rapidly falling into disrepute.

For this year, however, Baron Nothomb, the Belgian delegate and Cav. Vincenzo Florio, the representative of Italy, suggested to the International Sporting Committee, that the races should be of ten hours duration and should be open to racing cars of any description. It was argued that engines in recent years have probably been developed in advance of the rest of the chassis, and that the best way to test the whole mechanism of the car was to drive it at high speed for a long period of time. Like every other attempt to revive real motor racing, the idea was immediately decried by the technical press in every country of Europe; but it was adopted by the Sporting Committee, and the race which took place at Monza certainly seems to have shown that the formula has much to recommend it.

Fourteen Starters.

Of the 25 entries, 14 cars finally were drawn up in front of the grand stands at Monza on the morning of 24th May. Two drivers per car were allowed under the rules, and the starters with their drivers announced for them were as follows :—

Klinger and Ghersi (Maserati).
Varzi and Chiron (Bugatti I).
Divo and Bouriat (Bugatti II).
Lehoux and Etancelin (Bugatti).
Wimille and Gaupillat (Bugatti).
Senéchal and Fiétet (Delage).
Ivanowski and Stoffel (Mercédès).
Campari and Minozzi (Alfa-Romeo I).
Nuvolari and Borzacchini (Alfa II).
Minira and Zehender (Alfa-Romeo III).
Pirola and Lurani (Alfa-Romeo).
Ruggeri and Balestrero (Talbot).
de Vecchio and Ferrari (Talbot).
Caniato and Torlini (Alfa-Romeo).

Among the more important absentees were the official team of three Maseratis which had been withdrawn owing to the fact that two of the cars had been crashed in the Targa Florio, and the marque was therefore only represented by an amateur entry driven by Klinger and Ghersi, the two other private Maseratis entered by Pedrazzini and Castelbarco, having been withdrawn. A second Mercéd's had also been entered and was to have been driven by Strazza and Mano, who started together in the 1,000 Miles Race, but its withdrawal left Ivanowski and Stoffel to start by themselves on their giant 7-litre machine. A 1,500 c.c. Alfa-Romeo which was to be driven by Lettieri was also an absentee as was an Itala entered by Facchetti and three Bugattis whose drivers had never been announced.

Of the cars which were left the most likely to prove the winner was obviously either one of the two Bugattis or one of the three Alfa-Romeos entered by their manufacturers. The Bugattis were of course of the new 2,300 c.c. type with the double overhead camshaft straight-eight engine and had as their drivers Achille Varzi, Louis Chiron, Albert Divo and Guy Bouriat who form the official Bugatti team. Two of the Alfa-Romeos which were to be driven by Campari, Minozzi, Minoia and Zehender were of the new 2½-litre straight-eight type, while the third, to be driven by Nuvolari and Borzacchini was the new 12-cylinder racer to which reference is made elsewhere. Of the remaining entries the two other Bugattis were driven by amateurs, and the 1,500 c.c. class consisted of Senéchal's Delage and the two Talbots, all three of which are 1927 Grand Prix racers, together with the two remaining Alfa-Romeos which were 6-cylinder machines.

In brilliant sunshine and in view of an enormous crowd the start was given at 7 o'clock on the Sunday morning. Rather to everyone's surprise, Lehoux, the amateur driver from North Africa was the first away on his Bugatti, and he was not caught by Varzi of the official team until nearly the end of the first lap. The latter, however, soon took the lead, closely followed by Campari, and it was soon apparent that the Bugatti-Alfa duel was going to be keen.

At the end of the first lap Divo on Bugatti II stopped to change a plug, and Senéchal on the Delage was also early in trouble. He stopped at the end of the third lap for four minutes in an attempt to cure violent misfiring, and got going

THE ITALIAN GRAND PRIX—continued.

again only to stop once more on the eighth lap for a long time to work on his magneto. On the tenth lap Divo also stopped again to change a tyre, an ominous proceeding so early in the race. The Bugatti hopes therefore were now fixed on Varzi, who was leading the race, though so hotly pursued by Campari that after the first five laps he had a lead of only 27 seconds which had only been increased to 36 seconds by the tenth lap. At the end of the first hour the order was as follows :—

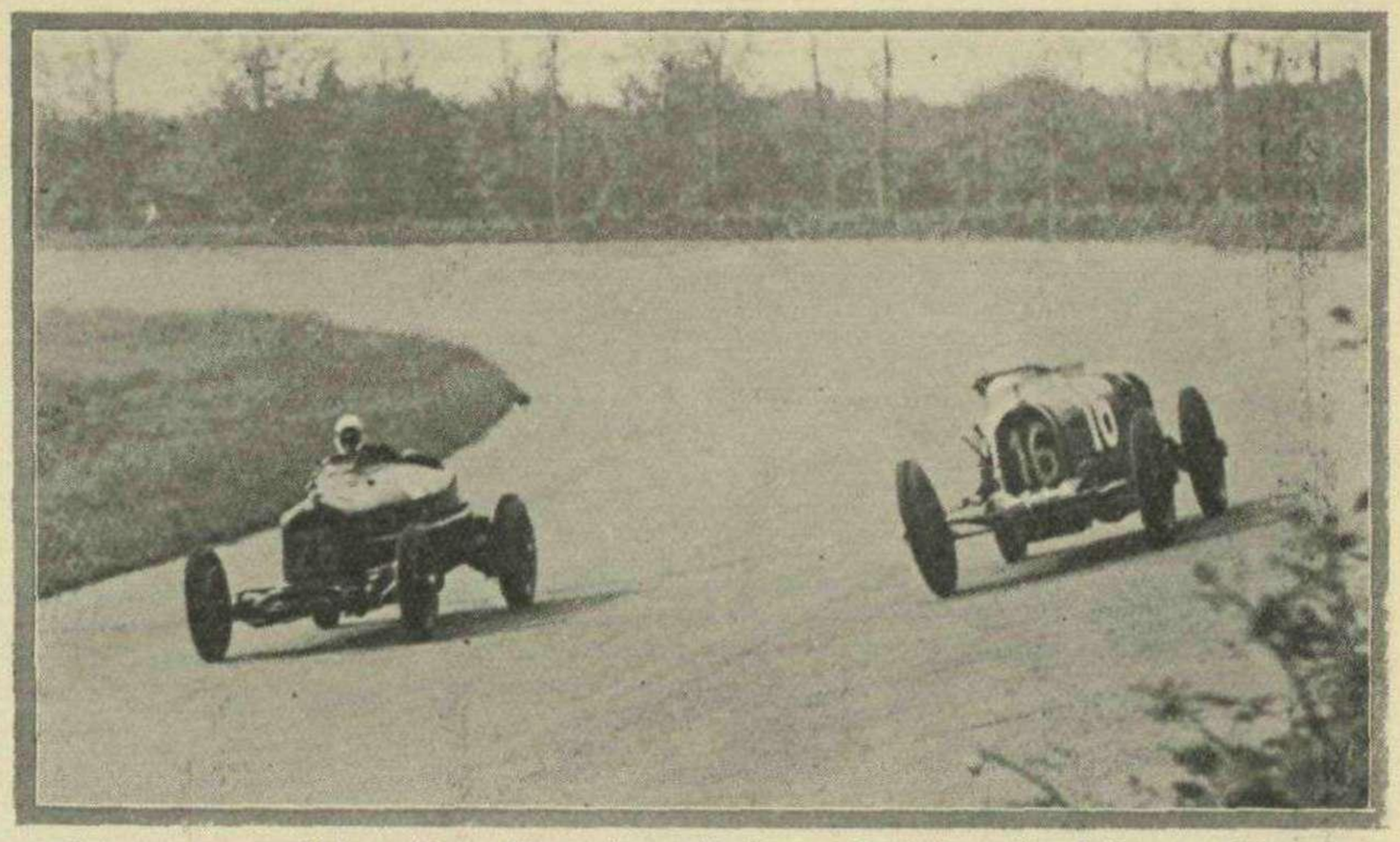
1. Varzi (Bugatti), 162 kilometres 700.
2. Campari (Alfa-Romeo), 160 km.
3. Lehoux (Bugatti), 159 km.
4. Minoia (Alfa-Romeo), 154 km.
5. Nuvolari (Alfa-Romeo).
6. Ivanowski (Mercéd s).
7. Ruggeri (Talbot).
8. Klinger (Maserati).
9. Divo (Bugatti).
10. Wimille (Bugatti).
11. di Vecchio (Talbot).
12. Pirola (Alfa-Romeo).
13. Caniato (Alfa-Romeo).
14. Senéchal (Delage).

Behind the leaders the giant Mercéd s, although obviously not at its best on the track, was going extremely well, ably driven by Boris Ivanowski who is one of the few men who can be trusted to keep a car like this weighing a couple of tons and possessed of terrific speed from going off the course. Interest, however, continued to centre on the Bugatti-Alfa duel. By the fifteenth lap Varzi had a lead of a minute over Campari, which he had increased by 5 seconds by the twentieth. Then on the 24th lap the veteran Campari proceeded to set up a record for the Monza road-circuit in 3 minutes 32 4/5 seconds. In the meantime Minoia had passed Lehoux, and Nuvolari, who was gradually working up speed on the 12-cylinder machine had got past both of them, while Divo in spite of another stop on the twentieth lap to change tyres had got ahead of the Mercédes. After two hours of the race had gone, the order was as follows :—

1. Varzi (Bugatti), 329 km. 600.
2. Campari (Alfa-Romeo), 322 km.
3. Nuvolari (Alfa-Romeo), 313 km.
4. Minoia (Alfa-Romeo), 312 km.
5. Lehoux (Bugatti), 311 km.
6. Divo (Bugatti), 302 km.
7. Ivanowski (Mercéd s), 295 km.
8. Ruggeri (Talbot), 293 km.
9. Klinger (Maserati), 291 km.

and the remainder in the same order as before.

Soon after the beginning of the third hour a dramatic event occurred, for Nuvolari drew up at his depot with the new Alfa-Romeo and the car was withdrawn. Thereupon it was decided that Nuvolari should relieve Campari at the wheel of Alfa-Romeo I instead of Minozzi and that Borzacchini should act as second driver to Minoia on Alfa-Romeo III in place of Zehender. At about half past nine in fact, when one quarter of the race was over most of the cars came into the pits to refuel and change drivers. Varzi on the leading car did the work rapidly, and the Bugatti was soon away again with



Campari passing Lehoux (Bugatti) on the inside during the Italian Grand Prix at Monza.

Louis Chiron at the wheel. The Monégasque champion had hardly got going, however, when he was seen to be slowing down, and shortly afterwards it was announced that the car had had to be withdrawn with a broken ball-race in the back axle. The race was thus robbed of a great feature of interest as it now looked as if the Alfa-Romeos would have things all their own way. At the end of the third hour the order was as follows :—

1. Campari (Alfa-Romeo), 466 km.
2. Minoia (Alfa-Romeo), 462 km.
3. Lehoux (Bugatti), 459 km.
4. Klinger (Maserati), 446 km.
5. Divo (Bugatti), 446 km.
6. Chiron (Bugatti I), 446 km.
7. Ivanowki (Mercédes).
8. Ruggeri (Talbot).

and the others as before.

Bugatti I still figured in the race as its withdrawal had not as yet been officially announced. Klinger on the Maserati was now making a great spurt and during the third hour had moved up from ninth to fourth place. Shortly afterwards Lehoux was forced to retire with a broken valve, and the amateur Bugatti entry which had made such a brilliant start in the race was thus out of the running. As a result the Maserati moved up into third place behind the two leading Alfa-Romeos. Campari in the meantime had been relieved by Nuvolari and Minoia by Borzacchini, but the two cars continued their triumphant progress. At the end of the fourth hour the order was as follows :—

1. Campari and Nuvolari (Alfa-Romeo), 638 km.
2. Minoia and Borzacchini (Alfa-Romeo), 610 km.
3. Klinger and Ghersi (Maserati), 600 km.
4. Divo and Bouriat (Bugatti), 560 km.
5. Ivanowski and Stoffel (Mercédès).
6. Wimille and Gaupillat (Bugatti).
7. Pirola and Lurani (Alfa-Romeo).
8. di Vecchio and Ferrari (Talbot).

During the fifth hour the two Alfa-Romeos proceeded to pull steadily away from the 2½-litre Maserati, until their lead was so substantial that Signor Jano had signals made to them to slow down. The Bugatti driven by Divo and Bouriat was still suffering from apparently endless tyre troubles, those on the near side of the car, which was on the outside of the corners on this right-hand course, persistently bursting on their inner sides. The tyres used were of ordinary racing type, but at about this time in the race, Meo Costantini, who was in charge of the Bugatti pit, decided to change over to the special new Targa Florio type. Immediately all tyre troubles vanished, and the Bugatti rapidly succeeded in overhauling and passing the Maserati. At the end of five hours running, or half way through the race, the order was as follows :—

1. Campari and Nuvolari (Alfa-Romeo), 784 km.
2. Minoia and Borzacchini (Alfa-Romeo), 776 km.
3. Divo and Bouriat (Bugatti), 740 km.
4. Klinger and Ghersi (Maserati), 707 km.
5. Ivanowski and Stoffel (Mercédès), 697 km.
6. Ruggeri and Balestrero (Talbot).
7. Wimille and Gaupillat (Bugatti).
8. di Vecchio and Ferrari (Talbot).
9. Pirola and Lurani (Alfa-Romeo).

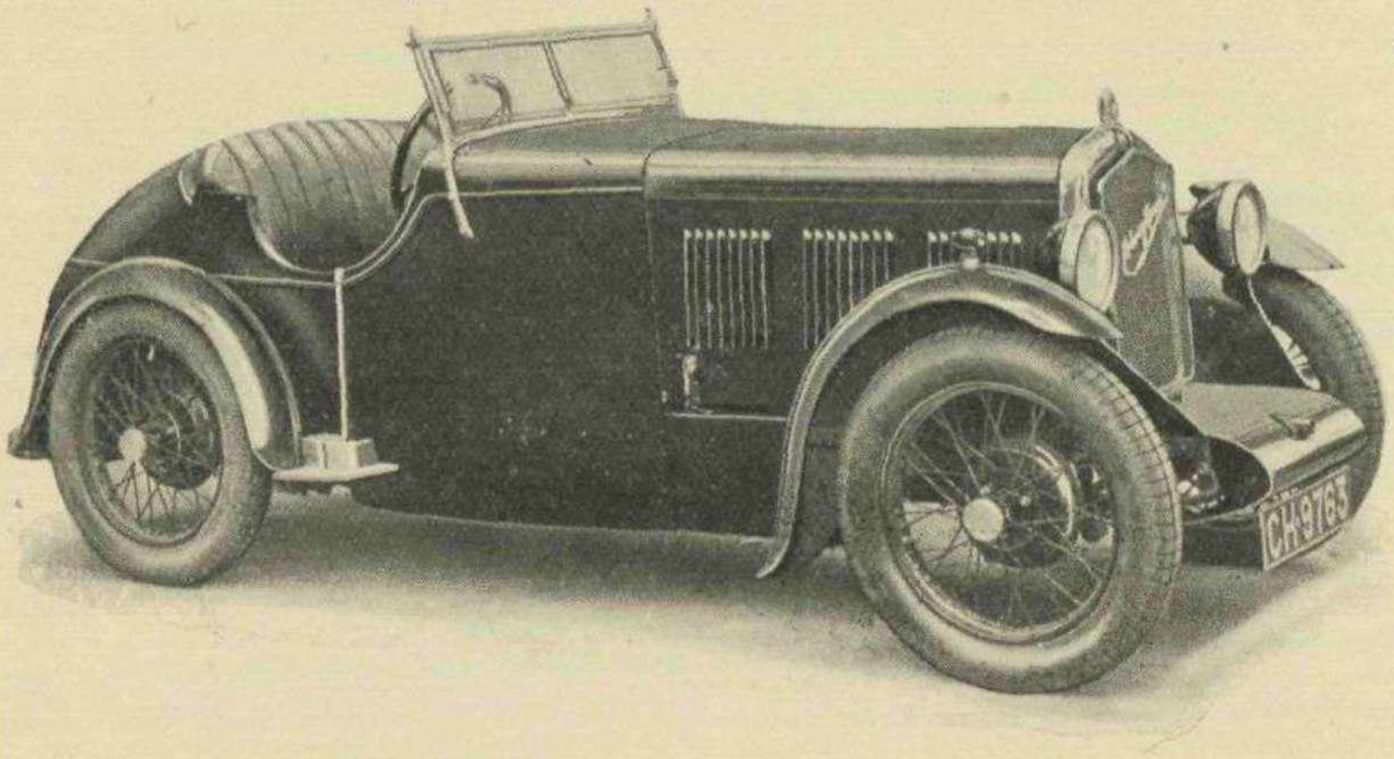
Senéchal, though never figuring among the leaders, still appeared from time to time, doing a few laps and then returning to his pit to change his magneto again. In spite of his troubles, however, he maintained his usual imperturbable manner and always found time as he passed the grandstands to have a good look round and inspect the crowd.

The feature of the sixth hour of the race was the sudden leap into prominence of the second amateur-entered Bugatti, driven by Wimille. Ruggeri's Talbot slowed somewhat and fell back, but Wimille succeeded in passing not only it but also the big Mercédès and thus gained fifth place. Wimille is one of the younger of the French Bugattisti and looks like

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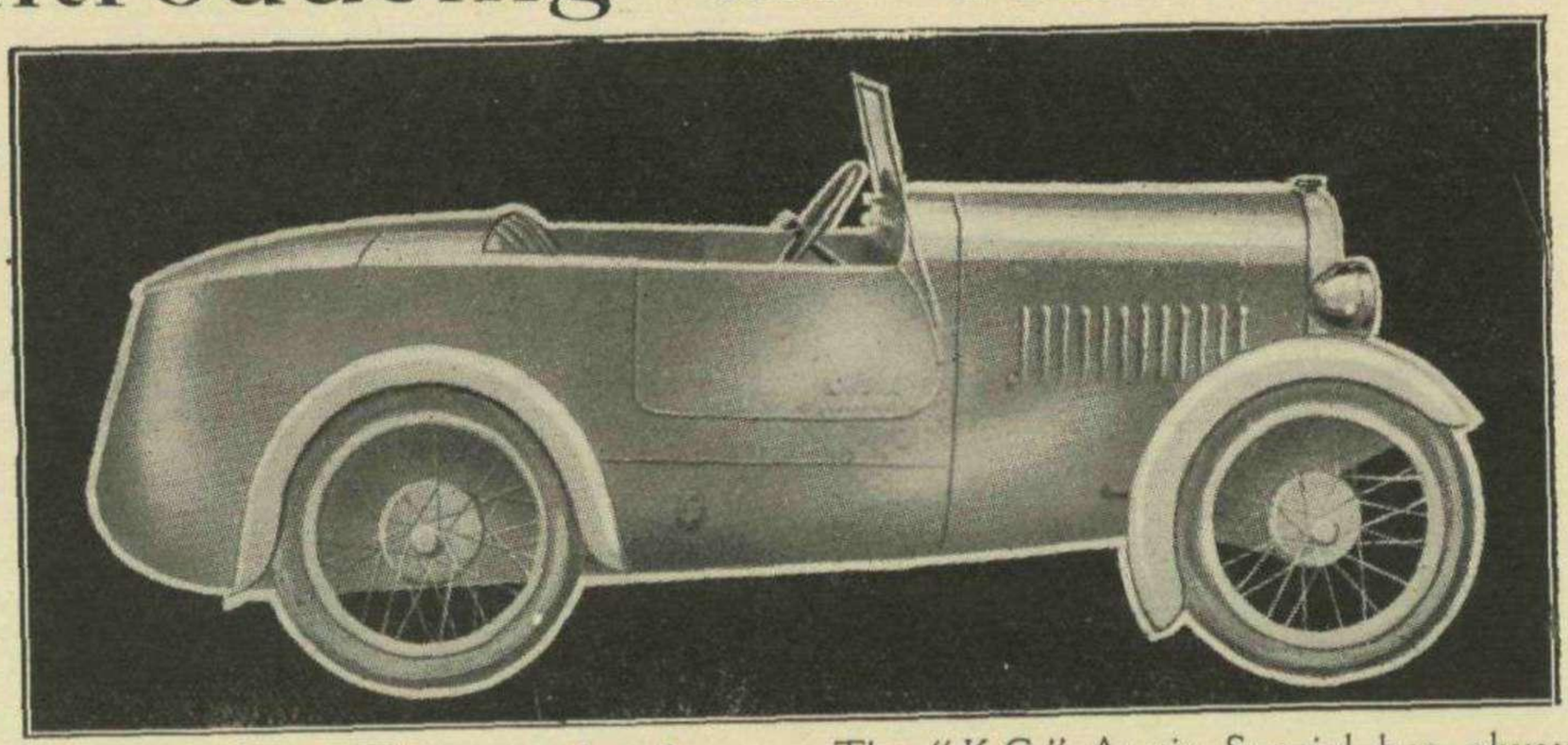
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THE ITALIAN GRAND PRIX—continued.

becoming famous one day. At the end of the sixth hour the order was as follows :—

1. Campari and Nuvolari (Alfa-Romeo), 931 km.
2. Minoia and Borzacchini (Alfa-Romeo), 923 km.
3. Divo and Bouriat (Bugatti), 900 km.
4. Klinger and Ghersi (Maserati), 865 km.
5. Wimille and Gaupillat (Bugatti) 831 km.
6. Ifanowski and Stoffel (Mercédès).
7. di Vecchio and Ferrari (Talbot).
8. Pirola and Lurani (Alfa-Romeo).
9. Ruggeri and Balestrero (Talbot).

Campari completed 1,000 kilometres in 6 hours 26 minutes 30 seconds, or at an average speed of just over 97 m.p.h. Nearly half an hour later, however, poor Senéchal, after seven hours running, had only covered 489 kilometres.

During the afternoon the Maserati, which hitherto had been going really well and looked like upholding the honours of the marque worthily in the absence of the official team, drew into its pit and the crew commenced extensive work on the engine. While they were thus engaged they were passed by Wimille and Gaupillat's Bugatti, the Mercédès, Ruggeri and Balestrero's Talbot and the 1,500 c.c. Alfa-Romeo driven by Pirola and Count Lurani. The two last named cars as a matter of fact were engaged in a most terrific duel for first place in the 1,500 c.c. class covering lap after lap with scarcely a length separating them. Divo at the same time, now that his tyre troubles were over, was making desperate efforts to catch the flying red Alfa-Romeos, but it seemed that the Italian cars had too great a lead for the Bugatti to be able to get ahead, although it was perhaps the fastest car on the course.

As the hour of five approached public attention became fixed on the leaders. Just, however, when it looked as if no more exciting incidents were likely to be witnessed, Borzacchini on what was to be his penultimate lap, struck a pheasant, which are quite common objects at Monza, with the radiator of the second Alfa-Romeo while travelling at over 125 m.p.h. If the bird had hit the driver's head instead of the car it can easily be imagined that a nasty accident would have occurred, as Borzacchini must at least have been stunned. As it was he feared that the impact must have damaged his radiator, and on completing the lap, pulled up at his pit and stopped for about 5 seconds to inspect the damage. While he was there Divo flashed past on the Bugatti, but the Alfa had a lead of a lap, and on discovering that his stone guard had withstood the shock and prevented the radiator being holed, Borzacchini shot off again to complete one more lap before the time limit was up.

At five o'clock the race was stopped and Campari's Alfa-Romeo I was declared the victor, having covered about eight miles more than the second car of the team. The first three cars had covered a considerably greater distance than their nearest rival, but in the 1,500 c.c. class the duel between the two leading cars continued right up to the end, the Talbot finally getting home first by little more than a hundred yards. The final result was as follows :—

1. Campari and Nuvolari (Alfa-Romeo), 1,547 km. 500.
2. Minoia and Borzacchini (Alfa-Romeo), 1,534 km. 800.
3. Divo and Bouriat (Bugatti), 1,525 km. 300.
4. Wimille and Gaupillat (Bugatti), 1,385 km. 950.
5. Ivanowski and Stoffel (Mercédès), 1,341 km. 100.
6. Ruggeri and Balestrero (Talbot), 1,290 km. 200.
7. Pirola and Lurani (Alfa-Romeo), 1,290 km. 080.
8. Klinger and Ghersi (Maserati), 1,148 km. 400.
9. Sénéchal and Fietet (Delage), 809 km.

The winners' average speed of 154.755 k.p.h. is equal to approximately 96.16 m.p.h.

* * *

The winning Alfa-Romeo is one of the new racing editions of the 2,300 c.c. sports model which appeared for the first time in the 1,000 Miles Race in April. The 8-cylinder engine now has a bore and stroke of 76 x 88 mm., giving a capacity of 2,476 c.c., the bore having been increased by 2 mm. compared with the original sports edition. The cylinders are cast in two blocks, with the ten bearing camshaft bolted together in the centre, where are two helically cut gear wheels, one driving the supercharger, oil pumps and water pump, and the other operating the two overhead camshafts through a couple of intermediary pinions. There are two valves per cylinder and the valve gear is very similar to that on the 6-cylinder 1,750 c.c. model. The sparking plugs are situated in the centre of the cylinder head and are fed by a coil. The supercharger, which is of Roots type runs rather above engine speed, the compression ratio is 6.2 to 1, and dry-sump lubrication is used. The engine is built up as a unit with a multi-disc clutch and 4-speed gearbox, while the propellor shaft is enclosed in a torque tube. Suspension is by ½-elliptic springs all round, those at the front being shackled at their forward end.

HISTORY OF THE RACE.

The first Italian Grand Prix was run in 1921 on the Brescia road circuit, and was won by Jules Goux on one of the 3-litre Ballots, which were so narrowly defeated that year by the Duesenberg in the French Grand Prix. Goux covered the 326 miles of the race in 3 hours 35 minutes 9 seconds, and was followed home by Jean Chassagne also on a straight-eight Ballot and Louis Wagner on a Fiat.

In 1922 the scene of the race was moved to Monza track, which had just been completed and where it has been he.d ever since. The race was for 2-litre cars and resulted in a fine win for Pietro Bordino, on one of the new 6-cylinder Grand Prix Fiats, who covered the 500 miles of the race in 5 hours 43 minutes 13 seconds, an average speed of 86.9 m.p.h.

Fiats were again victorious in 1923, and this time the winner, Carlo Salamano, drove one of the new straight-eight 2-litre cars which were the first successful supercharged racers. The race actually was that year merged with the European Grand Prix, and Salamano covered the 800 kilometres in 5 hours 27 minutes 38 seconds, an average speed of 91 m.p.h. Felice Nazzaro on a similar Fiat was again second, and Murphy on a Miller third.

1924 was the turn of Alfa-Romeo and the race resulted in a victory for Antonio Ascari who on the straight-eight Grand Prix racer reduced the time for the distance to 5 hours 2 minutes 5 seconds, an average of 98.7 m.p.h. Louis Wagner and Guiseppe Campari, this year's winner, were second and third on similar cars, and Minoia, who finished 2nd this year, also on an Alfa-Romeo was fourth. The race was unfortunately marred by the death of Count Zborowski.

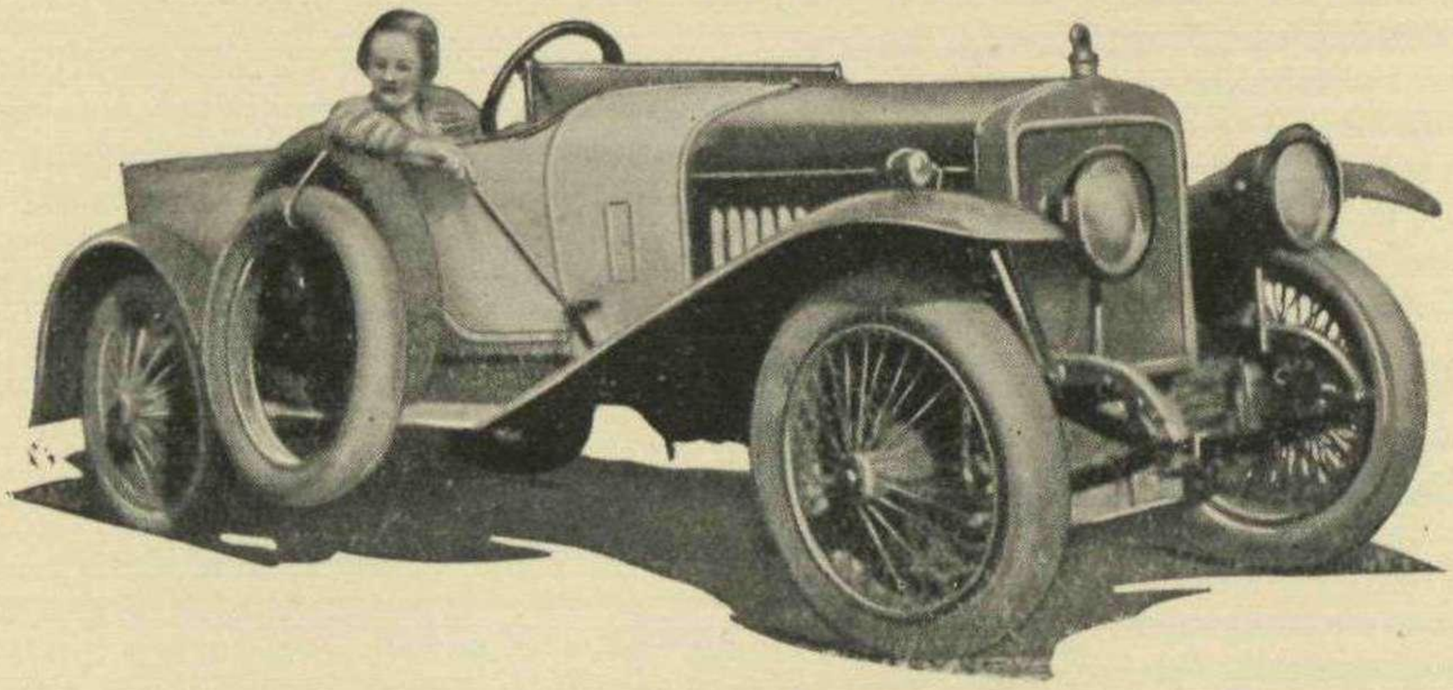
In 1925 the Milanese firm was again successful, but this time the winner, Gaston Brilli Peri was not able to equal Ascari's record, his time being 5 hours 14 minutes 33 seconds, an average of 94.76 m.p.h. Guisippe Campari, also on an Alfa-Romeo was again second, and Meo Costantini on a 1,500 c.c. Bugatti was third.

In 1926 the race was something of a fiasco, for, run under the new 1,500 c.c. rule only one Bugatti driven by " Sabipa " finished. The distance on this occasion was reduced to 372 miles, and the winner's time was 4 hours 20 minutes 29 seconds, an average of 85.9 m.p.h. The next year the race was again merged with the European Grand Prix, and still under the 1,500 c.c. rule, a better field was collected. The winner proved to be Robert Benoist on the straight-eight Delage, whose time was 3 hours 26 minutes 59 4/5 seconds, equal to an average speed of 90 m.p.h. Second place was gained by Morandi on a straight-eight O.M., and Peter Kreis on a Miller was third.

The 1928 race was again merged with the Grand Prix of Europe, and was won by Louis Chiron on a 2-litre Bugatti, his time for the 372 miles being 3 hours 45 minutes 8 1/5 seconds, an average speed of just under 100 m.p.h. Achille Varzi on a 2-litre Alfa-Romeo was second, and Tazio Nuvolari this year's winner, was third on a 2-litre Bugatti.

In 1929 and 1930 the Italian Grand Prix was replaced by the Grand Prix of Monza, the winner on both occasions being Achille Varzi, first on a 2-litre Alfa-Romeo and then on a 2½-litre Maserati. This year's race is therefore the ninth of the series, and provided the third win for Alfa-Romeo.

Veteran Types



A Pre-War
15.9 h.p. "Alphonso" type
Hispano-Suiza.

IN an article which appeared in "MOTOR SPORT" some half a dozen years ago, Mr. Lionel Martin ascribed the first appearance of the real sports car to the introduction of the 30/98 h.p. Vauxhall in 1914. While I entirely agree that the real definition of a sports car does not include racing cars fitted with wings and a windscreen, nor on the other hand touring models modified by fitting a less comfortable body and different gear ratios, I do contend that real sports cars existed before the introduction of the "30/98," as for instance in the shape of its immediate predecessor, the Prince Henry Vauxhall. To arrive, however, at the matter really in hand, I think that every one who is so fortunate ever to have had any experience of it must admit that the Alfonso Hispano-Suiza was a sports car in the strictest sense of the term. I am perhaps somewhat biassed in this matter, as an "Alfonso" was the first car that I ever owned, and will always remain in many ways my ideal of a sporting model, and it was thus with great pleasure that I heard that one was still going and that I could write it up in the "Veteran Types" series.

While in no sense of the term a racing car, the Alfonso Hispano was developed as practically every good sports car always has been, as the result of racing experience. The origin of the Hispano-Suiza dates back now nearly a quarter of a century to a time when some Swiss capitalists and with them a brilliant Swiss designer named Marc Birhigt decided to begin the manufacture of cars at Barcelona in Spain. A year or two later they decided that the best way to try out and improve the excellent cars which they had built was to test them in the hard school of racing, and in 1909 they entered three cars in the Coupe de l'Auto voiturette races at Boulogne-sur-Mer. The regulations for the race limited the bore of 4-cylinder engines to 65 mm., which dimension was employed by the Hispano-Suizas in conjunction with a stroke of 140 mm., which gave a capacity of 1,860 c.c. These engines ran at 1,800 to 2,000 r.p.m., but although the three cars driven by Pilliverde, Zucarelli and Dermy all finished, they could not live with the French single-cylinder racers in the matter of speed.

The next year, however, the firm returned to the charge with three new cars. The bore of the new engines remained at 65 mm., but the stroke was increased to 200 mm., and thus the capacity to 2,656 c.c., while they developed some 45 h.p. at their maximum speed of 2,300 r.p.m. The old reliability still remained, for the three cars which started all finished the race, but this year the Hispanos had found more speed and Zucarelli came home the winner of the race, beating the Peugeot with the 80 x 280 mm. 2-cylinder engine, and his team-mates, Jean Chassagne and Pilliverde were third and sixth, the winner averaging 55.6 m.p.h. for 280 miles.

Forced Induction.

One is tempted at this point to describe the Hispano-Suiza cars built for the 1911 Voiturette Race, which were not ready in time, but which were perhaps the first racers employing forced induction contrived by mechanical means. These cars, however, are quite irrelevant to our narrative which should now pass on to the appearance in 1912 of the famous sports model officially known as 15T. This car was a direct development of Zucarelli's successful racer of 1910, and as a result of the favour which it found with the King of Spain, it became famous as the Hispano-Suiza, model Alfonso XIII.

It was a car of this type that I recently came across, and after a few contretemps had intervened to prevent earlier success we finally set out one Spring evening to go and see it. The car was at Brooklands, and the owner kindly offered to motor me down there from London. We chafed for what seemed hours in a quite inexplicable block at Putney Bridge, but at last we had skirted Weybridge and swung in at the gates of the deserted Track. A few minutes later we had descended, and were surveying with unmixed joy the beauties of a specimen of the genus Alfonso.

The engine is a 4-cylinder unit with the cylinders cast en bloc. The dimensions have been materially modified from the somewhat exaggerated relation of Zucarelli's racer caused by the limited bore regulations, but the stroke, although reduced to 180 mm. still seems enormous nowadays when compared to the bore, in spite of the increase of the latter to 80 mm. which gives a capacity of 3,614 c.c. Otherwise the design of the engine follows closely that of the 1910 racer. The valves are very large and their size is rendered possible by their position one at each side of the cylinder, operation being by two camshafts in the crankcase driven by timing

VETERAN TYPES—continued.

wheels at the front of the engine. These half-speed wheels in turn each drive another pinion, which operate on the near side of the engine the water pump and on the off side a Bosch ZU4 magneto, that joy of all discerning motorists. The latter supplies current to four plugs which are mounted in the centre of the cylinder head, exactly, that is to say, where they should be. The carburettor is on the off side of the engine and in Zucarelli's car and originally on the Alfonso model was of Hispano-Suiza construction. On my own car before mentioned, however, it was replaced by a Zenith and on the car immediately in question by an S.U.

Unusual Oiling.

The lubrication system for the engine is interesting as showing the care with which the detail work on the car was worked out. A fair-sized tank is slung on the chassis on the near side, and into this one normally pours the oil. From the tank the oil runs down a pipe, which can be closed by means of a tap, to a float chamber fixed to the side of the sump, in which it keeps the oil always at the correct level. In the crankcase a pump delivers oil under pressure to the troughs whence it is splashed onto the cylinder walls and to the little ends of the connecting rods. The only objection to this system is that oil being a somewhat viscous fluid, the needle valve in the float-chamber sometimes finds it rather hard work to seat properly, and as a result if the car is left standing for any length of time without turning off the tap on the tank, oil is inclined to seep past the needle valve, and one is greeted with clouds of blue smoke when one next starts up the engine. Notwithstanding this fact, however, some owner of the car at present under consideration had apparently come to the conclusion that the oil did not get a chance to get through to the sump quick enough, and in consequence he had connected up the disused hand-pump of the old pressure system to the oil-tank in order that the lubricant might be speeded on its way.

The " Autocar " of 1909 describing the freakish nature of the cars which ran in the voiturette race, remarks of the Hispano-Suizas, " even they were not, properly speaking, standard models, for we presume that the Hispano-Suiza concern have no intention of selling cars with engines running at 2,000 r.p.m." Yet a year or two later the firm were actually selling cars with engines running at this formidable speed.

While with regard to the engine, the specification of my own Alfonso Hispano, which was built early in 1913 ; and that of the one I am now describing, which dates from 1914, do not vary materially, there are important differences in the rest of the chassis. In the 1914 car, power is transmitted from the engine through a leather cone clutch, whereas in my 1913 model the latter was a very small multiple plate affair with between forty and fifty plates kept in engagement by a fork and external coil spring. My car also had a 3-speed gear-box built up in unit with the engine, but the 1914 car although still having only two selectors has a 4-speed box, the lever having to pass through the first speed position to engage reverse. The propeller shaft is open with two universal joints and the back axle, bevel driven. The 1914 car also has $\frac{3}{4}$-elliptic springs at the rear while my car had $\frac{1}{2}$-elliptics and those extraordinary back dumb-irons of pre-War days with curly ends, which rude people call pieces of bent wire. The foot brake operates in a drum on the propeller shaft and the hand brake in drums on the back wheels, which are Rudge-Whitworth.

This 1914 Hispano has a most attractive body which would disgrace no modern sports car, and which is tastefully painted black and white. It also has some most modern refinements such as a dynamo which not only supplies current for the lights but also starts the engine (at least sometimes). When, however, we had finished our first admiring inspection of the car we decided that the latter operation had better be done by hand, and quickly set about it.

Climbing into the car we took a short run round to get the engine warmed up a bit, and then the owner decided to go and visit a friend of his at the Flying Club and handed Alfonso over to me. By now the shadows of evening were falling fast, and as I took my place in the driver's seat, with the car's engine rumbling pleasantly, I had a most curious feeling of stepping back into the past. " The leather cone clutch takes up the drive much more sweetly than ever the old multi-plate used to," I thought to myself as we moved off, and then Alfonso gave a few hearty " plop-plops " in first, before the lever was pulled back into second. Before top was engaged I was marvelling, as I have often done before, at the extraordinary features of the Hispano gear-box. I wonder why other makers cannot succeed in constructing boxes such as these, in which all changes can be made with consummate ease, either straight through or without using the clutch. There is something almost uncanny in the way one can pull the Hispano lever about just as one wishes with practically no thought or discretion.

Ticking over at 65 m.p.h.

Now Alfonso is in top, there is just a pleasant burble from the engine, and the car is surging along. About 65 m.p.h. or a little more is the maximum, but I know from experience that given a suitable road these cars will cover ten miles in as many minutes, which is far better than an exalted " spot " maximum speed. The steering of the car is perhaps a little odd to modern ideas, but that great broad bonnet in front of one, necessitated in sober fact by the T-headed engine, gives one a wonderful feeling of confidence.

The top gear ratio on this 1914 Alfonso is even higher than it was on my old 3-speed model, and third is certainly a delightful gear. I am not quite sure, however, whether the 4-speed box has such enormous advantages over the 3-speed, for with so light a chassis and such a comparatively large engine one can afford to have a very high first, on which however, I have proved that it is *very* nearly possible to climb Alms Hill under fairly adverse conditions.

The joy of Alfonso, however, is not so much when he is barking joyously on the indirect ratios—a thing which many a modern car can do as well—but when that high top gear is engaged, and one sweeps along with the engine just turning over comfortably. And so as darkness was falling we sped back to the flying sheds, the burble of the exhaust just beating reassuringly, music which for nearly twenty years has delighted the heart of many a true enthusiast.

E. K. H. K.

THE SPORT ABROAD.

The Grand Prix of Casablanca.

COUNT CZAIKOWSKI, driving one of the new 2,300 c.c. supercharged Bugatti racing cars with the double overhead camshaft engine, won the Grand Prix of Casablanca, which was run on the 17th May, 1931. Second place was captured by Philippe Etancelin, winner of the French Grand Prix last year, on an old type 2-litre Bugatti racer, Jean de Maleplane was third on a similar car, and Scaron secured fourth place on his little 1,100 c.c. Amilcar which thus easily won the 1,500 c.c. class.

The race was run over what is known as the Circuit of Aufa, which consists of certain streets of the town of Casablanca, and thus somewhat resembled the Grand Prix of Monaco. The circuit, which had to be covered fifty-five times proved considerably faster than had been expected, and in spite of twenty-two starters there was at no time undue crowding of the competitors.

In the class for cars above 1,500 c.c., the competitors numbered ten, and consisted of Czaikowski on the new Bugatti racer, with Lehoux, Etancelin, Fassi, Fleccia, Grimaldi and de Maleplane on older cars of the same make, Ferdinand and Charles Montier on their special Fords and Ferrant with his veteran Peugeot racer. In the smaller class were seven more Bugattis, driven by Roux, Veyron, Galba, Hiercourt, Pao, Saint-Geniès and Madame Itier, two Alfa-Romeos driven by Capello and Plate, Scaron and Dourel on Amilcars, and Schlumberger on a Rally.

The start was given at 2.30 p.m. in the presence of the Sultan of Morocco and the Resident General, the cars being drawn up in rows of three in front of the grandstands. The whole pack got away with a terrific roar, and from the start an intense duel developed between Lehoux, who is a native of North Africa and immensely popular, and Count Czaikowski, who was favoured by the possession of one of the new Bugattis and the training given him by Friedrich, the veteran Bugatti driver. Etancelin clung close to their heels, and after the first ten laps had been covered the order of the leaders was as follows :—

1. Lehoux (Bugatti), 29m. 18s.
2. Czaikowski (Bugatti), 29m. 19s.
3. Etancelin (Bugatti), 30m. 16s.

1,500 c.c.

1. Galba (Bugatti). 32m. 34s.
2. Scaron (Amilcar), 33m. 9s.
3. Veyron (Bugatti), 33m. 27s.

The duel between Lehoux and Czaikowski continued unabated, the first setting up the record for the circuit in 2 minutes 50 seconds, and the other driver promptly equalling it. After twenty laps had been covered Lehoux still had a lead amounting to no more than 4 seconds over Czaikowski, and in the 1,500 c.c. class Galba led Scaron by just over half a minute. Galba is a local driver who was taking part in a big race for the first time, and his performance was one of the features of the day.

At about half distance Lehoux stopped to refill, and then got going again at great speed, having lost the lead to Czaikowski, who it was known did not intend to make a stop for replenishments. The effort however, was too much for his car and he was forced to retire with engine truble. This let Etancelin up into second place, and de Maleplane who was driving with remarkable regularity, became third. The order in the 1,500 c.c. class remained the same until after the 30th lap when Galba fell back behind Scaron, and Veyron passed both of them to gain the lead in his class. Shortly afterwards, however, the latter was forced to retire and the lead went to Scaron. Towards the end of the race Etancelin lost the use of his third speed, but he continued nevertheless very nearly as fast, and retained second place. The final result was as follows :—

1. Count Czaikowski (Bugatti), 2h. 41m. 52 1/5s. (Average speed, 85.6 m.p.h.)
2. Philippe Etancelin (Bugatti), 2h. 45m. 33 2/5s.
3. Jean de Maleplane (Bugatti), 2h. 51m. 58 4/5s.
4. (1) Scaron (Amilcar), 2h. 58m. 45s. (Average speed, 77.49 m.p.h.)
5. Ferrant (Peugeot), 2h. 58m. 50 1/5s.
6. (2) Galba (Bugatti), 3h. 0m. 25s.
7. Grimaldi (Bugatti), 3h. 15m. 26 2/5s.
8. (3). Plate (Alfa-Romeo), 3h. 24m. 40 1/5s.
9. (4) Dourel (Amilcar).
10. F. Montier (Ford-Montier).
11. (5) Cappello (Alfa-Romeo).
12. Fleccia (Bugatti).
13. (6) Saint-Geniès (Bugatti).
14. (7) Hiercourt (Bugatti).

The positions of the finishers in the 1,500 c.c. class are shown in brackets.

THE 12-CYLINDER ALFA-ROMEO.

The new 12-cylinder Alfa-Romeo racing car, on which Arcangeli met his death and which has already proved itself excptionally fast, is a really remarkable machine. Mounted in a fairly wide chassis are two of the famous 1,750 c.c. 6-cylinder engines, with a bore and stroke of 65 x 88 mms., which thus give a total capacity for the 12-cylinder car of 3,496 c.c. Each engine is quite separate from the other, having its own supercharger, clutch, gearbox and propeller shaft, each of which drives one back wheel, and a differential is therefore particularly necessary. The steering wheel is situated in the centre of the car, and operates two push-and-pull rods, one for each front wheel, so that no tie-rod is needed. The driver thus sits in the middle of the car between the propeller shafts, and the overall height of the machine is kept satisfactorily low.

The complete car only weighs some 18 cwt., while the engine develops over 300 h.p., and the speed of the car is believed to amount to over 150 m.p.h.

Brooklands Possibilities

THE impossibility of holding road races in England is a fact so long and often bewailed that there seems at first little point in bringing up the subject again. Many have suggested that some private park or estate should be obtained and utilised for this purpose, but such places are not so easily available as people imagine.

Therefore, instead of imagining courses which do not, and at present cannot exist, would it not be better to consider what can be done with the resources at present available? The centre of motor racing in this country is Brooklands, and it is really surprising to think how little has been done in the last two decades to make better use of the facilities which its founder provided.

In the last two years a great deal has been done in the way of improving the club house, and in making it more attractive from a social point of view. This is all to the good, and those responsible for it are to be commended on their work, but allowing for this we are forced to the conclusion that this has been the chief line on which improvements have been made. Unfortunately it is not the line that is really most important. To the real enthusiast, be he a member of the public or a member of the B.A.R.C., it is a matter of completely minor importance how grandly the official sanctums are decorated, or in what atmosphere of luxury a member may pass his leisure hours at the track. If he gives such matters a thought, it is probably to the effect that equal comfort can be obtained elsewhere for less money, and that the primary object of the track should be to stimulate interest in motor racing, by providing racing which is really interesting both to take part in and to watch.

Road Conditions.

It is in this particular that Brooklands falls badly short. What everyone wants to see in a race, is something approaching road conditions, where the niceties of braking, cornering, gear-changing, etc., are brought into play, and what is more will be readily visible to the public.

There are various roads at the track, some of which have been used for high speed trials, but for racing with fast cars these would require widening and making up. As this would involve considerable expense we must first see what can be done with the track itself, and here there is little need for thought or originality, as we have only to expand on the ideas used for some of the bigger events of a few years ago.

The R.A.C. Grand Prix, the later J.C.C. 200 miles races, the Essex Club Six-hour races, the Production Car race, and others, pointed the way to making a more interesting circuit than the usual "round-and-round." If the track is to become really popular with drivers and public, such circuits must not be confined to rare long-distance events, but must form part of the programme of each meeting.

We had hoped that when the new management took over the track, this would be done, but as no interesting circuits have been devised for any event, long or short, we conclude that club and social matters have dwarfed the racing side of the programme,—at least for the present. Some may answer that the Mountain races fill the bill at ordinary meetings, but we cannot agree with this. Their introduction was certainly a step in the right direction and made us hope for more, but we were disappointed. This particular circuit has advantages from the organiser's point of view, in that it requires next to no preparation, but when one considers the abundance —we are tempted to say superfluity—of officials at Brooklands, lack of hands in the organising department can hardly be a reason for discarding more complicated events.

Suggestions.

Most would-be competitors cannot afford very long events, as apart from the high entry fees usually associated with them, the wear and tear on the car, together with tyres, fuel, and other items, put them outside the reach of any but affluent private owners.

A race of between twenty and fifty miles should provide excellent opportunities, according to the course, of good driving showing up well, without making it necessary to supertune engines to the extent required for a sprint event.

The next things to consider are the requirements and limitations of the circuits available. There is, and always will be, a place in the scheme of things for the straight-away races on the outer circuit, though a little more variety in their length, and rather less of them on a programme, would be an improvement. Therefore nothing in the way of artificial turns must obstruct the outer circuit, and we are confined to the "finishing" straight, to which to introduce corners. Those used in the R.A.C. Grand Prix, consisting of double S bends, are very suitable, as their speed and position can be easily varied. In this race the cars came off the Byfleet banking all out and came down the straight to a set of bends almost opposite the paddock stand.

This gives the public a good view of the cornering. The safety of the public must naturally be considered, but the present management are too apprehensive to need reminding of that, and rather need impressing with the fact that the public, as well as wishing to be safe, would also like to see a little racing! It would, however, as well as reducing the speed of the cars entering the bend, increase the interest of the circuit if further bends were introduced at the Fork, such as the "tub" hairpin used in at least one 200 miles race. In this the cars came down to the Vickers Sheds, round the "tub," which is easily removed and replaced, and doubling back, take the corner at Chronograph Villa, used in our present Mountain events.

The actual tub can be moved along to give various distances between the corners, so as to avoid merely another S-bend, while there will be ample room to attain a reasonable speed before the next set of bends is reached, thus giving a further test of braking and cornering, without an excessive speed close to the palings of the public enclosure.

Another S-bend made with sand banks can be placed, after the manner of previous events, at the end of the

BROOKLANDS POSSIBILITIES—continued.

straight, giving a lead onto the banking, and also certain advantages to those in the paddock in the way of a better view of this point.

A circuit using the members' banking involves using the inside of the straight at the Byfleet end if a set of corners at the Fork is to be used, and as this part is even rougher than the rest of the track, and as the straight itself cannot then be used, the first proposed idea seems more suitable, both for the drivers and spectators.

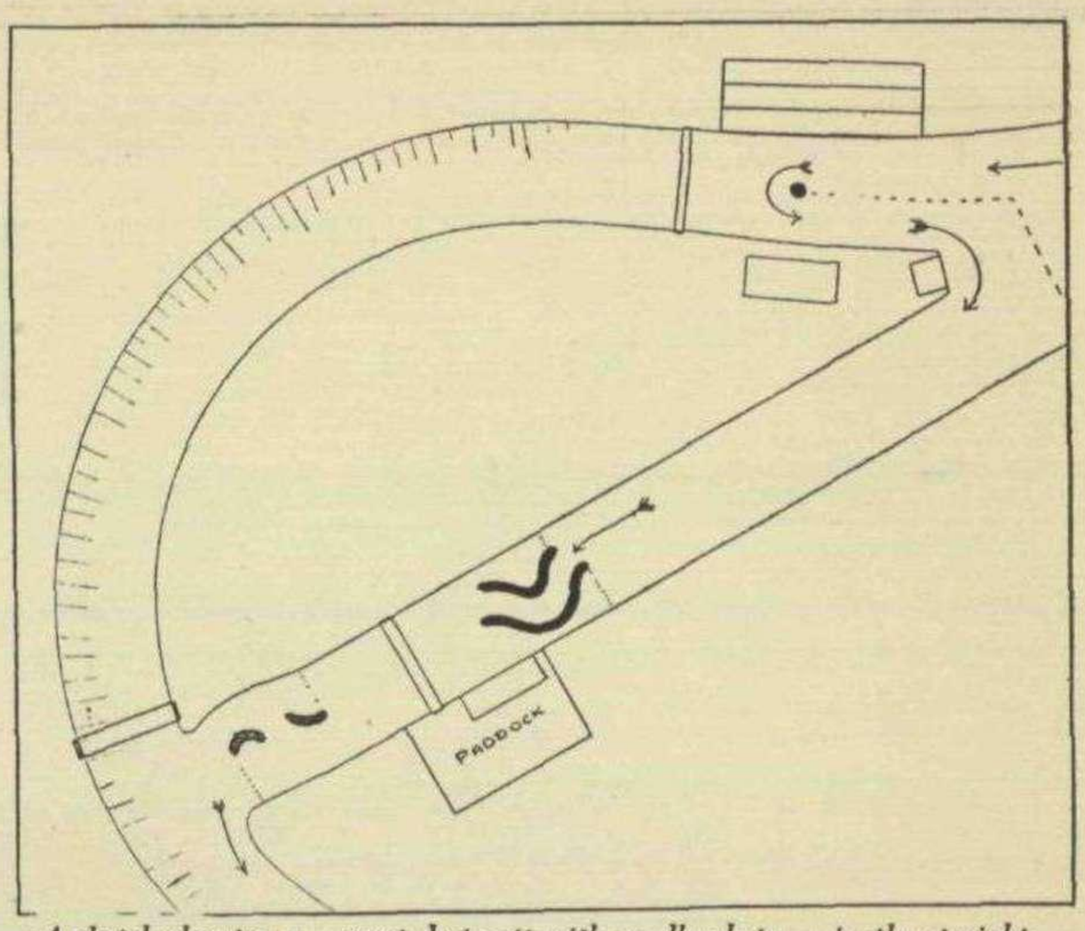
The idea of confining the whole circuit, with corners, to the length of the present Mountain course, may at first seem attractive, but a little thought will show that this gives little chance for maximum speed to be used advantageously. If a car will go fast as well as round corners it should have a chance of doing so, and the greater part of the outer circuit will be available for this.

This circuit suggested is far from ideal, owing to the obvious limitations of the track itself, but it would at least provide racing of reasonable interest, which would give opportunity of trying cars out without much expense, in preparation for the later road races, of picking drivers for more important races, and most important of all, it would give the not-too-well-off amateur a chance to run on his own car.

In view of these objects it is essential that regulations should be confined to those ensuring the fitness and safety of the vehicle entered, instead of enforcing the present "standard car race" regulations, which force the entrant to build a special car to comply with body and other regulations!

In the matter of driving rules, if such events are to teach people to drive, there must be no regulations with regard to passing on corners. The driver should be free to use his discretion and take whatever opportunity his fellow competitors give him, and the course should at all points be wide enough for such passing. There is at present a rule in the Mountain races which forbids passing inside at the Fork hairpin. This entirely fatuous regulation means that a bad driver, taking the corner too fast and swinging wide, is condoned for his folly by the fact that a following driver cannot take a correct course and slip ahead, but must either hang behind or attempt to' pass on the outside, a usually impossible feat.

As the corners are the only points which enable a good driver to pass a bad driver on a car of equal performance, the sooner drivers are allowed more freedom in their methods the better. The stewards can easily warn any driver whose enthusiasm outruns his discretion, and the threat of this, quite apart from the normal instinct of self preservation, should ensure safety while raising the standard of driving.



A sketch showing a suggested circuit with sandbank turns in the straight.

Comparisons are said to be undesirable, but they are sometimes useful in making a point, so let us compare the track with a West-end theatre, as both are out to give entertainment. At most theatres a sum of thirty shillings will not only provide two of the best seats in the house, with highly paid artists to perform for one's pleasure, but will also leave enough for garaging the car.

At Brooklands two people and a car wish entrance to the paddock, and it is "*Two pounds please!*" For this sum they may stand about in varying degrees of discomfort, according to the weather, what time a number of drivers, who have all *paid highly* for the privilege, compete in races of distressing uniformity.

The reduction made in the ordinary admission prices during the Whitsun meeting was a most welcome innovation. Is it too much to ask for better stand accommodation, and more varied racing? The latter will at least cost the track no money, and may make up to some extent for other defects.

Brooklands has great possibilities as a spectacle and as a valuable aid to British motor racing. Let us hope that they may some day be fully exploited.

THE GERMAN GRAND PRIX

ENTRIES at ordinary fees for the German Grand Prix which is to be run on the Nuerburg Ring on 19th July promise a large measure of success for this important race. In the big car class no fewer than six Mercédès have been entered, their drivers being Rudolf Caracciola, Hans von Stuck, Boris Ivanowski, Spandel, von Branchitsch and another not as yet specified. Against them are ranged nine Bugattis, consisting of the official team of four cars, which will probably be the new 5-litre machines, driven by Louis Chiron, Achille Varzi, Albert Divo and Guy Bouriat, and five amateur entries made by von Morgen, Burggaller, Prince von Leiningen, Lehoux and another as yet unnamed. Four Maseratis will represent Italy, one of them being driven by Sir Henry Birkin, and the others probably by Réné Dreyfus, Fagioli and Biondetti.

In the 1,100 c.c. division England will be represented by an Austin Seven, which will be matched against three D.K.W. cars and an Amilcar. In view of the exciting nature of the Nuerburg Ring, which is a specially constructed mountainous road circuit, the race should be of outstanding interest.

THE IRISH GRAND PRIX



[*Motor Sport Photograph*]

The start of the second day's race, with Earl Howe's and B. O. Davis' two Mercedes in the foreground.

ONCE more we have to congratulate the M.G. Car Company for the fine performance put up by their cars. Following on the speeds achieved by the latest 750 c.c. model in the Double-Twelve, a victory in the first day's race was by no means unexpected, but their winning of the Irish Grand Prix, for the best performance on handicap throughout the two days, was rather more of a surprise, and the Earl of March, who entered the winning car, and Norman Black, who drove it so successfully, have every reason to feel pleased with life.

The team prize went to the same make, this time to the team entered by Major A. T. Gardner, who is one of the most consistent supporters of this event and a real enthusiast for the sport, whose success is deservedly popular.

The Rileys put up a very impressive performance, and although not quite able to overcome their handicap against the smaller cars attracted general admiration for the consistent performance of their team of Sir Malcolm Campbell, C. R. Whitcroft, and W. P. Noble, and also for Gillow's wild but valiant effort to repeat his last year's victory.

A. Frazer-Nash's performance of averaging over 69 m.p.h. in the supercharged Austin will long be remembered, while A. C. Taylor's fine run from scratch in his 1,500 c.c. Alfa-Romeo added to the interest of the race.

Hopes of fine weather for the race faded entirely on the day, and drivers and spectators alike prepared themselves for an uncomfortable though exciting afternoon.

Non-starters included Sir Henry Birkin's new Alfa, Outlaw's Maserati, which was withdrawn after the discovery of a crack in the chassis frame, and Staniland's M.G. The fall of the flag at 3 p.m. sent 26 cars into the fray, and it soon became evident that the wet roads were not going to cut down cornering speeds, and within a few minutes there was some lurid work at Mountjoy Corner.

Noble (Riley) took the corner once almost broadside on, while Ferranti (Austin) and Gillow (Riley) took to the grass to get round. The early stages of the race produced a lively scrap between the scratch cars, Delaney's Lea-Francis and A. C. Taylor's Alfa-Romeo, with the Lea-Francis drawing gradually ahead. The Rileys were going well except Outlaw and Maclachlan, who made early calls at the pits, but the latter got away soon. Victor Gillow appeared to be driving with his usual dash and by very fast cornering was drawing ahead of his team mates.

The smaller cars with their big handicap were not, of course, ready to appear in the picture, and public interest centred as usual on the cars which were actually fastest, and the Alfa—"Leaf" contest became more marked as the former drew up closer once more to its rival. With close on half-an-hour of the race past, Outlaw's Riley was the only car at the pits, where he appeared to be remaining until further notice, his trouble being in the valve gear, and causing his retirement.

Although the wet conditions were making things none too pleasant for the drivers the course was in really first class condition and nowhere in the least treacherous.

Gillow's driving was proving every bit as lurid as last year when he won the first day's event on a Riley, and more than once he took to the grass on the corners in his efforts to disregard the weather and wipe out his handicap.

The first M.G. to call at the pits was the 850 c.c. model of the older type driven by Deering Jackson, who retired with a broken valve.

Timing of the cars showed that Delaney's Lea-Francis was lapping in 3m. 20s. (76.7 m.p.h.), while the Alfa was only 2 seconds slower. Whitcroft's speed was 75.6 m.p.h., while Gillow actually managed a lap in 3m. 17s. (77.8 m.p.h.). Among the small cars Frazer-Nash was turning the wick up effectively and lapping at 70.7 m.p.h. The M.G.s were running very nicely but it looked as if they might have a stiff job to hold their handicap lead from the "blown" Austins.

The scrap between Delaney and Taylor was closer than ever, and after nearly an hour's running they were only a yard or so apart with the Lea-Francis still just in front.

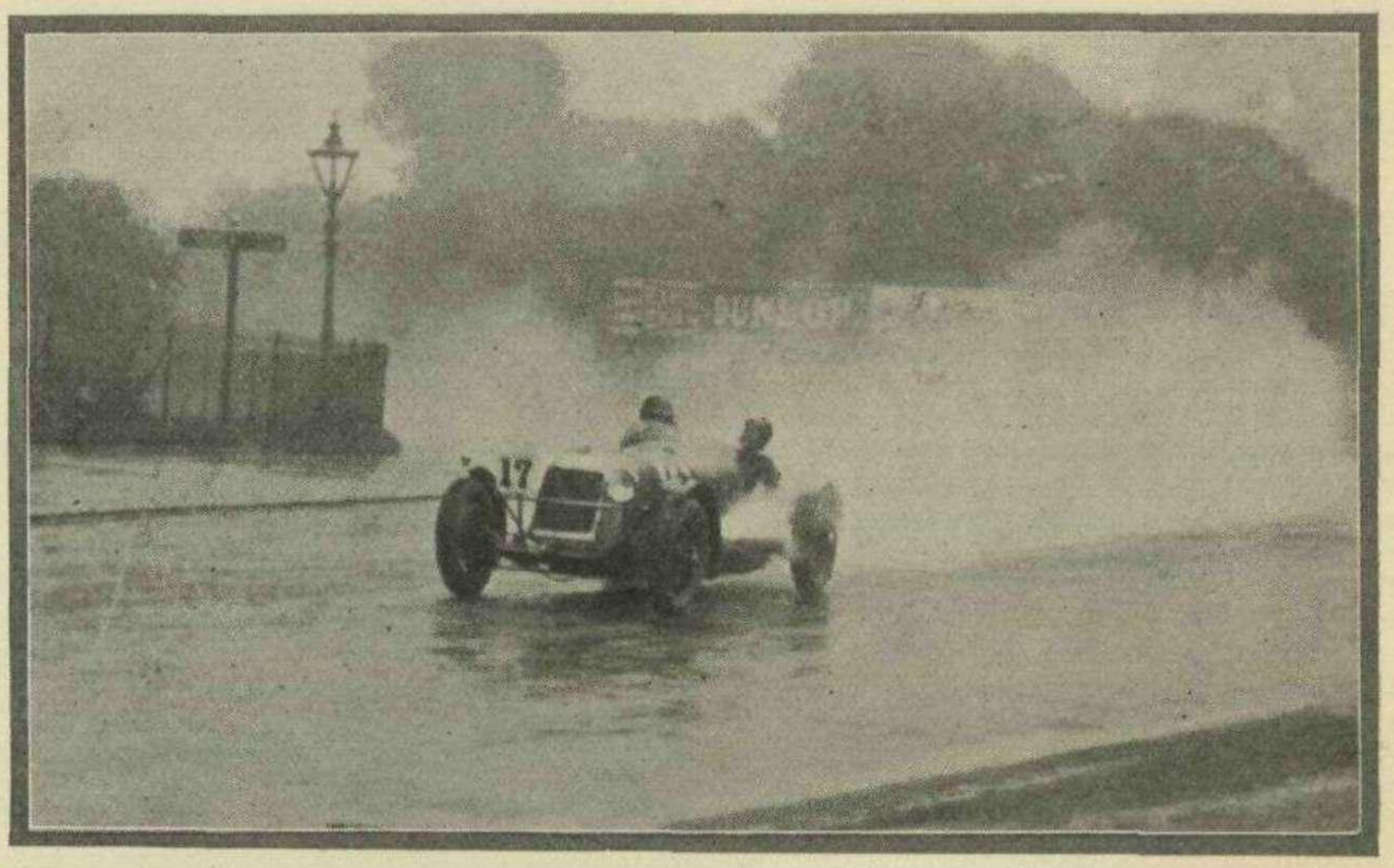
At Mountjoy Ferranti's Austin shed a front wheel which came to rest in the crowd without damage. It was duly retrieved and refitted, and the car proceeded. He came into the pits shortly afterwards and proceeded to change the wheel as a precaution. He used a wooden axle stand for a jack and lifted the car onto it,—another advantage of a "750." He was apparently having a little bother

THE IRISH GRAND PRIX—continued.

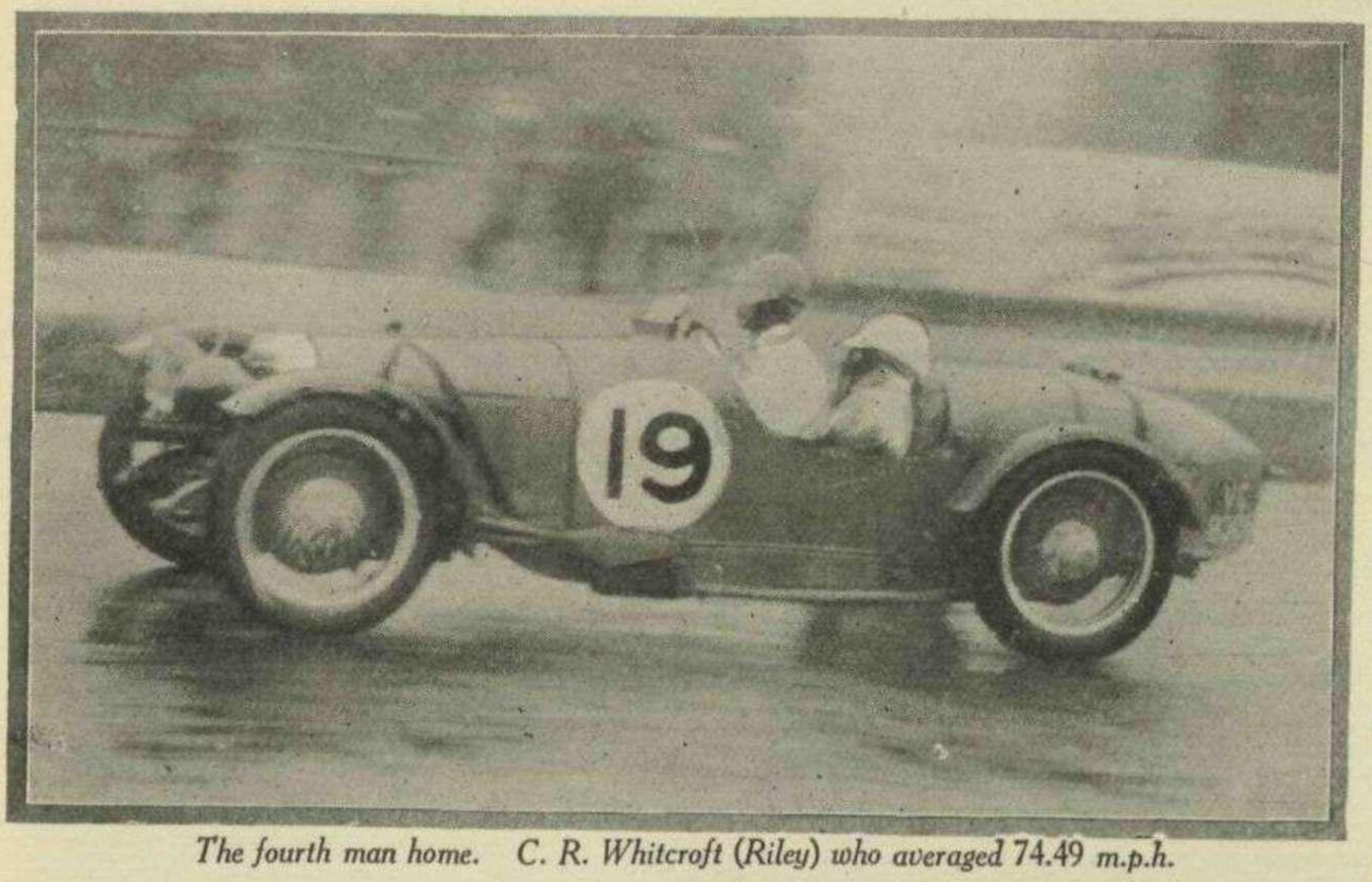
with the front brake on this wheel and spent some time adjusting it, and finally retired with a broken hub.

The race was now developing into a battle on handicap between the Rileys and M.G.'s, with Frazer-Nash's Austin following hard on their heels. Victor Gillow was leading the Riley contingent, though he overshot Mountjoy corner and lost a portion of his lead from Whitcroft. Noble was close behind Whitcroft with Sir Malcolm Campbell a rather greater distance behind Noble.

Norman Black, R. T. Horton and Dan Higgin, were leading the M.G.'s by a very small margin. Increased interest in the scratch cars was now occasioned by the fact that the Alfa, after drawing level for several laps, gained a definite lead of about 100 yards, and it became evident that the pace had been more than the Lea-Francis could stand, and Delaney had to pull into the pits with supercharger trouble, which delayed him too long to



Widengren's Maserati in the first race, with steam issuing from the exhaust, the result of a water leak.



The fourth man home. C. R. Whitcroft (Riley) who averaged 74.49 m.p.h.

have a chance of finishing well, but his had been a very fine effort.

With nearly half the race over a better idea of the likely winners was possible, the order at 30 laps being as follows :

1st, Victor Gillow (Riley).
2nd. R. T. Horton (M.G.).
3rd. Norman Black (.MG.).

Gillow was only holding his lead by the most desperate driving and it hardly seemed possible that he could last the race without a crash. His engine spat flame momentarily at the corners, as did some of the other Riley's, but apparently without harm, but his driving seemed to get wilder, and he was using the brakes to their absolute limit. He overshot Mountjoy corner more than once completely, and at Gough did some terrific skids, on one occasion coming to rest on the path after the corner, with the tail of the car only inches from the barrier.

His efforts finally proved too much for his sorely tried engine, and he slowed with bad misfiring, finally to retire with valve trouble. Hard luck after such a plucky effort !

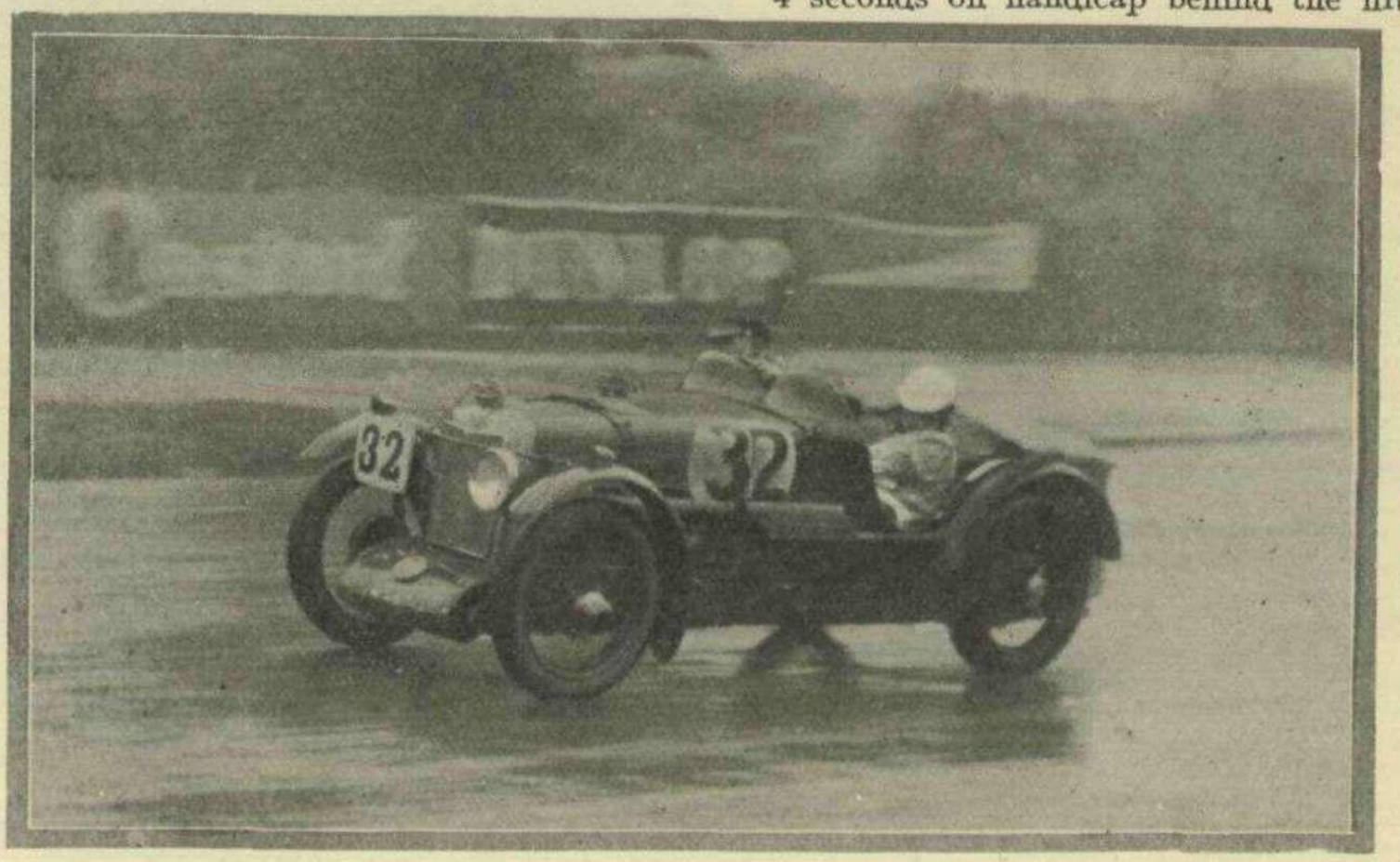
Gillow's retirement let the M.G.'s firmly into the picture and after 40 laps the order was :

1st. Norman Black (M.G.).
2nd. R. T. Horton (M.G.).
3rd. H. D. Parker (M.G.).

Cooke's Austin had developed clutch slip and could hardly get away from Gough corner, but Frazer-Nash on another Austin was still going magnificently.

Widengren's Maserati appeared to have developed some rather intricate leak in the water system, for he came round each lap with clouds of steam belching from the exhaust manifold. At 50 laps the order of the first three was unchanged, but Black had increased his lead, and M.G.s now held the first five places.

Whitcroft was driving a splendid race and his cornering was very fast, but always accurate and steady. He was lying sixth after 50 laps but was only 4 seconds on handicap behind the fifth



[*Motor Sport Photographs.*

Norman Black (M.G.) at Gough Corner.

THE IRISH GRAND PRIX—continued.

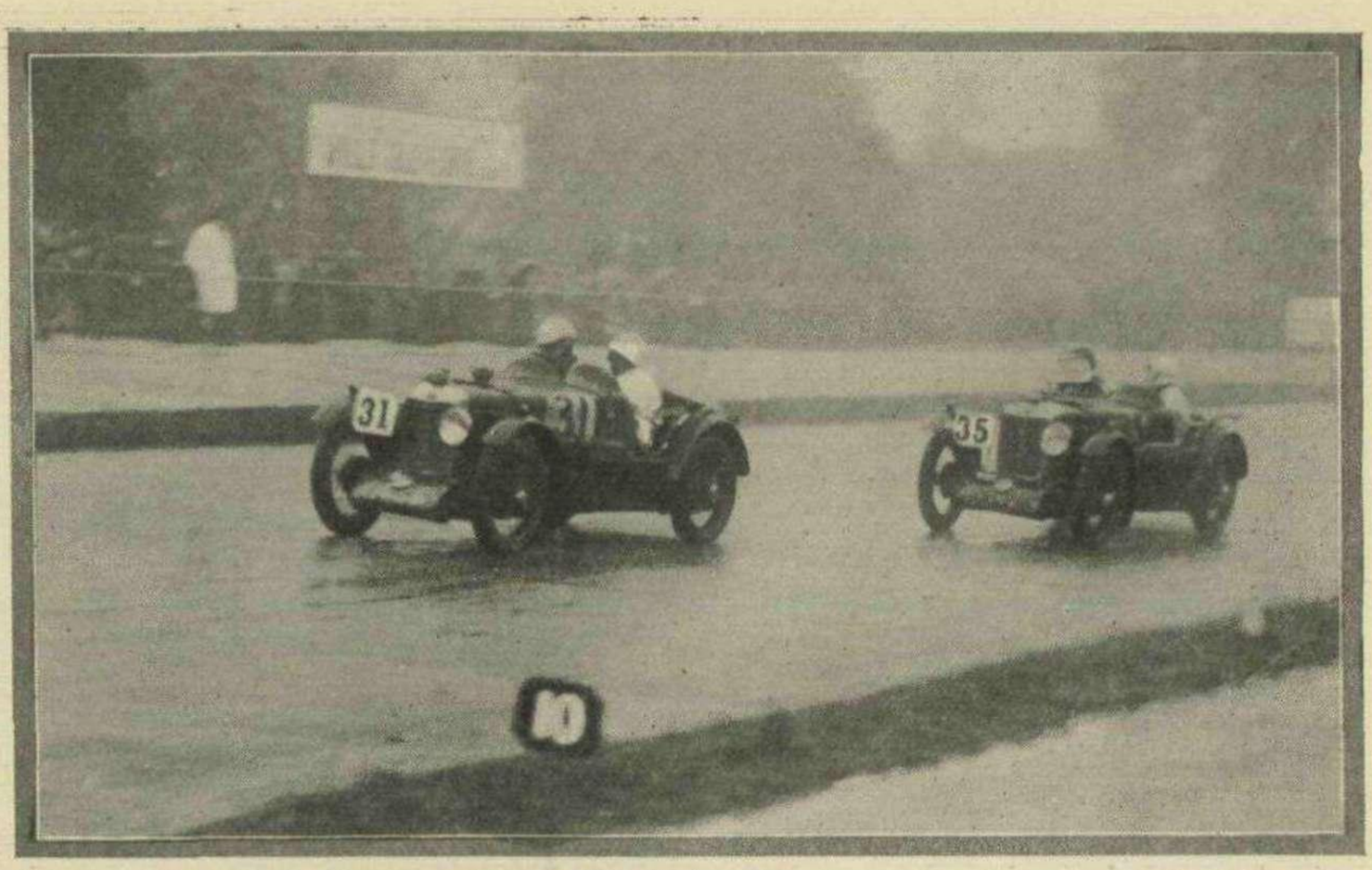
man (Dan Higgin) and 30 seconds behind Major Gardner who was 4th at this point.

At 60 laps Parker had taken second place from R. T. Horton, but there was no chance of anything but an M.G. win.

The fate of the team prize was far less certain, however, and lay between Gardner's M.G. team consisting of himself, Horton and R. R. Jackson, and the official Riley trio.

Whitcroft and Noble were doggedly pursuing the M.G.s, but Sir Malcolm Campbell's car was not going so happily and had lost a few hundred revs., though still running perfectly consistently. Proof of the state to which the latest Riley engine has been brought is to be found in the fact that they were running continuously at 6,000 r.p.m., for the whole race.

Urgent signs to the two leading teams to do all they knew, produced a great spurt at the end and R. R. Jackson while endeavouring to catch up the rest of his team had an anxious moment at Gough corner when he went into it close behind W. Kehoe (M.G.), who skidded round in front of him and drifted bodily sideways towards the barrier and stopped broadside on with the tail on the raised path which runs alongside the corner. Jackson, however, took neatly to the path, shot behind the stationary car, careered along the path and then drove down the grass bank into the road.



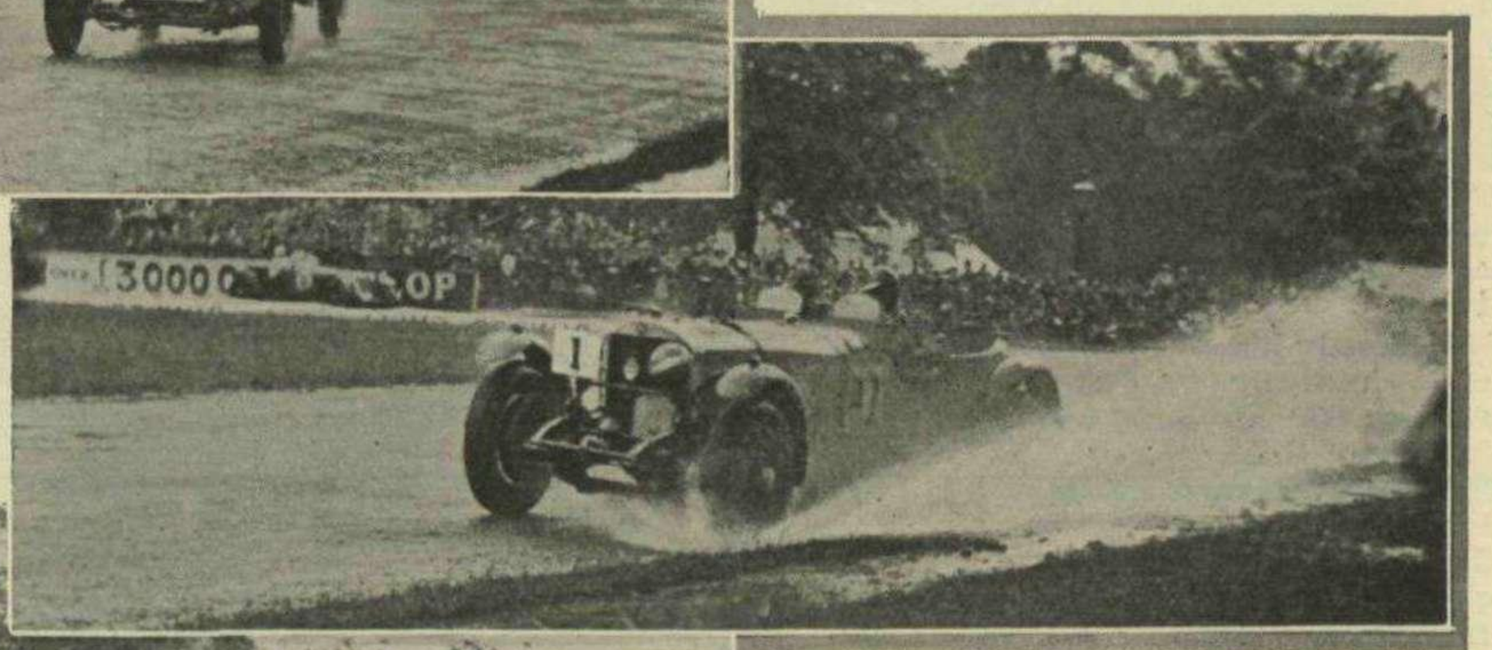
Wet going in the first day's race. Two M.G.'s in close formation. The drivers are (31) *H. D. Parker, and* (35) *R. T. Horton.*

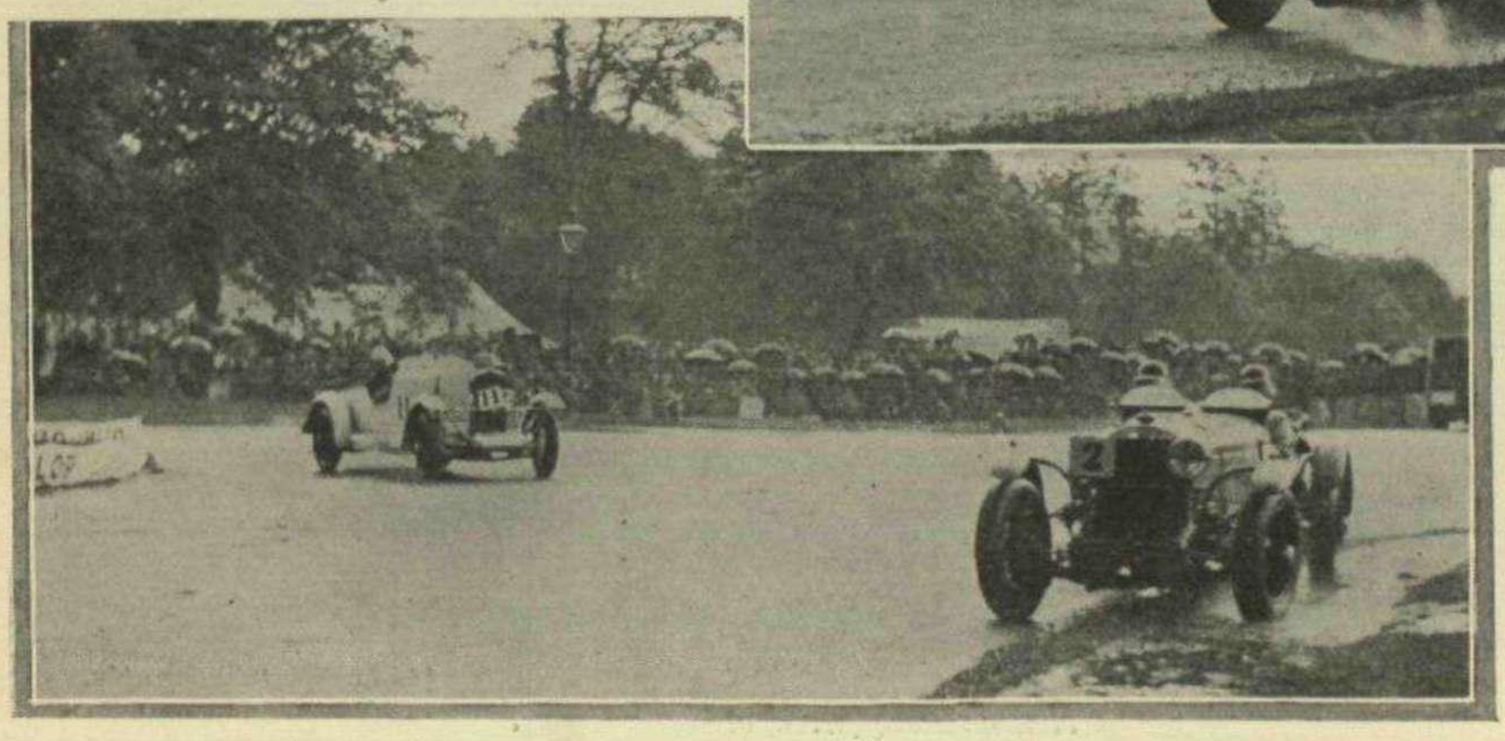
The Rileys made a great effort and Whitcroft and Noble pulled up to 4th and 5th places respectively at the finish. Norman Black got himself and his car half drowned by a shower of spray from another car and some found its way into the ignition system and for a few minutes he missed badly. It soon cleared, however, and he came home a winner of the first day's event at 64.76 m.p.h., a very fine performance for such a small engine under such wretched weather conditions.

Results of the first day's race for the Saorstat Cup were as follows:

1. M.G. Midget, Norman Black, 3h. 21m. 20s. (64.76 m.p.h.).
2. M.G. Midget, R. T. Horton, 3h. 24m. 5s. (63.88 m.p.h.).
3. M.G. Midget, A. T. G. Gardner, 3h. 24m. 15s. (63.83 m.p.h.).







Competitors rounding Mountjoy corner. Above is seen Sir H. Birkin, in the centre is Earl Howe's "Merc." and below—Davis (Mercedes) leading Esplen's Talbot.

[*Motor Sport Photographs*

4. Riley, C. R. Whitcroft, 3h. 25m. 55s. (74.49 m.p.h.).
5. Riley, W. P. Noble, 3h. 25m. 57s. (74.48 m.p.h.).
6. M.G. Midget, H. D. Parker, 3h. 26m. 11s. (63.23 m.p.h.).
7. M.G. Midget, Dan Higgin, 3h. 26m. 38s. (63.10 m.p.h.).
8. Austin, A. Frazer Nash, 3h. 29m. 13s. (69.61 m.p.h.).
9. Riley, Sir M. Campbell, 3h. 29m. 20s. (73.27 m.p.h.).

THE IRISH GRAND PRIX—continued.

10. M.G. Midget, R. R. Jackson, 3h. 32m. 9s. (61.45 m.p.h.).

11. Alfa-Romeo, A. C. Taylor, 3h. 37m. 22s. (75.27 m.p.h.).

12. M.G. Midget, F. S. Barnes, M. G. Midget, W. Kehoe, 3h. 38m. 27s. (59.68 m.p.h.).

14. Austin, Leon Cushman, 3h. 40m. 40s. (66.03 m.p.h.).

15. M.G. Midget, R. Watney, 3h. 41m. 54s. (58.75 m.p.h.).

The team prize went to Major Gardner's team, as the Riley hopes were rather spoiled by the fact that Campbell mistook the number of laps and came in a lap too soon, and lost time before proceeding.

Team Results and aggregate times :—

1. Major A. T. G. Gardner's M.G. Midget team, 10h. 20m. 29s. (A. T. G. Gardner, R. T. Horton and R. R. Jackson.)

2. Mr. Victor Riley's Riley team, 10h. 21m. 12s. (Sir M. Campbell, C. R. Whitcroft and W. P. Noble.)

3. The Earl of March's M.G. Midget team, 10h. 29m. 25s. (H. D. Parker, N. Black and R. Watney).

THE IRISH GRAND PRIX.

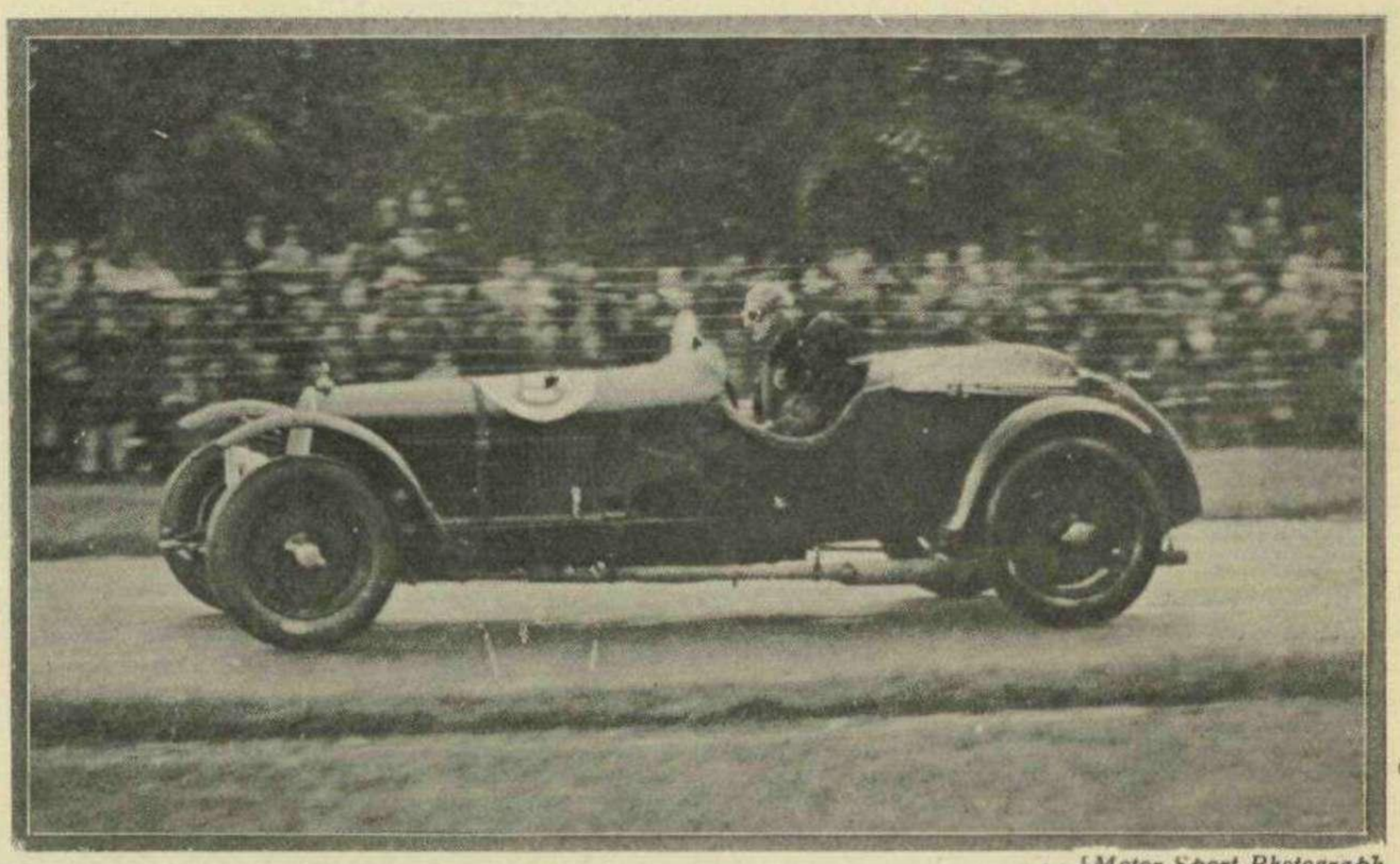
The Second Day's Race.

THE second day's race, for cars over 1,500 c.c., will long be remembered as one of the most thrilling and closest struggles in the history of motor racing. For the first time in these islands we were able to see the fight for supremacy between Italy's two leading racing firms, Alfa-Romeo and Maserati. Thundering on their heels were the two great Mercédès of Earl Howe and B. O. Davis, while it would have only needed a Bugatti entry to show Europe's finest road-racers in a replica of the fierce continental struggles which keep these cars in the very front rank of modern development.

The race was in doubt to the very end and the slightest incident to any of the leading cars might have altered the whole complexion of the event. Although Britain could not supply the winning car, both the race and the lap record fell to British drivers. All who have followed Sir Henry Birkin's racing career through all its fine performances and inevitable misfortunes, have long realized that here we have a driver who can rank with the world's best. Therefore, his fine victory, the result of faultless and accurate driving under varying and difficult conditions, was immensely popular.

Congratulations are also due to Earl Howe for his wonderful performance in breaking the lap record set up on this circuit last year. His new speed of 91.8 m.p.h. for the lap was attained more than once, and just beats Rudolph Caracciola's previous record by 1 second. Another great effort was that of the veteran, Campari, hero of many classic races, who, in spite of a badly cut eye from his splintered goggles, took over his car again after receiving medical attention, and drove with only one eye in use for the rest of the race and gained second place.

Brian Lewis on one of the "105" Talbots was the first completely British "equipage" to finish, gaining third place by a fine display of accurate driving, and by complete reliability on the part of his car, which in the true Talbot tradition of last season, ran absolutely non-stop from start to finish. His performance is all the better when it is considered that the Talbot is a very normal type of unsupercharged car entirely suitable for ordinary use on the roads without modification.



[*Motor Sport Photograph*

Sir Henry Birkin's winning Alfa-Romeo, snapped near the end of the race. He drove magnificently throughout and his victory was very popular.

After a dismal opening, the day brightened towards the starting hour, and the crowds in attendance were vastly greater than for the first day, and by the time the cars were lined up for the start the sun was shining and everyone hoped that the weather would hold.

At 2.30 p.m. the flag dropped, a maroon banged, and the engines broke into a growl, rising to a roar as the whole pack shot down to Mountjoy with Earl Howe in the lead. Silence at the grandstand for a minute or so and then a rising crescendo as Howe's Mercédès screamed up the straight about 100 yards in front of Davis and shot past with his foot hard down, the shrill scream of the blower blending with the low roar of the exhaust to produce that wonderful double note that has thrilled so many. Close behind the "Mercs" snarled Campari's Maserati, showing a turn of speed from 2½ litres that was simply amazing. Then Birkin, Eyston, Lewis and the rest roared by and the race was on in earnest.

With 10 laps completed Campari was leading on handicap by 1 second from Earl Howe, who soon after lapped in 2m. 47s. or 91.8 m.p.h. He had the blower engaged almost continuously and this is probably the cause of his later trouble with it. Had he kept to the usual Mercéd s practice of using the blower only on the gears, with an intermittent touch to hold the required speed in top, all might have been well. However, when a driver is man enough to hold such a car so constantly flat out on a road course as to overtax its mighty engine, one can only offer criticism with a feeling of intense respect! Lord Howe has lately shown himself to be one of the finest drivers of the day, and if it is lap records he wishes, who are we to suggest caution?

The Invicta was showing up very well and though for the first few laps Field was a little wild on the corners, he soon settled down and gave a fine display of fast yet steady cornering which he maintained to the end.

The early promise of a dry race was rudely shattered by a clap of thunder, followed by heavy rain, and conditions immediately became anything but pleasant. The noise of the thunder was so

THE IRISH GRAND PRIX—continued.

sharp that several drivers had anxious moments listening to their motors to locate the noise, while Brian Lewis informed us afterwards that a particular clap of thunder coinciding with a gear change made him quite certain for the moment that his gear-box had " burst " !

In spite of the rain, speeds remained terrific, and there was some lurid work on the corners. Davis was cornering very fast but not too steadily at times, as for instance when he disappeared off the road backwards at Mountjoy, but only lost a few seconds getting going again. After this little mistake his handling of the great car was excellent.

Campari still led at 15 and 20 laps but his lead was gradually being cut down. Howe had dropped from second place to fourth. Eyston pulled up to second with Birkin third. The Maseratis were lapping at just on 90 m.p.h., with Birkin almost as fast. Then the beat of Eyston's engine became less even, Birkin took second place and a few minutes later Eyston came in to change plugs. This cured his trouble and he was once more going well. He took the opportunity to fill up, and as he was doing so Campari came in and jumped out with his hand covering his face.

Ramponi, the Maserati reserve driver, at once took over the refuelling of his car, leapt into the driver's seat and roared away after Birkin and his Alfa. Campari, while attempting to pass Birkin had taken a flying stone on his goggles and a splinter had cut his eye. He was examined by Surgeon Pringle who ascertained that there was no glass actually in the eye, and as soon as he was bandaged up he was clamouring to take over once more from Ramponi. The latter was not quite keeping up the cracking pace which Campari had been setting, and which would be required if Birkin was to be caught. The latter had taken the lead at 25 laps from the Maserati, which was second, while Earl Howe had pulled up once more to third place. Eyston had now dropped out of the first six, showing how in such a hard-fought race the least stop can be fatal.

At 30 laps Birkin was leading Earl Howe by 2m. 44s. on handicap, the other " Merc " was up to third, and Ramponi fourth. Campari, wild with impatience, insisted on taking over again from Ramponi, and set off in a desperate effort to catch Birkin, now nearly 4 minutes ahead, and driving the race of his life.

The ensuing struggle will never be forgotten by those who witnessed it. Campari, seemingly unaffected by his injury, was doing all he knew. Lap after lap he shot up to Mountjoy, a slow right angle corner at the end of the two mile straight, and it seemed as if he would never cut out in time. Then close on the corner at something over 110 m.p.h., the car swayed and shuddered under the full power of its wonderful brakes, down through the gears he went, and he was round and away. As he and Birkin appeared each time the soaking crowds cheered and yelled.

At 40 laps Campari was second again, 3m. 43s. behind the Alfa. Davis was third and Lewis fourth. The Talbot driver was giving a wonderful exhibition, and his cornering was very fast and perfectly steady, as his almost silent car purred its way round the course.

All eyes, however, were on the leaders who were driving like demons, the angry roar of the Maserati contrasting with the smoother hum of the Alfa.

At Gough corner, where the width of the road gives scope for variety in styles, it was interesting to note the drivers' methods. Campari pulled his car in close on the last part of the bend, feeling the throttle all the time as the tail slid outwards in little jerks. Then his foot went hard down and he shot down the straight. Birkin took the corner in a more even sweep and used nearly the whole width of the road coming out of the corner. Both cars seemed absolutely at the limit and it was quite impossible to say which was the faster on the actual corners, though Campari's braking was the more violent.

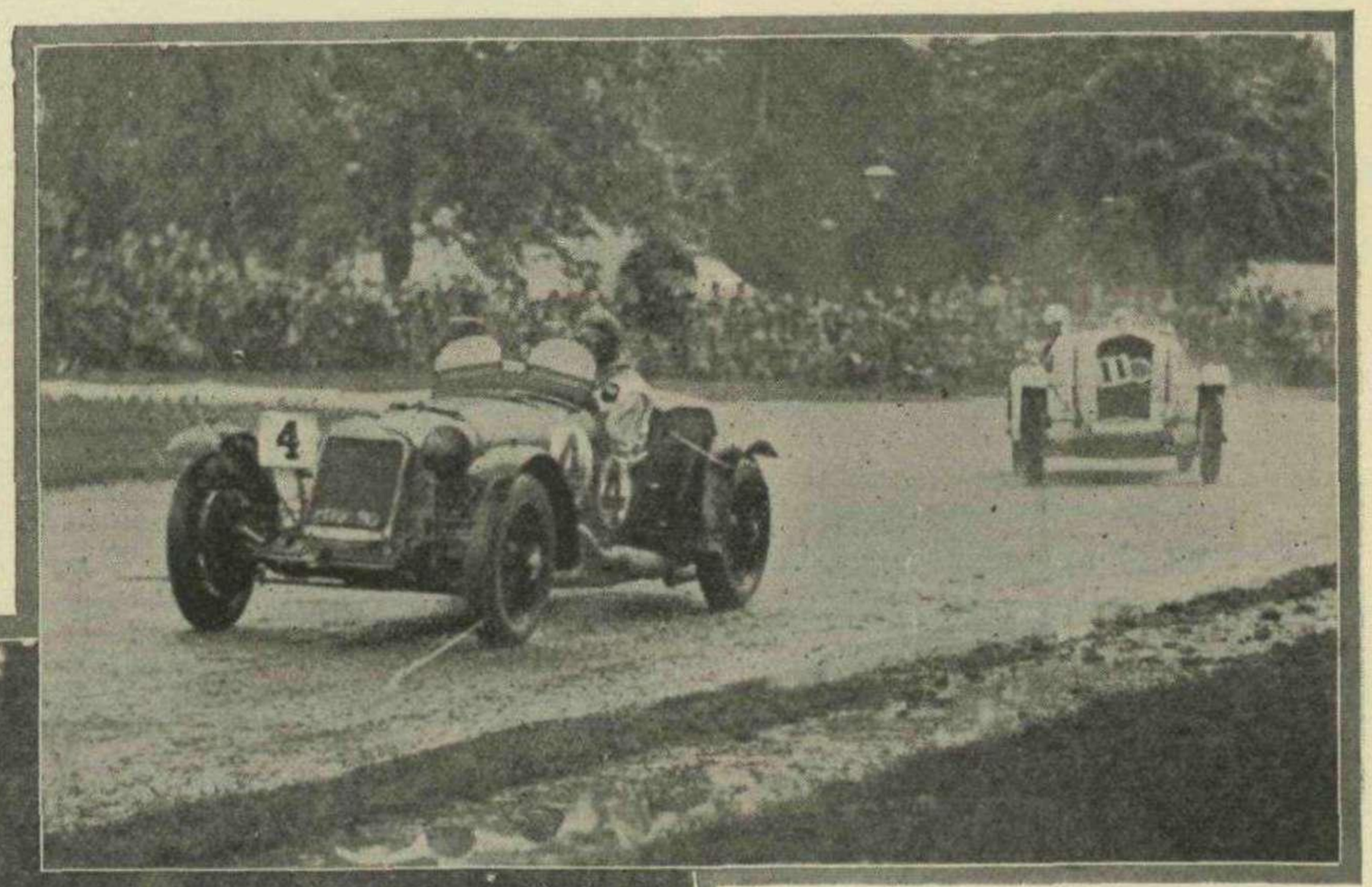
Earl Howe had now stopped blowing owing to a cracked supercharger casing, and though still doing a good 100 m.p.h., and more, was left on the straight by the flying Italian cars.

At 45 laps the gap between the leaders was almost unchanged, while Davis had brought his Mercéd.s back into third place. Eyston was once more in the picture, being fifth.

50 laps saw no change in the order, but the gap was now down to 2m. 43s. For another 5 laps, the gap remained unchanged, and at 60 laps it was still within a second of the same, and then Campari had to come in for another refuel.

Eyston was catching up once more and after 55 laps had passed Lewis and taken third place.

The positions were still so close that anything might happen, and no one could afford to have the most trivial trouble. Eyston, with a third place almost within his grasp ran short of fuel. After a momentary stop on the back stretch of the course he managed to get to the pits.



The Italian crack, Campari, accelerating away from Esplen at Mountjoy. The lower photograph shows G. E. T. Eyston (Maserati) followed by " Bug " Lewis at the same point of the course.

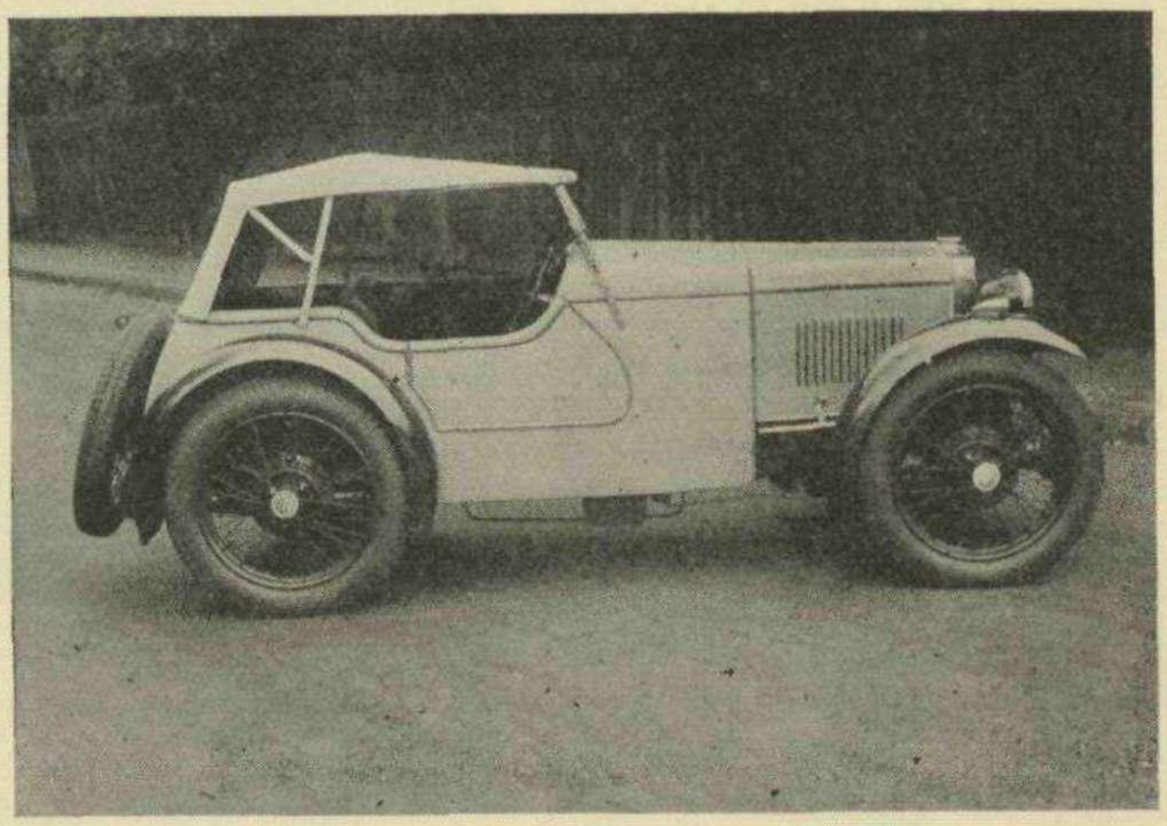
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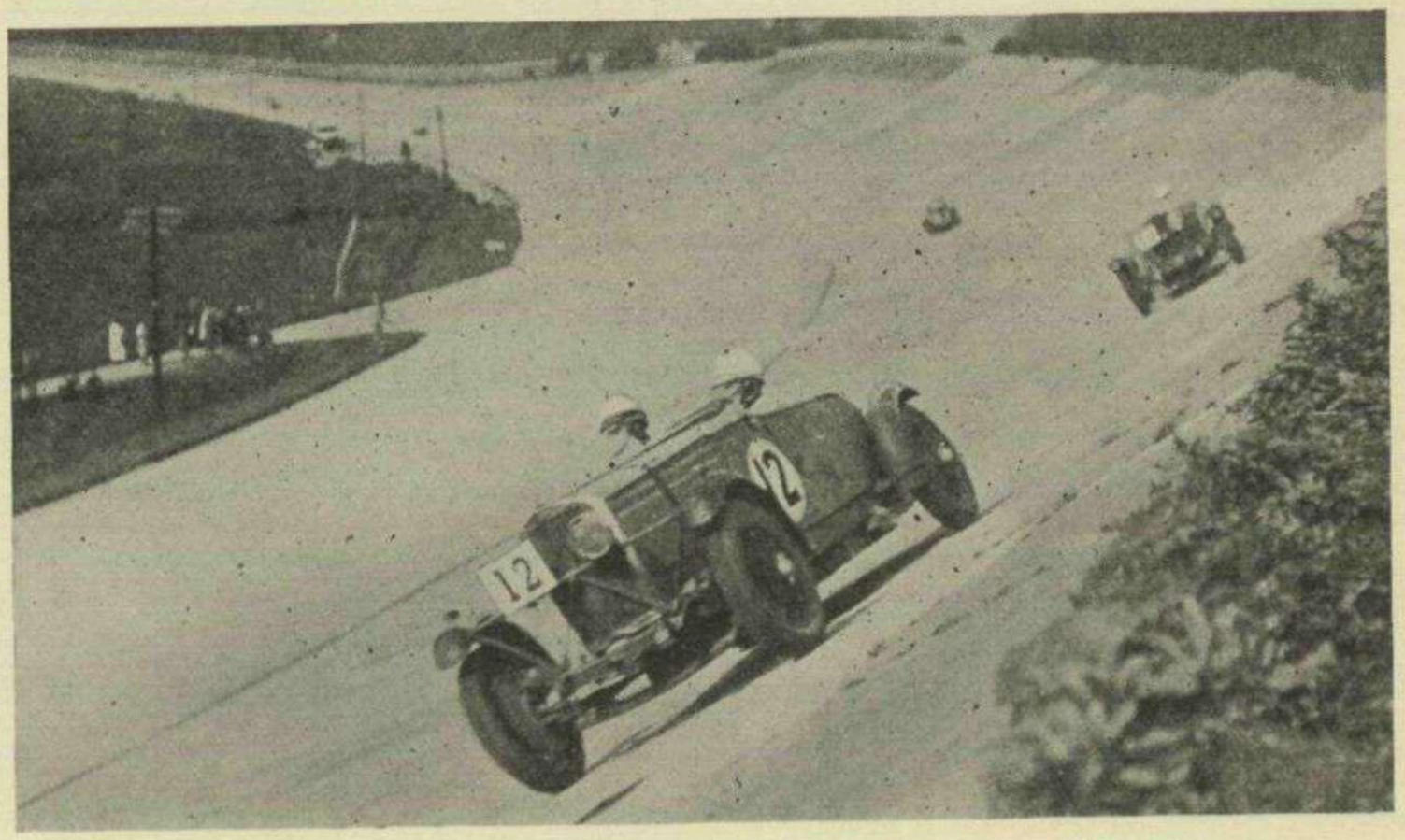
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THE "DOUBLE TWELVE." 1931.

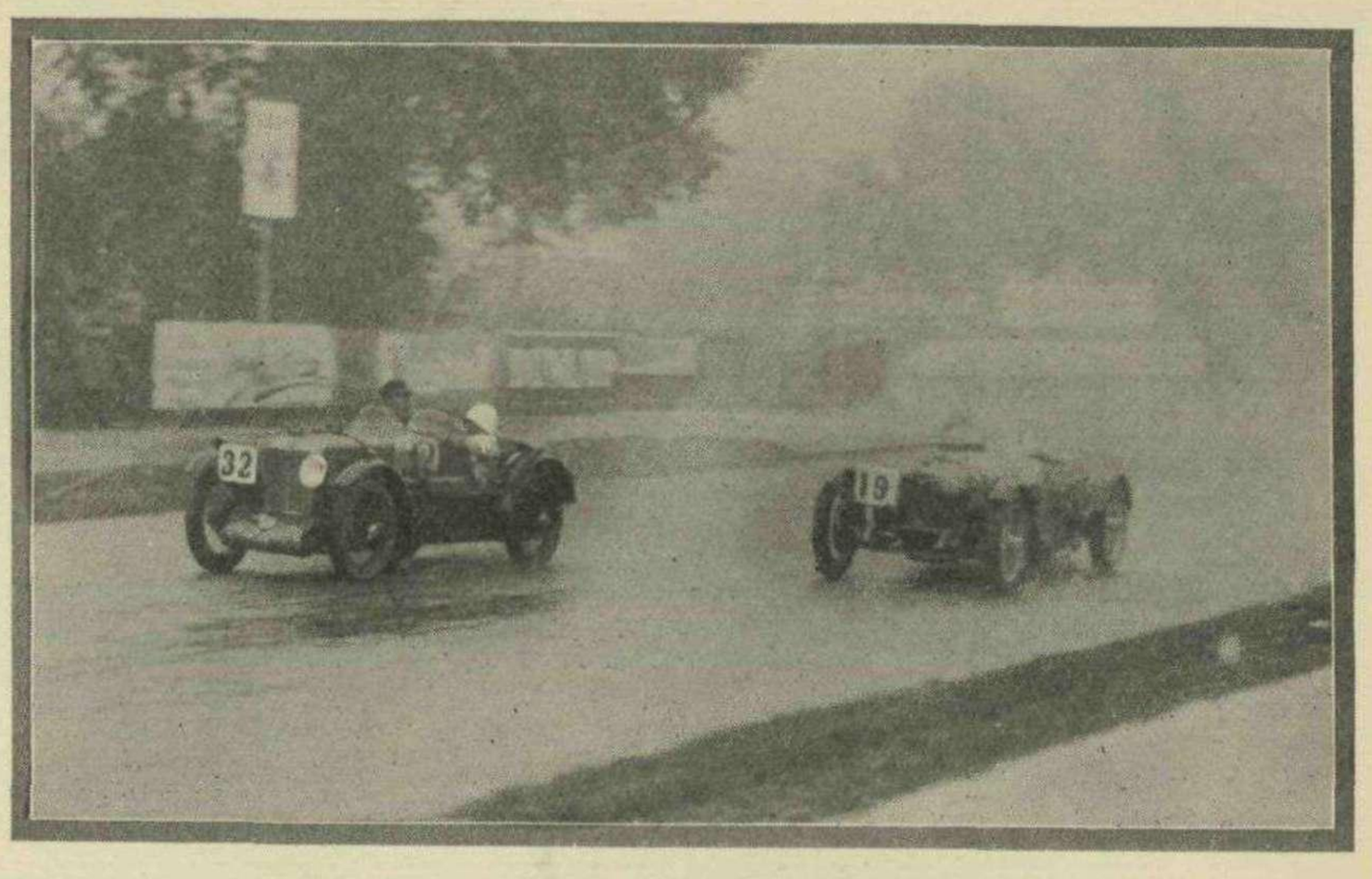


High on the banking. Saunders Davies taking his Talbot up to the corner.

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THE IRISH GRAND PRIX—continued.



He filled in frantic haste and got away so violently that the mechanic, who was but half in the car, shot over into the rear seat. All was not well yet, however, and the engine coughed and spluttered for many precious seconds before he could get going, and Lewis' never-failing Talbot took third place once more.

All eyes were now glued to the giant scoreboard to try and see who would win the Phoenix Trophy—Norman Black and his M.G. whose plaque was moving relentlessly up the board on its previous day's performance, or Birkin and the Alfa-Romeo.

With only a few laps to go Birkin was just leading the M.G., when his engine started to miss for lack of fuel.

He shot into the pits with his mechanic standing ready to jump for it. The car stopped with a jerk, the filler cap was snapped open, the funnel placed and two churns of fuel hurled into it, the whole issue pulled off half emptied, and the mechanic leapt into the car as it moved off. Very snappy indeed! But 27 valuable seconds had gone, and with them the Phoenix Trophy for the absolute winner, as the M.G. plaque reached the top of the board 11 seconds before Birkin flashed over the line, to a roar of cheering, winner of the day's event and the Eireann Cup, after one of the finest races ever seen in these islands.

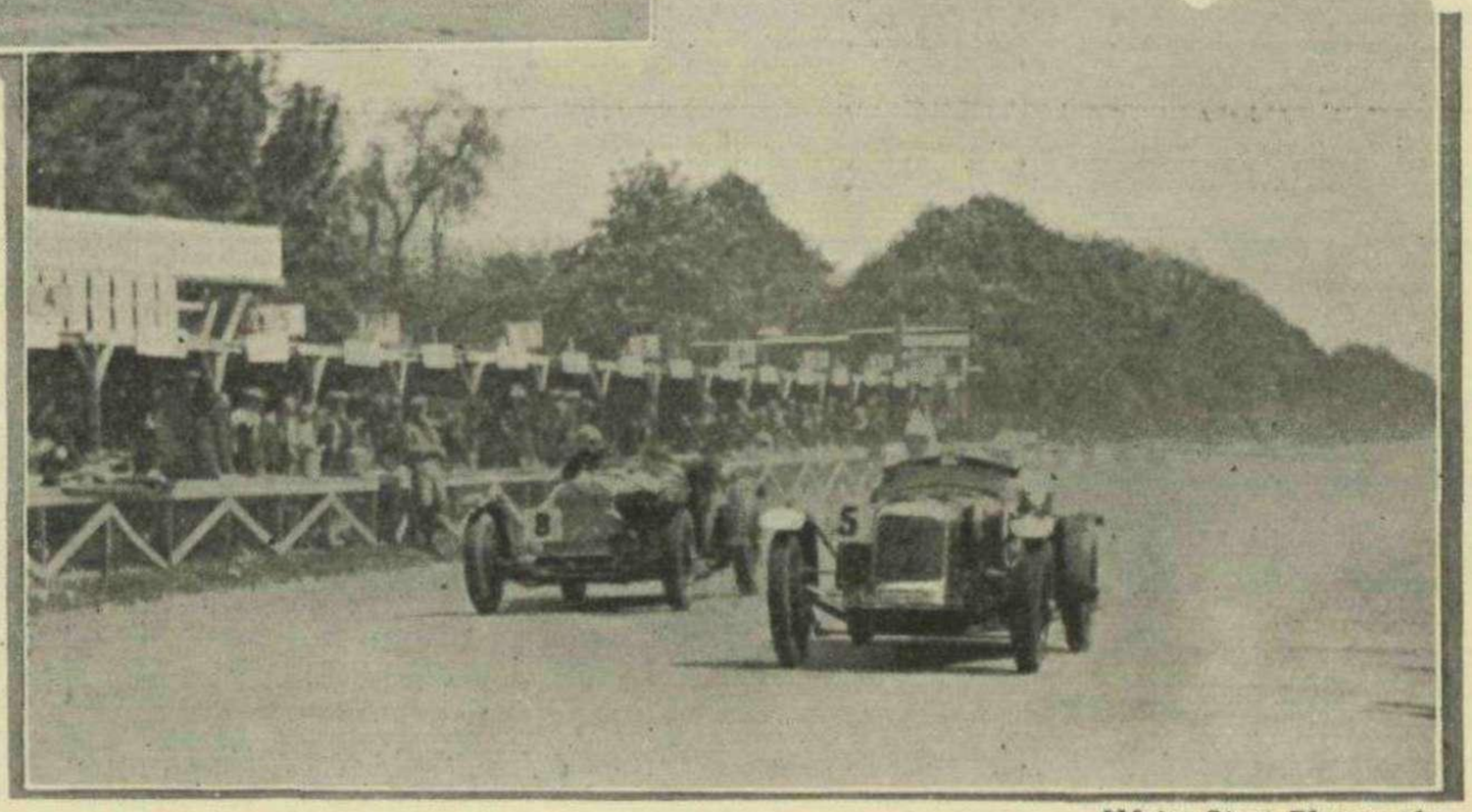


Less than 3 minutes later Campari followed, after a wonderful fight against odds and a display of driving that was indeed good to see. Then, very close on his heels was Brian Lewis and his wonderful Talbot, which had run without a stop or falter for the entire distance, and averaged 79.92 m.p.h. Earl Howe and Davis were next on the two Mercéd s, which had both been compelled to drop back from the leaders owing to minor troubles with their blowers, which meant running without them.

Field in the Invicta was seventh after a very excellent performance indeed, only overshadowed by the terrific battle among the leaders. The last place was filled by W. Esplen, who drove a privately owned and entered model "90" Talbot, and put up a very good show. It was his first big race and he drove steadily and well. We hope to see more of him in later events. The two retirements were R. F. Oats and Dan Higgin, who both very sportingly swelled the entry with cars which did not actually stand a chance of victory. Oats drove an unprepared supercharged O.M. as his Maserati could not be got ready in time, and went well till a cracked ball race in the engine made him retire. Dan Higgin's mount was a four year old Austro-Daimler which went out with engine trouble early in the race.

RESULTS.

1. Alfa-Romeo, Sir H. Birkin, 3h. 21m. 31s. (83.8 m.p.h.)
2. Maserati, G. Campari, 3h. 24m. 22s. (82.56 m.p.h.)
3. Talbot, B. E. Lewis, 3h. 24m. 31s. (79.92 m.p.h.)
4. Maserati, G. E. T. Eyston, 3h. 25m. 14s. (82.20 m.p.h.)
5. Mercédès-Benz, Earl Howe, 3h. 30m. 13s. (85.13 m.p.h.)
6. Mercédès-Benz, B. O. Davis, 3h. 31m. 05s. (84.71 m.p.h.)
7. Invicta, G. Field, 3h. 32m. 39s. (79.31 m.p.h.).
8. Talbot, Wm. Esplen, 3h. 52m. 28s. (70.38 m.p.h.)



[*Motor Sport Photographs.*

The picture in the top corner shows a scene in the first day's race. The cars are Norman Black's Midget and Whitcroft's Riley. Immediately above is seen Eyston's Maserati and the winning Alfa passing the pits, while the upper picture shows Lewis on the Talbot, at Gough corner.

Club News

THE LIGHT CAR CLUB.

DETAILS have now been issued by the Club regarding the forthcoming 90-lap Relay Grand Prix race which is to take place at Brooklands on Saturday, the 25th of this month.

In this event any open car of under 1,500 c.c., which is capable of lapping at 55 m.p.h. is eligible to compete; every car will be handicapped individually so that all teams will be on equal terms.

BUGATTI CLUB.

The results of the Bugatti Owners' Club hill climb which was held at the beginning of last month, at Chalfont Heights Estate, Chalfont St. Peter, are as follow:—

TOURING CARS.

1,100 c.c.-1,500 c.c.—1, G. P. Powles (Bugatti), 32secs.; 2, A. Esson Scott (Bugatti), 32.6 secs. Over 2,500 c.c.—1, J. S. Steele (Invicta), 29.8 secs.

SPORTS CARS.

Up to 850 c.c.—1, V. L. Seyd (Austin), 27.4 secs.; 2, J. R. Temple (M.G. Midget), 31.6 secs.; 3, H. C. Hamilton (M.G. Midget), 32.2 secs. 1,100 c.c.-1,500 c.c.—1, C. Penn-Hughes (Frazer-Nash), 30.2 secs.; 2, J. A. M. Patrick (Wolseley Hornet Patrick Special) and J. G. P. Timmins (Riley), 31 secs. 1,500 c.c.-2,500 c.c.—1, E. L. Giles (Bugatti), 25 secs.; 2, Col. G. M. Giles (Bugatti), 26.4 secs.; 3, L. G. Bachelier (Bugatti), 26.8 secs. Over 2,500 c.c.—1, E. L. Giles (Bugatti), 26.8 secs.; 2, O. Bertram (Vauxhall), 27.8 secs.

RACING CARS.

Any capacity.—1, A. N. Spottiswood (Bugatti), 24.8 secs.; 2, Col. G. M. Giles (Bugatti), 25.6 secs.; 3, J. R. Jeffress (Bugatti), 25.8 secs.

TEAM EVENT.

Bugatti Owners' Club Team II: J. R. Jeffress, A. N. Spottiswood and D. G. Evans (1,996 c.c. Bugattis), average time 26.4 secs. Runners-up, Bugatti Owners' Club Team I: J. R. Jeffress, G. N. Giles and L. G. Bachelier (2,261 c.c. Bugattis), average time 27.4 secs.

WOLSELEY HORNET CAR CLUB.

So great in popularity has the Wolseley Hornet become that two Wolseley Hornet clubs have now been inaugurated. One of these is in the Midlands, and prospective members can obtain full particulars from Mr. M. A. McEvoy, of Leaper Street, Derby. The other Club has headquarters in London, the address in this case being: Mr. S. Hutchens, 19, York Avenue, East Sheen, S.W.

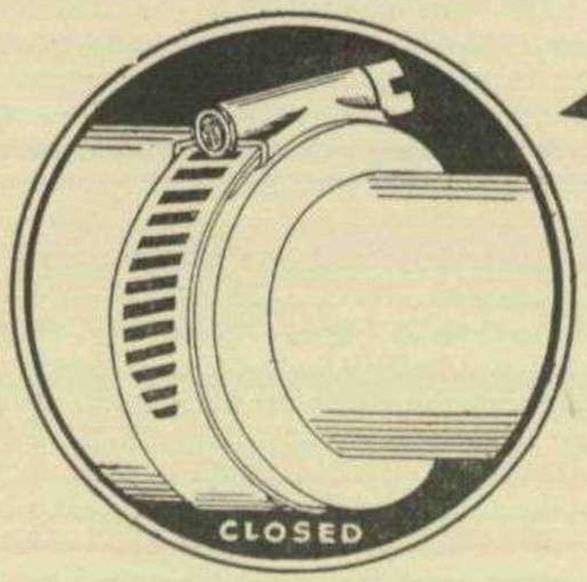
JUNIOR CAR CLUB.

In order to avoid clashing with the M.C.C. High Speed Trial at Brooklands, the J.C.C. night trial has been altered from 26th September to the 29th September.

The trial organised by the South West Centre of the J.C.C. will take place on Saturday, 26th September. The start will be at a point between London and Southampton and the event will finish at Lynton, Devonshire.

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

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THE BOL D'OR

Violet on a Huascar covers greatest distance in French 24-Hour Race.

THE big international races which figure as the most important events in the automobile calendar are seldom open to the participation of the ordinary amateur who cannot hope to compete on level terms with teams of racing cars entered by their manufacturers and running with a highly complex factory organisation behind them. Their absence from these races, however, lends additional interest to the one great event of the year which may be said to be organised almost entirely for the more or less amateur entrant, the French 24-hour race for the Bol d'Or run in the environs of Paris. The event is open to cars and cyclecars up to 1,100 c.c. and there is never a paucity of starters; but the entry list seldom has more than a sprinkling of cars whose makers' names are well-known, and the majority of machines which run bear curious titles or the names or initials of their drivers. Your real enthusiast in France, who probably is an amateur but for the ownership of one of those small garages on a great main road where repairs are carried out so amazingly efficiently, decides that he would like to build his own ideal small car; and so he sets to work and finally the product of his labours is entered for the Bol d'Or 24-hour race where perhaps it will win its class, its builder will gain fame and, who knows, one day his name as yet unknown will rank with those of Renault, Peugeot or Panhard!

One Driver Throughout.

Another peculiarity of the Bol d'Or is that in spite of the fact that the race goes on for two rounds of the clock, only one driver is allowed per car. Your entrant, therefore, as well as being an efficient mechanic must also be an enthusiast for long spells at the wheel. It must be admitted also that he should be distinctly indifferent to changes of scenery, for this tenth Bol d'Or, which took place this year on Whit Sunday and Monday, 24th and 25th May, was run over the Circuit of St. Germain, which has a total length of little more than 2½ miles.

At 5.45 on the Sunday evening, directly after the finish of the motor cycle race, the thirty-nine machines, which were to take part in the car event, were drawn up on the starting line. In the 3-wheeler division there was a single machine with a 350 c.c. engine, a Sphinx-Staub driven by Cheret. In the 500 c.c. class was a Monotrace, driven by Feger, with Annino on a car of his own construction powered with a J.A.P. engine, while another Monotrace with a 750 c.c. engine started with Gauder as its driver and had against it a Sandford driven by Remont. The biggest 3-wheelers with 1,100 c.c. engines consisted of a Sandford driven by its manufacturer and a Darmont-Morgan driven by Bourgier.

The smallest of the four-wheeled cyclecars which also had 350 c.c. engines, were driven by Raymond and Roger Colin, and were described as a Viratelle and a C.M. respectively. In the 500 c.c. class Wanamaker and Robail both drove cars of their own construction described as an L.R.W. and a Robail J.A.P. respectively, while the biggest cyclecar was a 750 c.c Renouvier driven by Renaud.

The only 350 c.c. racing car was an Antony driven by Antony himself, and the two 500 c.c. racing cars were a Sag. Jap. driven by Gordine and a Sima-Violet with de Latour at the wheel, while in the 750 c.c. racing division Bertholon had another Sima-Violet and the 750 c.c. sports cars consisted of two Rosengarts driven by Gauthier and Marc Chauvierre. The 1,100 c.c. class attracted by far the greatest number of entries. In the racing division were four Cabans, the marque which proved successful last year, and they had as their drivers Giraud-Cabantons, their constructor, Vernet, Labric and Trébor. In addition Chevallier drove a car bearing his name, and Delorme a Rally, while Rally himself drove a Naden. Two B.N.C.'s were driven by Trennet and Pesato, Martin and Druck had Amilcars, Dumoret an S.C.A.P. and Vanhoof a d'Yrsan, while Madame Violette Morris drove her own machine called a V.M., and Naegnad a car called after him. In the sports division were two more B.N.C's driven by Metais and Judet, Bourcier drove a Tracta and Vallon a Corre la Licorne, while Violet himself drove a Violet-Huascar and Madame La Caze an M.L.C., which stands for Maria La Caze.

Monsieur Cuillier, having made a preliminary tour of the circuit on his Amilcar in order to see that the road was clear after the motor cycle race, Monsieur Mauve, the indefatigable organiser of the Bol d'Or, and Josephine Baker who certainly added a novel note as the starter of a motor race, took their places in it as the pilot car. Slowly the minutes ticked by and at last as 6 o'clock struck, the pilot car moved off and led the competitors for the first lap of the circuit. Then it drew in to the side of the road and the tenth Bol d'Or had started in earnest.

The Start.

It was soon apparent that the fastest cars in the race were Druck's Amilcar, the two Cabans driven by Giraud Cabantons and Vernet, Treunet and Métais' B.N.C.'s and the big Sandford driven by its maker. At the end of the first hour Trennet and Giraud Cabantons had both covered 20 laps, while the two other Cabans driven by Vernet and Roger Labric and the big Sandford all had 19 to their credit. During the second hour Giraud-Cabantons, last year's winner, gradually drew ahead, and by 8 p.m. had a lead of a lap on his team-mates, Vernet and Labric, who in turn had gained a whole lap on the Sandford. The leader continued to run remarkably regularly, covering 20 laps an hour, and at 9 p.m. had scored 60 and was a couple of laps ahead of his nearest competitor.

At about half past nine de Latour's Sima-Violet caught fire on the straight stretch past the timing box, and although the driver got out unscathed the car was put out of the running. About half an hour later Bourgier's Darmont-Morgan burst a tyre at almost the same spot and left the road. Here again the driver was fortunately unhurt, but his machine was wrecked.

The Caban Leads.

At the end of the fourth hour Giraud Cabantons was one down on his schedule, having covered 79 laps, but he was still comfortably in the lead, and Bernet, Labric and Sandford having dropped back somewhat, Druck's Amilcar and Violet's Huascar were now second with 76 laps. During the fifth hour, however, Giraud-Cabantons again managed to cover 20 laps, and Labric passed Violet, so that the Caban position looked healthy, although Druck on the Amilcar was still second. Although it was now 11 p.m. the night was beautifully fine and a large crowd of spectators continued to watch the cars circling the course in the darkness.

Giraud Cabantons again put 20 laps into the sixth hour, and at midnight, when one quarter of the race had gone, he had a lead of half a dozen laps over Druck, his nearest competitor, with Violet and Judet on the B.N.C. third with 112 laps to their credit.

During the early hours of the morning a light rain began to fall, but this seemed hardly to trouble Giraud-Cabantons who continued serenely. His team-mate Labric, however, and Druck on the Amilcar. had both disappeared from the race, and Violet on the Huascar was now an easy second with Vallon who was also running in the 1,100 c.c. sports division on a Corre La Licoine, third. The race now looked like a certain thing for Giraud-Cabantons, until suddenly at about 11 o'clock, in the morning, he drew up at his pit, and after working on his car for some time finally withdrew. This let Violet up into the lead, and at midday on the Monday he had covered 328 laps against the 323 completed by Giraud-Cabantons before his retirement. Vallon on the Corre la Licorne, the second man still in the running, had still only covered 322 laps, while Bourvier on the Tracta was third with 314 to his credit. During the afternoon the cars continued running with few incidents of note, and promptly at 6 o'clock in the evening all the competitors were stopped. Violet and the other class winners were thereupon given a great ovation, and Cheret who had driven the smallest 3-wheeler in the race, was specially applauded as he had also ridden throughout the 24-hour motor cycle the day before.

(*continued overleaf*)

THE BOL D'OR—continued.

The full results were as follows :—

General classification :—

1. Violet (Huascar), 1,835 km. 030. Average speed 47.9 m.p.h.
2. Vallon (La Licorne), 1,801 km. 580.
3. Bourcier (Tracta), 1,751 km. 420.
4. Martin (Amilcar), 1,726 km. 240.
5. Sandford (Sandford), 1,713 km. 800.
6. Vernet (Caban), 1,705 km. 440.

Class Winners :—

3-WHEELERS.

350 c.c.

1. Chéret (Sphinx-Staub), 1,053 km. 360. Average, 27.5 m.p.h.

500 c.c.

1. Feger (Monotrace), 1,141 km. 140. Average 29.7 m.p.h.

750 c.c.

1. Rémond (Sandford), 1,571 km. 680. Average 40.5 m.p.h.

1,100 c.c.

1. Sandford (Sandford), 1,713 km. 800. Average 44.6 m.p.h.

CYCLECARS.

350 c.c.

1. Roger Colin (C.M.), 1,015 km. 740. Average 26.5 m.p.h.

500 c.c.

1. Wanamaker (L.R.W.), 1,153 km. 680. Average 30.1 m.p.h.
2. Robail (Robail), 902 km. 880.
3. Lecomble (Lecomble), 702 km. 240.

750 c.c.

1. Renaud (Renouvier), 1,157 km. 860. Average 30.2 m.p.h.

RACING CARS.

350 c.c.

1. Antony (Antony), 773 km. 300. Average 20.2 m.p.h.

500 c.c.

1. De Latour (De Latour), 1,007 km. 380. Average 26.2 m.p.h.

750 c.c.

1. Bertholon (Bertholon), 915 km. 420. Average 23.9 j.p.h.

1,100 c.c.

1. Martin (Amilcar), 1,726 km. 340. Average 45 m.p.h.
2. Bernet (Caban), 1,705 km. 440.
3. Mme. V. Morris (V.M.),1,600 km. 900.
4. Naden (Rally), 1,500 km. 620.
5. Naegnad (Naegnad), 1,208 km. 020.
6. Chevalier (Chevalier), 1,111 km. 080.

SPORTS CARS.

750 c.c.

1. Marc Chauvierre (Rosengart), 1,642 km. 740. Average 42.8 m.p.h.
2. Gauthier (Rosengart), 1,534 km. 060.

1,100 c.c.

1. Violet (Huascar), 1,835 km. 030.
2. Vallon (La Licorne), 1,801 km. 580.
3. Bourcier (Tracta), 1,751 km. 420.

CURRENT AND FORTHCOMING EVENTS

INTERNATIONAL FIXTURES—1931

JULY.

4-5th. *Belgium—24-hour Race for standard cars.*
5th. *Italy—Mont-Cenis Hill Climb.*
5th. *France—la Marne Grand Prix.*
11th. *Great Britain—Shelsley Walsh Hill Climb.*
12th. *Belgium—Belgian Grand Prix.*
19th. *Germany—German Grand Prix.*
26th. *Germany—A.D.A.C. Hill Climb.*
31st-7th August. *Switzerland—Germany—Austria—France—Italy* Coupe des Alpes.

AUGUST.

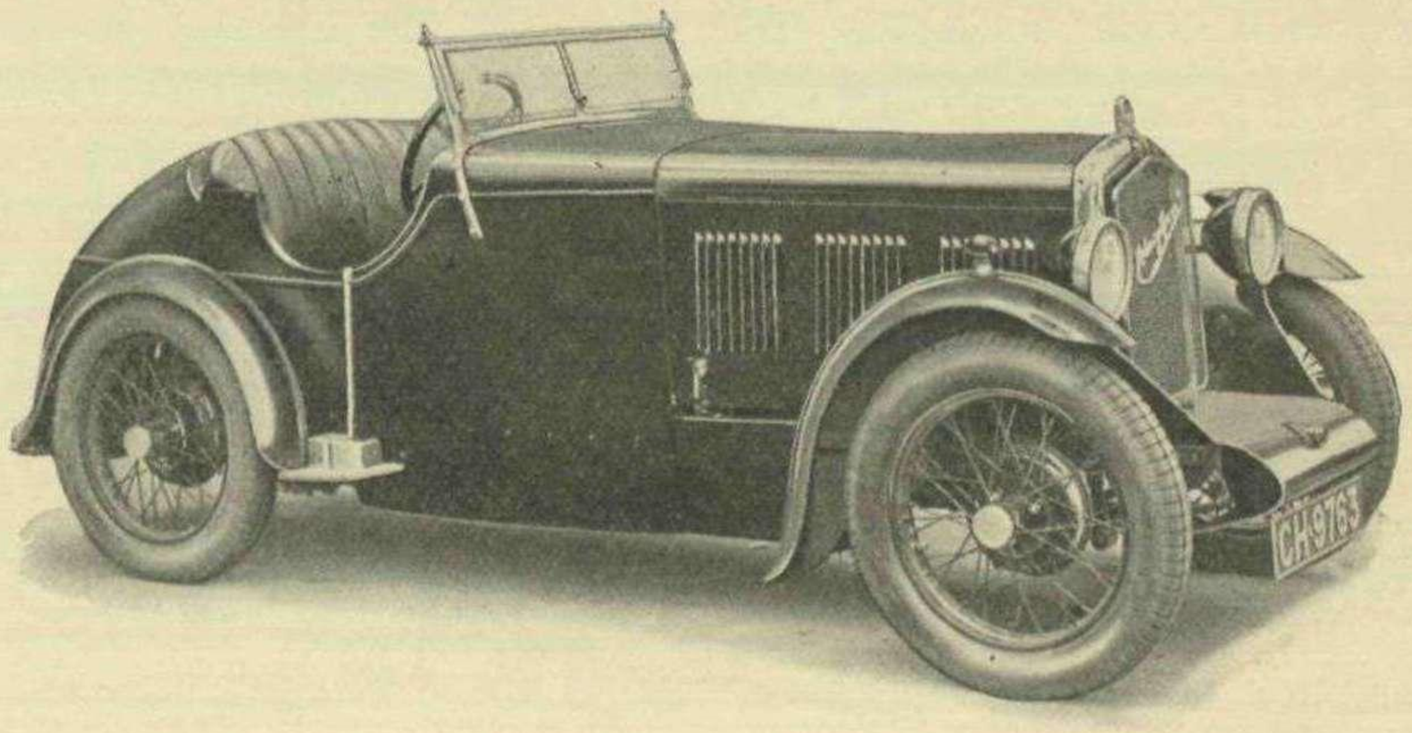
2nd. *Italy—Coupe Ciano.*
3rd. *Great Britain—B.A.R.C. Open Meeting.*
9th. *Austria—Gaisberg Hill Climb.*
9-16th. *France—A.C. du Midi Grand Prix.*
16th. *Italy—Coupe Acerbo.*
16th. *Poland—Tatra Hill Climb.*
17-23rd. *Switzerland—St. Moritz Automobile Week.*
22nd. *Great Britain—R.A.C. International Tourist Trophy Race.*

AN ATTRACTIVE "HORNET" SPECIAL

WHEN the Wolseley "Hornet" was first introduced it was not anticipated that it would enter the sports car category. The fact, however, that its little six-cylinder engine has an abundance of "pep" as well as smoothness and flexibility of running, makes the chassis quite suitable for adaptation for sporting purposes, and consequently several firms are now producing specially altered and prepared "Hornets" which both in appearance and performance are very attractive to the sporting motorist.

One of these is the McEvoy Special which is here illustrated. As can be seen, it has very neat and pleasing lines, the designer having been careful to keep the whole car in good proportion ; there is no ugly, excessive overhang at the tail, while the sweep of the wings blends well with the general lines found elsewhere in the body. At the same time, attention has been given to the seating and leg-room so as to provide ample comfort for both driver and passenger. Neither has accessibility been sacrificed for good looks.

The performance, according to the maker's statement, is in keeping with the car's sporting looks, for it is claimed that the maximum speed on top is 75-80 m.p.h., while 55 m.p.h. in second is obtainable without difficulty. These speeds are made possible by special tuning and alterations to the power unit, which include the fitting of an Amal downdraught racing carburettor, raised compression and heavy valve springs. Other alterations from standard include oversize tyres, 8-gallon petrol tank, outside handbrake, adjustable steering column, 100 m.p.h. speedometer and revolution counter. The price of the McEvoy Special is £240, and the maker's address is :—M. A. McEvoy, Leaper Street, Derby.



The McEvoy "Hornet" Special.

Luigi Arcangeli

IT was with great regret that we had to announce last month the death of Luigi Arcangeli, the famous Italian driver, while practising for the Italian Grand Prix. Arcangeli had been designated by Signor Jano, chief engineer of the Alfa-Romeo concern as second driver to Campari on the first of the straight eight racers. This arrangement, however, did not appeal to the impetuous Arcangeli, who wanted to drive the new 12-cylinder car which was obviously the fastest machine which the Milanese firm has as yet produced, and he therefore begged Signor Jano to allow him to take this car round for some practice laps in order to show what he could do. Nuvolari who had been practising with this car had treated it with due respect, and had been content to increase his lap speeds gradually day by day while he learnt the feel of the new projectile. Not so Arcangeli, however. On his first flying lap of the Monza road circuit he proceeded to go round in 3 minutes 45 seconds or at an average of over 100 m.p.h. Signor Jano, fearing an accident, immediately hung out the "slow" signal, but Arcangeli merely drove the faster. On his second lap he was negotiating the big loop of the circuit when the car skidded and hit a tree, the driver being killed instantly. There was no witness of the accident, for a man who was standing near the spot where it took place was so horrified at the sight of the racing car obviously out of control that he fled precipitately.

From the wheel tracks, however, it is possible more or less to reconstruct the course of events which ended so disastrously. The car had just crossed a slightly hump-backed bridge, which undoubtedly served seriously to reduce wheel adhesion, and was taking a long gentle left-hand bend, when it got into a bad skid and proceeded sideways for about 200 yards. Arcangeli seems to have regained control for a moment but the car was still travelling at over 110 m.p.h. and finally it left the track, hit a tree round which it pivoted and ended up against another tree with its back wheels on the grass and its front ones on the track. Arcangeli was found lying on the ground with his shoes, which were laced ones, still in the car. The accident took place at almost exactly the same spot where Count Zborowski and Sivocci were killed in previous years, and it is felt that this easy left-hand bend, coming just after the bridge, is excessively dangerous and should be altered. The car was found undamaged mechanically and started in the race on the Sunday in the hands of Nuvolari.

Arcangeli after making a great name for himself in motor cycle races, including the Tourist Trophy events in the Isle of Man, had lately shown himself a most dashing and skilful car driver. His outstanding success was probably his win in the Royal Grand Prix of Rome last year on a 2½-litre Maserati, and his decision to join the Alfa-Romeo team this year was a great loss to the Bolognese firm. As a mark of respect the Alfa-Romeo concern was anxious to withdraw its team from the Italian Grand Prix, but a telegram was received which read: "I pay my most sincere respects to the champion Arcangeli who has died a glorious death; I also think of Duty, and my orders are 'Start and win.' Mussolini." After the conclusion of the race the Alfa-Romeo firm sent a telegram to Rome saying, "We have obeyed."

THE RABASSADA HILL CLIMB

ANOTHER SUCCESS FOR CARACCIOLA IN POPULAR SPANISH EVENT.

THE Ninth Rabassada Hill Climb, which is the well-known Spanish event held in the neighbourhood of Barcelona, was run off very successfully this year by the famous sporting club, "la Penya Rhin," on Sunday, 17th May. The climb was the first of these counting for the 1931 European Mountain Championship and attracted considerable popular interest, a crowd of more than 50,000 lining the sides of the road. The course has a length of 4.9 kilometres, or rather over 3 miles and is of a difficult nature. Fastest time of the day was made by Rudolf Caracciola on his giant Mercédès-Benz, and he thus looks like repeating his performance of last year and gaining the championship in the sports class. A feature of interest also was the performance of the new Spanish Nacional-Pescara cars which ran in the 3-litre racing class and which proved remarkably fast. The results of the various classes were as follows:—

SPORTS CARS.

Under 1,100 c.c. Rodriguez (Amilcar), 5m. 52 92/100s.

Under 1,500 c.c. Elevros (Bugatti), 5m. 3 50/100s.

Under 5,000 c.c. Kotty (Ford), 4m. 21 67/100s.

Under 8,000 c.c. Caracciola (Mercédès-Benz), 3m. 45 43/100s.

RACING CARS.

Under 750 c.c. Stahol (Austin) 4m. 31 6/100s.

Under 1,100 c.c. Castello (Amilcar), 4m. 15 45/100s.

Under 1,500 c.c. Anglada (Bugatti), 4m. 9 10/100s.

Under 2,000 c.c. Oliveras (Bugatti), 4m. 5 44/100s.

Under 3,000 c.c. 1. Tort (Nacional Pescara), 3m. 50 51/100s.

2. Zanelli (Nacional-Pescara), 3m. 51 90/100s.

3. Lerschfeld (Bugatti), 3m. 53 71/100s.

THE SPORT ABROAD.

THE INDIANAPOLIS "500."

LOUIS SCHNEIDER, driving a Miller-built racing car called the "Bowes Seal Fast Special" won the nineteenth Indianapolis 500-mile race on Memorial Day, 30th May last. His time for the 500 miles was 5 hours 10 minutes 28 seconds, which gives him an average speed of 96.6 m.p.h., compared with 100.4 m.p.h. attained by the winner last year, and the record speed of 101.1 m.p.h. set up by Peter de Paolo in 1925. The slower speed this year was caused by the weather, which for once was inclement, rain falling during a considerable proportion of the time the race was being run. Second place was gained by Fred Frame on a Duesenberg, and Ralph Hepburn on a Miller was third.

Steady rain falling in the morning made the large crowd who had collected to see the race nervous lest it might be put off, but by mid-day the rain had ceased and the brick track was practically dry. Preceded by the pilot car, the 40 competitors, to which the original seventy odd entries had been reduced by the eliminating trials held during the three days preceding the race, got away for their preliminary lap. Then the flag dropped to give the flying start and the race had begun in earnest.

Immediately Billy Arnold, last year's winner, shot to the front with his Miller-Hartz racer, and travelling at tremendous speed proceeded to cover the first fifty miles of the race at 109.8 m.p.h. Then it began to rain again, but at 75 miles Arnold's average was still 109.1 m.p.h. and his lead was becoming increasingly comfortable. C. Cummings on an "Empire State" racer was second, followed by Frame's Duesenberg and Louis Schneider's Miller. Great interest was aroused by David Evans on the Cummins Diesel engined racer, which was coming along well and averaging about 90 m.p.h.

At half distance, 250 miles, Arnold still led, but as the result of the rain his average had dropped to 94.5 m.p.h. The weather, however, cleared up again, and Arnold once more began to lap at about 106 m.p.h., with the result that when 375 miles had been covered his average had improved to 96.9 m.p.h.

By this time a second consecutive win for Arnold looked certain, and then, on the 162nd lap fate stepped in. While travelling at full speed the leading Miller lost a wheel, got out of control and collided with Luther Johnson on the Richards Special. Both cars went over the retaining wall, the Miller caught fire and was burnt out, but the men got off with minor injuries, a truly remarkable escape.

The accident, however, entirely altered the course of the race, and Louis Schneider, who had been awaiting his chance in second place, leapt into the lead which he did not lose until the finish. The final order was as follows:—

1. Louis Schneider (Miller "Bowes Seal Fast Special"), 5h. 10m. 28s. Average 96.6 m.p.h.
2. Fred Frame (Duesenberg), 5h. 11m. 11s. Average 96.4 m.p.h.
3. Ralph Hepburn (Miller), 5h. 18m. 23s.
4. Myron Stevens (Miller "Jadson").
5. Russel Snowberger (Studebaker "Russel 8").

The Cummins Diesel-engined car finished twelfth at 86.2 m.p.h.

Caracciola (Mercedes) Wins the Eifel Race.

THE Eifel Race, which was run on the Nürburg Ring on 7th June, over a total distance of forty laps of the circuit, or 312 kilometres, developed into a terrific Mercéd.s-Bugatti duel. The fastest cars of the two marques were those handled by Rudolf Caracciola and von Morgen respectively, and in the end the former got home first by little over 2 minutes. In spite of the bad weather, rain falling almost continuously, some high speeds were attained. The final result was as follows:—

1. R. Caracciola (Mercédès) Benz), 2h. 50m. 47.2s. Average, 68.1 m.p.h.
2. von Morgen (Bugatti), 2h. 53m. 6.4s.
3. Braunschitsch (Mercédès-Benz).
4. Seibel (Bugatti).
5. Winter (Mercédes-Benz).
6. Zigraud (Bugatti).

The Mountain Championship.

FASTEST time in the Zbraslav-Jiloviste hill climb held in Czecho-Slovakia on 31st May, the second event counting for the Mountain Championship of Europe, was made by Rudolf Caracciola on his giant Mercédès, who climbed in 2 minutes 42 7/10 seconds. Caracciola was running in the sports class, but succeeded in beating by one-tenth of a second von Stuck, who this year is driving a Mercédès in the racing class of which he was champion in 1930. Third fastest time was made by von Morgen on a Bugatti in 2 minutes 46 8/10 seconds.

The German event counting for the Mountain Championship was the Kesselberg hill-climb, which was held on the 14th June. The event provided a surprise, for fastest time of the day was made by Juan Zanelli on one of the new Spanish Nacional-Pescara machines, which climbed in 4 minutes 0 2/5 seconds. Von Morgen (Bugatti) was second with 4 minutes 2 3/5 seconds, and Caracciola (Mercédès) third with 4 minutes 3 seconds.

The Circuit of Lwow.

YET another race in a town was held on 7th June last over a circuit measuring 3 kilometres 041 in the town of Lwow, Poland. The race was divided into three classes, one for the new "dominant type" cars, i.e. those of the model on which the manufacturer is concentrating, which had to cover 15 laps, or a total distance of 45 kilometres 615; the second for sports cars, which had to cover 25 laps, or 76 kms. 250; and the third for racing cars over 50 laps, or 152 kms. 500. A large crowd of spectators, estimated at 30,000, watched the race in spite of the rain, which caused several accidents, Hubert Sachsel, an Austrian driver, charging a tree and being rather badly injured, while two other cars driven by the German Jellen and the Pole, J. Ripper, left the course. Von Stuck started in the "dominant type" class, but was disqualified, and had to be content with winning the racing division. The final results were as follows:—

"DOMINANT TYPE" CLASS.

1. Madame Kozmian (Austro-Daimler), 43 m, 36.7 s. Average, 40.0 m.p.h.
2. Reim (Lancia), 43m. 39.4s.

SPORTS CLASS.

1. Nadu (Bugatti), 1h. 3m. 17s. Average, 45.1 m.p.h.
2. Bogucki (Bugatti), 1h. 3m. 31s.
3. Widawski (Austro-Daimler), 1h. 4m. 23s.

RACING CLASS.

1. Von Stuck (Mercédès), 1h. 56m. 46s. Average, 48.9 m.p.h.
2. Hardegg (Bugatti), 1h. 58m. 56s.
3. Holug (Bugatti), 2h. 9m. 45s.

The Grand Prix of Geneva.

87½ M.P.H. WIN BY LEHOUX AND HIS BUGATTI.

WHILE Achille Varzi was defending the Bugatti colours in Rome, Louis Chiron, the other crack of the Molsheim team, was due to take his racer to Geneva for the Grand Prix, which was run off on the same day, 7th June. Unfortunately, however, his car was crashed in an accident shortly before the race, and Chiron came to Geneva without it to apologise for his absence from the starting line by loud-speaker to the assembled throng of spectators. With Chiron out of it, however, there were still plenty of more or less amateur Bugattisti to defend the honour of the marque, in which they were distinctly successful.

The racing started with a series of eliminating races over a distance of 150 kilometres for cars up to 1,500 c.c., up to 2 litres and above that limit. In the smallest class Veyron on a Bugatti took the lead from the outset, followed by Roux and Gaupillat on similar cars. On the fifth lap, however, the last-named was forced to retire, and his place was taken by Kersler on an Alfa-Romeo. Avondet on a Bugatti was fourth, Hurani (Alfa-Romeo) fifth, Wimille (Bugatti) sixth, and Augwerd, also on a Bugatti, seventh.

The 2-litre class provided a duel between Bugatti and Alfa-Romeo, the former cars, driven by de Maleplane and Minangoy, however, getting home first, in front of Rusca Pesato and Pirola on the Alfas. The Bugatti contingent in the biggest class consisted of Lehoux and Lumachi on 2,300 c.c. machines, both of whom succeeded in beating Caflisch on his 7-litre Mercéd s and Klinger on a 2½-litre Maserati.

The final consisted of a race for 250 kilometres, and included all those who had qualified in the eliminating races. Lehoux, after his previous success, took the lead from the first, though hotly pursued by the other Bugattisti, Lumachi and de Maleplane, and by Klinger on the Maserati. Unfortunately, at this point the race was marred by an accident when Couut Czaikowski's Bugatti skidded while passing another competitor, left the road and killed one of the spectators. Czaikowski himself got off with a broken rib and a nasty wound in the right leg, but although the race was being run with official sanction, he was held responsible by the Swiss authorities and kept under observation in the hospital to which he was taken.

In the meantime Veyron (Bugatti), the winner of the 1,500 c.c. class, had been forced to retire, and he was soon followed by de Maleplane on the 2-litre Bugatti and Klinger on the Maserati. Thereupou Caflisch with the big Mercédès moved up into third place behind Lumachi and Kersler on the 1,500 c.c. Alfa-Romeo became fourth. However, there was no catching Lehoux, who finally crossed the line the winner by nearly five minutes. The final result was as follows :—

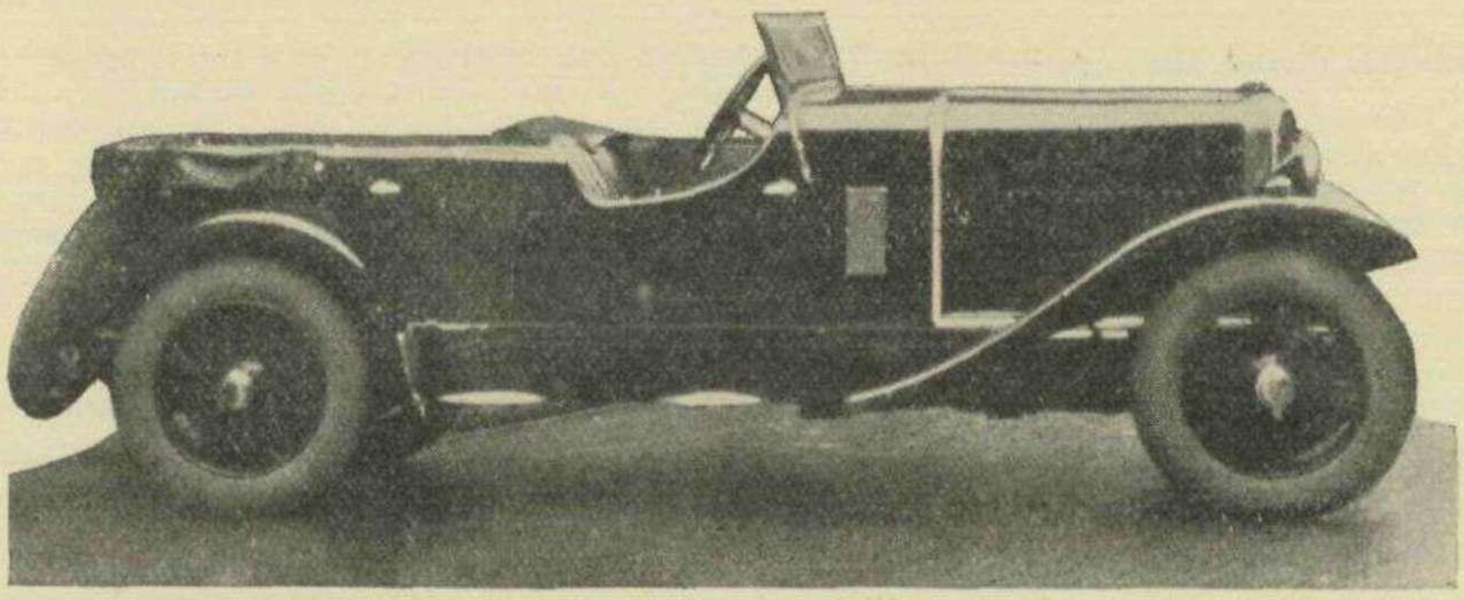
1. Lehoux (Bugatti), 1h. 47m. 42s. Average, 87.7 m.p.h.
2. Caflisch (Mercedes), 2h. 1m. 16s.
4. Kersler (Alfa-Romeo), 2h. 4m. 02-5s.
5. Pirola (Alfa-Romeo), 2h. 5m. 24s.

The Grand Prix for 1,100 c.c. cars was run over 200 kilometres, and was notable for the appearance of one of the little Bugattis, which it may be remembered were built some years ago. At the start Manet on a Salmson took the lead, but on the sixth round he was forced to retire, and victory went to Benoit on an Amilcar, who was followed home by the Bugatti. The final order was as follows :—

1. Benoit (Amilcar), 1h. 47m. 30s.
2. Romano (Bugatti), 1h. 50m. 0s.
3. Dourel (Amilcar), 1h. 55m. 45s.

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ITEMS OF INTEREST

FROM VARIOUS SOURCES

European 10,000 Kilometre Trial.

THE European 10,000 kilometre trial (May 22nd to June 6th inclusive), is organised by the German Automobile Club and covers practically every country in Southern and Central Europe.

In the 2-litre class competitors had to cover some 408 miles each twenty-four hours. Under the best conditions when an average of 30 m.p.h. was possible in running time (i.e., on about four days of the sixteen), this was equivalent to starting at 6 a.m. and " blinding " all day till nearly 10 p.m., allowing two hours in that time for meals and fuel replenishments.

Most of the way the highest possible average was 20 m.p.h. which meant driving for twenty hours out of twenty-four, the remaining four covering all stops and including sleep. There were days, e.g., in Yugo-Slavian territory, when drivers had no spare time for sleep or sit-down meals.

No money prizes were offered, so that there was no monetary advantage in entering. The Riley Company is therefore to be congratulated on seeing the wider possibilities of the trial. *The two Rileys were the only British cars in the event* and aroused the keenest interest everywhere. Their silent running was particularly commented on.

Donald Healey's car (an Alpine " Six " open tourer) was an official Riley entry, but Mrs. Montague Johnstone's (an Alpine " Six " Saloon) was her own.

Both gained first-class awards, and in addition Mrs. Johnstone won the Hungarian Motor Club Cup.

The route took competitors first across Germany, Switzerland and France into Spain. By far the best roads were those in Spain, where hundreds of miles on end of excellent tarmacadam were encountered, with bends so steeply banked that really high speeds were possible.

Every variety of weather and temperature was met with. In Southern Europe the heat was so terrific that Healey had to prop the sides of his bonnet open; his passenger sat with his feet through the windscreen opening! Many drivers' hands were blistered with the heat of steering wheels and gear levers.

There was no sign of the recent revolution in Spain, except that on crossing the frontier from France, every driver had to declare the amount of money in the car, as no one is allowed to take cash or securities out of Spain. Otherwise the Spaniards everywhere seemed determined to please visitors and attract them to come again.

In Portugal the greatest trial was the dust. It was like driving through a thick choking fog, and the English competitors returned with a new appreciation of the blessings of our tarred roads at home.

The most serious incident was when a German driver fell asleep at the wheel when doing 60 m.p.h. in Spain. The car left the road and telescoped against a tree. The driver was killed instantly, and the mechanic seriously injured.

Unhappily the car following was occupied by two ladies to whom it fell to cope with the mess.

In every country the national motoring bodies went to the greatest trouble, and spared no expense in organisation and assistance to the competitors. In Portugal, in addition to route-marking on a lavish scale, pilot cars were provided and a repair lorry toured the course in case of need.

The worst roads of all were encountered along the north coast of Italy, but most of the obstructions were caused by the fact that they were under extensive repair. Mussolini seems to have given the order for vast road reconstruction in this district, regardless of cost.

On the Italian frontier a lady representing the Italian Automobile Club presented every competitor with a wonderful bouquet of carnations, accompanied by a gracious salutation!

After a tour of Northern Italy, the course entered the Alps and included three of the most severe passes in Europe—Furka, Taurn and the Katchberg. The last named, six kilometres long, is the steepest in Europe, having a gradient of one in 3½.

Amazing mountain roads were encountered in Yugo-Slavia, south of Fiume, on the way to Ragusa. One climb (according to a German competitor whose passenger counted them with true Teutonic thoroughness) included seventy-six hairpin bends. Another, called the " Serpentine " was the finest piece of road engineering seen on the whole trip.

At 10 p.m. one night, when 4,000 feet above sea level in the mountains of Dalmatia, the competitors ran into a terrific thunderstorm. " It was eerie in the extreme " says Healey, " to see the almost continuous lightning all around us, most of it actually in the clouds below our level."

Approaching Zagreb, Lavalette (a French driver well-known to Continental competitors) fell asleep and ran into the ditch. The car was wrecked, but the occupants miraculously escaped any injury.

The national motoring organisations vied with each other in their reception to competitors, but the finest welcome of all was that staged by the Hungarian Club.

Here (at Buda-Pesth) Healey was so far ahead of schedule that he had twelve hours sleep in a real bed and a swim in one of the palatial baths for which the place is famous.

A German police car was one of the entries and the occupants were particularly solicitous of the English competitors' welfare. This car and Healey's were the first to reach the German frontier on the return through Czecho-Slovakia.

An enormous crowd had collected to welcome them at the frontier and officials insisted on Healey broadcasting on the spot, in company with the police! His words were relayed through German stations.

The officials also persuaded him to put on the ether the peculiarly musical note of the horn on his Riley.

The finish was at the well-known Avus Track outside Berlin on Saturday, June 6th. Here was a crowd some 100,000 strong and a tremendous ovation was given to the two Rileys. Each competitor to finish was presented with a wreath and a bouquet.

In Berlin the cars were locked away for twenty-four hours while officials examined and verified that the various components they had marked at the start were still there and had not been changed.

It is worth noting that they were competing with amongst others, crack *teams* of Continental drivers who knew most of the course and had cars specially built for the event.

Healey remarks on the enterprise of the Czecho-Slovakian nation which is making its own cars, assisted, of course, by a heavy tariff. No fewer than four makes of Czecho-Slovakian cars were in the trial.

Mrs. Johnstone, who is a daughter of Sir John Foster Fraser, was accompanied by her husband and a mechanic.

Healey's passenger was a Belgian whom he had met on a former rally and who could not speak a word of English.

Apart from that, Healey reports that English seems to be spoken all over Europe. In the wilds of Dalmatia at 2 a.m. on a mountain track they stopped a peasant, who exclaimed " Ah! I know you are English and want to know the way . . ."

Healey's Customs papers show that in little over a fortnight he crossed thirty-seven frontiers. According to an A.A. representative this is a record in high speed wandering. Nevertheless he found time to take a cine record of scenes en route.

Goggles and the Schneider Team.

THE Air Ministry has awarded the contract for goggles for the Schneider Trophy Team to E. B. Meyrowitz, Ltd., for the third consecutive time.

The members of the team will be supplied also with Crookes B. tinted lenses, which they will use to overcome excessive glare which they are apt to encounter especially during the training period.

Reconditioning Without Replacements.

MANY sports car owners hesitate to carry out a complete overhaul of their car, particularly if it has long passed its prime, on account of the high cost of new parts, and take the alternative of disposing of it. It is, however, now frequently possible to regain efficiency and economical running without going to the expense of buying replacements or having a complete overhaul, as is clearly shown by an interesting booklet that we have just received from Barimar's of 18, Lamb's Conduit Street, London, W.C.1., dealing with the reconditioning of worn cylinders and other parts of the engine. A copy of this booklet will be sent to any reader of MOTOR SPORT by Barimar's, upon receipt of a postcard.

TECHNICAL NOTES.

UPPER CYLINDER LUBRICATION.—Results of Tests.

THERE has recently been a revival of interest in the problem of upper cylinder lubrication by means of fluids mixed with the fuel, and we have carried out a prolonged test of the substance known as Speedoil, marketed for this purpose. Before dealing with the result of our findings it will be as well to consider some of the problems arising in attempting to lubricate valves, guides, and the upper part of the cylinder by substance in the fuel.

The parts required to be lubricated fall under two main headings. First such parts as come in contact with the lubricant before combustion and secondly those which only come in contact with the burnt or burning gases.

Under the first heading come the inlet valve stems and guides, and these will be to some extent lubricated by the old method of mixing an ordinary mineral oil with the petrol. Such a practice has, however, a certain definite disadvantage in the fact that such an oil is bound to be completely burnt in the combustion chamber, which means a definite increase in carbon formation, and the resulting burnt product is liable to cause gumming up of the exhaust valve stems, and the consequent delayed operation of same will be detrimental to the exhaust valve seats.

It is the claim of the manufacturers of Speedoil that no normal oil can remain unchanged under the heat of combustion, and they make no such claim for their own product. This on the other hand works on quite a different principle. It is a chemical compound whose nature is naturally secret, but which, in addition to being a lubricant in its normal state, forms, when decomposed by the heat of combustion, a greasy compound which acts as a lubricant, and so attends to those parts which only come in contact with the products of combustion.

The engine selected for test, was one of which the performance and habits were already well-known, one of them being that of badly burning its exhaust valves. The engine was cleaned out and then run with Speedoil in use for just under 4,000 miles. This engine was sufficiently worn to need decarbonising rather frequently, so after this period, as compression on one cylinder had become poor, it was taken down for examination. No adjustments had been made during the test, and the loss of compression was due to an exhaust valve tappet which was not allowing the valve to close fully.

The actual effect on the performance of the car was hard to define exactly, and there was no increase in maximum speed. Starting in cold weather seemed to be slightly improved owing no doubt to the improved lubrication of cylinders, and sealing effect on the valve guides, but it was in the effect on the mechanical condition of the engine that the results were most surprising.

The carbon, usually rather hard in this engine, was very soft and could be wiped off the head and pistons. The valve seats, with the exception of the one which was held up, were bright and clean. The stems of both inlets and exhausts were clean and slightly oily. It was specially noticeable that the burnt valve, in spite of the fact that the burning gases had been impinging fully on the stem, had remained clean and well lubricated in this department, which goes to indicate that the products of combustion of Speedoil fulfil the makers' claims. The standard grade of Speedoil must not be used with alcohol fuels but the makers supply a special "brew" for this purpose.

Many famous continental firms use this compound on their cars, including Mercedes-Benz, Rudolph Caracciola being one of their drivers who employs it consistently. The suppliers in this country are the Speedoil Co., 28, Basinghall Street, E.C.2.

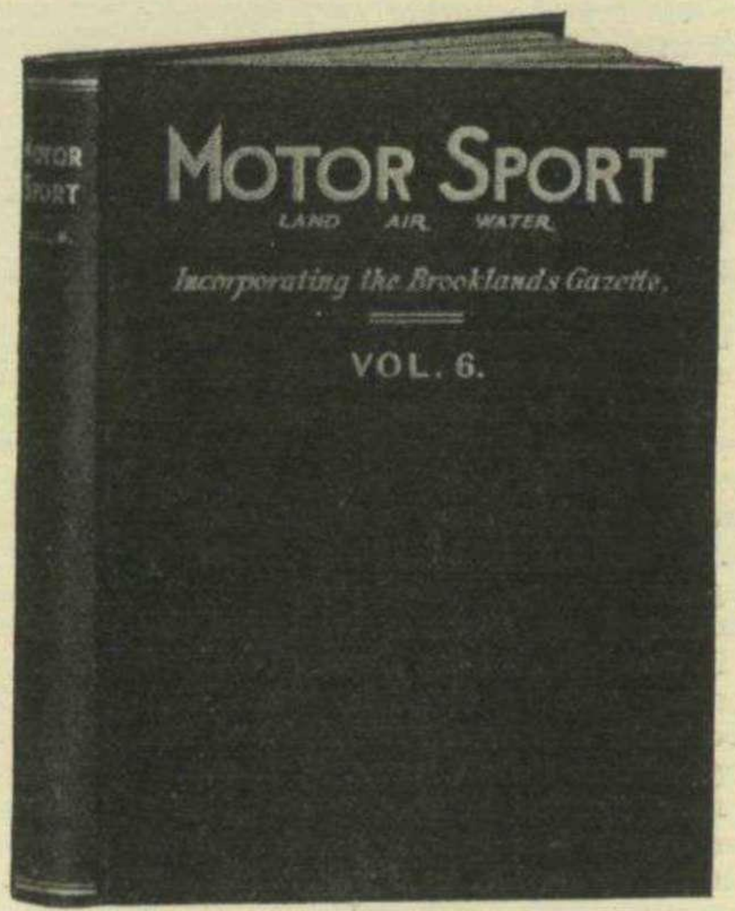
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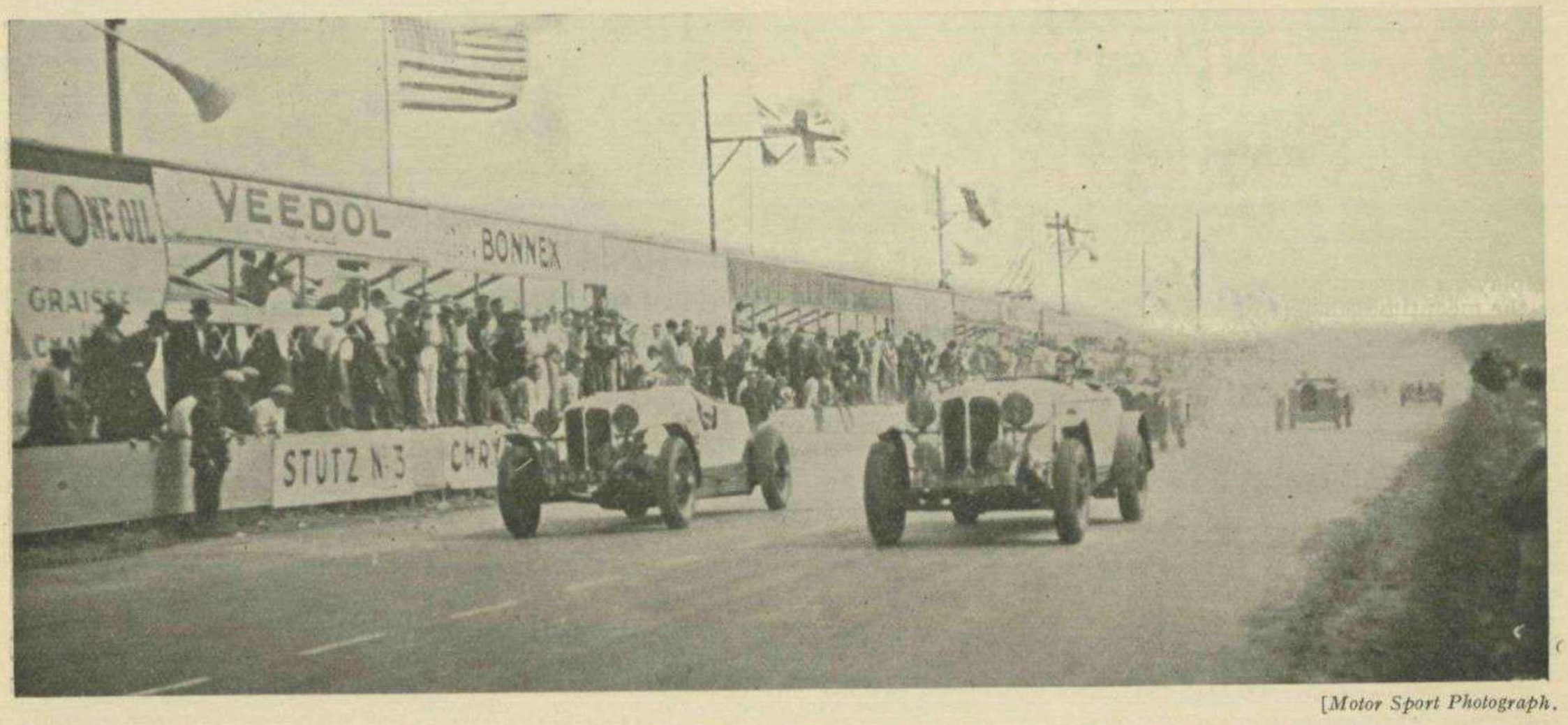


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THE GRAND PRIX D'ENDURANCE.

VICTORY FOR EARL HOWE AND SIR HENRY BIRKIN ON THE ALFA-ROMEO, BEATING RECORD FOR THE RACE.



[*Motor Sport Photograph.*

AFTERNOON at le Mans on Saturday, 13th June, 1931. The thoughts of all the world of motor racing are concentrated on the Sarthe; the Tribunes are packed with spectators, and in front of them are drawn up 25 cars which are going to take part in the greatest 24-hour road race of the automobile calendar. Twenty-five cars, fifty drivers, five nations England, France, Italy, Germany and America, all there with the purpose of winning the classic race

At the end of the line of waiting machines is Number One, the giant white Mercédès which is to be driven by the Russian Boris Ivanowski and the Frenchman, Henri Stoffel Next to it is the big Chrysler-Imperial, perhaps the fastest of the Americans, which will have de Costier and Lussau at the wheel, and then another transatlantic hope, the Stutz, which is to be driven by Brisson, that veteran of le Mans, and Cattaneo Then, numbers 4, 5 and 6, the cars on which French hopes are pinned the new big black Bugattis with 5-litre super-charged engines, and as their drivers the cracks of the Bugatti team, Louis Chiron from Monaco, Achille Varzi and Count Conelli from Italy, Albert Divo, Guy Bouriat and Rost from France

The first British car is Number Seven, a 4½-litre Bentley entered by Bevan and Couper; then comes Sommer and Delemer's 4-litre Chrysler, and Trébor and Ballard's 3.-litre Lorraine, of the type which won this race in 1925 and 1926. Then three more British cars, the two neat green Talbots, drivers Lewis, Hindmarsh, Rose-Richards and Saunders-Davies, and the privately entered Arrol-Aster to be handled by Lockwood and Bartlett.

Next comes the Italian attack, a couple of compact red Alfa-Romeos, the first to be driven by the factory drivers Marinoni and Zehender, the second by the English amateurs, Lord Howe and Sir Henry Birkin Then a 2,300 c.c. Bugatti (Nimmo and Ano) and two 1,500 c.c. cars of the same make (Mesdames Mareuse and Siko, Sebilleau and Georgie). Next three more English cars, the business-like looking Aston Martins, with Bertelli, Harvey, Bezzant, Cook, Newsome and Peacock as their drivers; then the 1,100 c.c. cars, a B.N.C. (Duverne and Girord), two Cabons (Giraud-Cabantons, Labric, Vernet and Vallon), a Lombard (Charrier and Royer), and finally the two 750 c.c. M.G.'s with Samuelson and Kindell, Mrs. Chetwynd and Stistead as their drivers.

RESULT OF THE SIXTH GRAND PRIX D'ENDURANCE.

1. Howe and Birkin (Alfa-Romeo), 3,017 km. 654. Average speed 78.7 m.p.h.
2. Iv. nowski and Stoffel (Mercédès), 2,905 km. 139.
3. Rose Richards and Saunders-Davies (Talbot), 2,837 km. 398
4. Trébor and Balard (Lorraine), 2,452km 692
5. Harvey and Bertelli (Aston-Martin), 2,286 km 393
6. Vernet and Vallon (Caban), 2,092 km. 185.

The hour of 4 o'clock approaches. Captain Woolf Barnato, winner of the le Mans race for the last three years, does a lap of the circuit on an 8-litre Bentley, in order to declare the road closed, and all is ready. The drivers are drawn up on the opposite side of the road to their cars, and an excited hush falls on the expectant crowd. Monsieur Georges Durand, Secretary of the Automobile Club de l'Ouest counts off the seconds, "five, four, three two, one"—then his starting flag falls, the drivers race to their cars, there is a whirr of starters, and the Ninth Grand Prix d'Endurance has begun.

Sommer on the 4-litre Chrysler is first away and behind him the whole pack roars away down the road towards Pontlieu Before the famous corner is reached de Costier on the Chrysler-Imperial has passed his team-mate, and the Bugattis are hard on his heels as the cars disappear round the bend.

Eagerly we scan the road in the other direction to see who will be the first to appear. Here is a car, yes, it is Number 4, the big black Bugatti driven by Louis Chiron, and hard on its heels is Number One, the giant white Mercédès, with Stoffel at the wheel. The cars flash past the grandstands, Albert Divo on Number 5 Bugatti third, then Sir Henry Birkin on Alfa-Romeo 16, Rost on Number 6 Bugatti, Nimmo on the 2,300 c.c. Bugatti, de Costier (Chrysler-Imperial), Marinoni (Alfa-Romeo), Sommer (Chrysler 8), Lewis and Rose Richards on the two Talbots in line ahead formation, Brisson (Stutz), Couper (Bentley), Trébor (Lorraine), Bertelli and Newsome on the Aston-Martins, Sébilleau on the 1,500 c.c. Bugatti 23, Giraud-Cabantons (Caban 28), Madame Mareuse (Bugatti 23), Vernet (Caban 29), Duverne (B.N.C. 27), Samuelson (M.G. 31), Lockwood on the Arrol-Aster, and finally Mrs. Chetwynd's M.G.

Brisson's Stutz stops for a moment at its pit but gets going again. At the end of the second round Chiron (Bugatti) is still in the lead and Stoffel (Mercédès) is second, but Birkin on the Alfa-Romeo has passed Divo and gained third place. Already the Bugatti-Mercedes-Alfa-Romeo duel is developing fiercely, but more is to come, for on the third lap Stoffel managed to pass Chiron, and the Mercédès travelling at tremendous speed gained

THE GRAND PRIX D'ENDURANCE—continued.

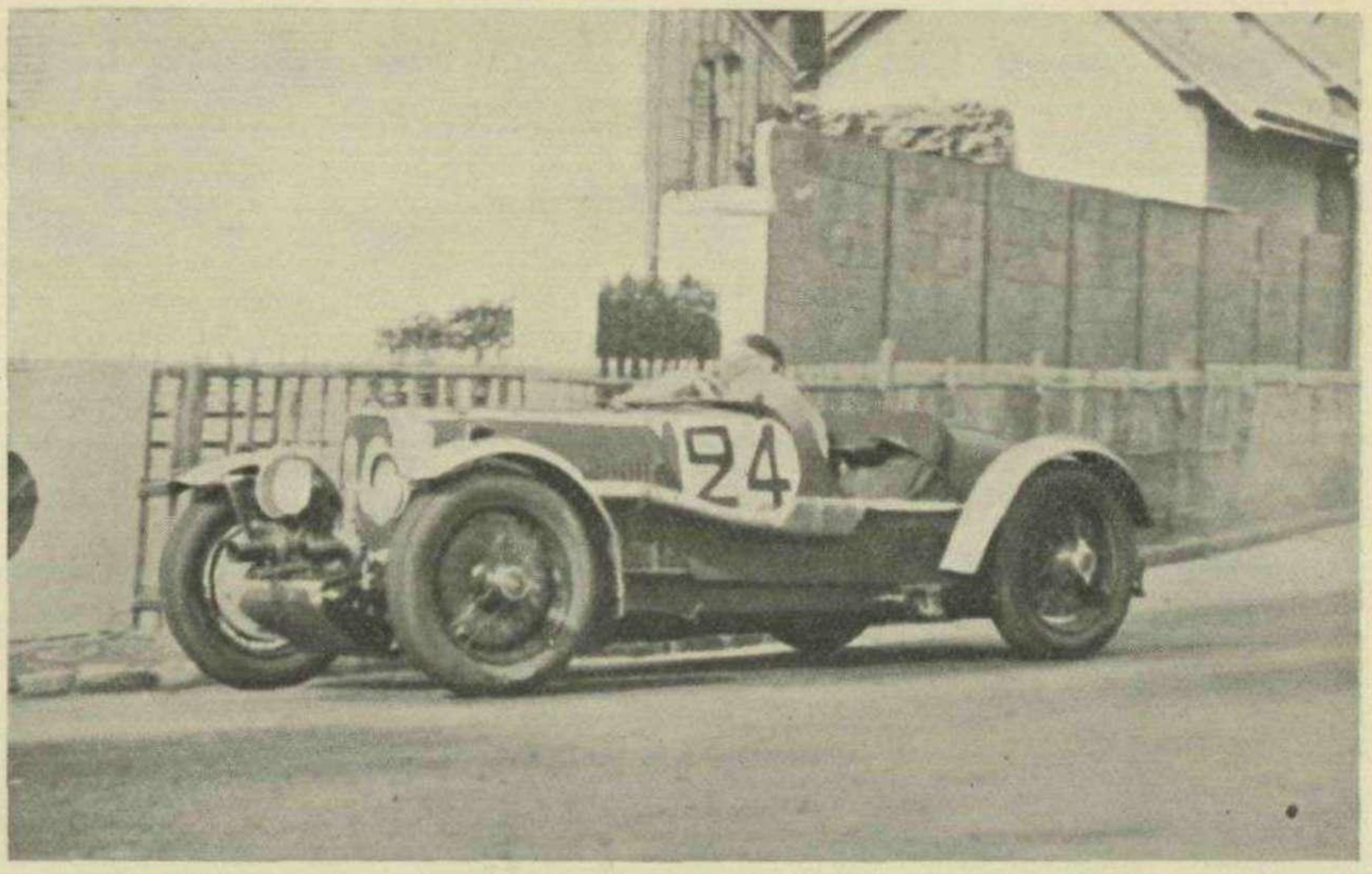
the lead. At the end of the lap poor Brisson again stopped with the Stutz and began to work on his car, and Duverne came in for a moment with the B.N.C., but rapidly got going again.

For the next eight laps the Mercédès led, followed by Chiron and Birkin, but Marinoni on the second Alfa-Romeo managed to pass Divo and gained fourth place, while Brisson got going again. Then at the end of the eleventh lap the big Mercédès drew in at its pit with a tyre already in ribbons at this early stage of the race, and shortly afterwards the same fate overtook Chiron on the leading Bugatti. It looked as if tyres were going to play an important part in this race. In the meantime Marinoni had been coming up rapidly on Alfa-Romeo 14 and had passed his team-mate Birkin with the result that he now leapt into the lead, followed by Divo and Rost on the big Bugattis. Brisson on the Stutz stopped once more at his pit, and Sommer on the Chrysler also drew up, but the Mercédès having got going again proceeded to beat the lap record at 83.8 m.p.h. At the end of the second hour the order of the leaders was as follows :—

1. Marinoni (Alfa-Romeo 14), 257 km. 657 (15 laps).
2. Divo (Bugatti 5), 255 km. 500.
3. Rost (Bugatti 6), 255 km. 420.
4. Nimmo (Bugatti 19), 254 km. 400.
5. Stoffel (Mercédes 1) 249 km. 700.
6. Chiron (Bugatti 4) 245 km. 400.

By the twentieth lap Stoffel on the Mercédès had succeeded in passing Nimmo and Rost and had captured third place behind Divo, but Chiron had had to stop again on the seventeenth lap to change a wheel and had dropped further back. Then, shortly after 6 o'clock Rost on No. 6 Bugatti failed to appear, and anxiety spread among the crowd as an ambulance was seen going off down the road. It was not long before news came through of what had happened. It appears that while Rost was travelling at about 115 m.p.h., along the Hunandieres straight, the tread flew off the near rear wheel, wrapped itself round the brake mechanism and locked the wheel. The tyre immediately burst and the car, now quite uncontrollable, skidded across the road, leapt the ditch and after tearing down the pallisade mounted the bank. The driver was thrown out, but the car continued, and after felling a tree finished up among the spectators of whom one was killed and three injured, one seriously. Rost was picked up with a broken collar-bone and a torn scalp as well as a number of bruises.

In the meantime Marinoni had come in with the leading Alfa-Romeo and had turned it over to Zehender, while Stoffel also brough the Mercédes in for Boris Ivanowski to take a spell at the wheel.



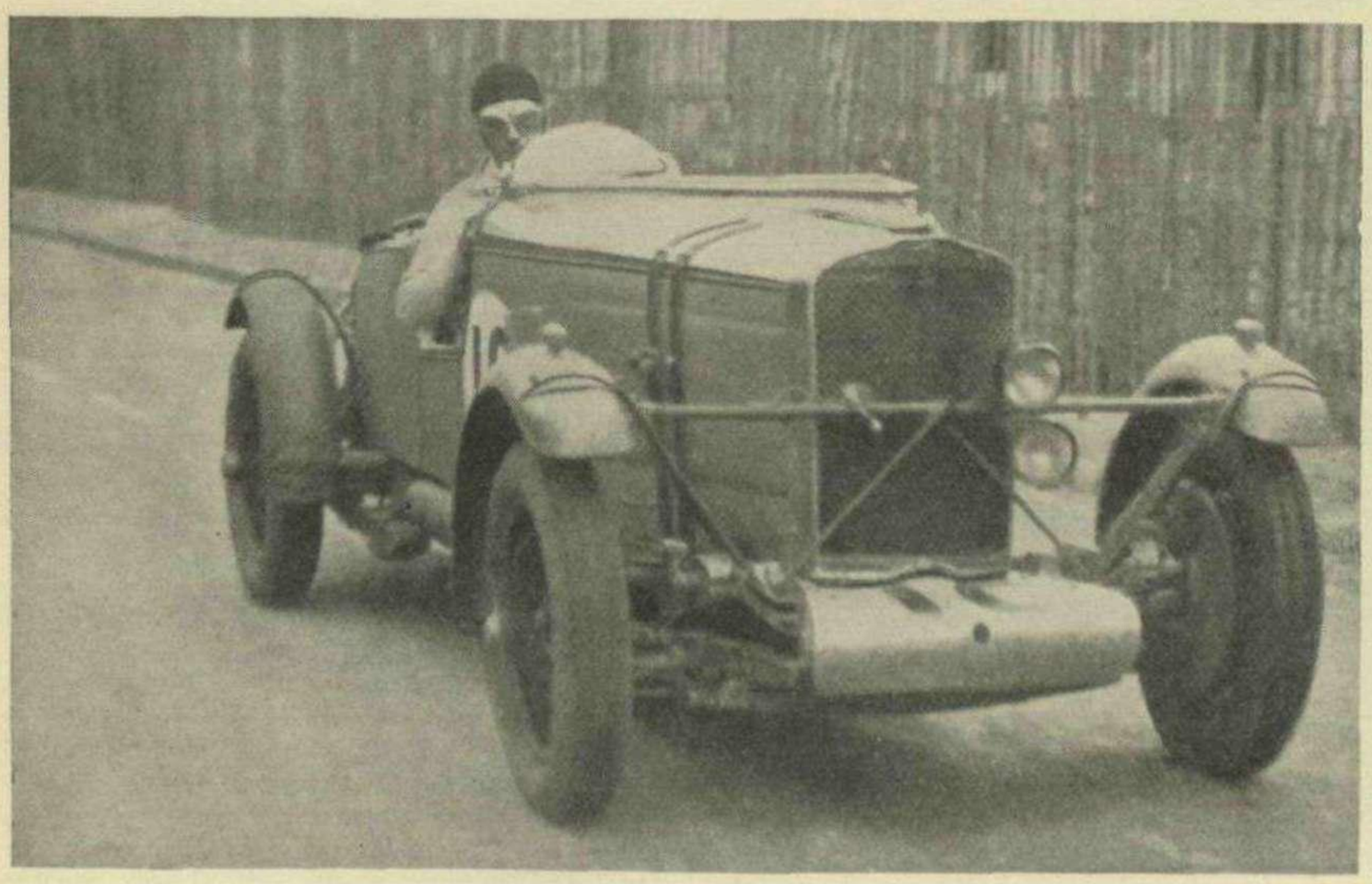
Bertelli (Aston-Martin) going well at Pontlieu.

Divo on the Bugatti thus gained the lead, which was not lost when he came in to fill up and to hand over the car to Guy Bouriat.

In the meantime, however, there had been several casualties among the field. Sommer had already stopped with the 4-litre Chrysler as a result of an irreparably leaking radiator due to chassis distortion, and shortly afterwards de Costier withdrew the big Chrysler-Imperial for the same reason. Then Nimmo who had been running extremely well in fourth place with the 2,300 c.c. Bugatti also drew up at his pit and retired with a broken universal joint. At the end of the third hour twenty-two cars remained in the running, and the order of the leaders was as follows :—

1. Divo and Bouriat (Bugatti 5), 23 laps.
2. Marinoni and Zehender (Alfa-Romeo 14), 23 laps.
3. Stoffel and Ivanowski (Mercédès), 23 laps.
4. Chiron (Bugatti 4), 22 laps.
5. Lewis and Hindmarsh (Talbot 10), 22 laps.
6. Rose Richards and Saunders-Davies (Talbot 11), 22 laps.

Chiron was now going very fast in an effort to make up for lost time, and proceeded to break the lap record at 84.3 m.p.h. Shortly afterwards, however, his Bugatti cast a tread in exactly the same way as Rost's had done, fortunately, however, without fatal consequences. Chiron drove slowly round to his pit and stopped while a consultation seemed to be taking place. Then the stop signal was hung out to Bouriat on Bugatti 5, the only remaining member of the team still running, and he too drew up at his pit. Shortly afterwards Monsieur Jean Bugatti, who in the absence of his father as the result of his recent accident, was acting as team-manager, announced that it had been decided to withdraw the Bugatti team as the unsuitability of their tyres



[*Motor Sport photographs*]

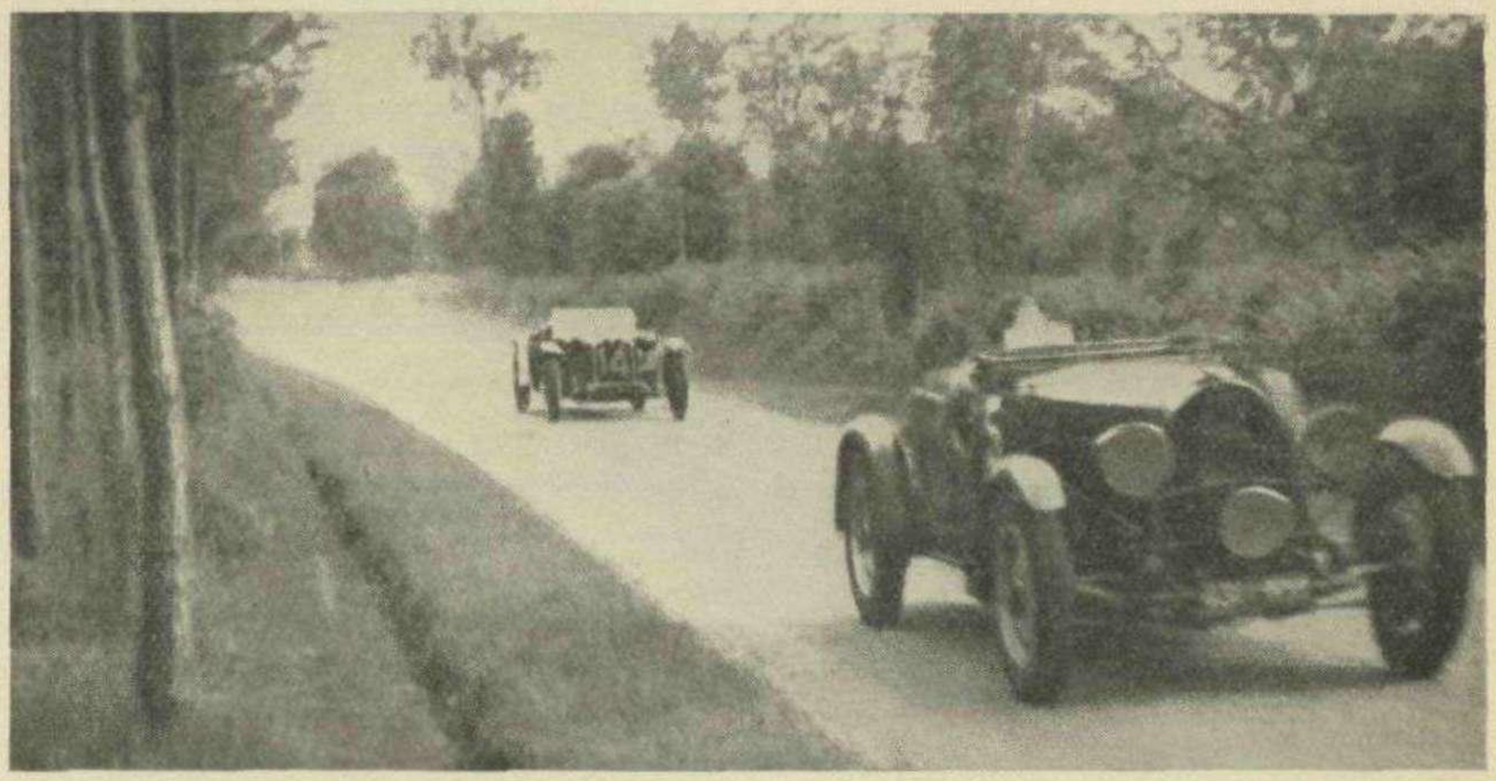
A close-up of Brian Lewis taken at Pontlieu—there seem to be some lamps missing!

THE GRAND PRIX D'ENDURANCE—continued.

rendered their further participation in the race unsafe. The announcement was received with considerable popular disapproval, but the decision was probably a wise one. The Bugattis were using a tyre with a very heavy tread of the same type as was used most successfully by Varzi in the Targa Florio. It was, therefore, unfortunate that these tyres should have proved unsuitable under the different circumstances ruling at le Mans. On the other hand I can remember a number of cases during the last ten years when the chances of the Bugatti team in an important race have been entirely ruined by the failure of their tyres, and I am inclined to think that the Molsheim firm is a little too much inclined to experiment in this direction instead of sticking to tyres of proved type on which it could rely unhesitatingly.

The withdrawal of the Bugattis altered the whole aspect of the race and robbed it of one of its greatest features of interest. Zehender on Alfa-Romeo 14 was now leading the field, and the rest of the competitors after four hours running were in the following order :—

1. Marinoni and Zehender (Alfa-Romeo 14), 507 km. 160.
2. Stoffel and Ivanowski (Mercédès 1), 490 km. 800.
3. Lewis and Hindmarsh (Talbot 10), 490 km. 800.
4. Rose-Richards and Saunders-Davies (Talbot 11), 490 km. 800.
5. Birkin and Howe (Alfa-Romeo 16), 490 km. 800.
6. Bezzant and Cook (Aston-Martin 25), 441 km. 720.

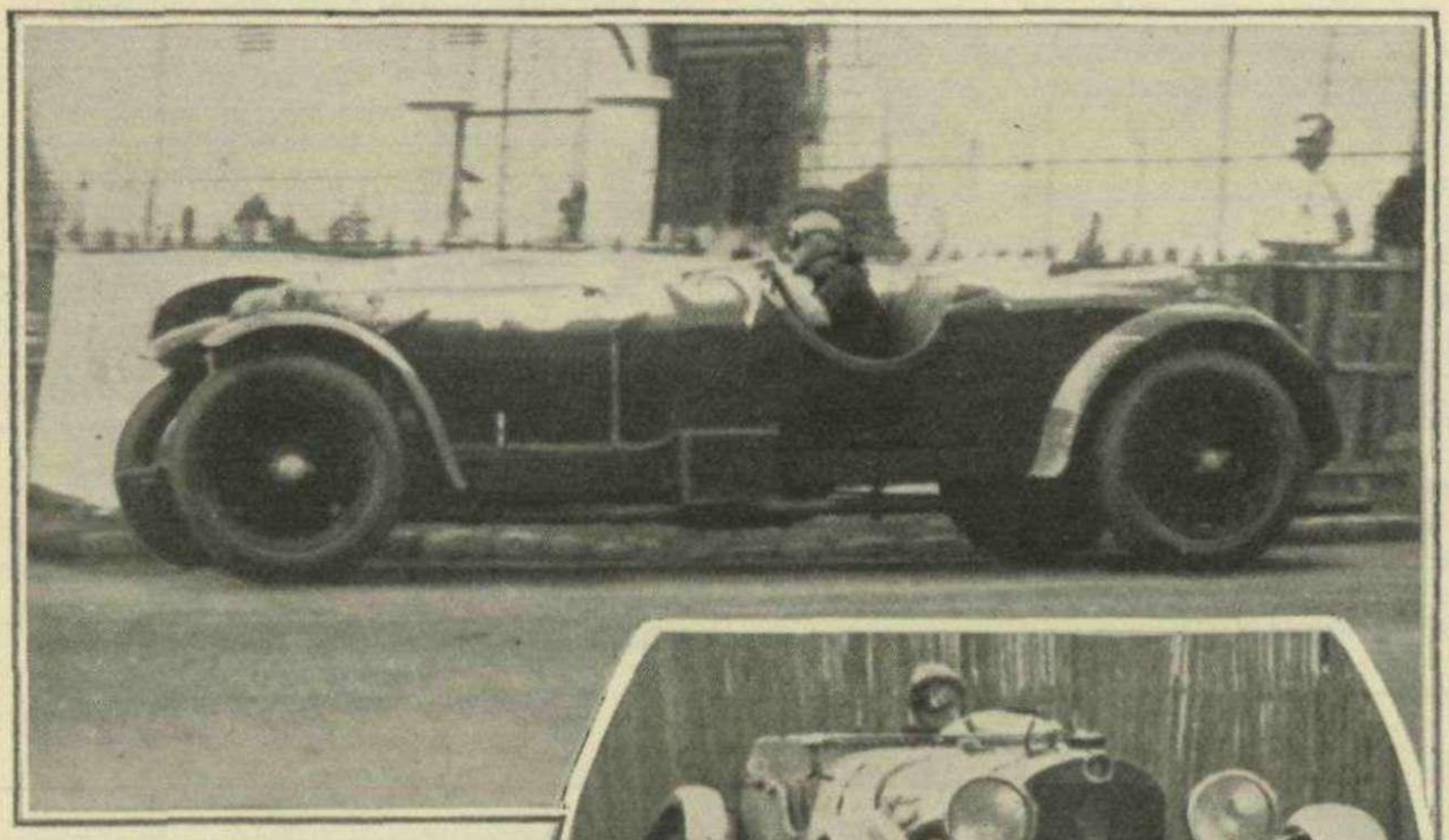


7. Newsome and Peacock (Aston-Martin 26), 425 km. 360.
8. Trébor and Balard (Lorraine 9), 409 km.
9. Bertelli and Harvey (Aston-Martin 25), 409 km.
10. Sébilleau and Georgie (Bugatti 22), 376 km.
11. Mdes. Mareuse and Siko (Bugatti 23), 376 km.
12. Samuelson and Kindell (M.G. 31), 376 km.
13. Giraud Cabantons and Labric (Caban 28), 376 km.
14. Lockwood and Bartlett (Arrol-Aster 12), 376 km.
15. Couper and Bevan (Bentley 7), 359 km.
16. Mrs. Chetwynd and Stisted (M.G. 32), 343 km.
17. Vallon and Vernet (Caban 29), 343 km.
18. Charrier and Royer (Lombard 30), 343 km.
19. Pesato and Felix (B.N.C. 27), 300 km.

The Stutz after having made numerous calls at its pit had finally retired, the trouble being described as a broken oil pipe. Then at about half past eight Ivanowski drew up at his pit with the big Mercédès, which was suffering from tyre troubles. The car stopped for about 8 minutes and while it was there it was passed by both the Talbots and by Lord Howe on No. 16 Alfa-Romeo. The latter was now going really well and before long had succeeded in passing the two Talbots and gained second place behind Zehender on Alfa-Romeo 14. The order of the leaders after six hours or quarter of the race had gone was therefore as follows :—

1. Marinoni and Zehender (Alfa-Romeo 14), 46 laps.
2. Birkin and Howe (Alfa-Romeo 16), 45 laps.
3. Rose-Richards and Saunders-Davies (Talbot 11), 45 laps.
4. Lewis and Hindmarsh (Talbot 10), 42 laps.
5. Stoffel and Ivanowski (Mercédès 1), 42 laps.
6. Bezzant and Cook (Aston-Martin 25), 40 laps.

Hindmarsh on Talbot 10 had had to stop to rectify a blown fuse and had been passed by his team-mate Saunders-Davies on Number 11, who was now three laps ahead. The grandstands by this time had been somewhat thinned of their spectators as the result of the counter-attraction of dinner, but otherwise the large crowd followed the course of the race with absorption. Just as dusk was falling, however, two more competitors fell by the wayside. The 4½-litre Bentley Number 7 broke its crankshaft down by the Pontlieu corner and shortly afterwards Stisted appeared on foot and announced that M.G. 32 had broken down with ignition trouble. Then just after midnight through some mistake on the part of the pit organisation, Madame Mareuse brought her Bugatti in to fill up and was disqualified for doing so



The photograph in the top right hand corner shows Divo and Marinoni duelling on the narrow stretch between Annage and the Tribunes. Above—Sir H. Birkin streaking round one of the Pontlieu corners—and right : Ivanowski's "Merc" at the same spot.

[*Motor Sport photographs*]

THE GRAND PRIX D'ENDURANCE—continued

two laps earlier than she was entitled to under the regulations.

In the meantime Lord Howe's Alfa-Romeo 16 had been gradually creeping up on its team-mate driven by Marinoni and Zehender, and at midnight only 3 seconds separated the two cars. Quarter of an hour later the English driver passed the Italian, and Alfa-Romeo 16 took the lead in the race for the first time, hotly pursued by the other Alfa.

Just before one o'clock in the morning the Lombard No. 30 drew up at its pit and retired with engine trouble. The Aston-Martins were being held back with a peculiarly annoying trouble as it was found that the head-lamp mounting was not strong enough, with the result that the bolts continually broke and the lamps pointed at the sky instead of down the road. The night so far had been beautifully fine, but about 2 o'clock lightning began to flicker in the sky and in about half an hour a tremendous clap of thunder heralded a short but violent downpour of rain. In the meantime Caban Number 28 when drawing up at its bit swerved and charged the bank at the side of the road, whence it had to be dug out by its driver which wasted a great deal of time. The leaders, however, continued serenely, the only change in their order being that Talbot No. 10 had caught up and passed its team-mate. During the rain also Zehender with Alfa-Romeo 16 ran off the road at the Arnage bend and damaged one lamp and wing. Some time was lost but he retained second place.

An Alfa Retirement.

At four o'clock in the morning, half way through the race, Howe and Birkin had covered 92 laps, Marinoni and Zehender 88, the two Talbots 86, the Mercédès 84, and Bezzant and Cook's Aston-Martin 79. Just before 6 o'clock in the morning, however, Marinoni drew up at his pit with Alfa-Romeo 14 and commenced a lengthy examination. Eventually it was discovered that the back axle had been put out of truth as the result of Zehender's crash, and the car was withdrawn. This let Rose-Richards and Saunders-Davies' Talbot No. 11 which was ahead of its team-mate for the moment, up into second place, and the Mercédès became fourth.

At about half past eight the Arrol-Aster, driven by Lockwood and Bartlett came into the pits and retired with ignition trouble. The big Mercédès, however, which had been suffering from tyre trouble all night changed over to a different make at about this point and got going really well again. On the 138th lap, Boris Ivanowski, who was now at the wheel, proceeded to break the lap record at 85.8 m.p.h. and his efforts were rewarded by passing No. 10 Talbot and gaining third place. The order at 10 o'clock in the morning, after three quarters of the race had been run, was therefore as follows :—

1. Birkin and Howe (Alfa-Romeo 16), 138 laps.
2. Rose-Richards and Saunders-Davies (Talbot 11), 131 laps.
3. Stoffel and Ivanowski Mercédès),. 131 laps.
4. Lewis and Hindmarsh (Talbot 10), 129 laps.
5. Trébor and Balard (Lorraine 9) 111 laps.
6. Bertelli and Harvey (Aston-Martin 24), 110 laps.

Shortly afterwards Bugatti 22, driven by Sébilleau and Georgie, which had been running well behind the Aston-Martin team, retired with a broken clutch. Then Hindmarsh suddenly came in with No. 10 Talbot and it was found that the chassis had broken just where it is upswept to pass over the back axle. Attempts were made to effect a temporary repair and the car actually completed two more laps before the matter was seen to be hopeless and it was finally withdrawn. This let the Lorraine, which had all along been running remarkably well, up into fourth place. This car was an absolutely amateur entry driven by its owner, and its performance in the race is a convincing answer to those critics who assert that no really standard car has any chance of doing well at le Mans. The Caban Number 28, however, driven by its manufacturer Giraud-Cabantons and Labric, retired with trouble with the fuel feed and shortly afterwards No. 25 Aston-Martin driven by Bezzant and Cook, had to be withdrawn owing to the loss of a wing which could not be replaced. These cars in fact were most unfortunate as they suffered from no mechanical troubles but were continually held back by breakages in accessories.

Nine Survivors.

This left only nine cars in the race, but the leaders were still going strong, and the Mercédès succeeded in passing the remaining Talbot and gaining second place. It was quite unable, however, to catch the Alfa-Romeo which was going as fast as ever. At about half past two, with only 1½ hours of the race left to go, Aston Martin 26, driven by Newsome and Peacock was forced to retire.

At a quarter past three the Alfa-Romeo had broken the record of 2,930 km. 663, for the 24-hours established by the winning Bentley last year, a performance which was greeted with loud cheers. Four o'clock approached and Monsieur Charles Faroux, the well-known journalist, stepped on to the course with his yellow flag. The little M.G. which had been held back with transmission trouble, could only just keep moving, but it carried on bravely. Four o'clock struck, and one by one the cars were stopped, the winners being greeted with ovations, flowers, cinematograph cameras, handshakes and all the usual paraphernalia of victory. The final classification was as given before, the M.G. driven by Samuelson and Kindell and the B.N.C., driven by Pésato and Felix not being placed as they had not completed the minimum distance. The result of the final of the 1930-31 Rudge-Whitworth Cup and the Eliminating Race for the 1931-2 Cup was as follows :—

	Figure of Merit
1. Howe and Birkin (Alfa-Romeo)	1.26
2. Rose-Richards and Saunders-Davies (Talbot)	1.19
3. Ivanowski and Stoffel (Mercédès)	1.12
4. Trébor and Balard (Lorraine)	1.016
5. Harvey and Bertelli (Aston-Martin)	1.015
6. Vernet and Vallon (Caban) ...	1.002

The 1906 Grand Prix Anniversary.

The twenty-fifth anniversary of the first Grand Prix of the Automobile Club de France which was run at le Mans in 1906 was celebrated by a luncheon which was given on 13th June before the start of the Grand Prix d'Endurance in honour of the surviving drivers who took part in the original race. Among the veteran "au du volant" present were Louis Szisz who drove the winning Renault, Felice Nazzaro, who finished second on a Fiat and Louis Wagner, who drove a Darracq. Mr. Ainsworth and M. Jacobsen who represented the Hotchkiss concern, which took part in the race, arrived on a 6-cylinder Hotchkiss built in 1906, which completed the journey from Paris at an average speed of nearly 40 m.p.h.

Riley Motor Club's 24-Hour Trial.

FOR their 24-hour trial in Wales on July 3rd and 4th—one of the most ambitious trials ever attempted by a club whose membership is limited to one make of car—the Riley Motor Club have already secured a record entry of seventy cars.

Cars have been entered by Mr. Donald Healey, and by Mr. and Mrs. Montague Johnstone whose Alpine "Sixes" (the only two British cars to be entered, by the way) both gained first-class awards in the 6,000 mile motor trial round Europe, organised by the German Automobile Club.

Cars must not only be of Riley manufacture, but must be equipped in accordance with their catalogue specification, while another condition is that every seat with the exception of the occasional or dickey seats must be occupied.

Special prizes are offered for lady drivers and for those who have never before taken part in any trial.

All competitors must make for Brecon by specified routes. Competitors may choose any one of over a dozen starting points, but for every ten miles distance which is less than the maximum official distance (Southsea to Brecon, 299 miles), one point will be deducted.

On the following morning, cars will start at one minute intervals from Brecon for Llangollen by a long, and in parts difficult, course through the heart of Wales. An average speed of 20 m.p.h. must be maintained and, in addition to two observed hill climbs, observed non-stop running and non-stop engine tests, there will be a test for fuel consumption.

The tanks will be filled with a known quantity of petrol at Brecon and measured at the close of the run, note being taken of any petrol bought on the way.

THE I.O.M. TOURIST TROPHY.

THE JUNIOR RACE

ON last year's form everyone was inclined to expect another Rudge victory in this year's Junior. In the I.O.M., however, victory is not easily gained or held and although this year's Rudge machines were slightly faster than before, the Norton camp have found a great deal more speed in their latest design than their rivals had bargained for.

When their very strong team is also taken into account, the result is not altogether surprising. It is not long since Hunt won the Amateur Road Race on his first visit to the island, and since then he has graduated into the very first rank of riders.

He won the 1931 Junior Race in 8½ minutes inside last year's time, and also lowered the lap record to 30m 5. secs., a speed of 75.27 m.p.h.

Conditions during practice were nearly always against high speeds, and when the day of the Junior proved to be fine and dry it was obvious that practice times were going to be no criterion.

At ten o'clock No. 1, W. H. T. Meageen (Velocette), pushed off, but had difficulty in starting. Hunt, with No. 3, followed closely with a good getaway, and one by one the fifty riders followed him.

Meageen held his lead on the road to the Mountain and was the first man through the start. Then Hunt came, having cut down the gap, and some later numbers were evidently not going to let the lead be easy to hold. Nott kept up the Rudge reputation with a lap in 31m. 8s. (72.73 m.p.h.) but it did not get him better than 4th place on this lap behind Hicks and his A.J.S. Actually Hunt, although by now travelling very fast indeed, had to stop to replace a loose plug terminal on his first lap and so lost valuable seconds which put him back to 8th place.

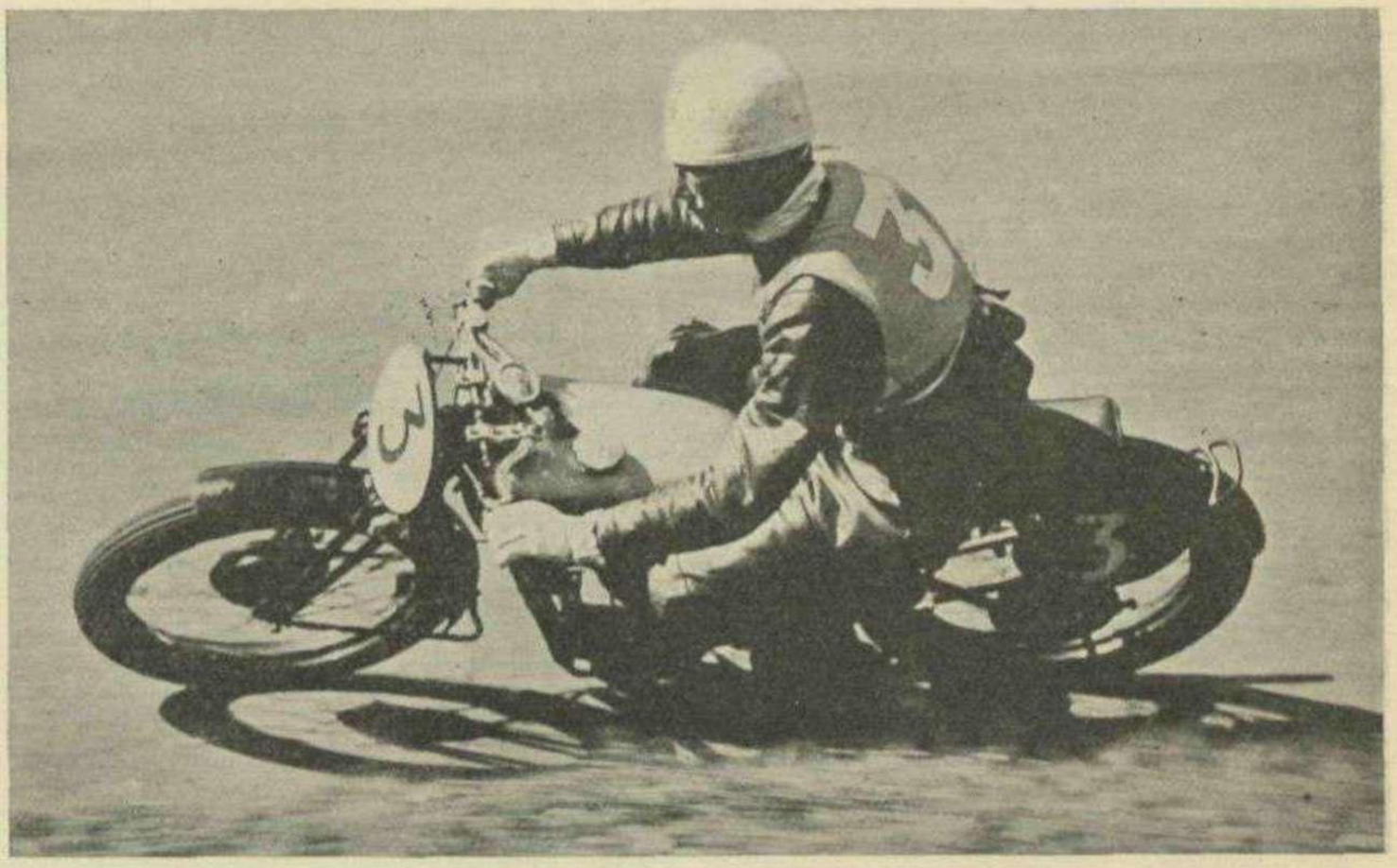
The first lap order was :—

1st. J. H. Simpson (Norton), 30m. 39s. 73.88 m.p.h.
2nd. S. Woods (Norton, 30m. 55s.
3rd. F. G. Hicks (A.J.S.), 31m. 7s.
4th. G. E. Nott (Rudge), 31m. 8s.
5th. J. Guthrie (Norton), 31m. 18s.
6th. C. J. P. Dodson (Excelsior J.A.P.), 31m. 26s.

Thus the opening of the race showed Nortons in a very strong position, challenged only by solitary Rudge and A.J.S. riders, and the reliable Velocettes, a few places down the list. The high speeds of the opening lap were soon to be eclipsed however, for Hunt making up for lost time, did 30m. 20s. for his second lap (74.65 m.p.h.).

Vic Austin (Douglas), Bray (Douglas) and Tolley (Montgomery) were already out of the race, but the Nortons were still to the fore. Other unfortunates included Lind and S. M. Williams (Velocettes) and S. A. Crabtree (Excelsior). Hunt s fast lap has pulled him up to 5th place and the order was now :—

1st. J. H. Simpson (Norton), 1h. 0m. 51s., 74.42 m.p.h.
2nd. S. Woods (Norton), 1h. 1m. 38s.
3rd. F. G. Hicks (A.J.S.), 1h. 1m. 46s.



P. Hunt (Norton) round ng Ramsey Hairpin on his winning Junior machine.

4th. G. E. Nott (Rudge), 1h. 1m. 59s.
5th. P. Hunt (Norton), 1h. 2m. 0s.
6th. C. J. P. Dodson (Excelsior J.A.P.), 1h. 2m. 2s.

At the end of the second lap lightning fill-ups were made by Hunt, Nott, Guthrie and Woods, but the leaders, in spite of the small gap between them, remained the same. Mellors (New Imperial) was going well and lying 8th, while Renier, the Belgian rider of a Velocette, was putting up a fine show.

After 3 laps, Simpson, riding as well as he ever has, in spite of a bad crash on the continent last year, still held his lead but Hunt's lap times were closing up the gap between them. The Rudges had bad luck when Tyrrell-Smith ran out of fuel on the mountain for some unknown reason, and Hicks struck trouble and fell out of the running.

The third lap showed Guthrie had pulled up 3 places, the order being :—

1st. J. H. Simpson (Norton), 1h. 31m. 51s. 74.36 m.p.h.
2nd. S. Woods (Norton), 1h. 32m. 24s.
3rd. G. E. Nott (Rudge), 1h. 32m. 41s.
4th. J. Guthrie (Norton), 1h. 32m. 49s.
5th. P. Hunt (Norton), 1h. 32m. 55s.
6th. C. J. P. Dodson (Excelsior J.A.P.), 1h. 33m. 8d.

Stanley Woods was showing once more that given the speed, he can ride with the best, and the four Nortons in the first six places were covered by just over a minute. Hunt may or may not have known this, but he was determined to make up for his unfortunate stop, and on his fourth lap put up the wonderful time of 30m. 5s. (75.27 m.p.h.), thus breaking all previous Junior records, and leaving a mark for next year's event. This lap pulled him up to second place, while a fine lap by Guthrie put him third ahead of Nott s Rudge.

Jimmy Simpson seemed to be slowing slightly, but still led after 4 laps when the leaders were :—

1st. J. H. Simpson (Norton), 2h. 2m. 36s. 73.89 m.p.h.
2nd. P. Hunt (Norton), 2h. 2m. 58s.
3rd. J Guthrie (Norton), 2h. 4m. 10s.
4th. G. E Nott (Rudge), 2h. 4m. 18s.
5th. S. Woods (Norton), 2h. 4m. 27s.
6th. G. W. Walker (Rudge), 2h. 8m 14s.

Graham Walker was riding a steady race, but no one could catch the Nortons. Simpson slowed more with some trouble which later proved to a partially choked jet and Hunt took the lead. Stanley Wood had dropped back, but the Nortons still held an almost unassailable position, and after 5 laps held the first 3 places. The 5th lap leaders were :—

1st. P. Hunt (Norton), 2h. 33m. 54s. 73.55 m.p.h.
2nd. J. H. Simpson (Norton), 2h. 34m. 8s.
3rd. J. Guthrie (Norton), 2h. 34m. 42s.
4th. G. E. Nott (Rudge), 2h. 35m. 33s.
5th. S. Woods (Norton), 2h. 35m. 48s
6th. G. W. Walker (Rudge), 2m. 39m. 41s.

In the next lap poor Jimmy Simpson was overtaken by the Nemesis which has dogged the steps of his I.O.M. career, and the clearing of a choked jet caused his lap to take 44 minutes, and he fell to 12th, while Nott took third place.

The 6th lap order was :—

1st. P. Hunt (Norton), 3h. 4m. 6s. 73.80 m.p.h.
2nd. J. Guthrie (Norton), 3h. 6m. 7s.
3rd. G. E. Nott (Rudge), 3h. 7m. 30s.
4th. S. Woods (Norton), 3h. 8m. 30s.
5th. G. W. Walker (Rudge), 3h. 11m. 58s.
6th. W. H. T. Meageen (Velocette), 3h. 13m. 40s.

THE JUNIOR RACE—continued.

The last lap produced no startling changes, and Hunt concluded his wonderful ride with a lap in 30m. 15s., only 10s. outside his own record, and Guthrie followed him 3 minutes later.

Jimmy Simpson, game to the last in spite of his wretched luck, put in a lap in 31m. 22s. and pulled in 4 places. Nott brought his Rudge into third place, and another wonderful race was over.

RESULTS.

TROPHY AND REPLICA WINNERS.

1. P. Hunt (Norton), 3h. 34m. 21s. 73.94 m.p.h.
2. J. Guthrie (Norton), 3h. 37m. 26s. 72.90 m.p.h.
3. G. E. Nott (Rudge), 3h. 39m. 1s. 72.37 m.p.h.
4. S. Woods (Norton), 3h. 42m. 1s. 71.39 m.p.h.
5. G. W. Walker (Rudge), 3h. 43m. 19s. 70.98 m.p.h.
6. C. J. P. Dodson (Excelsior-J.A.P.), 3h. 47m. 47s. 69.58 m.p.h.
7. A. G. Mitchell (Velocette), 3h. 48m. 11s. 69.46 m.p.h.
8. J. H. Simpson (Norton), 3h. 49m. 30s. 69.06 m.p.h.
9. G. E. Rowley (A.J.S.), 3h. 49m. 32s. 69.05 m.p.h.
10. E. A. Mellors (New Imperial), 3h. 49m. 38s. 69.02 m.p.h.
11. H. J. Willis (Velocette). 3h. 50m. 30s. 68.76 m.p.h.
12. E. R. Thomas (Velocette), 3h. 51m. 39s. 68.42 m.p.h.
13. M. Ghersi (New Imperial), 3h. 53m. 37s. 67.85 m.p.h.
14. G. E. Himing (A.J.S.), 3h. 54m. 8s. 67.70 m.p.h.
15. T. Simister (Velocette), 3h. 54m. 12s. 67.68 m.p.h.

OTHER FINISHERS.

16. F. A. Renier (Velocette), 3h. 56m. 51s. 66.92 m.p.h.
17. L. Higson (Rudge), 3h. 57m. 16s. 66.80 m.p.h.
18. D. Brewster (Velocette), 3h. 58m. 52s. 66.35 m.p.h.
19. Somerville Sikes (Velocette), 3h. 59m. 53s. 66.07 m.p.h.
20. W. H. T. Meageen (Velocette), 4h. 11m. 14s. 63.09 m.p.h.
21. T. Spann (Raleigh), 4h. 14m. 50s. 62.20 m.p.h.

THE LIGHTWEIGHT RACE

THIS year the lightweight event, usually a comparatively calm spot in a hectic week of racing, changed its usual character and provided one of the best-fought and most exciting races the island has ever seen.

The entry of over 40 riders ensured that there would be no runaway wins, and that records would go by the board, and the promise was fully carried out. That wonderful veteran, Graham Walker rode a magnificent and well-judged race, and everyone was glad to see him pull off an island victory at last, after the splendid series of rides he has put up in all parts of Europe. Nott had hard luck when, after leading the race for 6 laps, he had trouble on the last lap and dropped to fourth place, the sort of wretched misfortune that was taking place in all this year's races, but is all in the game.

At last we had a 250 c.c. machine which was definitely faster than anything our foreign rivals could produce, and the Guzzi was this year unable to get anywhere near the Rudges.

Good weather once more favoured the riders and the first lap times showed that this was going to be a fast and close race. They were :—

1st. G. E. Nott (Rudge), 31m. 55s. 70.81 m.p.h.
2nd. H. G. Tyrrell-Smith (Rudge), 32m. 40s.
3rd. G. W. Walker (Rudge), 32m. 57s.
4th. S. Gleave (Diamond), 33m. 20s.
5th. E. A. Mellors (New Imperial), 33m. 30s.
6th. F. A. Longman (O.F. Supreme), 33m. 35s.

The high speed was telling on the small engines in some cases, and L. H. Davenport (New Imperial), Mitchell (Excelsior) and Barrow (O.K. Supreme) were among the early retirements. George Hinny crashed at Windy Corner and had to stop at the pits for minor repairs as a result.

The second lap showed the Rudges order unchanged while Gleave had dropped to 5th and Mellors had pulled up to 4th.

The first six on the second lap were as follows :—

1st. G. E. Nott (Rudge), 1h. 3m. 41s. 71.11 m.p.h.
2nd. H. G. Tyrrell-Smith (Rudge), 1h. 5m. 21s.
3rd. E. A. Mellors (New Imperial), 1h. 5m. 35s.
4th. J. Sarkis (O.K. Supreme), 1h. 6m. 34s.
5th. S. Gleave (Diamond), 1h. 6m. 36s.
6th. F. H. Longman (O.K. Supreme), 1h. 6m. 44s.

Nott's speed on his second lap should have been enough to satisfy anyone, but he did not think so, and on his third lap did 31m. 34s. (71.73 m.p.h.), a record lap which remained unbroken to the end of the race. Tyrrell-Smith's lap times varied only a few seconds, but Graham Walker had clipped 13 secs. off his last and taken second place.

The 3rd lap order was :—

1st. G. E. Nott (Rudge), 1h. 35m. 15s. 71.31 m.p.h.
2nd. G. W. Walker (Rudge), 1h. 38m. 0s
3rd. H. G. Tyrrell Smith (Rudge), 1h. 38m. 4s.
4th. S.Gleave (Diamond), 1h. 39m. 11s.
5th. E. A. Mellors (New Imperial), 1h. 40m. 7s.
6th. J. Guthrie (O.K. Supreme), 1h. 41m. 7s.

On the fourth lap Paddy Johnston on the Guzzi pulled up to fifth place, but was having a hard ride as his bottom gear had passed away. Mellors was by now without any clutch, but this did not seem to worry him as he kept going in fourth place, hanging on the Rudges. Emery (Cotton), Bech (Diamond) and Tattersall (C.T.S.) joined the retired list.

(*Continued on page 456*)



Graham Walker leading another rider down Bray Hill at over 100 m.p.h.

THE SENIOR RACE

Another Norton Win — Island Lapped at 80 m.p.h.

THE most amazing performance of the 1931 Tourist Trophy Races was undoubtedly J. H. Simpson's wonderful third lap in 28m. 1s. at the almost incredible average of 80.82 m.p.h. Time and again this wonderful rider has broken the lap record only to retire, and his luck was still out for at Ballaugh on his fourth lap he braked heavily and the back wheel locked solid and jammed. Simpson crashed into the bridge wall and sustained a damaged wrist while the machine was also too badly damaged to be ridden further.

He was the first man to lap this course at over 70 m.p.h. when he rode an A.J.S. for 2 laps at this speed some five years ago, before the engine gave out under the terrific strain.

The weather was again good, though for the first lap care was needed as the roads had not fully dried up after a shower in the early morning.

From the very start it was obvious that all records would once more be broken, and that the fine entry of 58 riders would soon be thinned out by the cracking pace.

The first man away, Vic Brittain (Diamond) held his position on the road and came through the start first at the end of the lap. Hicks (A.J.S.) and Nott (Rudge) were early arrivals, and Hicks' standing start speed was 76.78 m.p.h. Then the field followed and when the times went up it was seen that four Nortons had beaten Hicks' time, with Guthrie in the lead at 77.61 m.p.h., and the first five were all covered by 20 seconds.



An impression of J. H. Simpson wrenching his Norton round the bend at the famous 33rd milestone on his record lap at over 80 m.p.h.

FIRST LAP LEADERS.

J. Guthrie (Norton), 29m. 7s. 77.61 m.p.h.
J. H. Simpson (Norton), 29m. 8s. 77.56 m.p.h.
S. Woods (Norton), 29m. 20s. 77.04 m.p.h.
P. Hunt (Norton), 29m. 21s. 77.00 m.p.h.
F. G. Hicks (A.J.S.), 29m. 26s. 76.78 m.p.h.
G.E.Nott(Rudge),30m.17s. 74.63 m.p.h.



[*Motor Sport Photograph.*

P. Hunt rounding Quarter Bridge in process of winning the Senior.

The entry included a bigger proportion of foreign and colonial riders than ever before, but their luck was not in to-day Fondu, a Belgian rider, Ericsson, from Sweden, and Franconi, who has ridden in several previous races, all retired early, and many others who were riding at really wonderful speeds were totally eclipsed by the Nortons and Rudges which were out alone.

Charlie Dodson, winner of two previous Seniors, had trouble on his first lap, but on his second put the lap record up to 78.21 m.p.h. but Simpson then outshone all other attempts by a lap at 79.92 m.p.h. which gave him the lead.

SECOND LAP LEADERS.

J. H. Simpson (Norton), 57m. 28s. 78.80 m.p.h.
P. Hunt (Norton), 58m. 9s. 77.88 m.p.h.
J. Guthrie (Norton), 58m. 13s. 77.79 m.p.h.
S. Woods (Norton), 58m. 20s. 77.63 m.p.h.
F. G. Hicks (A.J.S.), 58m. 40s. 77.19 m.p.h.
G. E. Nott (Rudge), 59m. 3s. 75.62 m.p.h.

Hicks and Nott were doing all they knew to catch the Nortons, but in vain, and Simpson made his lead even more secure by his historic third lap at 80.82 m.p.h.

To anyone who has not seen and ridden round the I.O.M. course it is impossible to convey any idea of what this performance means. That this 38 miles of winding roads with its 1,300 ft. climb over the shoulder of Snaefell, could be lapped at such a speed, would have been regarded as fantastic a few years ago.

It seems fantastic today, but it has been done, and heartiest congratulations are due to J. H. Simpson for his wonderful ride, and to the Norton company for producing the machine which made it possible.

Guthrie did a very fine third lap and regained second position from Hunt, but Simpson was now 1½ minutes ahead, a small amount after nearly 120 miles, but an almost impossible amount to catch up if he kept going.

THIRD LAP LEADERS.

J. H. Simpson (Norton), 1h. 25m. 29s. 79.47 m.p.h.
J. Guthrie (Norton), 1h. 27m. 3s. 78.35 m.p.h.
P. Hunt (Norton), 1h. 27m. 19s. 77.80 m.p.h.
F. G. Hicks (A.J.S.), 1h. 27m. 48s. 77.37 m.p.h.
S. Woods (Norton), 1h. 27m. 54s. 77.28 m.p.h.
G. E. Nott (Rudge), 1h. 29m. 3s. 76.28 m.p.h.

However it was not to be, and at Ballaugh on his fourth lap Simpson met his

THE SENIOR RACE—continued.

Waterloo in the shape of a crash due to a seized back brake, and Hunt once more passed Guthrie and took the lead. Stanley Woods also put in a terrific lap and went from fifth to second place, showing that he has lost none of the skill of past years.

Among foreign entries special mention should be made of the veteran Renier on a Rudge, who was now lying twelfth, and riding very well on this his first visit to the Island.

FOURTH LAP LEADERS.

P. Hunt (Horton), 1h. 55m. 38s. 78.32 m.p.h.
S. Woods (Norton), 1h. 56m. 41s. 77.62 m.p.h.
J. Guthrie (Norton), 1h. 57m. 7s. 77.34 m.p.h.
F. G. Hicks (A.J.S.), 1h. 57m. 48s. 76.89 m.p.h.
G. E. Nott (Rudge), 1h. 58m. 55s. 76.17 m.p.h.
H. G. Tyrell Smith (Rudge), 2h. 2m. 50s. 73.74 m.p.h.

The fifth lap was marred by tragedy. F. G. Hicks, riding the race of a desperate man is his valiant attempt to snatch seconds from the all conquering Norton team, tore into the succession of S bends in the village of Union Mills. Driving down into the final dip for the last bend his machine got out of control. He made a magnificent effort to gain control, but in vain, and crashed into a shop. Thus, on the field of battle, ended the fine career of that wonderful little rider and tuner, one of the most popular personalities the island has known; and Freddie Hicks goes to join the select band who have been overcome by the fate which, although fortunately rare, is at times inevitable in this great sport. The sincerest sympathy of his many friends and followers will go out to his widow and relatives.

The Rudge team were gradually closing up and were now lying 4th, 6th and 7th, but they could not shake the Norton trio.

The mechanical and other casualties were tremendous, only just over a third of the starters still remaining.

FIFTH LAP LEADERS.

P. Hunt (Norton), 2h. 24m. 44s. 78.18 m.p.h.
J. Guthrie (Norton), 2h. 25m. 52s. 77.61 m.p.h.
S. Woods (Norton), 2h. 27m. 4s. 76.98 m.p.h.
G. E. Nott (Rudge), 2h. 28m. 11s. 76.40 m.ph.
G. L. Emery (Sunbeam), 2h. 33m. 20s. 73.84 m.p.h.
G. W. Walker (Rudge), 2h. 33m. 28s. 73. 78 m.p.h.

Graham Walker was now riding with his clutch out of action and Mellors who had already shown his ability earlier in the week, was handling his N.S.U. magnificently and lying eighth, and pulled up to sixth on his next lap.

SIXTH LAP LEADERS.

P. Hunt (Norton), 2h. 53m. 30s. 78.30 m.p.h.
J. Guthrie (Norton), 2h. 55m. 30s. 77.37 m.p.h.
S. Woods (Norton), 2h. 57m. 23s. 76.58 m.p.h.
G. E. Nott (Rudge), 2h. 58m. 17s. 76.20 m.p.h.
G. W. Walker (Rudge), 3h. 4m. 24s. 73.68 m.p.h.
E. A. Mellors (N.S.U.), 3h. 5m. 41s. 73.16 m.p.h.

The order of the leaders remained unchanged to the finish, and Hunt rode faultlessly and recorded his second win of the week, a magnificent performance, while his team mates, Guthrie and Woods kept on to make the Norton victory complete.

Ernie Nott finished a wonderful ride at an average speed equal to last year's record lap, and yet had to be content with fourth place, which shows the terrific speed of the Nortons, for the Rudges are no sluggards, and Nott only missed third place by 5 seconds over the 264 mile course. That is racing indeed!

RESULTS.

1. P. Hunt (Norton), 3h. 23m. 8s. 77.90 m.p.h.
2. J. Guthrie (Norton), 3h. 24m. 57s. 77.34 m.p.h.
3. S. Woods (Norton), 3h. 27m. 36s. 76.35 m.p.h.
4. G. E. Nott (Rudge), 3h. 27m. 41s. 76.32 m.p.h.
5. G. W. Walker (Rudge), 3h. 34m. 14s. 73.98 m.p.h.
6. E. A. Mellors (N.S.U.), 3h. 36m. 36s. 73.18 m.p.h.
7. A. Tyler (Raleigh), 3h. 38m. 18s. 72.61 m.p.h.
8. A. Simcock (O.K. Supreme), 3h. 38m. 40s. 72.48 m.p.h.
9. J. G. Lind (Velocette), 3h. 41m. 14s. 71.64 m.p.h.
10. S. Gleave (S.G.S.), 3h. 42m. 45s. 71.16 m.p.h.

The above won Replicas of the Trophy.

11. J. Williams (Rudge), 3h. 45m. 11s. 70.39 m.p.h.
12. L. H. Davenport (Rudge), 3h. 49m. 3s. 69.20 m.p.h.
13. G. W. Wood (Rudge), 3h. 51m. 15s. 68.56 m.p.h.

THE LIGHTWEIGHT RACE—continued from page 454.

The fifth lap leaders were :—

1st. G. E. Nott (Rudge), 2h. 39m. 36s. 70.94 m.p.h.
2nd. G. W. Walker (Rudge), 2h. 43m. 39s.
3rd. H. G. Tyrrell Smith (Rudge), 2h. 44m. 53s.
4th. E. A. Mellors (New Imperial), 2h. 49m. 9s.
5th. M. Ghersi (New Imperial), 2h. 51m.
6th. F. Longman (O.K. Supreme), 2h. 51m. 3s.

On the next lap Nott, who with Tyrrell-Smith had refuelled at the end of their last lap, caught up with Tyrrell on the road, having gained 5½ minutes on him, and they continued almost together for the whole lap. The New Imperials and O.K. Supremes were putting up a very fine show, but lacked quite the necessary speed, and it seemed certain that Nott would win, as after six laps the order was :—

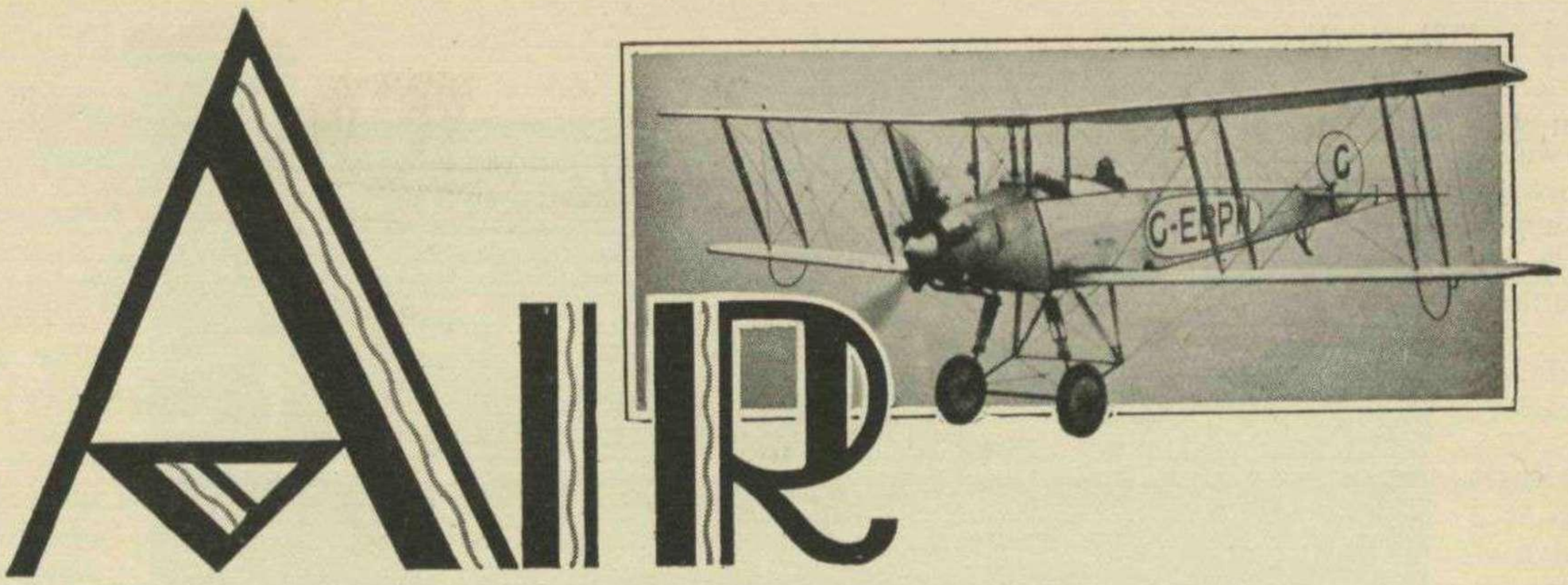
G. E. Nott (Rudge), 3h. 13m. 7s. 70.28 m.p.h.
G. W. Walker (Rudge), 3h. 17m. 6s.
H. G. Tyrrell Smith (Rudge), 3h. 18m. 46s.
E. A. Mellors (New Imperial), 3h. 23m. 25s.
F. A. Longman (O.K. Supreme), 3h. 25m. 44s.
M. Ghersi (New Imperial), 3h. 27m. 1s.

However, things are never certain in a T.T. and on the final lap Nott's luck deserted him, and on the Mountain climb a tappet slacked off and he stopped, struggled with tired fingers and inadequate weapons to rectify it and got going once more. He tore down the mountain but again it worked loose and he had to stop once more, and the trophy faded from his grasp as he again attempted to adjust it. Then he got going and rode over the finish, but not a winner after all. Hard luck indeed! Tyrrell-Smith finished and then the crowd waited for Walker. His pointer duly clicked round and he crossed the line to score his first win in a T.T.

It was a freak of fate that, having been himself robbed of victory on another occasion within 12 miles of victory, his own win should have been brought about by an exactly similar stroke of misfortune to the man who was leading him. Such is life! Nott's trouble dropped him to fourth place, 26 seconds behind Mellors.

The finishing order was as follows :—

1. G. W. Walker (Rudge), 3h. 49m. 47s. 69.98 m p h.
2. H. G. Tyrrell Smith (Rudge), 3h. 52m. 13s. 68.26 m.p.h.
3. E. A. Mellors (New Imperial), 3h. 57. 8s. 66.84 m.p.h.
4. G. E. Nott (Rudge), 3h. 57m. 34s. 66.72 m.p.h.
5. F. A. Longman (O.K. Supreme), 4h. 0m. 11s. 65.99 m.p.h.
6. M. Ghersi (New Imperial), 4h. 1m. 33s. 65.62 m.p.h.
7. S. M. Williams (New Imperial), 4h. 2m. 1s. 65.49 m.p.h.
8. C. W. Johnston (Guzzi), 4h. 5m. 21s. 64.60 m.p.h.
9. C. E. Needham (O.K. Supreme), 4h. 10m. 19s. 63.32 m.p.h.
10. C. B. Taylor (O.K. Supreme), 4h. 10m. 30s. 63.27 m.p.h.
11. J. Adams (Montgomery), 4h. 20m. 59s. 60.73 m.p.h.
12. G. L. Boudin (C.T.S.), 4h. 23m. 40s. 60.11 m.p.h.
13. R. Duncan (Excelsior), 4h. 28m. 33s. 59.02 m.p.h.



CLUB VISITS—II.

HESTON AIR PARK.

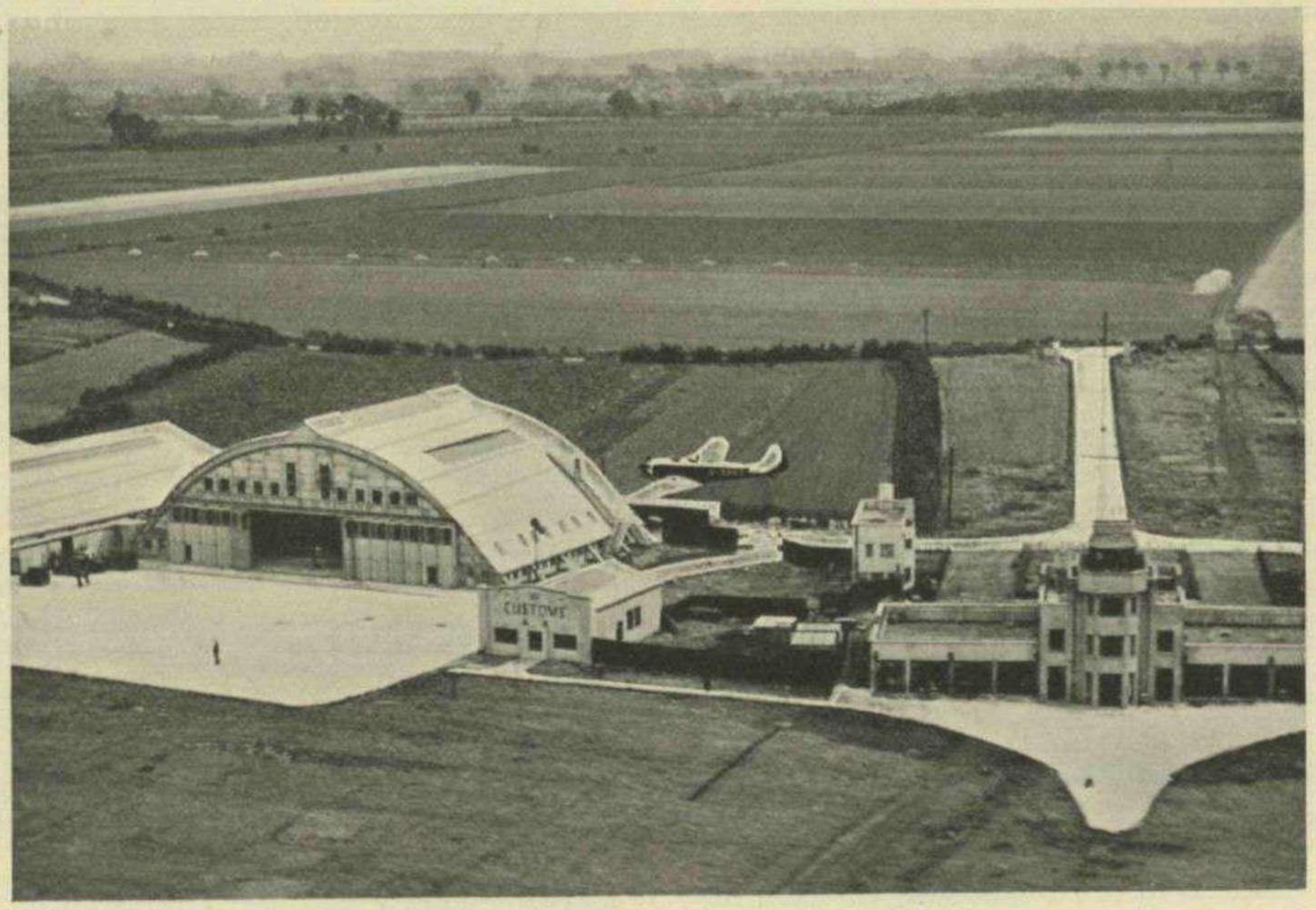
EVERYONE who is in the least interested or remotely associated with flying, and particularly private flying, knows or has heard of Heston Air Park. It is safe to say that it is as well known as the terminal aerodrome at Croydon. Yet it is only about two years ago that this extremely busy centre of civil aviation consisted of a stretch of neglected grassland and a series of odd-sized fields.

The fact that it has thus grown so phenomenally serves as an excellent indication of how rapidly civilian flying is advancing, and furthermore, it shows what happens when people with a long view of the development of air travel really "get down to it."

It was in 1929, that Mr. Nigel Norman with Mr. Alan Muntz realised the necessity of another aerodrome near London, and they chose their site at Heston, near Hounslow, Middlesex, as the spot coming nearest to their ideal. No doubt, a great many people at that time, as the laying out of the new establishment progressed, were sceptical of its probable utility, for then as now, private aviation was regarded as a movement still very much in its infancy and with an uncertain future. A visit to the Air Park to-day would prove how very wide of the mark their earlier estimates and prophesies were.

There they will find no empty buildings, deserted "tarmac" and atmosphere of listless, enforced inactivity. Heston at all times is a real hive of industry. The tarmac—or to use the more up-to-date parlance, apron—is choc-a-bloc with aircraft; with 'planes arriving and departing, and being tested and demonstrated and being—well, just flown.

Modernity and efficiency are the salient characteristics of the place. One can see at once that it has been *planned*. The entrance and roadways are of concrete—clean, dry and smooth, and the two main hangars which are of the very latest construction and design are also constructed of concrete, as is the extensive apron which is laid out along the entire frontage of the main building group. Additional accommodation is provided by steel hangars with lock-ups for craft with folding wings. Then there is the club-house—no crude



Heston from the air. Note the extensive concrete apron in front of the main hangar. The monoplane in flight is a Klemm.

HESTON AIR PARK—continued.



Another aerial view of Heston Air Park. Further extensions to buildings have been made since this photograph was taken.

wooden pavilion affair—but, a well-designed, well-built and perfectly equipped and furnished building. Both the Household Brigade Flying Club and the Stock Exchange Flying Club have their headquarters there.

This clubhouse, by the way, is quite unique for in addition to a capacious lounge, and restaurant, it also incorporates a control tower—a very useful adjunct at a busy aerodrome. Installed in this tower is a wireless transmitter and receiving set, which with a half kilowatt of power, can be used for telegraphic communication up to a range of about 300 miles. This transmitter has been and is used quite successfully and frequently in connection with the school of flying, so that first soloists and pupils of limited experience can receive advice and instruction from the ground in the early stages of their flying career. The school at Heston is run on highly systemized lines, with Captain J. Baker, M.C., and Messrs. " Biffy " Newman and V. Maloney as instructors, and over 100 members have been passed out as qualified " A " licenced pilots since the aerodrome was first established.

A further feather in the cap of Airwork Ltd., the proprietors of Heston Air Park, is that they have now been allocated a Customs official. Thus, private owners can clear there, and fly direct to the continent without the inconvenience of landing either at Croydon or Lympne in order to go through the usual formalities prior to their departure. The installation of a Customs House, has, of course, resulted in a great increase in cross-channel visitors, and one can often spend an interesting hour or so watching numerous foreign machines arrive. Indeed, at no other centre in England, is it possible to see so wide a variety of light aircraft of British and foreign make.

Naturally, at an aerodrome such as Heston one expects to find service and one is not disappointed ; there is a whole hangar given up entirely to the overhauling and repair of aircraft. This department is under the direction of Mr. J. Parkes, and the workshops staff are available for any job, from adjusting tappets to rebuilding a write-off.

Heston Air Park is now firmly established, but Messrs. Muntz and Norman are not resting on their laurels ; further developments are in hand. An hotel is being built on the aerodrome for the convenience of visitors from abroad, and the keen public interest in the place has prompted them to open a new public enclosure, with verandah canteen and lounge.

Whenever one calls at Heston there is always something doing, and it is certainly one of the brightest, busiest and most go-ahead centres of private flying in the country.

A BLACKPOOL OCCASION.

ON the 8th of this month the Blackpool Aero Club will hold a flying meeting and display at the new municipal airport of Blackpool, Stanley Park aerodrome.

The occasion promises to be a good one, and National Flying Services, Ltd., who are organising it, have arranged an open handicap race from Hanworth to Stanley Park for private owners of aircraft. This event will be the chief feature of the programme.

The prizes, too, are extremely attractive and well worth trying and flying for ; there is a gold trophy, and the first prize will carry with it £60, the second £30, and the third £20.

Further details may be obtained from the National Flying Services headquarters at Hanworth Air Park, Middlesex.



SLIPSTREAMS

Out of the Past.

WHOEVER was responsible for the organization of the flying meeting held at Hanworth last month is to be heartily congratulated for shaping a programme which was different—and really interesting.

The occasion was the N.F.S. Parliamentary "garden party," when members of the House of Commons and House of Lords visited the air park by invitation. So often these sort of affairs are tame—one sees the same machines, flown by the same pilots, performing the same evolutions time after time, and, frankly, one becomes bored. But this particular meeting was extremely entertaining, and for my part, what made it so was the presence there of a replica of the old type XI Bleriot monoplane, which had been sent over from France by the great pioneer, M. Louis Bleriot. Moreover, this old-time machine was not merely "on show"; it was flown. M. Quartremarre, took the gallant veteran up and circled the aerodrome, and though the day was far from ideal for so aged a craft to be aloft, she cruised around in fine style, with the old Anzani engine crackling healthily enough.

To modern eyes, to people who can only dimly remember the aircraft of even the late War-days, this 1910 monoplane must have appeared strange indeed. But, I think it will be agreed that for all her twenty-one years, the Bleriot is a graceful craft. Even her spidery "under-cart" and naked longerons do not detract from her good looks to any extent.

It was a bright idea, also, to invite as many old Bleriot pilots as were able to come. Alas! there are not many left. But one was glad to see Sir Alliott Roe, M. Marcel Desoutter, Mr. Marcus Manton and Commander R. Marix there. What memories the sight and sound of the Bleriot must have stirred amongst these veterans.

Pre-War Stunting.

The first machine I saw looped was a Gnome-engined Bleriot, and the astonishment of the crowd in which I stood was extraordinary. The late Gustave Hamel, C. B. Hucks and M. D. Manton were the finest of pre-War stunt pilots—and they all used Bleriots. When one examines this frail-looking little machine, and recalls how they were flung about, one's respect for these men, for their courage and skill, can be only profound.

Incidentally, many people imagine that the stunt in which a 'plane is dived over the vertical and flown on its back is an entirely modern evolution. Nothing of the sort. Both Hucks and Manton did this regularly in 1913-1914, and continued for quite considerable periods in inverted flight at no more than 300 feet from the ground.

Motor Firms and Aircraft.

During the War period all sorts of manufacturing concerns turned their resources to building aeroplanes. Shop-fitters, furniture makers and the like were all working feverishly in turning out warplanes. The motor trade, naturally, was particularly busy in this direction. But while this work with most firms in Coventry and elsewhere was entirely new to them, Humber Ltd. (who, if I remember rightly built R.E.8's and Avros), were no novices at the game. For in 1910 they made Bleriots under licence. This is the story of how they started.

One day in 1910 a telegram was received at the Humber factory announcing that George Barnes, the pilot, had remained in the air at Brooklands for 15 minutes. Mr. Burford, general manager, showed this to Mr. Davey (who was then, as now, sales manager) and asked "How much is that worth to you?" "About £2,000," replied Mr. Davey, to which Mr. Burford responded, "Spend it then." How many machines they built, I do not know, but a catalogue of aeroplanes was actually issued by the Humber Co., and that was 21 years ago.

The King's Cup Race.

At the time of writing, forty-one entries have been received, by the Royal Aero Club for the King's Cup Race which is to take place on the 25th of this month. The course will total 982½ miles, and the start will be from Heston Air Park. The route to be taken will include Leicester, Nottingham, Norwich, Brough, Leeds, Birmingham, Woodford (Lancs), Hooton, Shoreham, Hamble and Bristol.

The new rules governing the race, of course, ban all but amateur entrants and pilots, so this year the "trade" element will be entirely lacking—and there will be no special machines at all, which robs the race of more than half of its interest. Looking through the list of machines so far entered I see that it comprises—with the exception of the Canadian-built Curtiss-Reid "Rambler," an Arrow "Active," a Martlet and a Civilian "Coupé,"—"Moths," "Avians," "Spartans," "Bluebirds" and "Widgeons."

It is interesting to find that a large percentage of the pilots are R.A.F. officers, these being graded by some queer twist of the R.Ae.C.'s rules as "amateurs." There are also three women competitors—last year's winner, Miss Winifred Brown, Miss Diana Guest and the Hon. Mrs. Victor Bruce.

It is obvious that there will be no very high speeds, but as the competing machines will be all fairly evenly matched, there should be at any rate an exciting finish to the King's Cup Race, 1931.

"RUDDERBAR."

THE SPORT AFLOAT.

THIS month is to be the most important in the racing man's calendar, for not only is there the Thames International meeting, but also the Bristol Yacht Club's long distance race for the Roy Fedden Trophy and the races for the Detroit News Trophy to be held during Southampton Week. Should this not be enough for the keen man, he can fill his time in at the London Motor Boat Club's monthly meeting on the 4th (the second of the series) at the Welsh Harp, the Carr Mill Dam races organised by the live Lancashire and Cheshire Outboard Racing Club, to take place on the 19th ; and, lastly, there is to be an open meeting at Cardiff under the auspices of the Barry Yacht and Motor Boat Club, on the 18th.

Dinghy Popularity.

It is especially significant that the outboard races at the more important of the above meetings favours the new M.M.A. dinghies to a far greater extent than the hydroplanes. The most strenuous of these dinghy races will undoubtedly be the Roy Feddon Trophy Race, which is to be held on the Avon on Saturday, July 11th, at 4.30 p.m., and is to follow closely the lines of the Poole Hundred. Let us hope, however, that there is not the same number of failures as in the case of the Poole race, for the Avon is an unpleasant river on which to have no mechanical means of propulsion. The Bristol race is over a course of 40 miles, and the now familiar weight system of handicap will be in operation. The B or 350 c.c. class will travel with only the driver, the 500 c.c.'s must make up a total load of 200 lbs., including the pilot but excluding the weight of petrol, and the F class jobs have to carry 420 lbs. The handicap on the D class motor, which, unlike the Poole race, is not to come in the unlimited class, is not at the time of writing yet fixed, but it is fairly certain that the two larger classes will have to have some human ballast. An additional handicap not at once apparent on the big motors is the fact that they use proportionately much more fuel, and what are normally the fastest jobs will have to carry nearly 20 gallons of a 4.1 petrol mixture, unless they elect to stop and fill up. The first three boats home will carry off the Fedden Trophy, the King Cup, and the Yacht Club cup respectively, while there will be cash prizes for the first three in each class.

Scott-Paine's New Craft.

Much has been said about the chief event of Southampton Week, namely, The Detroit News Trophy, already in the public press, because it is a rule that the boat must be powered with an engine of American origin. It would, no doubt, be better from an international point of view if the race were on the lines of the B.T. Trophy, where the boat and engine must be of the same country of origin as the challenger. Still, the engine is only half the story, and instead of having to rely on two main factors, our hopes are now based on the ingenuity of our boat-builders. This hope was justified before in Miss Britain I. ; the question is—Can Scott-Paine work the oracle again with Miss Britain II., a boat with many novel features which has just been completed at Hythe? A sister boat to Miss Britain II. is Whyteleaf III., which will be piloted by Mr. F. White of Lloyds. And then there is, of course, Miss Betty Carstairs, for it would indeed be difficult to imagine an Anglo-American motor boat duel without Miss Carstairs in the thick of it. Her new boat, powered by a 5½-litre Gray, is a beautifully finished job, and was launched from Sylvia Yard, Miss Carstairs' private 'shops' at Cowes, in the middle of May. Thus, Miss Carstairs has wisely allowed ample time to accustom herself to the handling of the craft, and also time for the elimination of any of those petty troubles which have a habit of occurring when there is little time to put them right. It is forethought such as this that wins races.

There will be three American challengers for the D.N. Trophy, but arrangements with those boats do not appear to be quite cut and dried yet. For instance, Mr. John Rutherford is not yet satisfied with his boat, "Little Neddy," which boat is likely to prove the fastest of the competitors from trans-Atlantic, and alterations are still being made to the Lodge engine. Mr. Brown's boat, Phantom, was raced last year, but an increase of speed is now claimed, with a different method of power transmission. The other pilot will be Mr. Charles Mouthrop, who will race Mr. Aaron de Roy's Gray engined Century boat, Lady Helen III.

Southampton Week.

The Southampton Week will be run under the joint organisation of the Royal Motor Yacht Club and the British Motor Boat Club, and proceedings will be opened on Sunday, July 19th, with the arrival of the boats in the London to Cowes race. The heats for the D.N. Trophy will be run off on Tuesday, Thursday and Saturday. There will also be a good programme of outboard races, the most important of which is the Duchess of York's trophy race. This race has now fallen into line with other important outboard events, and is now a race for national class dinghies powered with 6 or 500 c.c. class engines.

Competitors, officials and even spectators will hardly have time to forget the dinner to be given at the South-Western Hotel on Saturday night by the R.M.Y.C. before they are flocking townwards to prepare for the Thames International Meeting, which is to take place on the last two days of the month, under the auspices of the Sussex Motor Yacht Club. The two events which will undoubtedly attract the greatest number of spectators are: The Star International Trophy and the Field Trophy for B and C class hydroplanes respectively.

A New Trophy.

Lord Wakefield of Hythe has put up a new Trophy for the International Championship of London, which is open to hydroplanes exceeding 17ft. in length, but with engines developing not more than 150 h.p. Many of the D.N. Trophy competitors should thus be attracted, but a further stipulation is that each boat shall carry a crew of two. In addition to the above events there

THE SPORT AFLOAT—continued.

will be also races for stock runabouts, and there is certain to be at least one M.M.A. dinghy event. The racing will no doubt be witnessed as before by some thousands of people, and it is therefore somewhat of a pity that Miss England II. will not be in the country, for few will forget the magnificent sight of Miss England I. doing about 70 m.p.h. past Duke's Meadow with the late Sir Henry Segrave at the wheel. How superbly he handled her, and what an impression it must have made on the thousands watching. Miss England II. is, however, still at Gardone, in Italy, and the repairs to her now being complete, Kaye Don has left for Italy for an attempt to improve upon his own record and to also get plenty of practice in before the boat is shipped to America for the British International Trophy race at Detroit.

An Ambitious Journey.

Mr. Richard Cole, who recently accompanied Miss G. Clements on her outboard trip from London to Brussells and back, must be inspired by Masefield's " Sea Fever," for a couple of months residence on land has sufficed him, and he is now planning an outboard motor boat cruise on a scale that will quite eclipse his previous adventures. As his friends are aware, it has long been Mr. Cole's ambition to visit a country where the sport side of motor boating is more on a par with car or motor-cycle racing. America is at present out of the question, and it was at first thought that Italy would have to be the goal. It was found, however, that the time taken over such a journey would necessitate Mr. Cole's absence from the majority of important events in this country, which, as Cole himself says, is unthinkable. The proposition now is to make an " outboard dash across the Channel " through the rivers and canals to Berlin and back in time for the Star Trophy races. Well, it's Mr. Cole that is tackling the job, ' Gottsei dank.' As before, the trip will be in the nature of an all-British propaganda stunt, and Mr. Cole will use the same Watermota-engined Wood dinghy, namely, Miss Watermota, as was used for the Brussels journey.

He will have a companion in Mr. Shrubsall, who more often conducts his cloud of spray round Chichester Harbour and Hayling Island.

These two men are still rather vague about their route, but the details are in the capable hands of the Motor Boat Association. It is, however, certain that the canals will be entered at Ostend, the Meuse will be reached by the Scheldt and suitable canals, and then across to the Rhine at Dusseldorf, and after that they have to rely upon the M.B.A. As neither knows Germany or the language particularly well, I should think a cosmopolitan parrot would be a useful mascot to put them on a level footing with the Continental bargees.

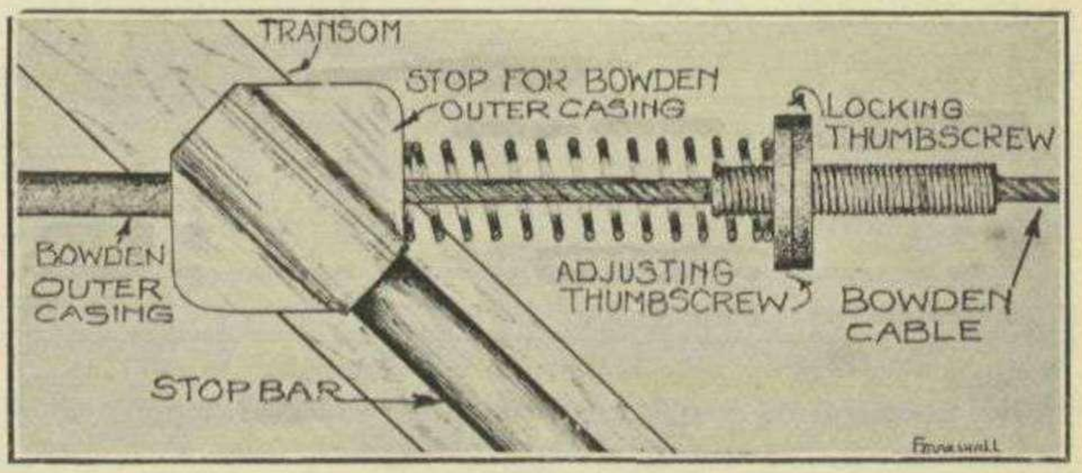
—F.M.

COUNTERACTING TORQUE REACTION.

ANOTHER "WATERMOTA" INNOVATION.

IT will be remembered that last month a description was given of the speed dinghy, " Miss Watermota," a craft with a history, and it was then stated that Miss Clements' only criticism of her outfit was a constant pull to port on the steering wheel owing to the torque reaction of the water. Miss Clements was doubly unfortunate, for before she had returned, Walter D. Fair & Co. had on the market a neat little arrangement by which the disadvantage of this is counteracted, and, what is more, turned to an advantage, as explained below.

The device is the work of Mr. Colin Fair, and is used in conjunction with Watermota patented steering (described in the issue of MOTOR SPORT for January). Moreover, while being extremely efficient, the contrivance is very simple, and is fitted on the length of Bowden cable between the port stop bar and the steering quadrant on the motor. A piece of small bore brass tubing, threaded on the outside, is soldered to the Bowden cable at about nine inches from the stop. This piece carries two large diameter milled edge thumbscrews, the purpose of which are, respectively, to adjust and lock in position the adjustment of the load on the compression spring which is imposed between the stop and the adjusting thumbscrew. The spring is so adjusted that any pull of the motor to port out of the dead fore and aft line immediately puts a load on spring, which reacts to prevent any movement occurring at the steering quadrant. Should the motor be turned to port the strength of spring is sufficient to overcome the torque reaction and to return the wheel to the fore and aft position ; from starboard movements of the wheel the torque reaction returns the steering gear central, and thus it will be seen that the little device gives a very pleasing self-centreing action to the motor, a quality much appreciated by car drivers in particular.



A sketch of the device designed and made by Walter D. Fair & Co., and here described.

Walter D. Fair & Co. are fitting these devices as standard to all Watermota steering gear units which are to be used with Watermota engines at no additional cost, while 10/- is the price charged for modification of existing units.

HERE and THERE

By "Camshaft"

How Safety Glass was discovered.

THIS month sees one of the most interesting motoring anniversaries—the 21st birthday of the filing of the safety-glass patent.

Nowadays most motorists know that safety-glass is a sandwich of two sheets of glass with celluloid in between—hence the name Triplex—welded together by some secret solution, but few know how the idea originated.

The inventor of safety-glass was Edouard Benedictus, a French chemist of Dutch origin, who had an experimental laboratory in Paris. One day he dropped a bottle to the stone floor, and although it was starred inside like a crystal it did not break. He remembered that it had contained a mixture of various chemicals which had evaporated and coated the interior with a transparent enamel. Benedictus noted the formula but thought no more about the matter till some time later when he heard of a girl being injured by broken glass in an accident. Then he realised that on his shelf lay the secret of unsplinterable glass.

The patent was filed in 1910, but it was not till Mr. Reginald Delpech, the English pioneer motorist, took up the idea that safety-glass was manufactured. Mr. Delpech founded the Triplex Company and began to produce the glass.

At first, when open cars were the order of the day, and motorists expected motoring to entail risks, there was not great enthusiasm for the new idea. In 1914 the sales were only 15,500 square feet per annum, but in the 17 years that have passed the attitude has completely changed, and to-day the out-put of the Triplex factories is two million square feet per year.

Foreign Motor Shows.

It is surprising how our motor manufacturers neglect foreign motor exhibitions. Rolls-Royce is one of the few organisations which realise their value and although their position is consolidated all over the world they exhibit at more shows than any other company.

In the seven months following the Paris show they appeared at no less than nine international exhibitions, namely Amsterdam, Milan, Berlin, Sydney, Paris, Geneva, Prague, Brussels and Buenos Aires.

The arrangements of many of the shows are not so elaborate as Olympia. The exhibition building at Delhi one year was an affair of canvas and laths which caught fire and although the manager's hat was lost in the flames, the Rolls-Royce staff on the spot managed to push the cars to safety just in time!

But these shows bring business. Paris, for example, is more favoured by South American exhibitors than London, while it is usually at Paris that the Maharajah of Kashmir, who owns ten Rolls-Royce, makes his purchases.

British manufacturers who wish to capture foreign trade will have to do like Rolls-Royce and send their cars abroad.

Silencers and Power.

The design and condition of the exhaust system, particularly if the engine is of small capacity and therefore dependent on high revs. for its power, play quite an important part in its satisfactory running or otherwise of a car. Woolliness can often be ascribed to a badly sooted-up expansion chamber and tail pipe, or to a silencer which has been designed with an unobtrusive exhaust note as the principal object in view. This fact has resulted in a number of proprietary silencing systems being placed on the market, and amongst these is the C. & W., which is made by Cheswick and Wright, of Gladstone Street, Blackpool. Made specially for the Austin Seven this set is of straightforward design, embodying a large diameter pipe and expansion box. The latter contains a one piece spiral baffle, and while it gives a free passage for the spent gases, the exhaust note is pleasant, and by no means unduly noisy. It is priced at 27s. 6d., complete with the necessary clips and hangers, and the makers claim that it adds some 4 or 5 miles an hour to the maximum speed of a car.

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