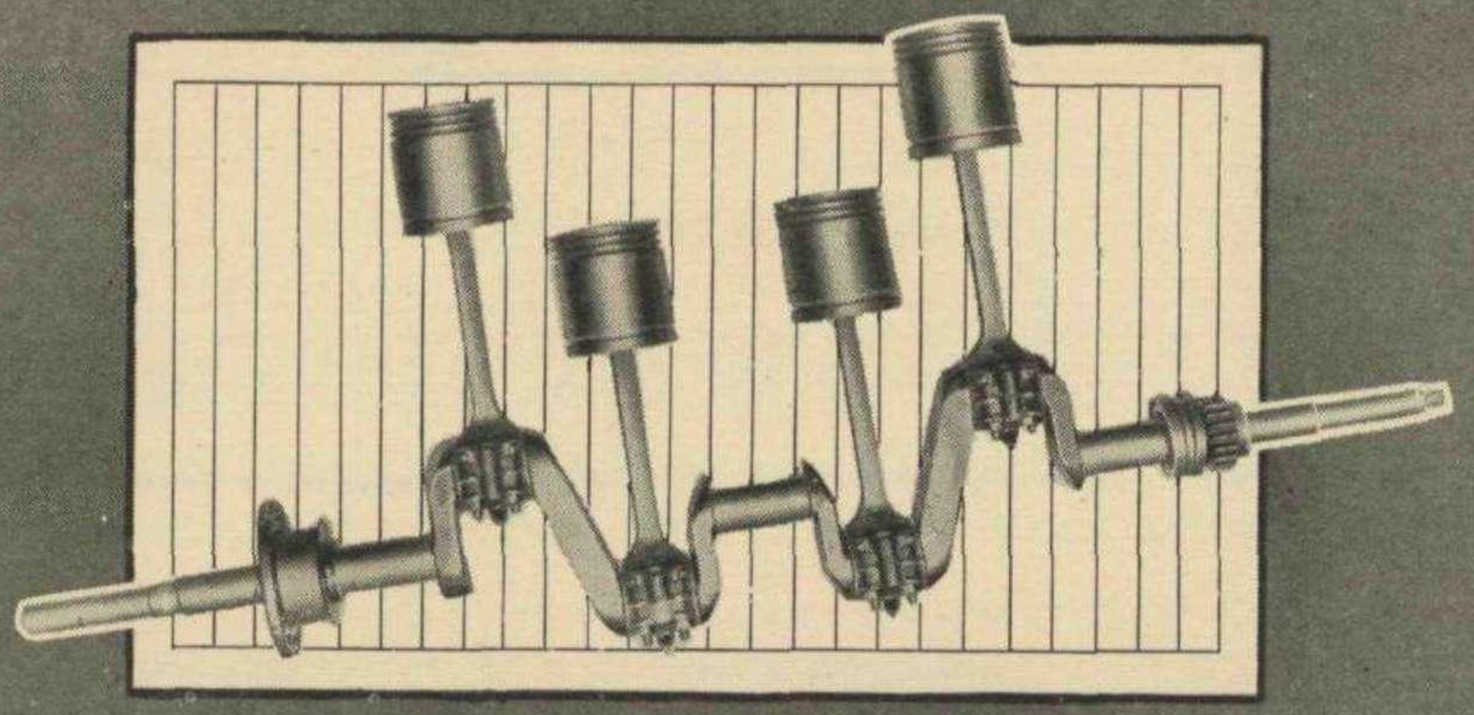


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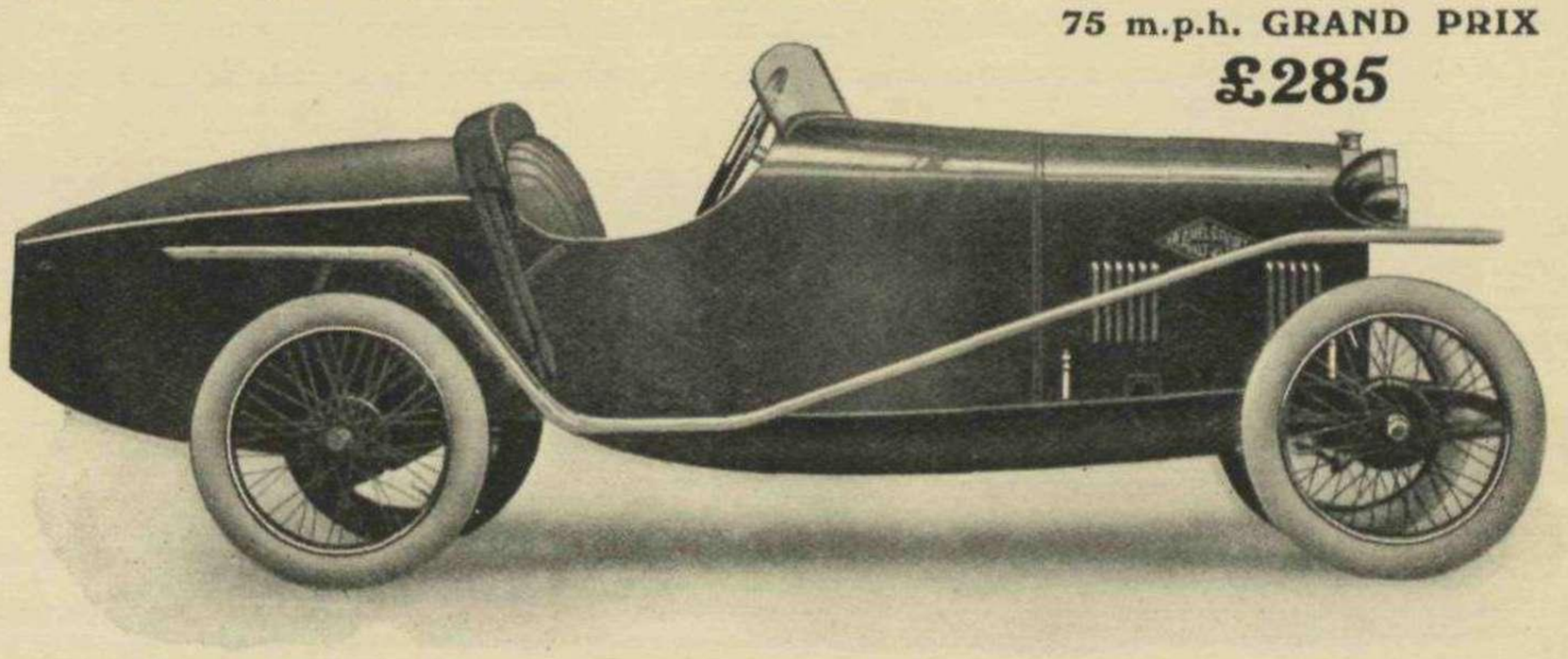
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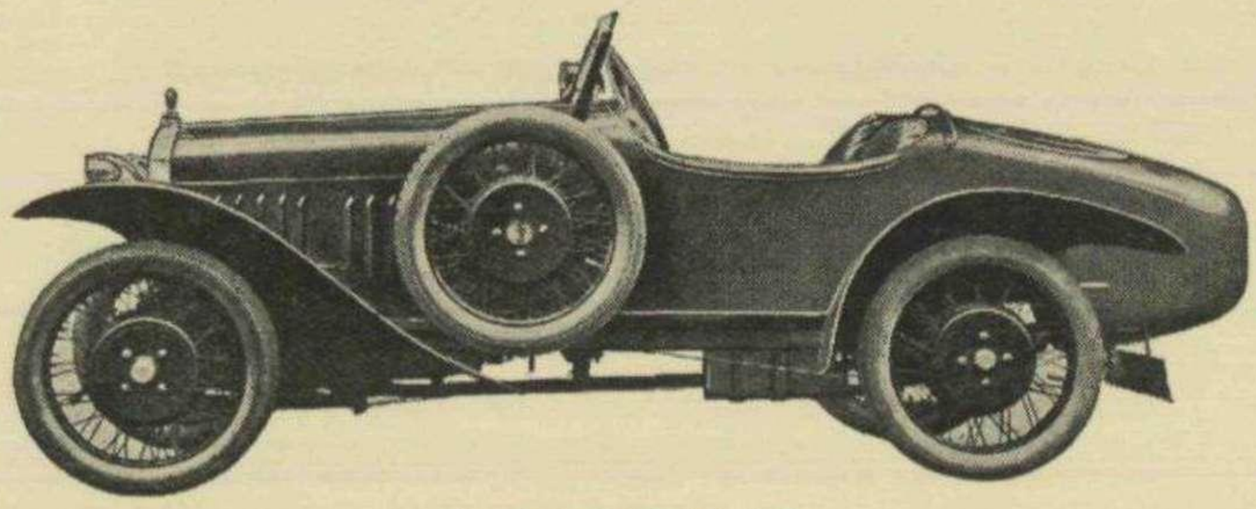
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No. 12. VOL. 2.

Edited by RICHARD TWELVETREES, A.M.I.MECH E., M.S.A E., M.SOC.ING.CIV. (France)

JUNE, 1926.

EDITORIAL NOTES.

A National Asset.

ONE of the most remarkable features in connection with the National Emergency which has been brought to a satisfactory conclusion, is the wonderful response made by all sections of the motoring community. There is no doubt that, but for their response, the situation would have been considerably protracted. Those who were present at the Horse Guards Parade during the strike will have observed how readily owners rallied round and placed their services and cars at the disposal of the country. In many cases, drivers had started from far distant points, and carried up loads of passengers, and they offered their services for whatever duties might have been allotted to them during the day.

As might have been expected, the sporting motorists were conspicuous in their large numbers, the emergency drivers comprising well-known racing men, competition drivers, motor cycle speedmen, and a large proportion of ladies. The whole spirit prevailing among the volunteer workers was that which inspired England at the outbreak of the War, this sporting spirit being undoubtedly one of our greatest National Assets.

At a time when the sporting side of motoring appears to be standing in some disfavour with certain sections of the community, we should like to draw attention to the fact that the spirit of sport is one which should certainly be fostered, and we, as a nation, are neglecting our duty as citizens if we fail to keep alive the spirit which actuates the desire to serve the country at such a crisis as the one which has just passed. It is of course to be hoped that no similar call will be made on motorists for many years to come, but unless the sporting side of the movement is kept alive, there may be a gradual dwindling away of what we may term the sporting spirit.

There can be no doubt that from every point of view, the competition side of motoring is one that should be encouraged by all possible means, and whilst at present what seem to be petty jealousies, are ruining the movement in trade circles, there are limitless possibilities for clubs to extend their sporting programmes, so that all who are keen in competitions, will find ample opportunities for following the great game. It is to be hoped that the wonderful response of motorists will influence those bodies which appear to be at cross purposes with regard to the way in which competitions should be organised, so that the competition world may be able to carry on with a more extensive programme of events, and that these events will receive far wider support than they have of late.

Not only does the motorist of to-day look for extended reliability trials as one form of pastime, but hundreds of keen drivers are fretting because road trials have been vetoed. It will be remembered that the popular hill climbs came into disfavour merely because of the unsporting behaviour of spectators, and it seems that the time has arrived when some steps can be taken to restore a certain number of well organised hill climbs throughout the country. It may perhaps be optimistic to expect our antiquated legislation to allow road racing in this country, though as every driver who has travelled extensively over England knows, there are hundreds of places where long courses could be arranged, over which road racing could take place at high speeds without danger to the public, and with great benefit to the industry. We have only to look over-seas to observe how continually manufacturers have benefitted and are benefitting through road racing experience, and until we are allowed to enjoy similar privileges, it stands to reason that the sporting side of motoring cannot be allowed full sway in this country.

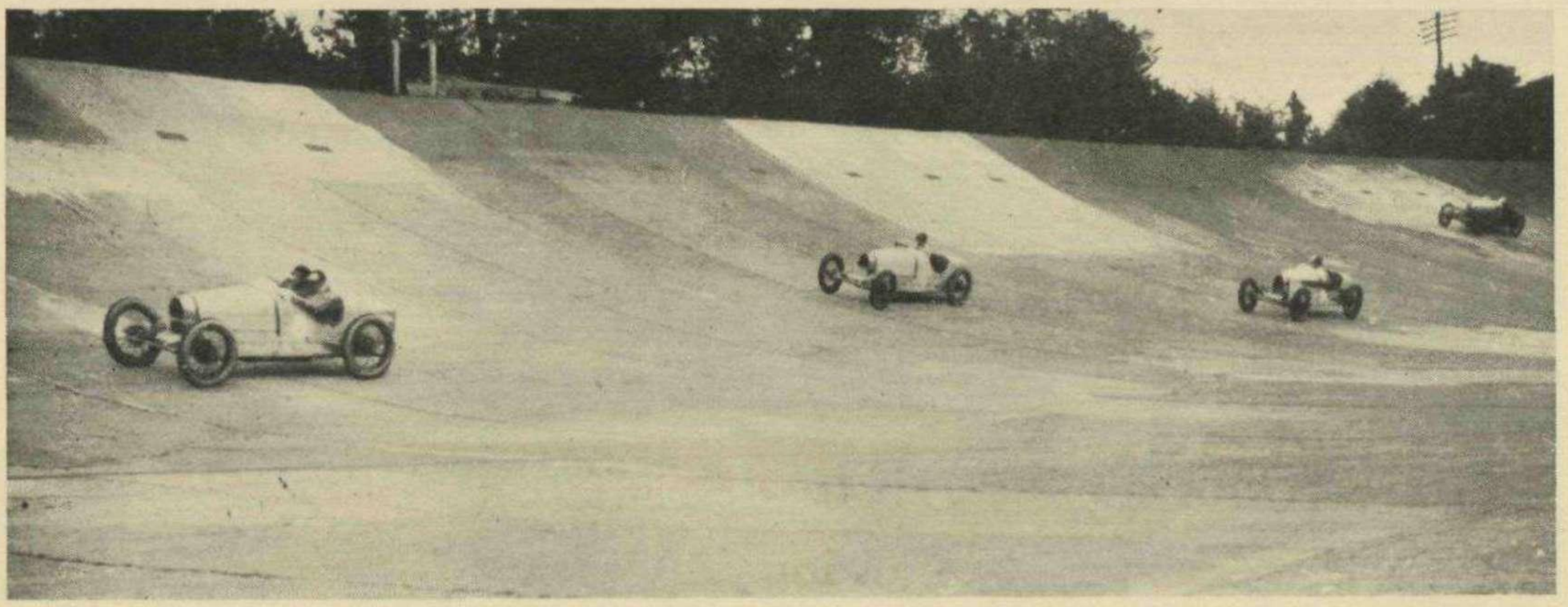
The Editor wishes to thank the many readers who have written letters of sympathy in connection with his accident, sustained whilst dispatch riding for the Government. His condition is satisfactory, and as it will be some time before he is able to resume his ordinary work, he will be pleased to see friends at Charing Cross Hospital on Wednesdays or Fridays between four and five o'clock.

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WHIT-MONDAY MEETING OF THE B.A.R.C.

Yet Another Sunny Day at Brooklands.



A Quartet of Bugattis in the Race for Cars of That Make.

AS at Easter, in spite of a week of doubtful weather, the conditions on Whit-Monday were delightful for the ordinary holiday-maker; for the Brooklands *habitué*, however, the sun was rather fierce in the early afternoon, the great concrete oval acting as a very efficient reflector of both light and heat.

For once the handicappers displayed unusual skill in staging close finishes; in several races the entire field seemed to cross the line in a bunch. This feature, together with the appearance of the famous "Thomas-Special" "Babs," resulted in a thoroughly interesting afternoon. We cannot help wishing, however, that some effort could be made to enable the spectator to see more of the racing, as at a motor-cycle meeting; at present, if one is in the Paddock, one can see very little of the start or finish of the race, and in any case one is too far from the track to read the competitors' numbers as they flash past the gap at the end of the straight. If one stands near the edge of the track, one misses the interest and excitement of the Paddock, and the parade of fashions (both automobile and sartorial!). If the present form of race continues, the paddock and grand stands should be moved to the railway straight, when much greater satisfaction would be obtained for one's fifteen shillings or more that is paid for admission.

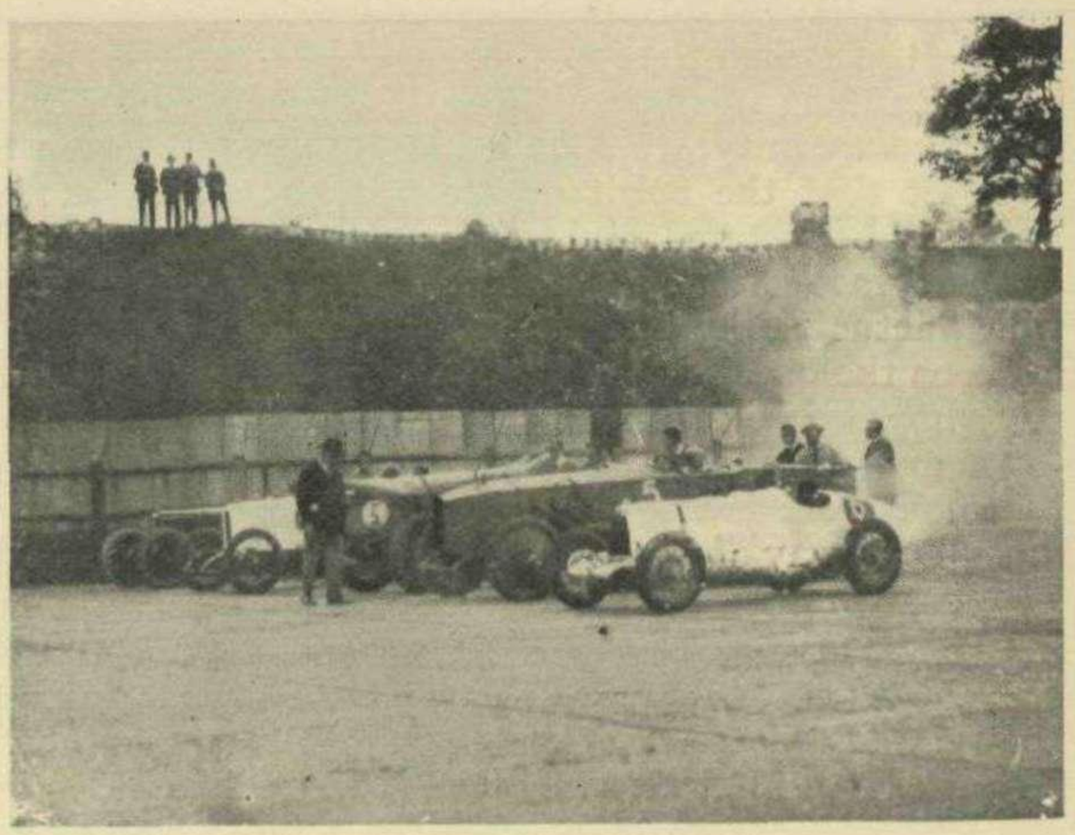
The first race was the Private Competitors' Handicap, and provided a mixed field, ranging from an Austin Seven to a 5-litre Ballot. At the end of the first lap Maxwell (Austin Seven) was still holding his original lead, but H. W. Purdy (Bugatti) and R. B. Howey (Ballot) were observed to be catching up ground rapidly. On the last lap Purdy managed to scrape in front of the Austin as they crossed the line, and the big Ballot just failed to catch B. Eyston's Aston-Martin, which finished third. The winner's speed was 88 m.p.h.

A "Slow" Race.

The 75 m.p.h. Short Handicap was next decided, and provided a win for L. C. Rawlance on the 2-litre O.M. On the first lap the limit man, B. H. Norris (Rhode), led, followed by the Marendaz-Special and B. Eyston (Aston-Martin), but shortly afterwards he was passed by a bunch of later starters, including the two above, the winner, G. N. Norris (Lea-Francis) and G. Newman's Salmson. The dog fight among this bunch resulted in second and third places falling to the Lea-Francis and the Marendaz-Special respectively. The finish was remarkably close, and the winner's speed was 87½ m.p.h.

"Babs" makes her debut.

There were ten starters in the 100 m.p.h. Short Handicap for the Brooklands Gold Vase, and an exciting duel ensued between two "35-second men," K. Don on the Wolseley-Viper, and A. G. Miller on a 5-litre Sunbeam. After Meeson, on his surprisingly fast touring Vauxhall, had led for one lap, Miller and Don in the order named came to the front, the former eventually winning by half a length at 102 m.p.h. Third place went to the intrepid Barclay on the T.T. Vauxhall.



The Start of one of the Races.
The Halford-Special is seen in the Foreground.

WHIT-MONDAY MEETING OF THE B.A.R.C.—continued.

The much-vaunted " Babs " was obviously not being hurried in this race, and the pitiful outbursts of the lay press, such as " Babs nowhere ! " and " World's fastest car hopelessly beaten " were rather amusing.

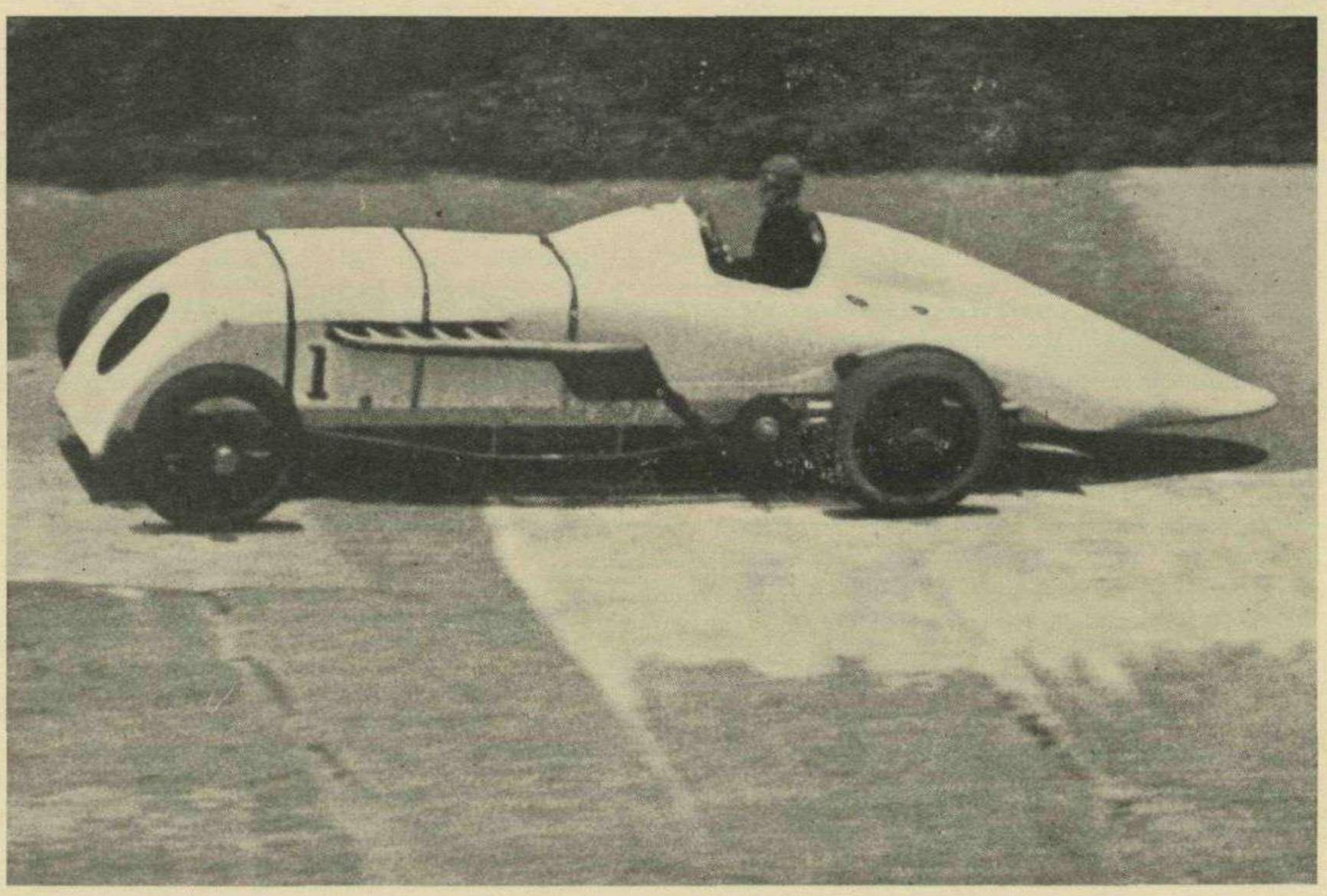
The Twenty-third 90 m.p.h. Short Handicap.

The most interesting entry and incidentally the winner in this race was the six-cylinder supercharged Halford-Special, of 1,500 c.c., which will be driven in this year's 200-mile race. The supercharger protrudes beneath and in front of the radiator between the chassis dumb irons, and the whole car is most attractively finished.

with 3 seconds' start. R. B. Howey drove his brother's Leyland Thomas with 19 seconds' start.

Meeson's Vauxhall led on the first round, hotly pursued by Barclay on the Vauxhall. In spite of a 3 seconds' start, Cobb was passed in a flash by Babs, 100 yards from the start. The other Leyland was gobbled up at the beginning of the second lap in similar fashion. Barclay passed Meeson half a lap from the finish, and managed to hold off " Babs " by about 50 yards at the line, Meeson being third. Barclay's speed was 100¼ m.p.h.

After the race, Thomas complained of being very sore owing to the bumps. He estimated his speed at



J. R. Cobb, Driving the Famous Thomas Special " Babs," on the Members' Banking.

The race itself was not very interesting, except for Major Halford's dash through the field from the 16-second mark, overhauling Lanfranchi (Alfa Romeo) and G. E. T. Eyston (Aston-Martin), who followed him home in the order named. The winner's speed was 95¾ m.p.h.

Thomas uses his Brakes.

The Lightning Short Handicap was a thrilling spectacle from start to finish, the most impressive sight perhaps being when the three great white cars (Babs and the two Leylands) one after the other crawled slowly out to the start and lined up side by side just behind the starting line in order to use the slope of the banking to restart their engines. " Babs " was to have been driven by J. R. Cobb, but at the last minute Thomas and Cobb changed seats, so that the latter took the Leyland

the end of the railway straight to be 160 m.p.h., and had to brake hard before negotiating the Byfleet Banking at a beggarly 120 m.p.h. !

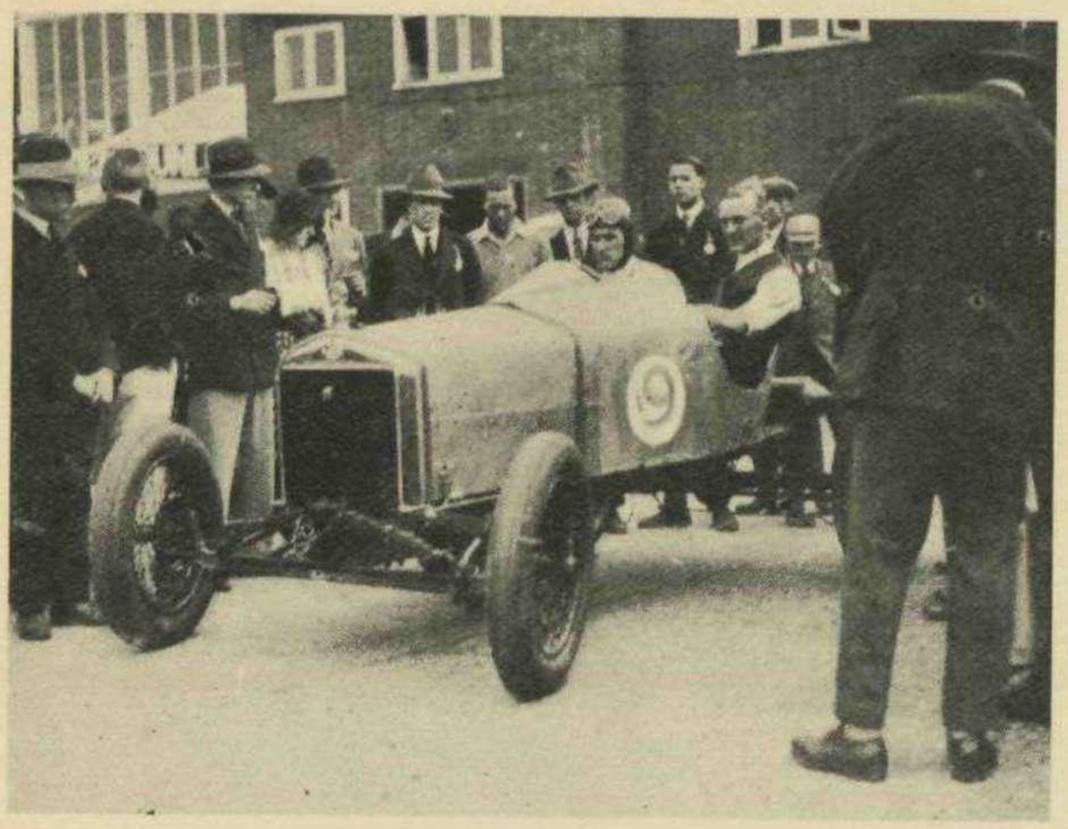
The " Bug-Bean-O."

A novel race for the three types of Grand-Prix Bugatti was staged next over the same distance, seven starting. C. S. Staniland, with 20 seconds, soon ran through the four 4-cylinder models (40 secs. start) and led comfortably to the end. G. Duller, lapping very fast from the scratch mark, came in second, with H. W. Purdy third. Staniland won at 93¾ m.p.h.

The 90 m.p.h. Long Handicap.

Held over 8½ miles, the long handicaps are always more interesting than the shorter races, the last lap usually providing great excitement. This race was no exception, on lap one G. E. T. Eyston led, followed by

WHIT-MONDAY MEETING OF THE B.A.R.C.—continued.



A. MOSS, ON THE FRONTY-FORD, DID NOT HAVE MUCH LUCK ON WHIT-MONDAY.

Newman and Hazlehurst, on Salmsons. On lap two the Bugatti "finger" (J. C. Douglas) was in the pie once more, having displaced Hazlehurst. On the third lap the Bugatti "thumb" (Malcolm Campbell) plunged into the confectionery and extracted the plum. Campbell won by a length from Douglas at 94¼ m.p.h. The Halford-Special, rehandicapped to scratch in company with Thomas on the Lanchester, finished third.

"Tip and Run" on the Track.

The 100 m.p.h. Long Handicap produced more passing and repassing than has ever been seen before in a race of this sort.

On lap one the limit man, Lanfranchi, on the Alfa Romeo, held his lead, but Staniland (Bugatti), 25 secs. had passed Meeson (Vauxhall) 28 secs. Barclay (scratch) drew away from Newman (Austro-Daimler), also scratch. On lap 2 Meeson repassed Staniland, but could not leave him. Kaye Don, on the Wolseley-Viper, had passed Thomas and Halford (the former on the Lanchester), and was now fourth. On the last lap everything was reshuffled again. Meeson and Staniland passed the leading Alfa Romeo, one on each side of it, in close company. Thomas passed and was repassed by the Halford-Special, and the unwieldy looking Viper overhauled everyone in front, to win by 400 yards at 105 m.p.h. Staniland lost second place to Halford by inches.

The Ninth Race.

The 75 m.p.h. Long Handicap was a procession throughout, with very little overtaking, but, however, a very bunched finish. The Eyston brothers looked winners from the start, G. E. T. beating brother B. by two lengths at 85½ m.p.h., after giving him 3 seconds' start. Both drove Aston Martins. G. Newman's (Salmson) was a close third from the 27 sec. mark. The ancient Nazzaro from scratch was a hectic last. Dr. Benjafield, well in the running for a place on his Frazer-Nash, miscounted, and failed to turn down the finishing straight.

The "Star" Gold Star Handicap.

Once more the two Thomas productions were brought out, this time Cobb taking charge of "Babs."

Only six were allowed to start, and the first lap order was Miller (Sunbeam), Campbell (Bugatti), Barclay (Vauxhall). On the second lap Campbell passed Miller and Howey on the Ballot passed all three of the previous leaders. Barclay appeared to be much slower in this race though the trouble did not seem serious, and he dropped back to fifth. This time it was "Babs'" turn to sulk and Cobb could do no better than last. The Leyland, however, travelled at a tremendous speed, and was only 50 yards behind Howey, who won at 110 m.p.h., having received 25 secs. start from Thomas. M. Campbell, on G. Duller's Bugatti, was third. The whole meeting passed off smoothly and without accident.

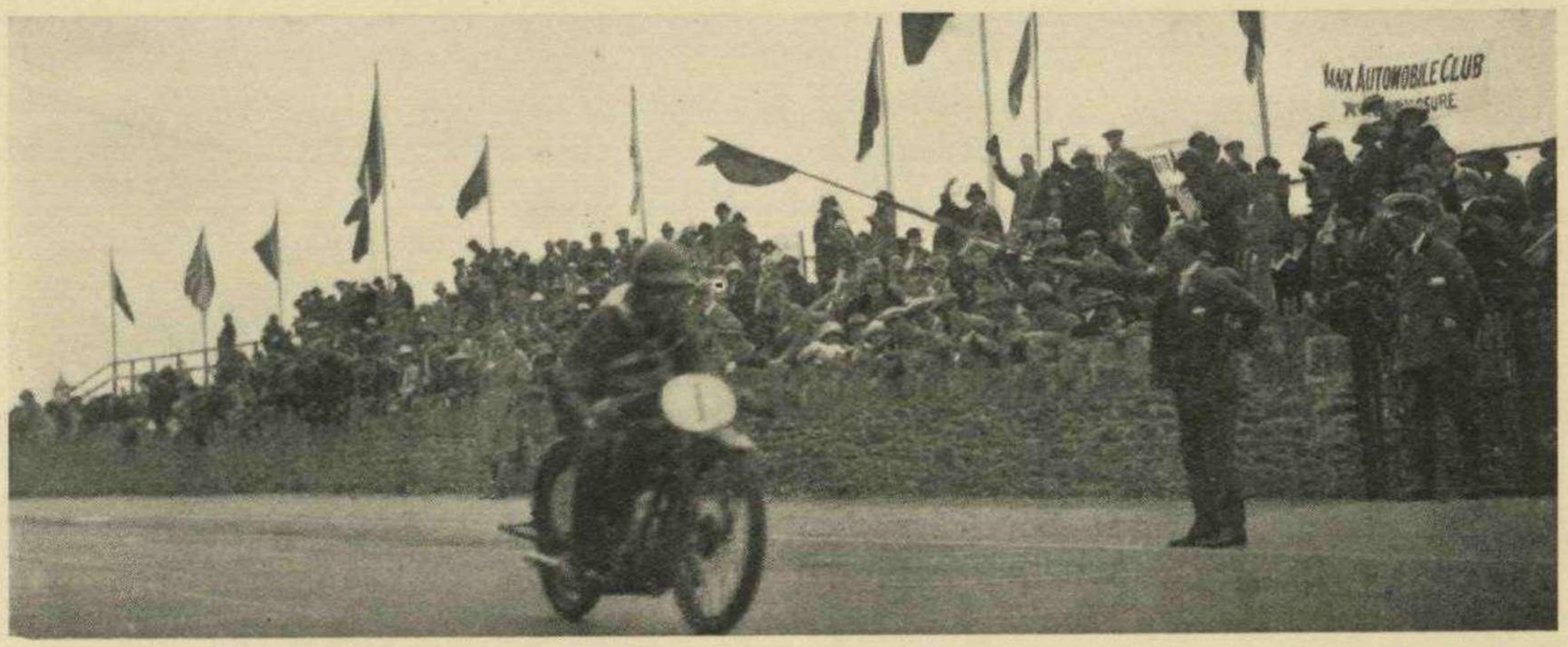
MORE RECORDS FOR "BABS."

Further to the remarkable speeds put up by Mr. J. G. P. Thomas at Pendine, we have to report new short distance records established by this driver at Brooklands on May 26th. With the 27 litre "Babs," Mr. Thomas covered the standing kilometre and standing mile at 86.9 m.p.h. and 98.87 m.p.h. respectively over both ways of the course. On the same day, driving the Leyland-Thomas, he broke the world's record in Class B for 5 kilometres at a speed of 128.41 m.p.h.

The Sunbeam company are evidently not content to leave the world's speed record in the hands of Mr. Thomas, their latest venture being a 44 litre giant, propelled by two 12-cylinder Sunbeam-Matabele engines, one in front of the seat and one behind, coupled together by a shaft and driving the rear wheels through the medium of gear-boxes, clutches, cross shafts and chains. For the interest of the amateur who does his own tinkering we should like to draw attention to the fact that this car has 96 *valves* to be ground in, 48 sparking plugs to be cleaned and 8 magnetos to be attended to, while the petrol consumption is at the rate of approximately one gallon per minute.



A FAMILIAR SCENE DURING THE STRIKE, ARMOURED CARS GUARDING FOOD CONVOYS.



WHO WILL WIN ?

Being Premature Prophecies on the 1926 Tourist Trophy Races.

By L. A. H.

IT is yet early to attempt any serious review of the prospects of this year's T.T. Races, but by the time these notes appear, practising will have commenced, and readers will be able to judge for themselves whether our remarks are worth heeding or not.

To begin with, let us study the entry lists ; what a refreshing sight ! All the giants have returned to the game, after, in some cases, several years' abstinence, and a pleasing sense of novelty is inspired by such newcomers as the Italian Guzzi, Bianchi, and Garelli machines, to say nothing of the new Ivy and Wallis, neither of which have been seen in the Island before.

The overseas element is again well represented, the perennial C. H. Young is handling a Triumph once more, while Roy Charman is one of Australia's most noted riders.

A Homeric contest should be witnessed in the Senior race, with practically all the noted manufacturers in the field once more : Rudge-Whitworths, the 1914 winners ; Sunbeams, the 1920 and 1922 winners ; Douglas Motors, the winners in 1923 ; A.J.S., who monotonously annex a place in at least one race every year ; Nortons, perhaps the outstanding example of the standard model racing policy, with a reputation in the island second to none ; Scotts, who have just failed to win several times lately ; and, lastly, the Triumph concern, whose unofficial entries usually manage to make the other trade entries feel uncomfortable.

To these old-timers must be added the names of P. & M. and H. R. D., two newcomers to the island last year, both of whom performed brilliantly, the former gaining fourth place and the latter in a never-to-be-forgotten manner attaining first place in the Senior and second place in the Junior races.

So much for the machines ; with regard to the riders in the Senior race, the list reveals nothing very startling, all the cracks are riding, most of them on their favourite machines as before ; the only notable changes being Clarence Wood and the two Twemlows, on H.R.D.'s and Stanley Woods on a Norton. L. Randles, of Amateur T.T. fame, is now riding as an official Sunbeam nominee, while another persistent Amateur rider in E. Archibald introduces the new O.K. Supreme to the Manx circuit.

If G. W. Patchett is as brilliant on the road as he is on the track, we may see yet another small concern rushed into the limelight, as has so often been done before, by some comparatively unknown but nevertheless top-notch speed-man. However, the McEvoy is a single entry, and as such is fighting against heavy odds. It is fairly safe to say that if any of the following five riders is granted a trouble-free run, he will outstrip the field : J. H. Simpson (A.J.S.), F. W. Dixon (Douglas), A. Bennett (Norton), H. Langman (Scott) or H. R. Davies (H.R.D.). So long as these five continue to race, they will always be freely tipped as likely winners, and up to this point prophecy is easy. To decide which of the five is most likely to win is no mean task, but the writer is a great believer in the law of averages. Howard Davies won last year ; it therefore seems unlikely that he can win again this year, although there is no good reason why he should not, especially when one remembers how he has surprised us in the past. However, I should rather back him for a place than for a win. Alec. Bennett, too, has had more than his fair share of wins in big road races, and granted that last year was an unlucky one for him, and that he displayed even better form than many realised, I still find it hard to back him wholeheartedly for first place.

F. W. Dixon, in spite of his lurid driving, somehow manages to outlast and outpace his team-mates, but this year the race is seven laps——! No, Freddy, we expect some fireworks, but can you last the course ?

Harry Langman is a demon of furious riding on his Scott, and has finished in the first half-dozen for the last two years, in each case after minor troubles. This may be the best Dame Fortune can do for him, and, indeed, it is a record to be proud of, but on the other hand he may

WHO WILL WIN ?—continued.

command 100 per cent. good luck this year ; but there is just that element of doubt which prevents me from putting my shirt on him.

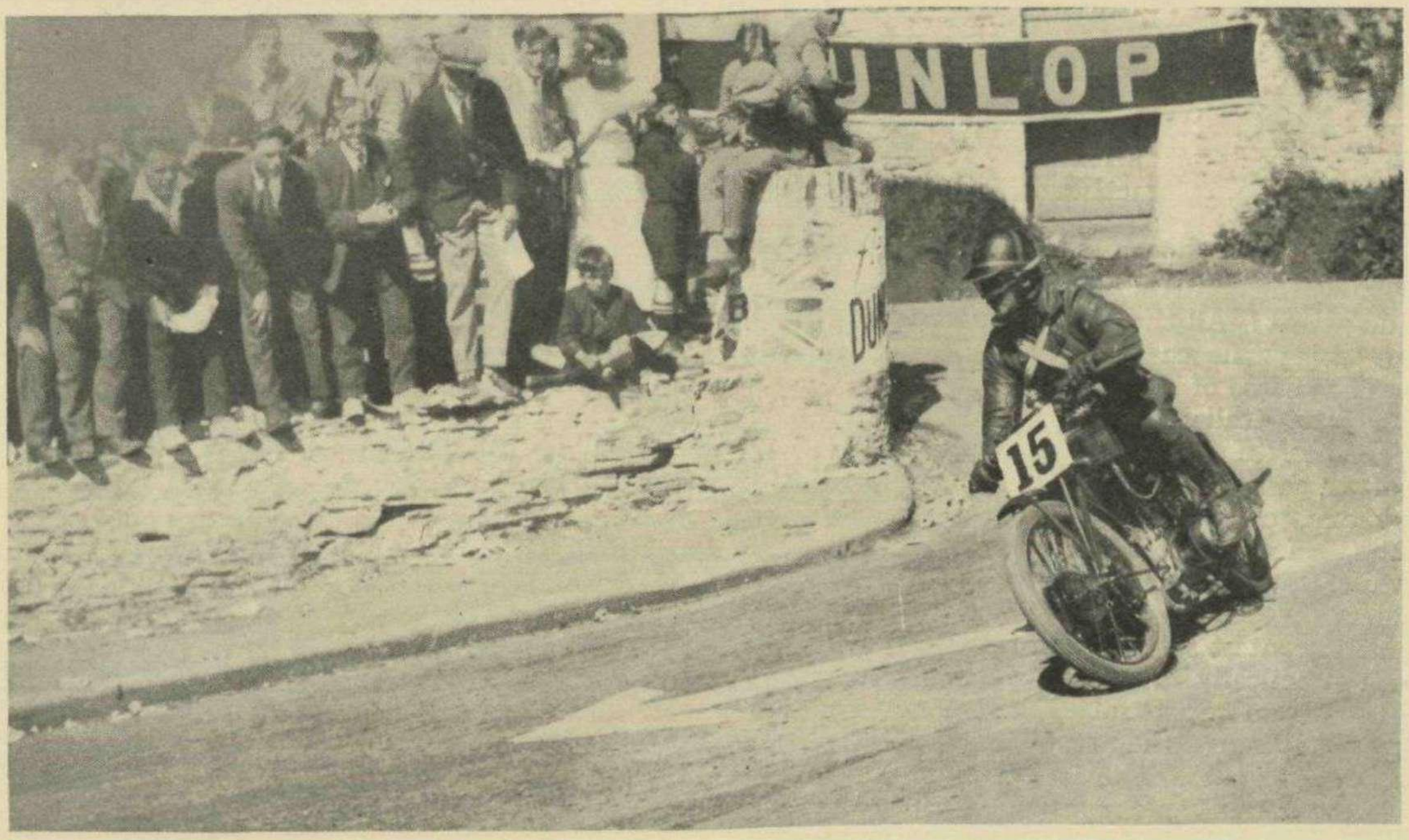
This brings us to J. H. Simpson, mounted on a 498 c.c. A.J.S. There seems to be no doubt that Jimmy is just a fraction faster than the very best other riders, and this without extracting a corresponding extra toll from his machine. He does not flog his machine after the manner of one or two other top-notchers, and he has never yet won a T.T. race. Longman showed us last year that the big A.J.S. had the necessary stamina for 6 laps at 65 m.p.h., and therefore, unless Simpson is to follow in the footsteps of that most unlucky sportsman, George Dance, I would unhesitatingly back him to win the Senior race. If Simpson has no trouble, he will win, and any of the other quartet who enjoy similar good luck will be close on his heels. If none of these fast five finish, the race will be won by either the A.J.S., H.R.D., or Norton second strings, or the fastest Sunbeam, P. & M., or Triumph rider, all of whom will be roaring angrily for a place, ready to leap into the front rank should any of the leaders fall.

The Junior Race.

The Junior race is altogether more open, as there is lots of new blood and fewer super-men. Dark-horse entries such as Velocette, Matchless and Bradshaw machines also complicate matters. To begin with, the Junior race is won more by the machine than by the rider when compared with the Senior race. The exception to this rule was last year, when Handley threw all caution to the winds and for once was not unlucky. In previous years the Junior race has been won at speeds which can and are accomplished by far more than just a select five of super-riders, as in the Senior. Mechanical trouble, too, is more prevalent in the Junior. To keep to our system, however : there are again five riders who are really dangerous in themselves : G. Dance (Sunbeam), W. L. Handley (Rex-Acme), J. H. Simpson (A.J.S.), F. W. Dixon (Douglas), and A. Bennett (Velocette). Of these, Dixon I eliminate, for the same reason as before ; Handley's luck may hold good yet again, but I doubt it, and the law of averages bars him from carrying my money. Simpson I have tipped freely for the Senior race ; to win two races in one year is not impossible, but it is unlikely, and I think Jimmy drives a little too fast for a 350 c.c. engine, so we will eliminate him, unless he strikes the happy mean and guesses the exact schedule at which he must ride to win. This leaves G. Dance and Alec. Bennett, both top-notchers, the one with a win really excessively overdue and the other on a comparatively new machine of great promise. As in the Senior, I do not expect more than two of the fast five to finish, and I really think it is George's turn. The o.h.v. Sunbeam should be fit by now after all its testing, but, frankly, I think Dance is the only real winner in the team. Bennett should get a place, followed as before by the slower A.J.S. men and the fastest Bradshaw, Blackburne or J.A.P. rider.

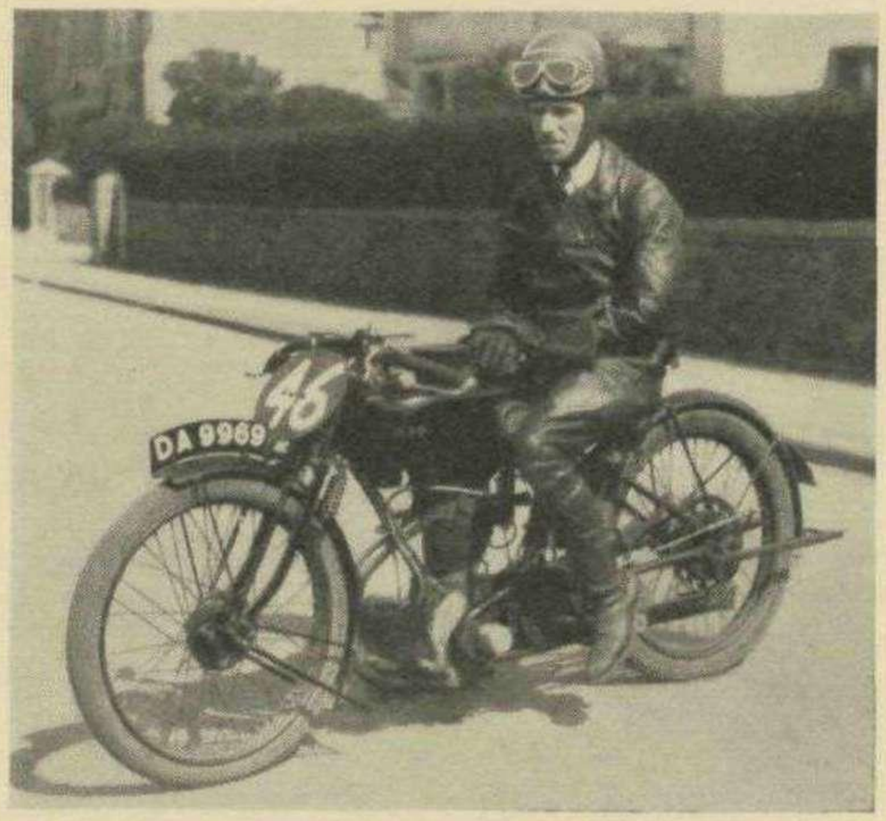
There are only twenty-one entries in the Lightweight race, and as in previous years a furious duel between J. A. Porter (New Gerrard) and W. L. Handley (Rex Acme) should result, with the Cotton and New Imperial teams close on their heels. J. G. Burney on an Enfield should also be watched, as he has performed very well in Irish races.

It is impossible to say whether Handley or Porter will win, as both are riding similar machines, and both have



HOWARD DAVIES, THE RIDER-MANUFACTURER, WHO PERFORMED BRILLIANTLY LAST YEAR, CORNERING AT GOVERNORS BRIDGE.

WHO WILL WIN?—continued.



J. H. SIMPSON (A.J.S.) OF WHOM GREAT THINGS ARE EXPECTED.

won previous races. Should both "pack up," Johnston (Cotton) or Black (New Imperial) are the most likely "runners up."

We cannot leave the subject of the 1926 races without a note of regret for the lack of a sidecar race. Last year, both as a spectacle and as a race, this event surpassed all the other classes, and it seems fairly obvious that every nut and bolt in the whole machine is stressed to a far greater extent when a sidecar is attached.

As a means of improving the breed generally, therefore, the sidecar race stands pre-eminent, although at first it may appear that the wrong type of combination is developed by racing. Personally, however, I regard the sidecar race as a means of "super testing" a solo or dual purpose machine, rather than developing the sidecar outfit, which is not likely to undergo any radical change in design for some years at least. The only point the sidecar race does not bring out is the steering and road holding of a machine, and one or two solo classes should provide ample opportunity for testing this feature. May I therefore respectfully suggest that for 1927 the lightweight race, which both as regards machines and riders is very much a smaller edition of the Junior event, should be dropped in favour of the late-lamented sidecar race.

Should the A.C.U. take this step, I feel sure that the T.T. Races would attain even greater popularity and support than ever.

T. T. TIT-BITS.

The Rex-Acme machines for the Junior and Lightweight races are almost identical with those used last year, which is not surprising considering the remarkable success that attended Handley's efforts. For the Senior race, however, a most interesting machine has been evolved, fitted with an entirely new design of twin Blackburne engine. This machine will, of course, be ridden by W. L. Handley and its performance will be watched with great interest, as for some years the Blackburne concern have abstained from contesting the 500 c.c. class.

Two other firms whose names are not usually associated with the half-litre class are the Cotton and the New Gerrard. This year C. W. Johnston and J. A. Porter are riding machines of these respective makes with 500 c.c. engines. It is more than likely that both will be using the new twin Blackburne as fitted to Handley's Rex-Acme.

* *

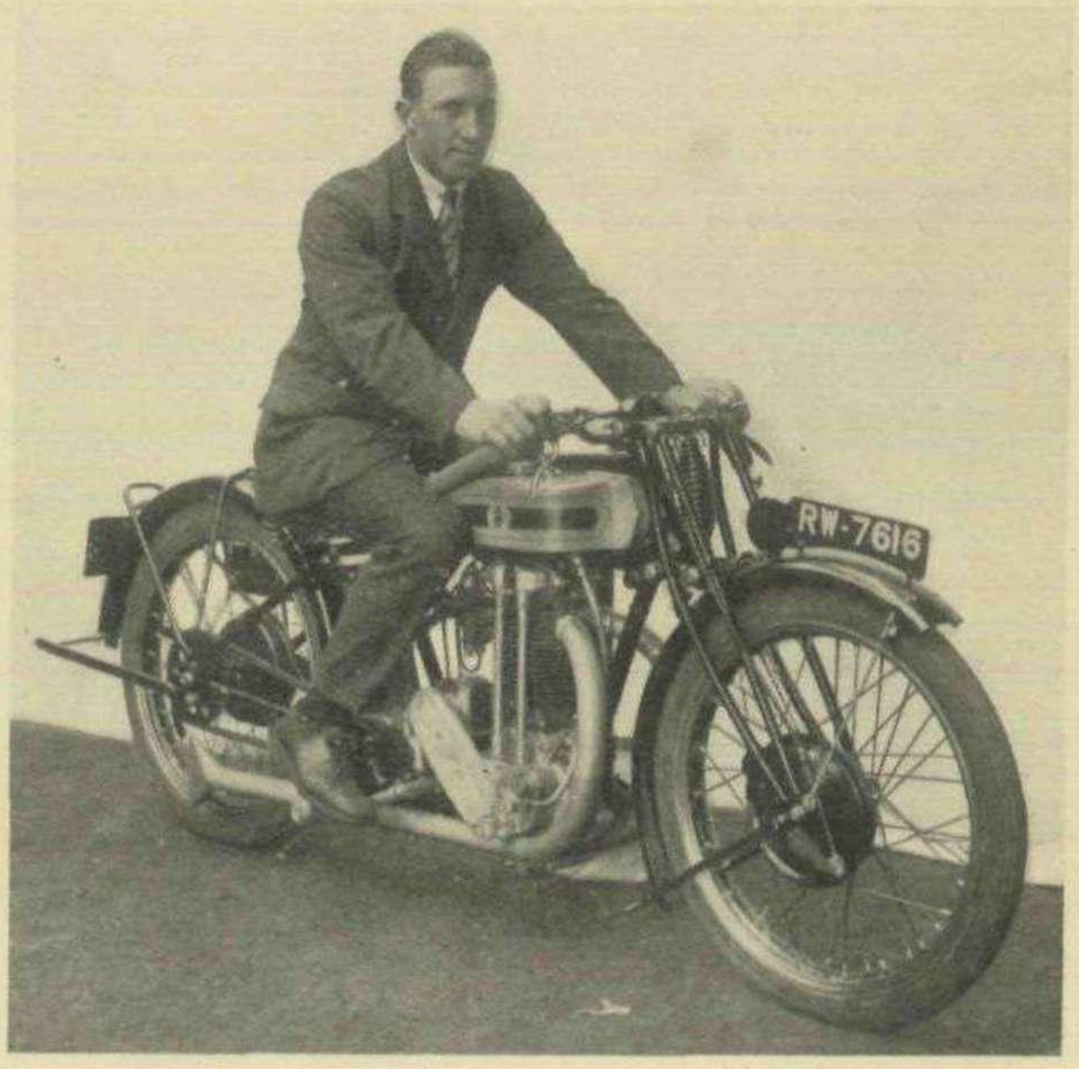
We have long ago ceased to be surprised at any machine emanating from the Zenith works at Hampton Court, since it is well known that F. W. Barnes delights to cater for the individual requirements of racing enthusiasts. The 348 c.c. Zenith-Chater-Lea, however, is bound to cause some slight stir. The Zenith frame is renowned for its steering, and if Marchant is observed to even approach within a few yards of the engine, it can safely be prophesied that L. P. Driscoll will have one of the fastest machines in the races.

Driscoll, too, seems full of confidence, as he is pitting his 350 c.c. machine against the Senior giants, besides racing in the Junior event.

* *

Manufacturers as a whole are exhibiting a growing tendency to enter machines in the T.T. closely resembling their production sports models, or perhaps it would be more accurate to say that T.T. machines are now more freely marketed than before.

The Norton, of course, is the outstanding example of this policy, while Douglas, Sunbeam and A.J.S. machines each year resemble more closely the standard products of these factories. Unfortunately, however, in spite of this tendency, the T.T. does not constitute a very accurate guide to the purchaser, as although design may be standard, special materials and extra accurate fitting may enable a mediocre machine to perform wonders.



WILMOT EVANS THE WELL-KNOWN TRIUMPH RIDER ON HIS T. T. MACHINE.

List of Entries for the Tourist Trophy Races, 1926.

SENIOR RACE.

Entrant.	*Make and C.C.*	*Driver.*
H.R.D. Motors, Ltd.	498 H.R.D.	H. R. Davies
H.R.D. Motors, Ltd.	498 H.R.D.	H. F. Harris
H.R.D. Motors, Ltd.	498 H.R.D.	E. Twemlow
H.R.D. Motors, Ltd.	498 H.R.D.	K. Twemlow
H.R.D. Motors, Ltd.	498 H.R.D.	C. P. Wood
Frank Hallam	498 H.R.D.	H. Birrell
O. Wade	498 H.R.D.	Entrant
O. Wade	498 H.R.D.	J. E. Wade
A. J. Stevens & Co. (1914), Ltd.	498 A.J.S.	J. H. Simpson
A. J. Stevens & Co. (1914), Ltd.	498 A.J.S.	C. W. Hough
A. J. Stevens & Co. (1914), Ltd.	498 A.J.S.	F. A. Longman
A. J. Stevens & Co. (1914), Ltd.	498 A.J.S.	C. E. Rowley
A. J. Stevens & Co. (1914), Ltd.	498 A.J.S.	C. E. Wise
A. J. Stevens & Co. (1914), Ltd.	498 A.J.S.	J. H. Stevens
Wallis Motors, Ltd.	498 Wallis	Roy Charman
E. Archibald	490 O.K. Supreme	Entrant
E. Archibald	490 O.K. Supreme	R. Crauford
The Triumph Cycle Co., Ltd.	598 Triumph	W. Evans
The Triumph Cycle Co., Ltd.	498 Triumph	N. Hobson
The Triumph Cycle Co., Ltd.	498 Triumph	H. J. Willis
The Rex Motor Manufacturing Co., Ltd.	Rex -Acme	W. L. Handley
The Cotton Motor Co.	498 Cotton	C. W. Johnson
New Gerrard, Ltd.	496 New Gerrard	J. A. Porter
Phelon & Moore, Ltd.	499 P. & M. Panther	C. T. Ashby
Phelon & Moore, Ltd.	499 P. & M. Panther	T. G. Bullus
Phelon & Moore, Ltd.	499 P. & M. Panther	H. M. Walters
M. A. McEvoy	490 McEvoy	G. W. Patchett
A. J .Robertson	490 A.J.R.	Entrant
J. H. Welsby	498 Scott	Entrant
The Scott Motor Cycle Co., Ltd.	498 Scott	——
The Scott Motor Cycle Co., Ltd.	498 Scott	H. Langman
L. P. Driscoll	348 Zenith Chater Lea	Entrant
Douglas Motors, Ltd.	494 Douglas	V. C. Anstice
Douglas Motors, Ltd.	494 Douglas	R. N. Judd
Douglas Motors, Ltd.	494 Douglas	J. Whalley
Douglas Motors, Ltd.	494 Douglas	F. W. Dixon
L. Parker	498 Douglas	Entrant
E. Searle	490 Norton	Entrant
R. M. N. Spring	490 Norton	O. B. Hodgson
Maude's Motor Mart	490 Norton	A. Grey
Norton Motors, Ltd.	490 Norton	A. Bennett
Norton Motors, Ltd.	490 Norton	S. Woods
Norton Motors, Ltd.	490 Norton	J. W. Shaw
Norton Motors, Ltd.	490 Norton	J. Craig
Penya Rhin (Barcelona)	490 Norton	I. Macaya
John Marston, Ltd.	493 Sunbeam	F. B. Tetstall
John Marston, Ltd.	493 Sunbeam	L. Randles
John Marston, Ltd.	493 Sunbeam	Tommy Spann
John Marston, Ltd.	493 Sunbeam	G. W. Walker
C. Waterhouse	493 Sunbeam	Entrant
Moto Guzzi	500 Guzzi	P. Gherzi
Frank Whitworth, Ltd.	499 Rudge-Whitworth	——
Frank Whitworth, Ltd.	499 Rudge Whitworth	——
Natal M.C.C.	498 Triumph	C. H. Young
H. Moller (New Zealand)	490 Norton	Entrant

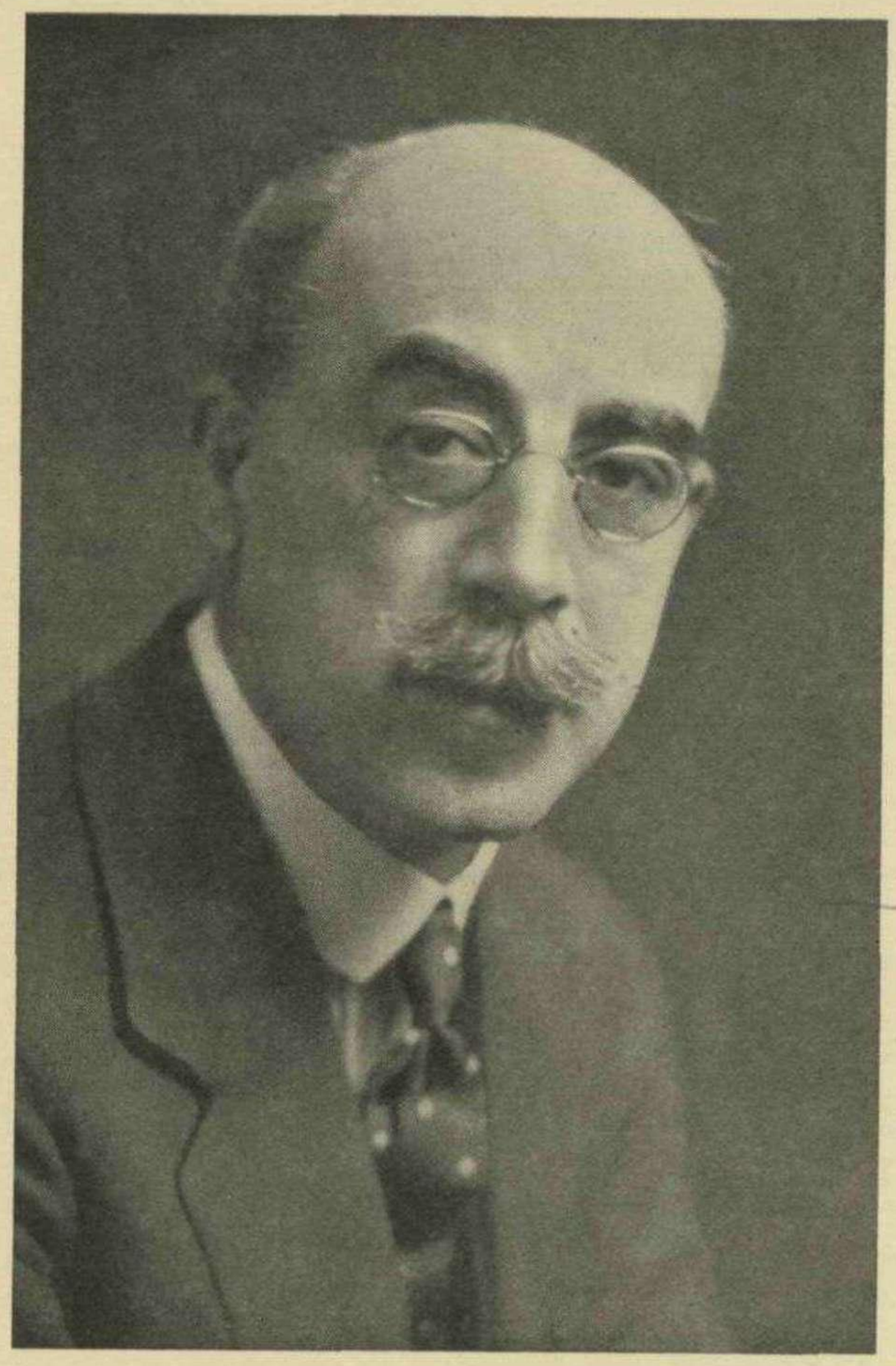
JUNIOR RACE.

H.R.D. Motors, Ltd.	346 H.R.D.	E. Twemlow
H.R.D. Motors, Ltd.	346 H.R.D.	K. Twemlow
Jones Bros.	346 H.R.D.	T. R. Jones
Wallis Motors, Ltd.	344 Wallis	Roy Charman
E. Archibald	344 O.K. Supreme	Entrant
J. Robinson	344 O.K. Supreme J.A.P.	Entrant
Dormans of Stafford	349 O.K. Bradshaw	——
Dormans of Stafford	349 O.K. Bradshaw	B. Kershaw
Dormans of Stafford	349 O.K. Bradshaw	C. Harman
Calthorpe Motor Cycle Co.	348 Calthorpe	F. Simpson, Jun.
Calthorpe Motor Cycle Co.	348 Calthorpe	S. Gill
Calthorpe Motor Cyc:e Co.	348 Calthorpe	J. Cooke
E. A. Todd	347 Matchless	Entrant
N. M. Scott	347 Matchless	Entrant
H. Collier & Sons, Ltd.	347 Matchless	R. R. Barber
Veloce, Ltd.	348 Velocette	A. Bennett
Veloce, Ltd.	348 Velocette	G. F. Povey
Veloce, Ltd.	348 Velocette	G. Kuhn
The Rex Motor Manufacturing Co., Ltd.	Rex-Acme	W. L. Handley
W. Montgomery & Co.	344 Montgomery	A. Noterman
M. A. McEvoy	349 McEvoy	G. W. Patchett
The Cotton Motor Co.	348 Cotton	C. W. Johnson
The Cotton Motor Co.	348 Cotton	W. Colgan
The Cotton Motor Co.	348 Cotton	H. F. Brockbank
W. J. Lord (Coventry Motor Mart)	349 B.S.A.	W. J. Lord
J. Austin & Sons (Harlesden)	349 B.S.A. Super	A. Austin
New Gerrard, Ltd.	348 New Gerrard	J. A. Porter
A. J. Robertson	344 A.J.R.	Entrant
L. P. Driscoll	348 Zenith Chater Lea	Entrant
Maude's Motor Mart	344 Zenith	A. Grey
C. W. H. Merrill	344 Zenith	Entrant
L. Parker	Douglas	Entrant
Douglas Motors, Ltd.	349 Douglas	V. C. Anstice
Douglas Motors, Ltd.	349 Douglas	R. N. Judd
Douglas Motors, Ltd.	349 Douglas	J. Whalley
Douglas Motors, Ltd.	349 Douglas	F. W. Dixon
E. H. Bunn	349 James	Entrant
The A.B. Motor Co.	348 A.J.S.	C. Bell
A. J. Stevens & Co. (1914), Ltd.	349 A.J.S.	J. H. Simpson
A. J. Stevens & Co. (1914), Ltd.	349 A.J.S.	C. W. Hough
A. J. Stevens & Co. (1914), Ltd.	349 A.J.S.	F. A. Longman
A. J. Stevens & Co. (1914), Ltd.	349 A.J.S.	G. E. Rowley
A. J. Stevens & Co. (1914), Ltd.	349 A.J.S.	C. E. Wise
A. J. Stevens & Co. (1914), Ltd.	349 A.J.S.	J. H. Stevens
New Imperial Motors, Ltd.	349 New Imperial	S. H. Jones
New Imperial Motors, Ltd.	349 New Imperial	G. S. Davison
New Imperial Motors, Ltd.	349 New Imperial	G. W. Shepherd
New Imperial Motors, Ltd.	349 New Imperial	N. Black
Porter's Motor Mart	347 Sunbeam	J. G. Porter
John Marston, Ltd.	347 Sunbeam	E. Smith
John Marston, Ltd.	347 Sunbeam	C. J. P. Dodson
John Marston, Ltd.	347 Sunbeam	G. Dance
The Enfield Cycle Co., Ltd.	344 Royal Enfield	J. G. Burney
The Enfield Cycle Co., Ltd.	344 Royal Enfield	G. L. Reynard
The Enfield Cycle Co., Ltd.	344 Royal Enfield	C. S. Barrow
S. A. Newman, Ltd.	347 Ivy	N. Anderson
The Enfield Cycle Co., Ltd.	344 Royal Enfield	C. H. Young
Moto Garelli	349 Garelli	Achille Varzi
Osborn Engineering Co., Ltd.	348 O.E.C.	C. Juggins

3 Bianchi entries, but no particulars available.

LIGHTWEIGHT RACE.

E. Archibald	249 O.K. Supreme	Entrant
The Rex Motor Manufacturing Co., Ltd.	Rex-Acme	F. G. Craner
The Rex Motor Manufacturing Co., Ltd.	Rex-Acme	W. L. Handley
The Cotton Motor Co.	249 Cotton	C. W. Johnson
The Cotton Motor Co.	249 Cotton	W. Colgan
The Cotton Motor Co.	249 Cotton	F. G. Morgan
New Gerrard, Ltd.	248 New Gerrard	J. A. Porter
New Imperial Motors, Ltd.	246 New Imperial	D. Prentice
New Imperial Motors, Ltd.	246 New Imperial	N. Black
New Imperial Motors, Ltd.	246 New Imperial	G. S. Davison
New Imperial Motors, Ltd.	246 New Imperial	R. Grey
New Imperial Motors, Ltd.	246 New Imperial	S. H. Jones
The Enfield Cycle Co., Ltd.	246 Royal Enfield	J. G. Burney
The Enfield Cycle Co., Ltd.	246 Royal Enfield	C. S. Barrow
The Enfield Cycle Co., Ltd.	246 Royal Enfield	G. L. Reynard
George Himing	249 Zenith	Entrant
Butterfields, Ltd.	248 Levis	P. Pike
Butterfields, Ltd.	248 Levis	A. R. Edwards
Moto Guzzi	248 Guzzi	P. Gherzi
Diamond Motors	248 Diamond	S. Gleave
S. A. Crabtree	249 Crabtree Special	Entrant



MOTORING SPORTSMEN.

Mr. Arthur George Reynolds.

By THE EDITOR.

ARTHUR GEORGE REYNOLDS started life as a boy in a printing office until he became thoroughly acquainted with all the practical side of the printing trade, and then he joined his father, who was then carrying on a printing business in its early stages in London. Mr. A. George Reynolds' first experience with the road dated from 1886, when he was a keen rider on a "Penny Farthing," on which he won his first road race in 1887, beating a field of very good riders from a Three Minute Handicap, and covered the 10 miles in the very creditable time of 38 minutes 15 seconds.

On the introduction of the safety machines he became expert on grass tracks and road racing, specialising in 50 and 100 miles and 12 hour races. Although he equalled some of the premier performances of that time in his club events on Essex roads, his attention to business prevented him taking part in the classic rides of that time, where his strength at these distances would no doubt have brought him premier honours.

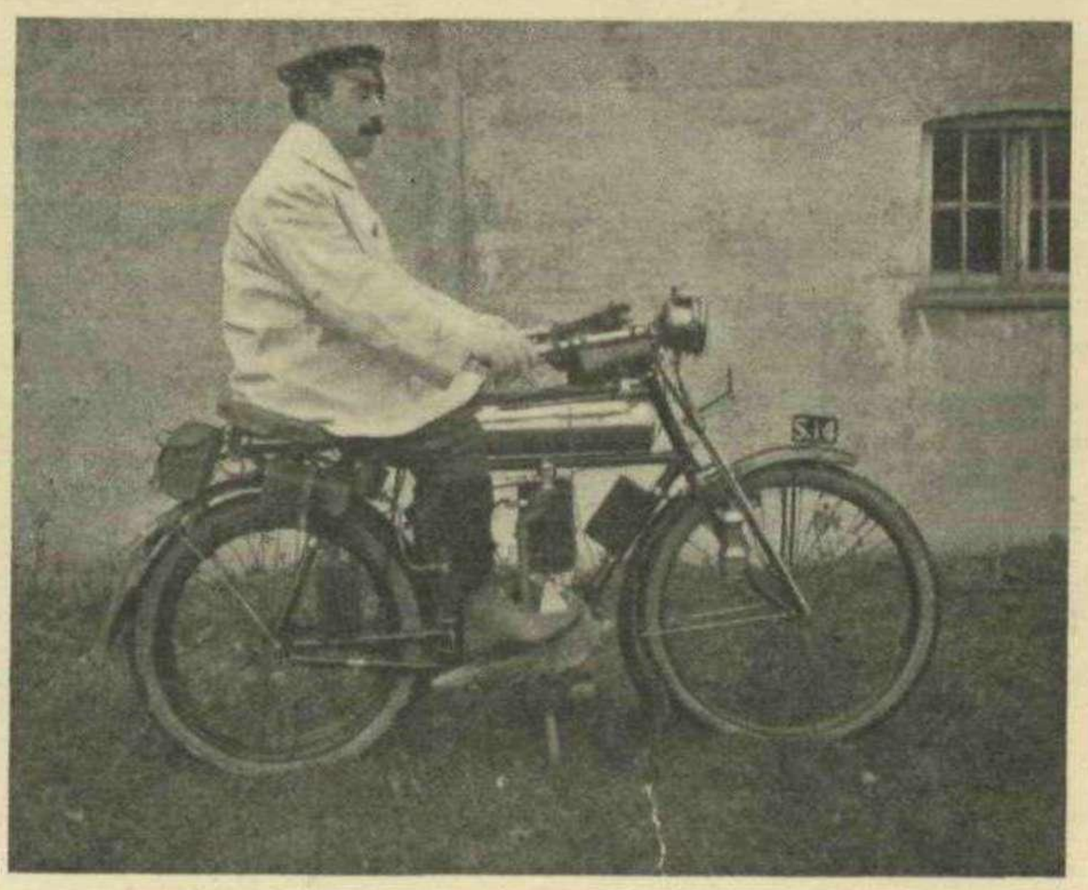
During this period of his cycling career he collected a nice share of medals and trophies and maintained his amateur status, following the sport as a pastime and hobby.

Early Motoring Experiences.

Mr. Reynolds became interested in motors after he witnessed the start of the great Emancipation Run from London to Brighton in November, 1897, and the performances of some of the motor cycles inspired him with the desire to become the possessor of one of these then wonderful machines. A little later, with a $2\frac{3}{4}$ h.p. De Dion tricycle fitted with surface carburettor and battery ignition, he gained a good deal of experience. After having gained such experience with the De Dion machine, George Reynolds owned several of the early makes of motor cycles, including a front-driven Werner and a Chappele, which, though interesting as pioneer machines, were hardly reliable enough for anything serious in road work. In 1900 he became the proud owner of a $3\frac{1}{2}$ h.p Benz car, a single cylinder with tube ignition, surface carburettor and solid tyres, upon which many well-known motorists of the day gained their earliest experience. It is interesting to note that with the possession of this car he was able to propound the working of an internal combustion engine to some of his friends who are at the present day well-known experts in the motoring world. On this car he competed in the 1901 Automobile Club's ride to Southsea and obtained a certificate for his performance.

In 1902 George Reynolds bought one of the early and first built "Bat" motor cycles which he entered in one of the first trials organised by the Motor Cycling Club, a 150 miles non-stop on northern roads, and gained a certificate.

All this time he was actively engaged in business and carried on with motor cycling competitions in the



MR. GEORGE REYNOLDS ON HIS 1902 BAT.

MOTORING SPORTSMEN—continued.

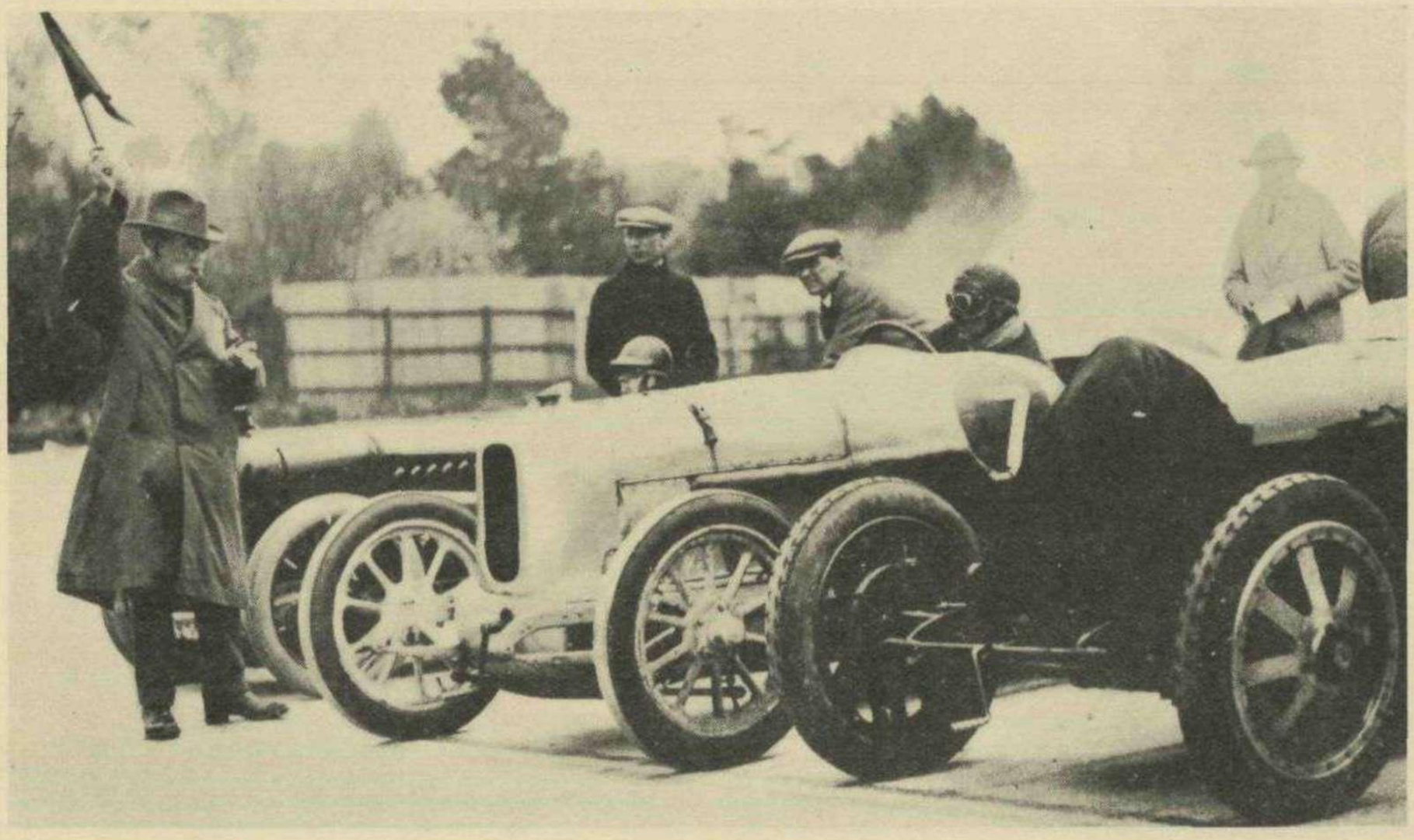
time he had to spare. He took part as a competitor in the second annual A.C.C. (now the A.C.U.) 1,000 miles Six Days' Trials which was held in 1905, and riding his "Bat" was successful in finishing the trial. On this historical occasion the loss of marks he suffered was not for failing to keep to schedule time, etc., but for the fact that he was the only rider of a non-pedal machine in the trial, and while other competitors were able to climb the hills by assisting their engines with vigorous and exhaustive pedalling, he had to help his machine by dismounting and running alongside, keeping the engine running to the summit.

In 1905 he became actively associated with the A.C.C. (now the A.C.U.), and joined its Committee, an appointment which he has held ever since. With his experience gained in the previous Six Days' he was able to put up many useful suggestions to the Committee and it was decided that he would be more useful if he helped as an official instead of a competitor, which he did, and acted as a travelling Judge throughout the trial, following the competitors throughout the course on his now famous "Bat." This same machine was used by him in the second, third & fourth London-Edinburgh rides promoted by the M.C.C., riding in subsequent Edinburgh runs on a "Vindec" and "Indian" machines. He gained Six Gold Medals in these runs in succession and shares the distinction with Mr. W. H. Wells of being the first British rider of an "Indian" machine in this country.

During this series of runs, George Reynolds was successful in gaining the Gold and special performance award for the double journey, the inscription being a "remarkable performance for man and machine to keep within a fraction of the set schedule of about 18 miles an hour for nearly 800 miles in the double twenty-four hours."

About this period he felt obliged to relinquish his participation in Competitions, owing to the increased amount of work thrown upon him as an active Honorary Official of the A.C.U., in which capacity he is best known to modern motor cyclists and car competitors. He was now in close collaboration with the late Mr. Fred Straight, the Secretary, and was sharing the responsibility for the organisation of the principal A.C.U. events, and was largely responsible for the organisation of the first Tourist Trophy Motor Cycle Races in the Isle of Man.

A famous organisation of to-day which owes its origin to George Reynolds in 1904, is the Essex Motor Club, which is now one of the largest and most influential in the country. While serving on the committee of The Motor Union and in conjunction with Mr. Rees Jeffries, the General Secretary, who was also Secretary to The Roads Improvement Association, Mr. George Reynolds acted as Head Marshal and Organiser of "The First Trials and Experiments for Dustless Roads," which at that time created an enormous amount of public interest. Some of the tests prior and throughout the trial, furnished very valuable technical information which was watched and greatly appreciated by the municipal authorities. Mr. Henry Maybury, now Sir Henry, being amongst the interested. In 1907 he received his appointment as an Official Timekeeper to the R.A.C. and A.C.U., and in this work was contemporary with Mr. A. V. Ebblewhite, with whom he had been close friends from the early cycling days.



MR. REYNOLDS OFFICIATING AT A RECENT MEETING OF THE SURBITON MOTOR CLUB.

MOTORING SPORTSMEN—continued.



THE TIMEKEEPER'S BOX WITH MR. REYNOLDS ON DUTY.

Perhaps his most remarkable achievement in the interest of the pastime, was the formation of the British Motor Cycle Racing Club in 1909, for which Club he held the post of Hon. Secretary, when he was compelled to relinquish it, owing to an accident sustained in the 1910 A.C.U. Six Days' Trial, which unfortunately put him out of action for all motor cycle events for a long period. Mr. Reynolds was still anxious about the welfare of the club during his enforced retirement, but he found an able substitute in Mr. T. W. Loughborough, who then held the post until 1924 when Mr. Reynolds again took up the work.

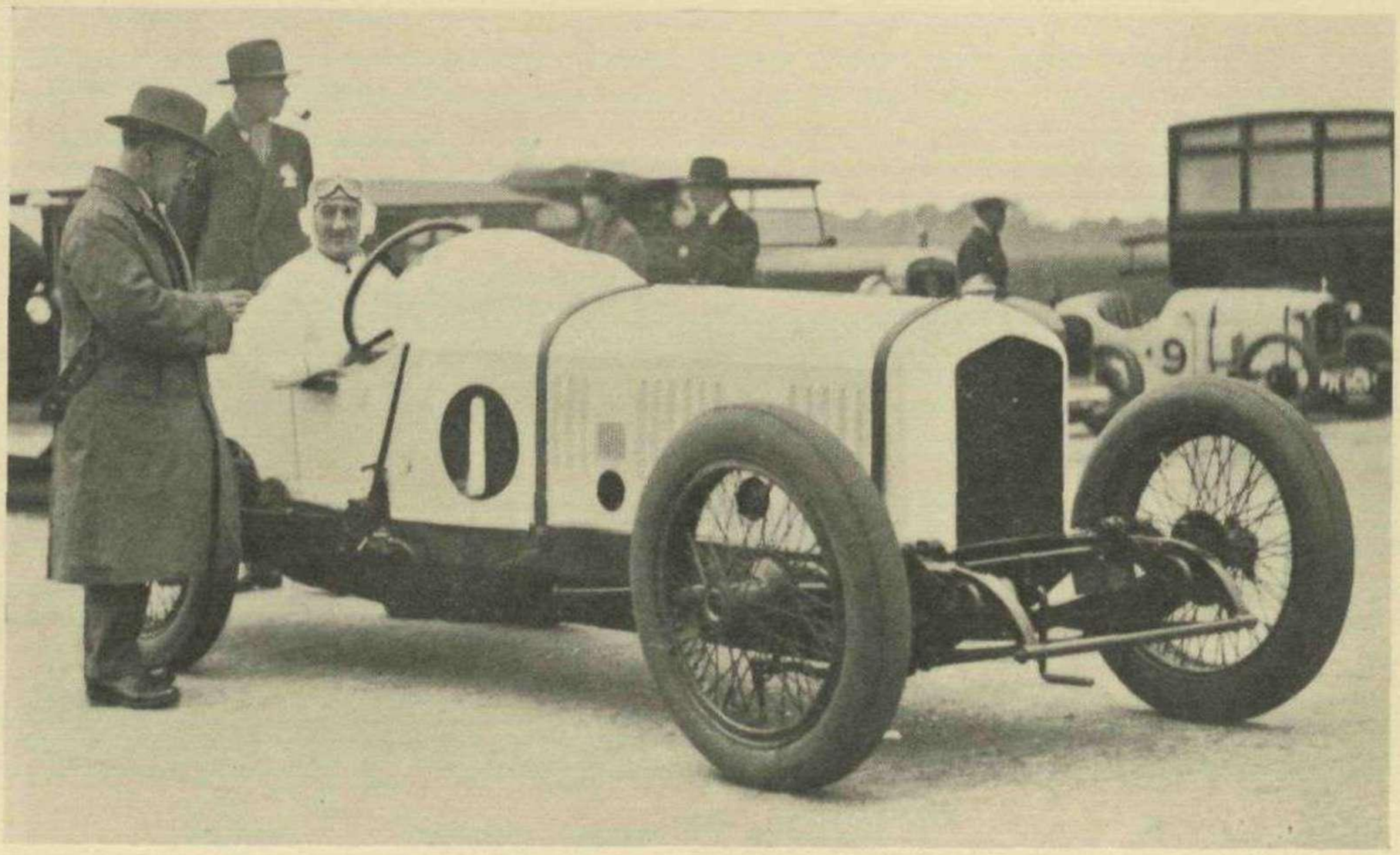
Mr. George Reynolds organised the first and only Royal Meeting at Brooklands, and was instrumental in so popularising this event, that the sum of £2,500 was shared between the Middlesex Hospital and the Industrial Welfare Association, as the financial result of this Meeting.

As our readers are quite aware, he is a prominent figure at the principal Brooklands fixtures and in addition to which, he has acted and been responsible for the timing at most of the classic and speed tests all over the country.

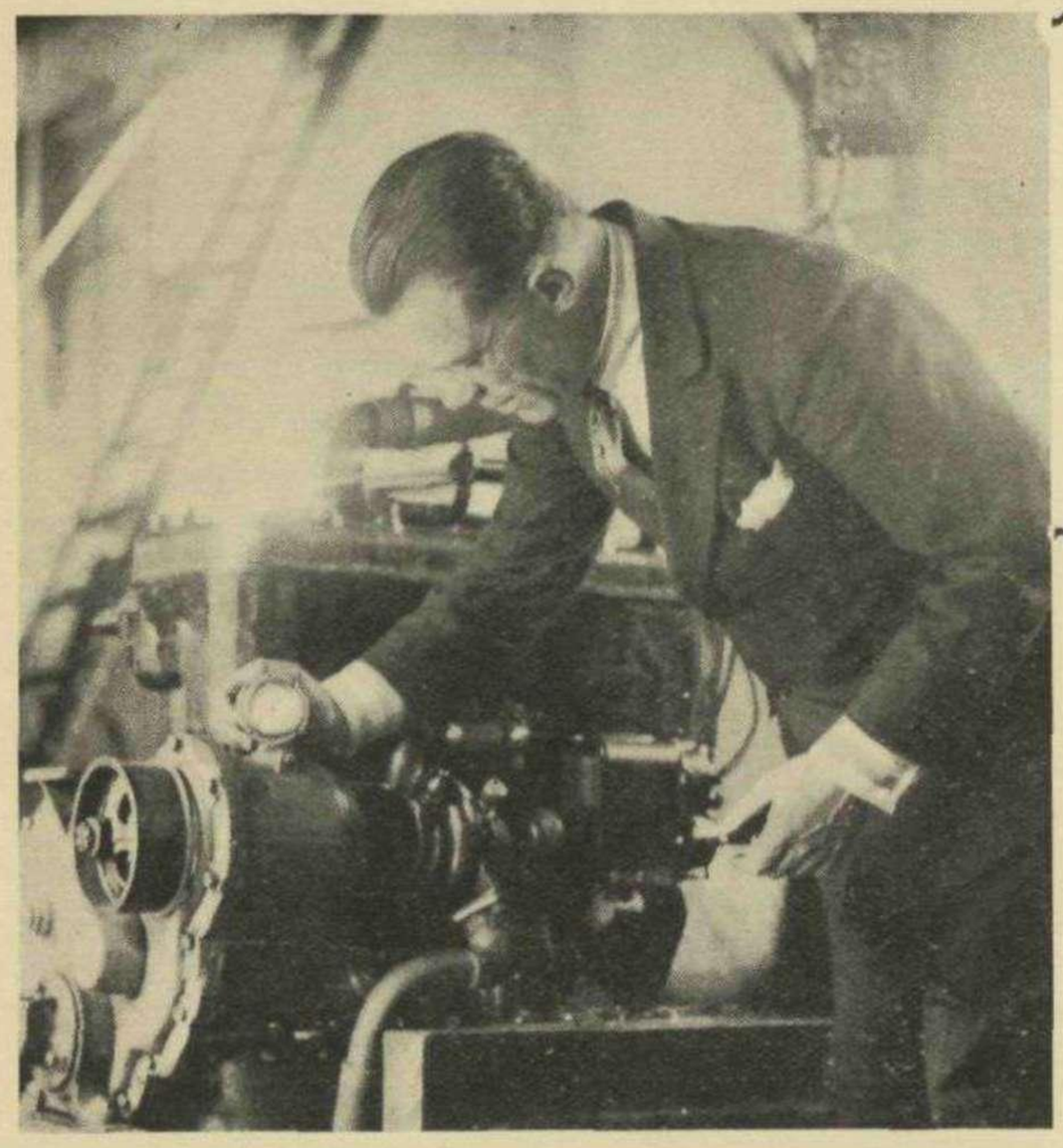
During the war years he served with the City of London R.A.S.C. (M.T.), driving the W.D. lorries acting on Military duty.

He is also Official Timekeeper to the Royal Aero Club, and has timed many of the early Aeroplane events, including the first *Daily Mail* £10,000 circuit of Britain Race, all the principal Aero Club events, and the Aerial Derbys, and was Handicapper and Timekeeper at the Hendon Aerodrome which was the scene of so many important flying contests prior to the war.

Mr. Reynolds continues to look upon the sporting side of motoring as his principal hobby, and is naturally very keenly interested in doing all he can to further the sport, maintaining the most loyal support to the Royal Automobile Club and Auto-Cycle Union, believing that the interest of the great pastime can only be served by a unity of control, such as these two controlling bodies provide.



MR. R. B. HOWEY ASKS THE LAP TIME OF THE BALLOT.



MR. HAGENS AT WORK ON A TEST BENCH.

SUPERCHARGING AND ITS POSSIBILITIES.

By H. HAGENS.

This is Mr. Hagen's second article on this very interesting subject and we should like to remind readers that the author is responsible for the design of many successful racing engines, among them being two of the fastest machines in the world, i.e., Mr. C. F. Temple's Anzani Motor Cycle and Mr. Eldridge's Car. We are sure all our readers will eagerly await the appearance of his 150 m.p.h. Motor Cycle.

It is interesting to note how so many of Mr. Hagen's predictions in the April, 1925, number of the Brooklands Gazette have subsequently been borne out.

SUPERCHARGING is opening up possibilities in engine design which hitherto have remained dormant to a more or less degree.

It must be remembered that supercharging in itself is not new, but has been made use of on various occasions to achieve some object or overcome some difficulty which may have arisen. One marked instance of this was the supercharging of aeroplane engines, in order that an engine at a high altitude might still develop its maximum power, in spite of the rarefied state of the atmosphere. More recently supercharging has been used on racing motor cars, in order that an engine of a certain cubical capacity might propel a car at speeds which could not even be hoped for except by installing a considerably larger engine.

To-day a new field for the designer is being opened up by making use of supercharging.

Limitations of the Two-stroke.

Hitherto, two-stroke engines have never been considered much for motor vehicles, except lightweight motor cycles, as there have always been certain disadvantages which apparently more than counter-balance any of the advantages of this type of engine.

Let us consider some of these points, as they have a direct bearing on the engine I am going to describe subsequently.

Firstly, the small two-stroke engine as fitted to the motor cycle is delightfully simple, there being no valve gear, the crankcase serving as pump chamber for the purpose of charging the cylinder.

Without going into details, it may be said that this construction leaves a great deal to be desired from an engine function point of view, but the moment one attempts to rectify the weak points on such a design of two-stroke engine, it loses the wonderful simplicity of construction (which simplicity naturally makes it a cheap engine to manufacture), and then the four-stroke engine holds its own easily. In other words, the four-stroke engine becomes the simpler engine of the two.

Supercharging, however, serves a dual purpose where the two-stroke engine is concerned, the supercharger or blower acting as the pump for charging the cylinder of the two-stroke engine, apart from supercharging the cylinder.

Having these points before us, we may now consider how best to make use of them in designing an engine.

To begin with, I will enumerate the points I consider of importance in designing a modern engine.

The engine must be light, compact, capable of developing a large amount of power for its size and weight; it must be cheap to manufacture and capable of hard work, with only reasonable wear and tear.

To obtain a great power out of a small engine it is necessary that the engine should run at a high speed. This necessarily imposes severe stresses on many of the working parts due to inertia forces; the forces increase in magnitude very rapidly as the engine speed goes up, and over 3,000 r.p.m. become quite formidable. Therefore, one has to make the reciprocating masses as light as possible, in order to keep down the inertia forces, and to bring these weights down to a minimum we must make the reciprocating parts as small as possible; hence we will choose a multiple cylinder engine; in other words, make an engine with a large number of small cylinders. The engine I have in mind is a 12-cylinder engine, 1,500 c.c. capacity, running at 6,000 r.p.m. and supercharged, each cylinder giving a power stroke every revolution of the crankshaft. Such a two-stroke engine cannot be made valveless if we are to obtain the best results, but the valve gear can be very simple if rotary inlet valves are used, this type of valve having the great advantage that it opens and closes equally well at all engine speeds, whereas the operation of the poppet valve at high speeds becomes quite a problem due to valve bounce.

Valve Details.

Rotary inlet valves run cool, clean and silent, and are therefore quite permissible, but I would consider their

SUPERCHARGING AND ITS POSSIBILITIES—continued.

use as an exhaust valve as courting failure, as in the case of the exhaust they would be running under adverse conditions due to high temperature and by-products of combustion, which are not as clean as the incoming charge. I therefore intend to design the engine with exhaust ports cast in the cylinder skirt, so that the piston uncovers the exhaust port when it reaches the bottom of its stroke, the same as in ordinary two-stroke practice.

In order to keep the peripheral velocity of the rotary valves low, I intend using two instead of one. This procedure enables me to make their diameter small and still maintain an effective port area, as both the rotary valves in one cylinder will open and close together and the port area (and width) in each will be half the total area (and width). These valves will be perfectly lubricated, as the fuel will be mixed with lubricating oil, in order to lubricate the supercharger and the valves.

The ignition system presents some difficulty if it is desired to use a magneto, but this is easily overcome by using a battery and coil ignition which system is rapidly gaining favour, as it surely deserves to, it has great advantages, and is quite reliable. Nevertheless, a certain amount of prejudice exists against this system over here. Its advantages are easy starting, good operation at low speeds, and elimination of the magneto drive. Whatever this happens to be, chains or gears, and where one has already an electrical installation for lighting and starting, it seems out of place to instal another electrical machine, such as a magneto, for the sole purpose of ignition.

In order to make the engine of compact design, I intend to arrange the twelve cylinders in three rows of four cylinders, each row being at an angle of 60 degrees to its neighbouring row. Figure 1 shows an end view of the arrangement, and I suggest driving the rotary valves by means of gears and chains.

A convenient bore and stroke for an engine of this type to come within the 1,500 c.c. class is 54 by 54.

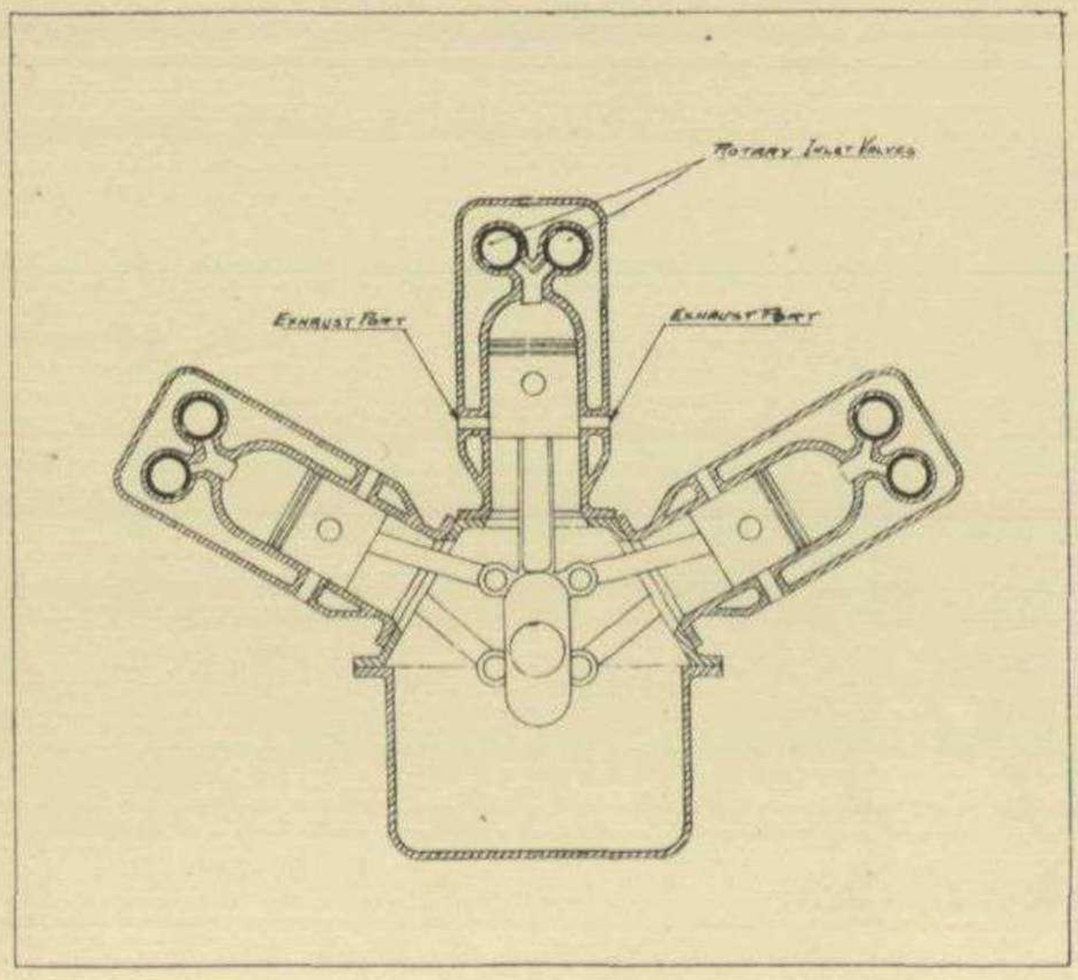


FIG. 1. THE TYPE OF ENGINE PROPOSED BY MR. HAGENS.

It may be queried why an equal bore and stroke have been chosen instead of a smaller bore and longer stroke. A short stroke keeps down the piston length, which is necessarily longer than in standard practice, on account of the necessity of not uncovering the exhaust port, when the piston is at the top of its stroke ; and since the engine is supercharged, there is not much to be gained, as it is possible by means of supercharging to have quite a high compression and yet retain quite a reasonable combustion space without increasing the stroke. By a reasonable combustion space I mean one where the wall area to volume ratio is small, which is a point of considerable importance in high efficiency engines, as the jacket losses due to a poor combustion space can be so great that it would on occasions pay to reduce the compression ratio in order to improve the compression space.

Probable Performance.

A carefully designed engine of the type under discussion would be capable of developing approximately 150 h.p. at 6,000 r.p.m., and the overall dimensions of such an engine would be 1 ft. 8 ins. long by 1 ft. 6 ins. high by 1 ft. 4 ins. wide approximately. I will now briefly explain the functioning of the engine.

The supercharger is placed in between the carburetter and the engine.

When the engine is rotated the supercharger draws from the carburetter and forces a charge into those cylinders which are ready to receive their charge, namely, those that have started exhausting, the incoming charge which enters the top of the bore through the rotary valves assisting to scavenge the cylinders. The charging of the cylinders continues after the rising piston has covered the exhaust ports, and the rotary inlet valves close at a point when the charge in the cylinder, which is being compressed by the rising piston, equals in pressure the supercharging pressure. The piston then continues to rise and compresses the charge in the ordinary way till the end of the stroke, when ignition takes place and the power stroke occurs.

The firing order of the cylinders will be as follows, the numbering of the cylinders is shown in the accompanying diagram :—

1 & 4	6 & 7	9 & 12
2 & 3	8 & 5	10 & 11

1	2	3	4
8	7	6	5
9	10	11	12

Regarding an engine of this type from a manufacturer's point of view, the proposition is delightful. When we consider that the engine is built up of small parts such as small bores, small pistons, etc., it must be obvious that they can be machined easily and rapidly and at a minimum of cost which is what is required for a good production job.

I think I may venture to say that before this season is over we will be acquainted with a new speed motor cycle fitted with a multi-cylinder supercharged engine capable of attaining a speed of somewhere in the region of 150 m.p.h.



THE FIRST THREE RIDERS TO COMPLETE THE LONDON-EDINBURGH TRIAL. L. TO R., G. W. HOLE, D. S. BADDELEY AND H. B. BROWNING.

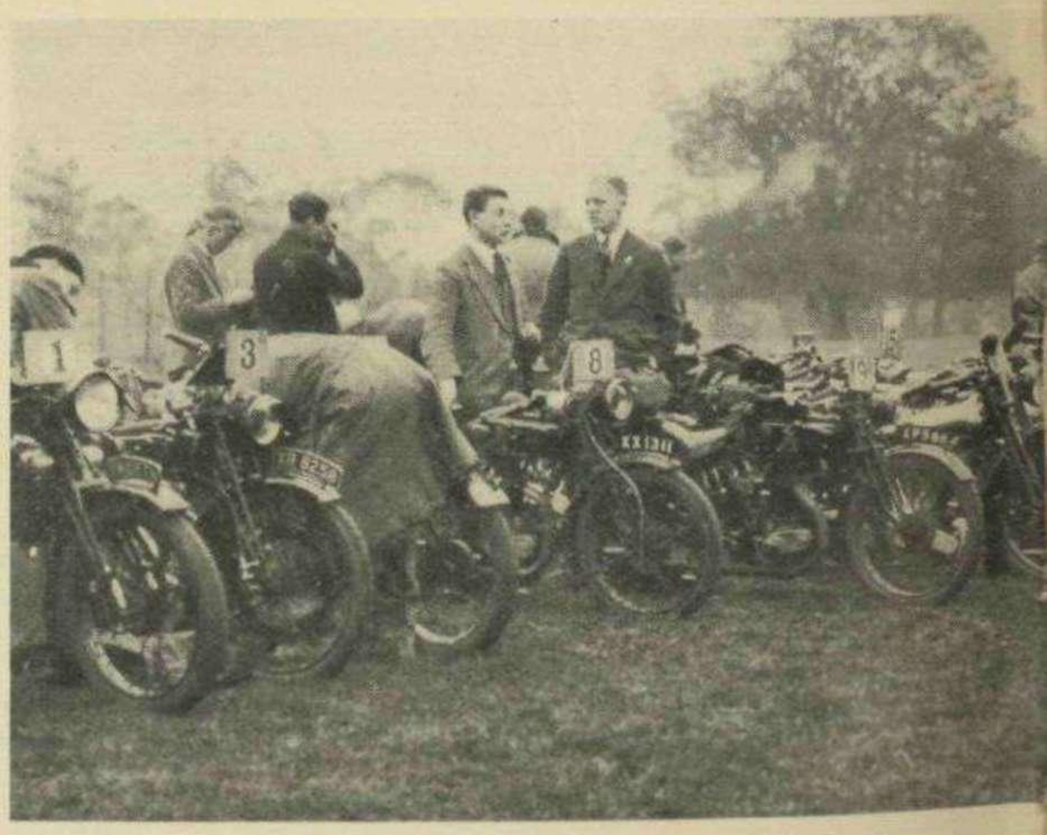
Recent Sporting E



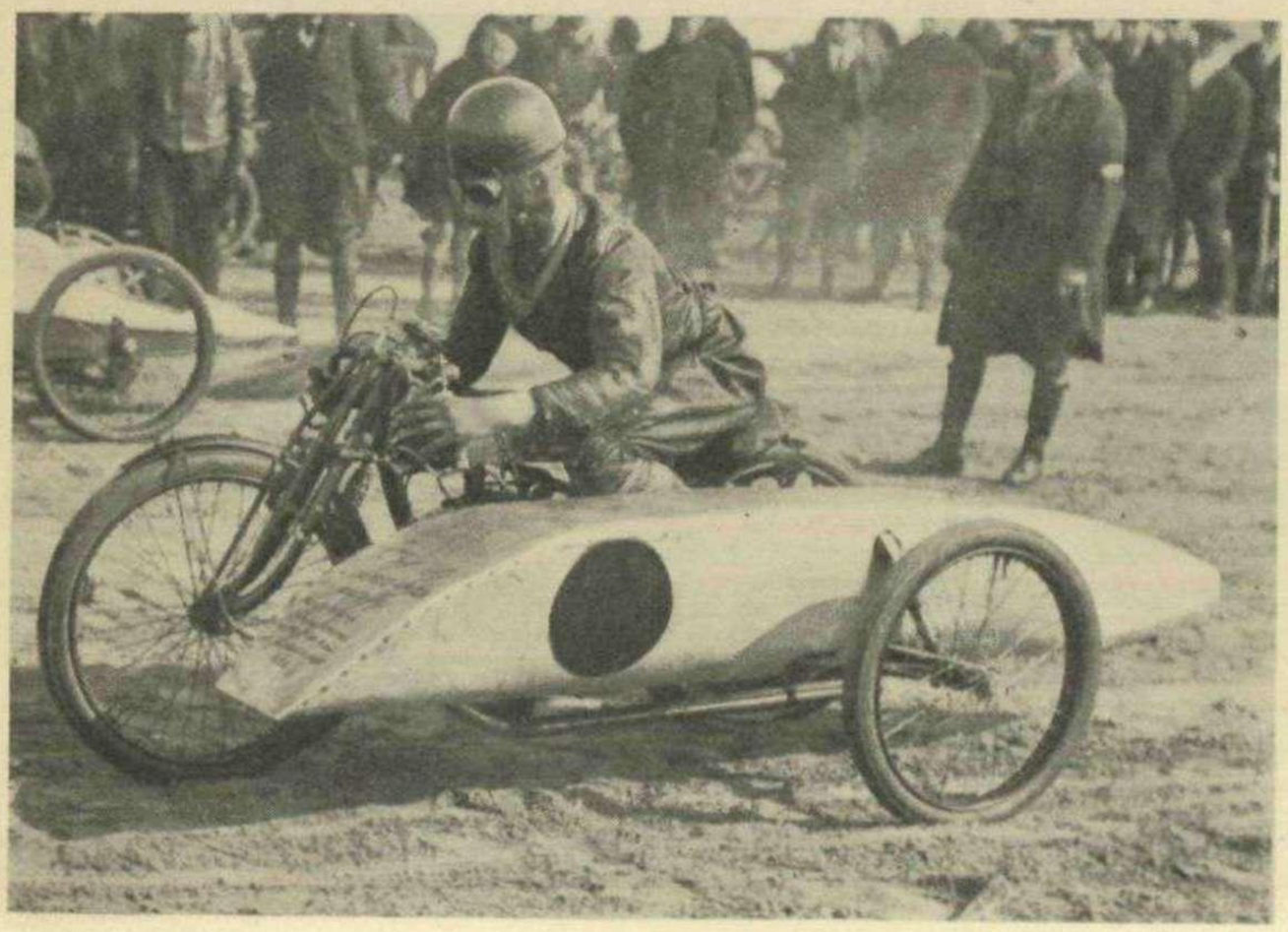
H. W. HARRINGTON (BROUGH SUPERIOR) ABOUT TO START IN THE M.C.C. LONDON-EDINBURGH RUN.



THE WINNER OF THE 1100 C.C. CLASS IN THE TARGA FLORIO. CORNERING DURING THE RACE.



COMPETITORS ASSEMBLING AT THE STAR

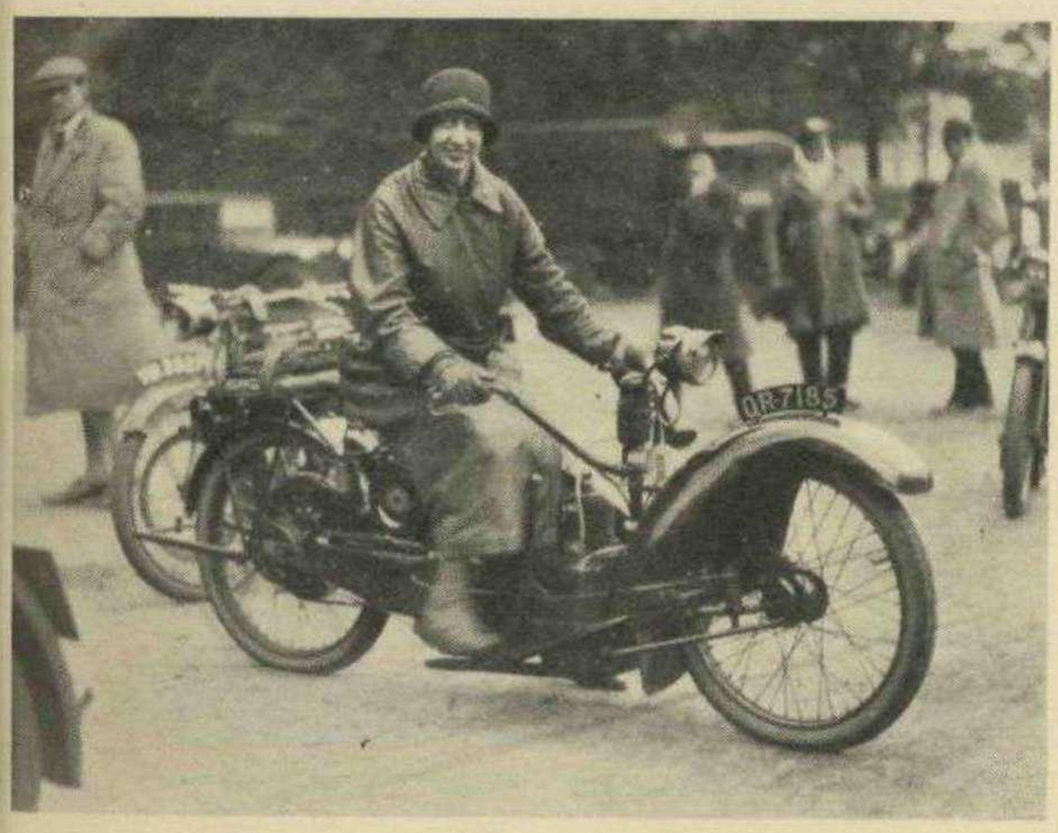


THE "COVERED WAGGON." H. F. BROCKBANK'S LATEST SIDECAR ATROCITY SEEN AT SOUTHPORT.



DURING THE STRIKE A MOBILE WORKSHOP WAS INSTITUTED AT THE MINISTRY OF TRANSPORT—

vents in Pictures

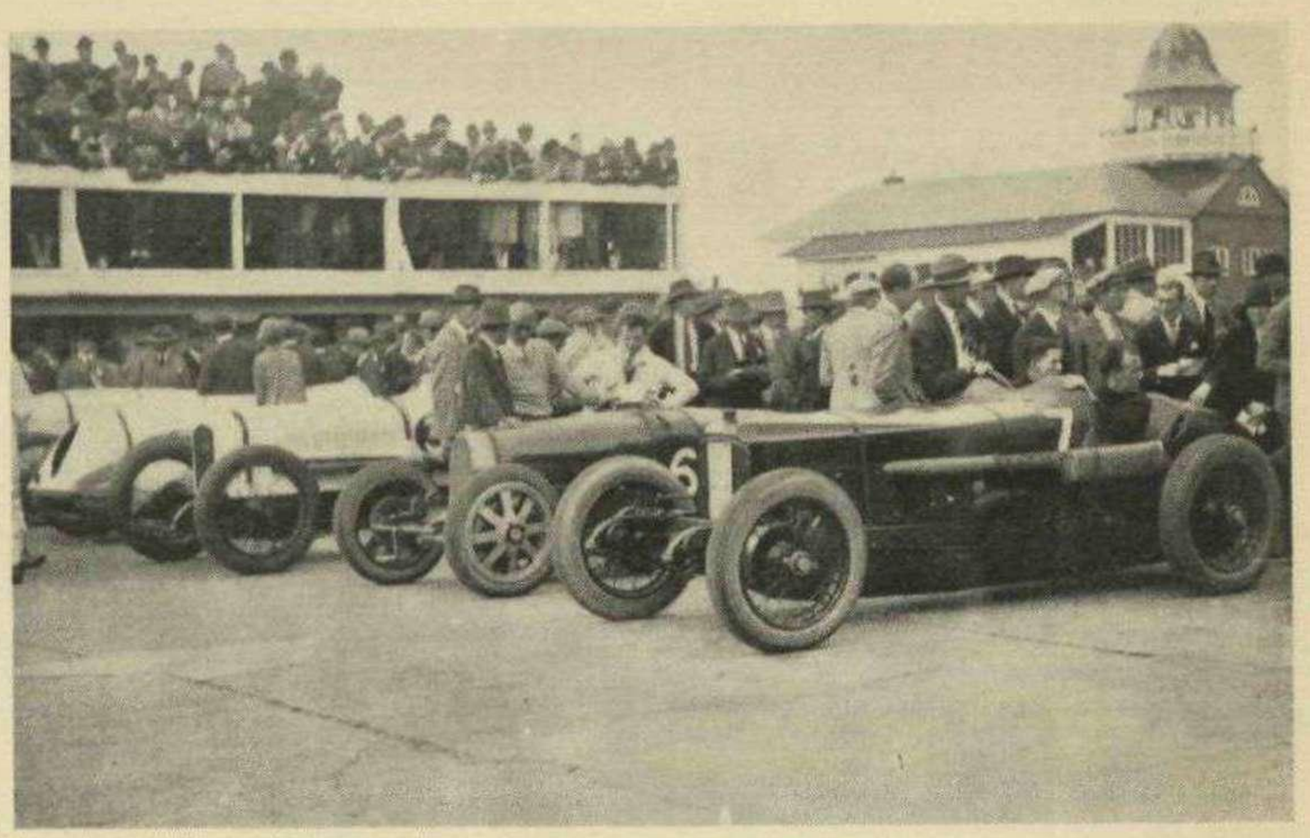


THE ONLY LADY MOTOR CYCLIST DISPATCH RIDER AT THE MINISTRY OF TRANSPORT (MISS CUSTANCE).



F THE LONDON EDINBURGH RUN.

—FOR THE REPAIR OF VOLUNTEERS' CARS. ABOVE IS LORD CURZON'S SUNBEAM IN FOR ATTENTION.



LINING UP FOR THE LAST RACE AT THE WHIT MONDAY B.A.R.C. MEETING



A TRIO OF MORGANS STARTING AT A RECENT SOUTHPORT MEETING.



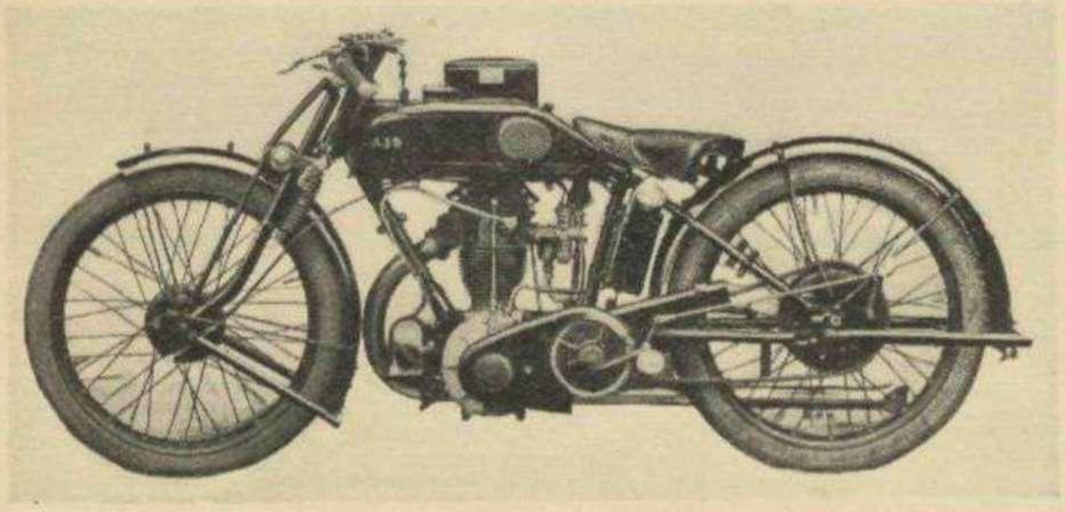
AN IMPRESSIVE VIEW OF THE START OF THE TARGA FLORIO RACE HELD IN SICILY.

SHORT NOTES AND PHOTOGRAPHS OF MACHINES COMPETING IN THE TOURIST TROPHY RACES.

A.J.S.

For 1926 this firm have made no startling alterations in the design of their T.T. machines. The bicycles are to all intents and purposes standard G.R.7 (350 c.c.) and G.10 (500 c.c.) models as supplied to the public. The only deviations from standard concern the very large petrol tanks holding 3½ gallons of petrol and, in certain cases, non-standard brake controls are fitted to suit individual riders. The machines differ from those used last year in having the valve clearance adjustment on the tappet tube end of the overhead rockers, the tappets themselves do not protrude from the timing cover. Rocker return springs are again fitted. A larger exhaust port, with a finned pipe union, is also a new feature so far as the T.T. is concerned. A simple handlebar or pedal operated oil only is used for engine lubrication.

The riders include most of those who performed last year, supplemented by J. H. Stevens, who won the French Grand Prix last year and C. E. Wise.



THE 498 C.C. T.T. A.J.S.

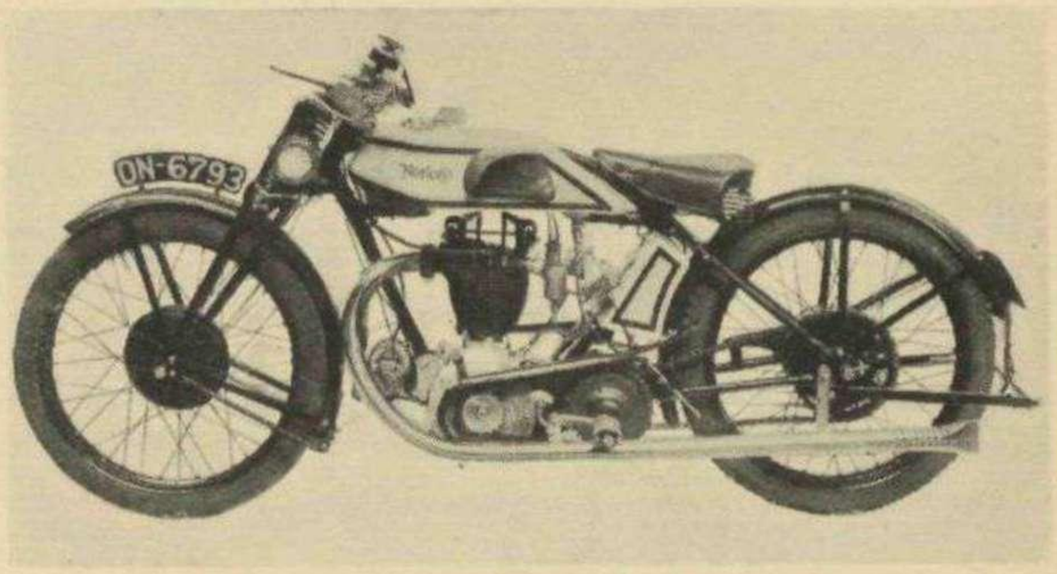
H.R.D.

For the Junior event Howard Davies is relying on standard 350 c.c. machines except for small details of equipment. The 500 c.c. machines, however, have a very fine duplex frame, extending from the head, beneath the engine and gear-box, to the back wheel, which results in wonderful strength, road holding, and a very low centre of gravity. It is probable that the two-port J.A.P. engine will have the new system of valve springing, consisting of one central coil and seven small coils disposed at intervals round the centre one, all bearing on to a flower-shaped collar. A large saddle tank is fitted, and the footrests and brake pedals have a very wide range of independent adjustment. Burman gear-boxes, foot-operated 8 in. brakes, and wired-on tyres are fitted.

The senior riders include the Twemlows, C. P. Wood, and H. R. Davies himself, and are bound to start hot favourites.

Norton.

The Norton T.T. machines look very formidable with their enormous saddle tanks, 8 in. brakes, and prominent steering dampers. The oil tank, too, is of very large



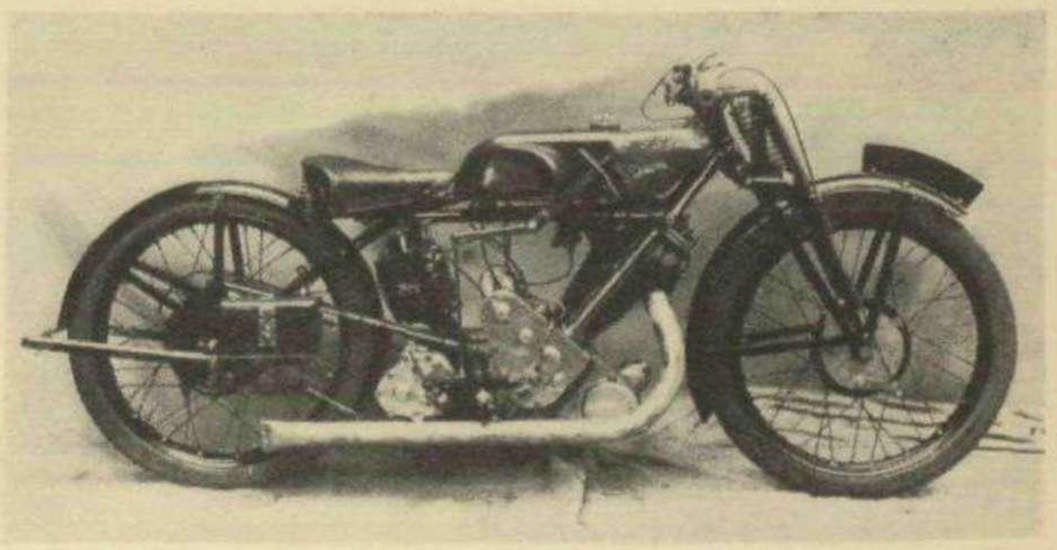
NOTE THE ENORMOUS TANK FITTED TO THE I.O.M. NORTON.

capacity, and a small auxiliary tank feeds oil on to the chains. A special form of dry sump lubrication is used, their being no adjustment of the mechanical pump itself, though the "dryness" of the sump can be varied. Apart from these modifications the machines are practically standard, the equipment including Terry saddle, Webb forks and B. & B. carburetter.

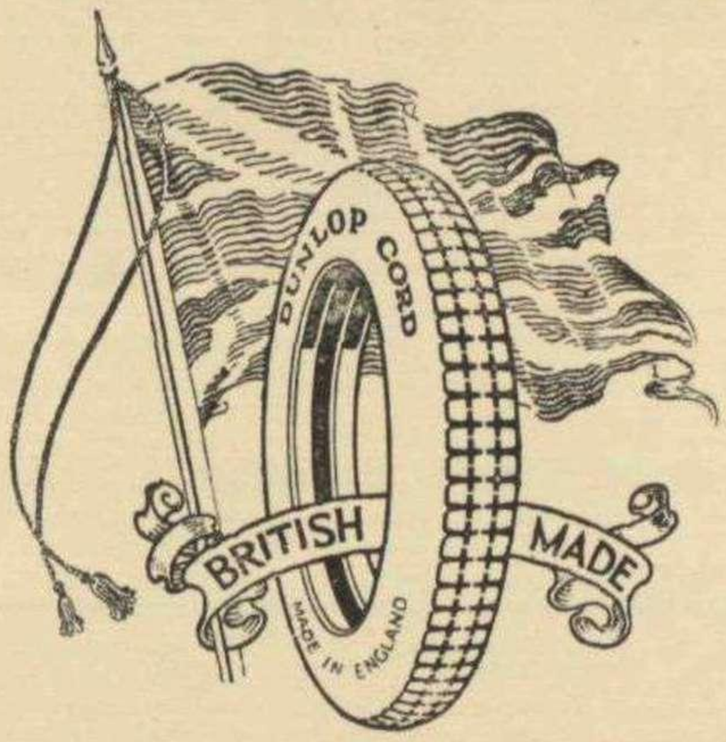
The Norton team is very strong, as it includes A. Bennett, S. Woods (two previous winners), and J. Craig, one of the premier Irish road racers.

P. & M.

Roughly speaking, the standard T.T. Panther will be used in the races, though several small but important alterations have been made. The inlet port is now at right angles to the cylinder bore, and the gudgeon pin is now clamped into the small end of the connecting rod. The makers have decided that lubrication is the most important item in a T.T. machine, and a special system has been devised. A standard mechanical pump delivers oil under pressure (adjustable) through the crankshaft and flywheels to the crank-pin, which is provided with four holes. These holes allow the oil to penetrate to the big-end rollers, thence to the sprayer into the cylinder bore, and the inside of the piston. Separate feeds are provided for the timing gear and inlet valve guide, the overhead rocker gear being lubricated



THE T.T. P. & M. PANTHER CLOSELY RESEMBLES THE PRODUCTION MACHINE.



Mr. J. G. Parry Thomas' Car

on which he broke the World's Flying Mile and Kilo Records at Pendine Sands, in April last, was fitted with

DUNLOP
CORD TYRES

(WIRED-TYPE)

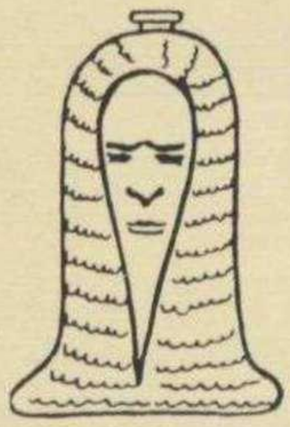
(Records subject to Official confirmation).

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C.F.H. 197

A WISE HEAD and the GRAND SPORT AMILCAR



THERE are some bright notions under the Amilcar bonnet worth your enquiring into.

For instance, there is a wonderful and sturdy little engine which gives you trouble-free service and carries you along as pleasantly at 5 m.p.h. through traffic as when "all-out" on the open road.

And there is that ingenious lowering of the gravity centre so that she holds the road like a "good-un" at all times and which, in combi ation with Four-wheel Brakes of wonderfully efficient design makes safety certain even at speed which might be considered reckless in any car but the Amilcar.

And then again there is her streamline aluminium body, which enables her to just laugh at wind resistance and yet allows you and your companion to lie back at ease in your comfortable seats knowing that the week-end suit-case is neatly tucked away with the tools at the tail.

Truly, the Sporting Motorist finds his ideal in the

GRAND SPORT AMILCAR.

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SOME AMILCAR SATISFACTION POINTS.

A wonderfully sturdy engine with all reciprocating parts perfectly balanced and very light. Will sustain high revolution for indefinite peroids without loss of power.

Efficient lubrication, under pressure, to every working part. Cooling by thermo-syphon system.

Valves located inside crank-case ensuring perfect lubrication and fitted with dual springs.

Clutch and Gear-Box of unit construction with engine entirely enclosed and positively lubricated from Engine Sump.

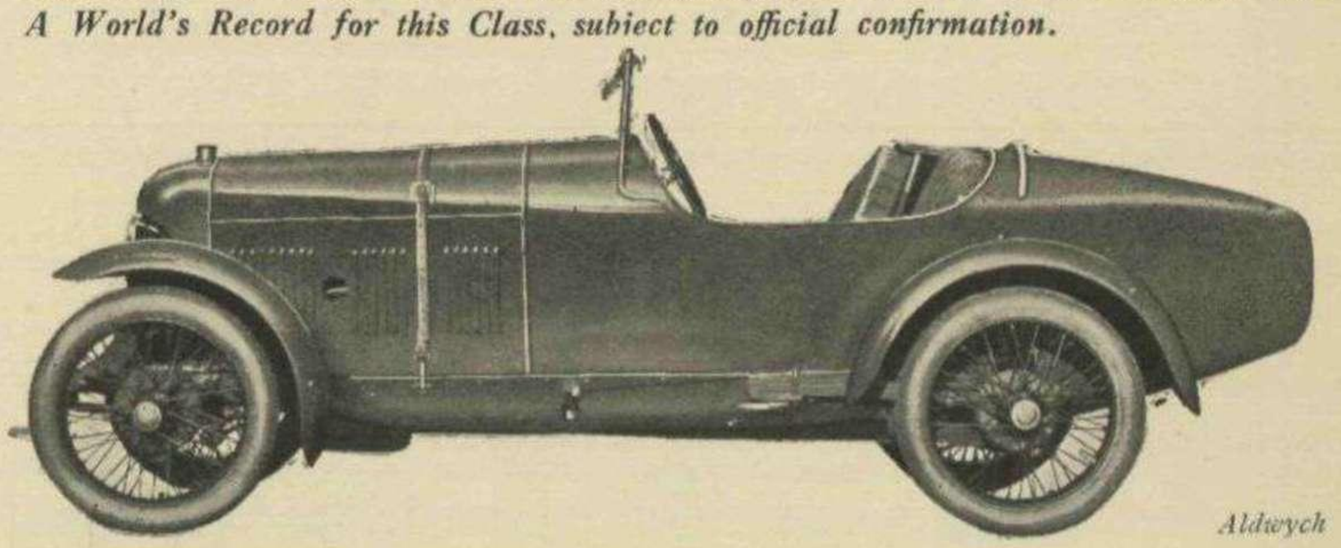
Clutch of the two-plate type and very smooth and progressive.

Transmission carried through a single Hardy disc to enclosed propeller shaft running on 3 bearings entirely eliminating vibration.

Final drive by Gleason Silent Spiral bevels with independent road shafts.

Equipment comprises lighting and starting, "Marchel" head-lamps, side and tail lamps, rev-counter, speedometer, clock, spare wheel, petrol gauge, Hartford shock absorber, number plates and tools.

The 1,100 c.c. Amilcar attained the amazing speed of 123 m.p.h. on May 9th. A World's Record for this Class, subject to official confirmation.



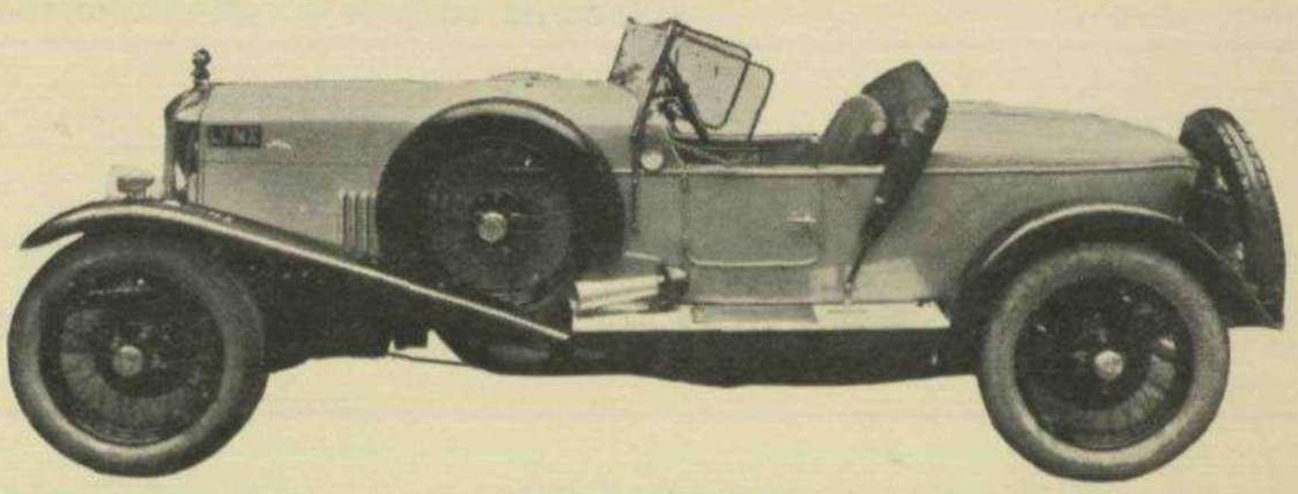
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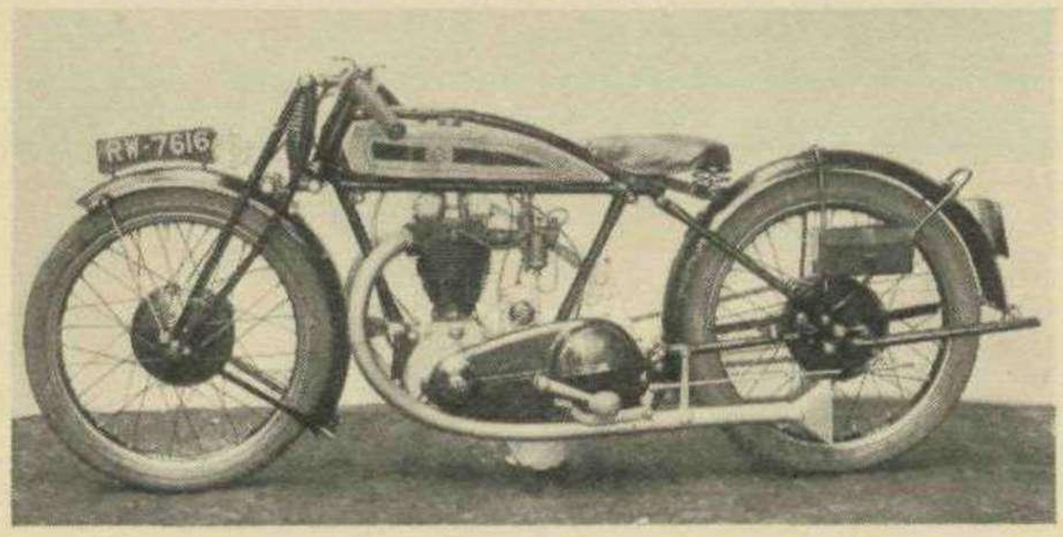
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TOURIST TROPHY MACHINES—continued.

by oil from the timing case *via* the tappet enclosing tube. The saddle pillar tank is carried as a stand-by should the other system fail and serves to lubricate the chains. A four-speed close ratio box is fitted, the petrol tank holds 3¼ gallons, and the sump 3 pints of oil. The engine develops 22 h.p., and is capable of 90 m.p.h.

C. T. Ashby, H. M. Walters, and T. F. Bullus, all good men, are the riders.



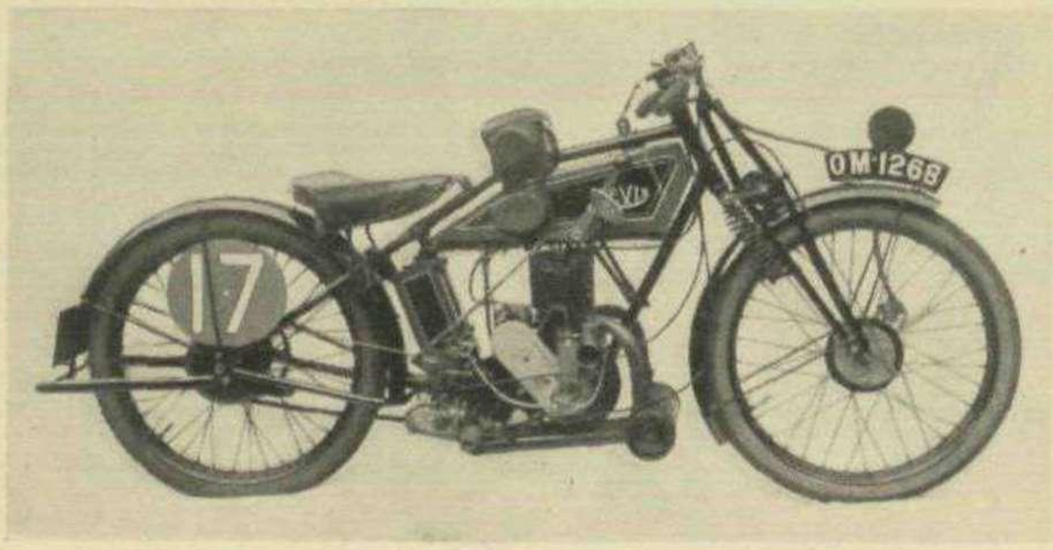
T.T. Triumph temporarily fitted with a Standard Tank.

Triumph.

The T.T. Triumphs are extremely interesting machines and depart considerably from anything previously emanating from the Coventry works. The two-valve engine is modelled on the machines used so successfully at Brooklands by Victor Horsman, but now boasts two exhaust ports. The push rods and tappets are totally enclosed, and the magneto is placed behind the engine, thus allowing the latter to be brought well forward.

A large two-piece tank is strapped securely to the top tubes, and a separate oil tank behind the saddle tube. These are not shown in the photograph. A Triumph three-speed gear is fitted, with a new form of gear lever, having a concealed gate and a positive stop for middle gear. The forks are a new type, with a single tension spring and friction dampers. Eight-inch brakes are fitted front and rear.

The riders include H. Willis, who has performed well on a Montgomery, W. Evans, a scramble specialist, and C. H. Young, the South African.



The latest Racing Levis.

Levis.

As will be seen from the photograph, the T.T. Levis is on similar lines to previous Levis racers. The most noticeable change being in the tank and top tube design.

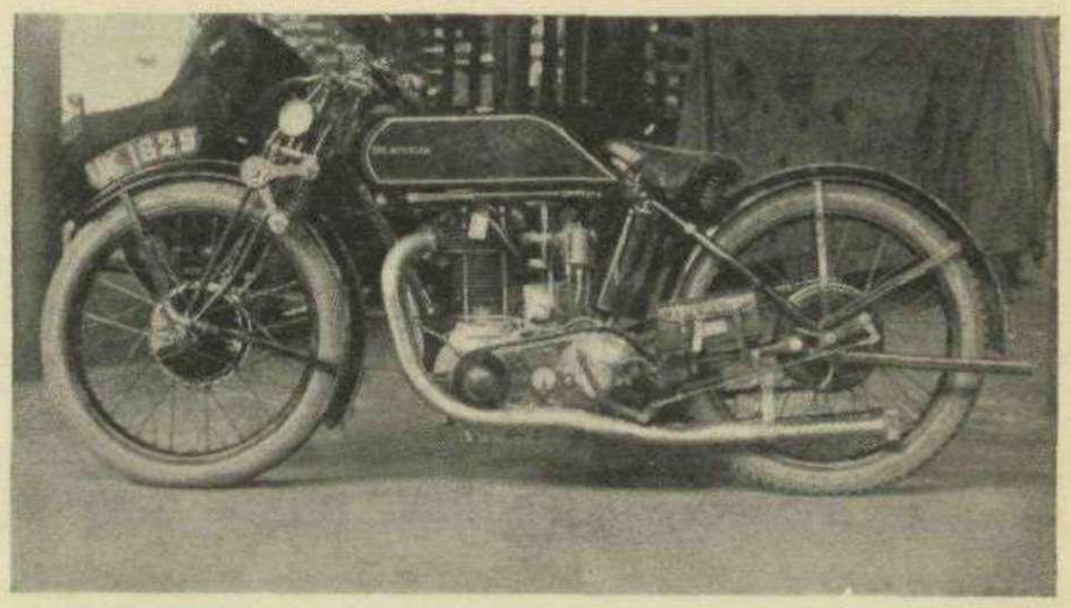
The riders are Phil Pike and A. R. Edwards.

Scott.

Great innovations have been made by the Scott Company in designing their T.T. machines. For the first time, three-speed gears will be used, having a gate control on the side of the tank. At first glance the machine looks similar to previous models, but in reality an entirely new frame is used with two pairs of tubes running from the head to the top and bottom of the crankcase respectively; torque tubes and chain stays in an unbroken line from crankcase to back wheel complete the lower portions of the frame. The most startling feature, however, is a top tube, pin-jointed at either end, joining saddle tube and head, and running through the tank, which, being of the usual Scott shape conceals this feature. The front forks have extra girders and an unenclosed spring, but otherwise operate on the usual Scott system.

Douglas.

These machines do not appear to have undergone any radical change from last year, and resemble standard O.C. T.T. models. The star riders are F. W. Dixon and J. Whalley, both of whom have been well up in previous races. Douglases are usually among the fastest machines in the island, and their entry is always keenly watched by rival firms.



Note the huge Tank on the I.O.M. Sunbeam.

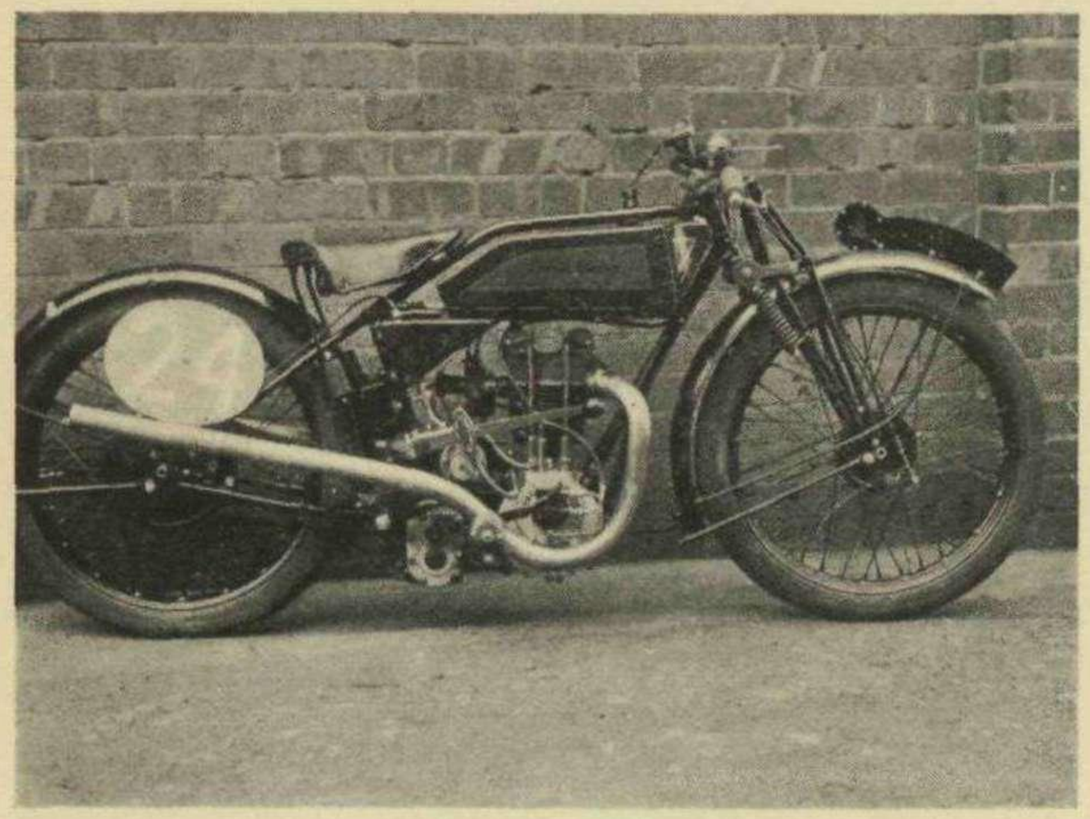
Sunbeam.

Once again it can only be said of the T.T. Sunbeams that they are standard two-port models fitted with 3¼-gallon tanks and 8-in. brakes, the rear brake now being on the near side. A new form of hairpin valve spring is used, having coils on both sides of the valves, well away from the stem, really only a double form of the well-known single hairpin type used before. Double pedals are provided for the back brake as usual. The Sunbeam dry sump lubrication system is employed, supplemented by a handlebar controlled pump. Except for engine size and gear ratios, the 350 c.c. and 500 c.c. machines are identical.

TOURIST TROPHY MACHINES—continued.

Enfield.

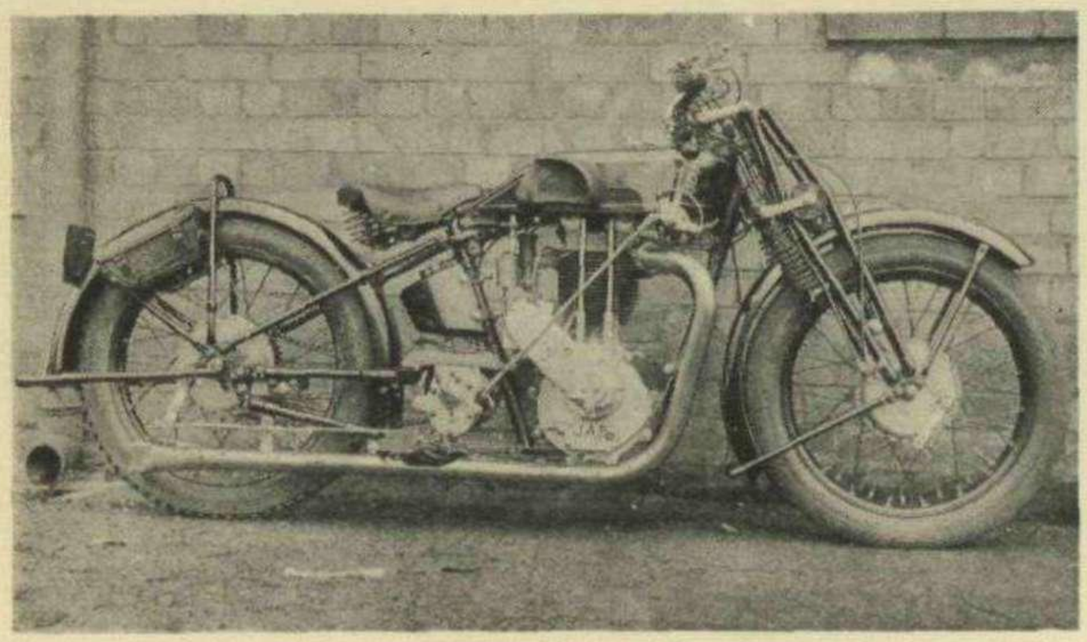
The Enfield company are the latest recruits to the standard machine policy; it being possible to purchase a machine almost identical with the actual racer. The only modifications being an 8 in. back brake and a 2½ gallon petrol tank. The engine is a two-port J.A.P., modified to include the Enfield lubrication system. Enfield forks and brakes are fitted, and it is interesting to note that about half a dozen prominent trade entries in the races are also using Enfield brakes. A Sturmey-Archer close ratio gear-box is used with a gate change. Dunlop wired-on tyres are fitted, and a small tank drips oil on to the rear chain. The machines have quite racy lines, and in the hands of C. H. Young and J. G. Burney should perform well. The 250 c.c. machines are similar, except for tyre sizes and gear ratios.



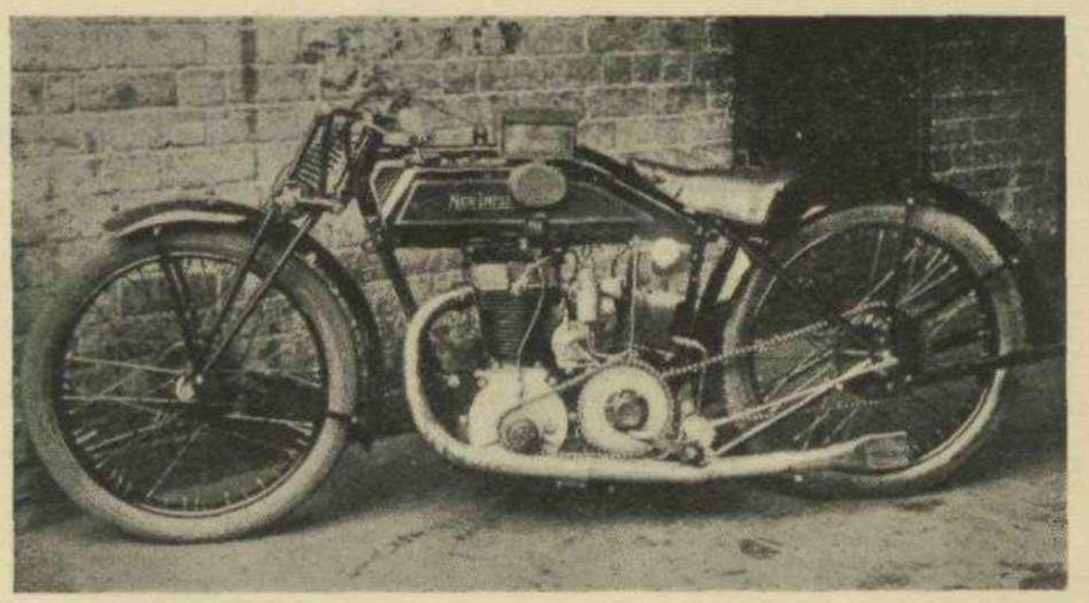
VERY RACY LINES DISTINGUISH THE T.T. ROYAL ENFIELD.

O.K.

The O.K. Bradshaw machines for the Junior Race are practically standard sports models as sold for £56, but have larger tanks and brakes and detail modifications to suit individual riders' requirements. The O.K.-Supreme-J.A.P. machines were designed specially as T.T. super sports models, so that, although not yet in production, they can be described as standard models.



THE 490 O.K. SUPREME ENTERED BY E. ARCHIBALD IN THE SENIOR RACE.



THE 350 C.C. T.T. NEW IMPERIAL.

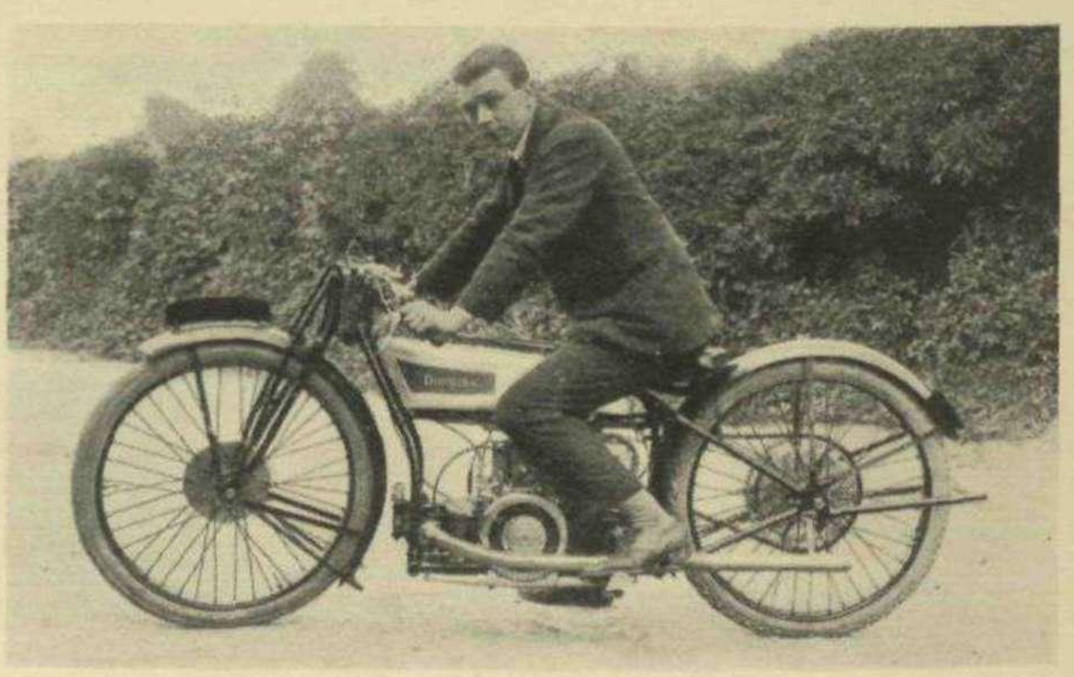
New Imperial.

This firm has taken the bold step of forsaking a proved proprietary engine for one of its own design. Both 350 c.c. and 250 c.c. engines are on the lines of the standard 250 c.c. unit. The 250 c.c. machine has the standard loop frame as used last year. Both have large tanks, standard gear-boxes and special servo brakes.

G. S. Davison is now one of the New Imperial team.

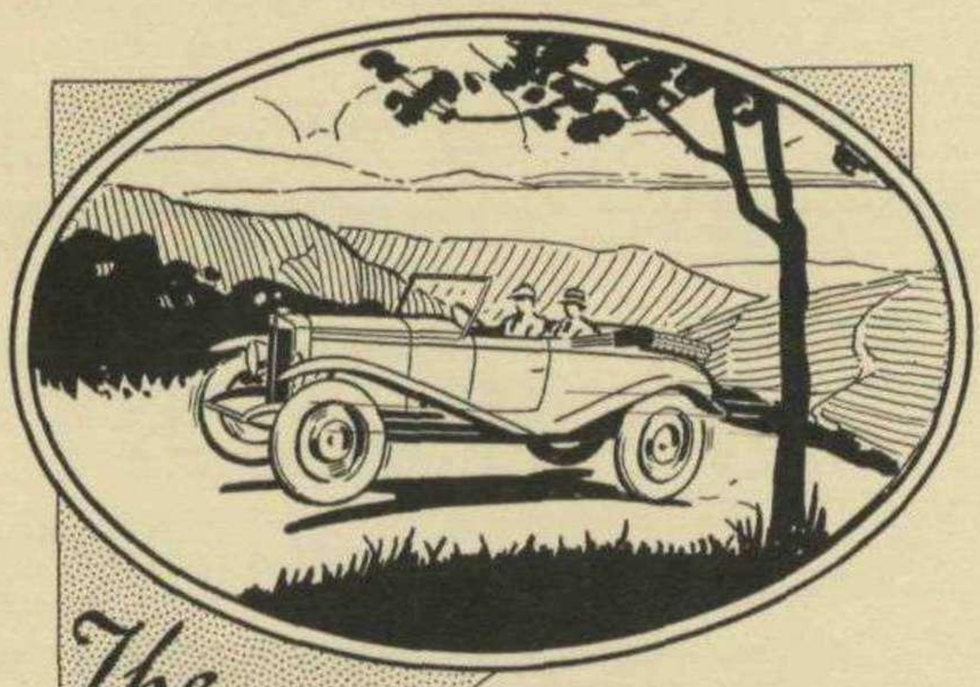
The Sunbeam concern usually contrive to do something a little different from anyone else. In 1923 they used 350 c.c. machines in the Senior race, although they had 500 c.c. machines ready. Another year some of their riders did only one week's practising for fear of getting stale. This year's little stunt is that no rider is performing in more than one race, the most surprising point being that G. Dance will not be riding in the Senior. On paper the Sunbeam team does not look any too strong, but doubtless the team manager has something up his sleeve. We wonder what has become of T. C. de la Hay.

The Sunbeam machines for this year are practically standard o.h.v. two-port machines, fitted, however, with larger tanks and larger brakes, two features which are only called for by the special conditions imposed by the race.



V. ANSTICE THE WELL-KNOWN DOUGLAS EXPONENT ON HIS T.T. MACHINE.

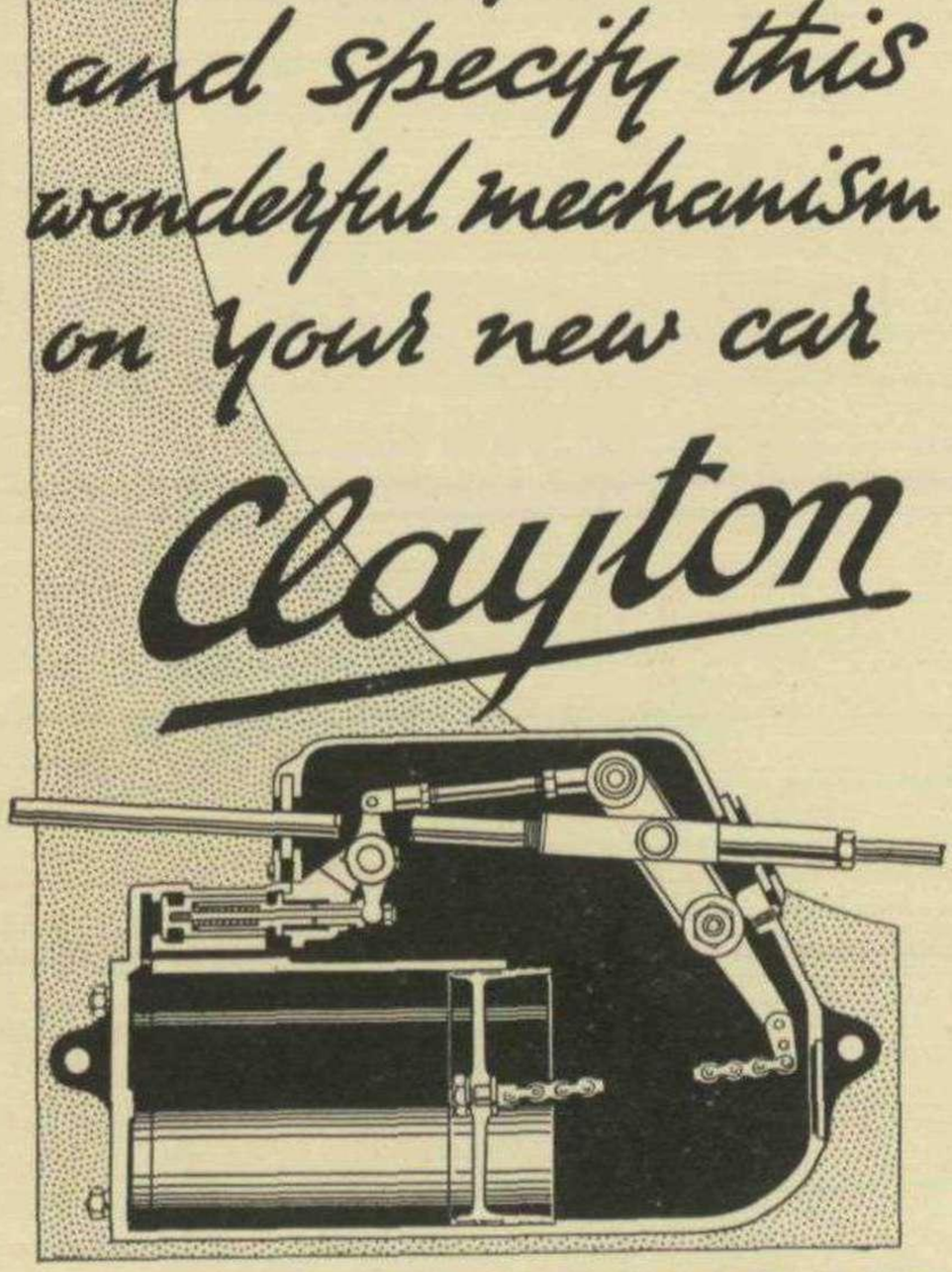
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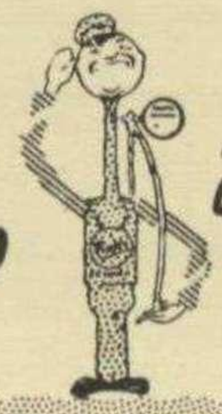
PRATTS

M.C. and A.C. Trophy for best performance of the day. Won by J. L. Norton on a 588 c.c. Norton and sidecar. JUNIOR CUP. CLASS 1. For the best solo performance under 250 c.c. Won by G. McLean on a 249 c.c. B.S.A. GOWCH TROPHY. CLASS 2. For the best solo performance from 250 c.c. to 350 c.c. Won by S. Gill on a 348 c.c. Calthorpe. B.N. BOWL. CLASS 3. Won by G. Goodman on a 493 c.c. Sunbeam for the best solo performance over 350 c.c. TRADER TROPHY. CLASS 5. For best performance by a three-wheeler under 500 c.c. Won by H. S. Perrey on a 349 c c. B.S.A. and sidecar. TEAM PRIZE won by H. G. Uzzell, G. McLean and H. S. Perrey.

All the above on Pratts.

Also

15 Gold Medals out of 20.



Pratts—on Top in all Road Tests

MONTHLY BULLETIN
OF

The British Motor-Cycle Racing Club

(Affiliated to the Auto-Cycle Union.)

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A. GEO. REYNOLDS, 95, Fillebrook Road, Leytonstone, E.1.

Under this heading will be reported from month to month the doings and features of the World's Premier Racing Club.

THE general upset of Calendar arrangements due to the general strike has been universally felt and particularly in view of a full season's programme made by this Club, it has been difficult to fit an already arranged programme without some inconvenience.

The Three 200 Miles Sidecar Races will take place on Saturday, June 26th, just a week after the T.T. Races in the Isle of Man, and as there will be no Sidecar events, a considerable amount of interest will follow this event. Below is given the list of entries, the first race starting at 1 p.m., the last race finishing at 5 p.m.

Owing to the postponement of these races it has been necessary to adjust the date of the Four 200 Miles Races, which was fixed to take place on July 10th, to a later date, Saturday, July 24th. The Meeting arranged for July 10th will consist of Three and Five Lap Scratch and Handicap Races, by this arrangement two long distance races will not clash and so give time for preparation.

LIST OF ENTRIES RECEIVED FOR THE

200 MILES SIDECAR RACES.

Which take place at BROOKLANDS on SATURDAY, JUNE 26th, 1926.

CLASS B/s up to 350 c.c. — **LIMIT 20.**

ENTRANT.	MACHINE.	C.C.
C. W Johnston	Zenith-Blackburne ...	348
E. S. Prestwich	J.A.P....	344
J. S. Worters	Excelsior J.A.P. ...	344
R. H. Hopkins	Chater-Lea	348
L. J. Pellat	O.K.-Bradshaw ...	349
Dudley H. C. Goode ... ... Driver, A. G. Boulting	Zenith-J.A.P. ...	344
W. L. Handley	Rex-Acme-Blackburne	348
Chas. Harman	O.K.-Bradshaw ...	349
L. Milne	Rex-Acme-J.A.P. ...	344
A. P. Hamilton	Velocette	349
F. J. Youngs	O.K.- ...	
C. A. C. Birkin	McEvoy-Blackburne	348
G. F. Simond	A.J.S.	349
S. M. Greening	Zenith-J.A.P. ...	344
H. Grose ... ... Driver, W. G. Greenaway	Matchless	348
C. G. Pullin ... ... Driver, H. Glover	Douglas	348
C. G. Pullin ... ... Driver, V. C. Anstice	Douglas	348
H. Weslake ... ... Driver, G. C. Cobbold	Sunbeam	346
N. Anderson	Ivy	346
W. D. Marchant	Chater-Lea	348
J. J. Hall (Reserve) ... ... Driver, W. M. Cowper	P. & P.-J.A.P. ...	348
S. R. Gittings (Reserve) ...	P. & P.-J.A.P. ...	349

CLASS F up to 600 c.c. — **LIMIT 20.**

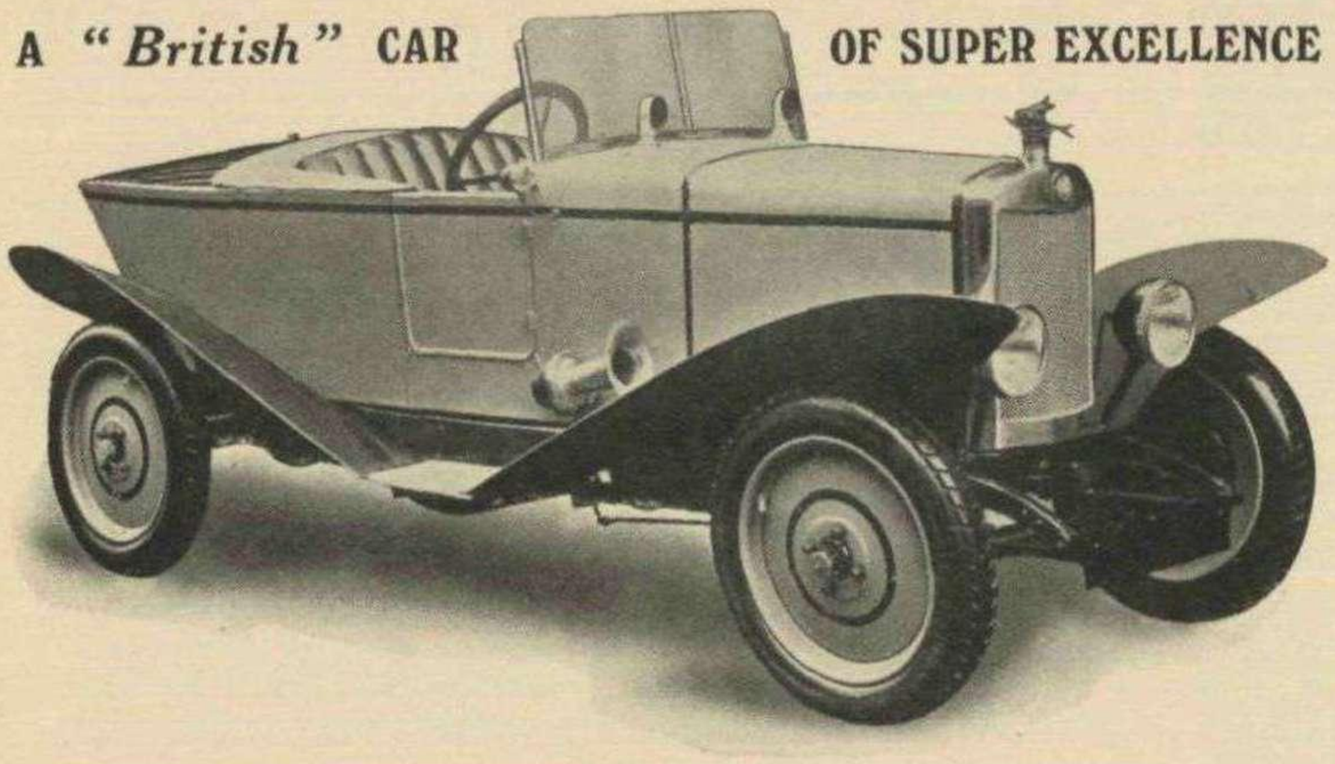
ENTRANT.	MACHINE.	C.C.
P. Brewster	Zenith J.A.P. ...	596
Jack Emerson	H.R D. J.A.P. ...	596
J. S. Preston	Norton	588
W. S. Braidwood	A.J.S.	498
H. O. Matthews	Norton	588
D. R. O'Donovan	Norton	588
V. E. Horsman	Triumph	599
Kaye Don	Zenith J.A.P. ...	488
D. R. O'Donovan ... ... Driver, L. P. Driscoll	Norton	588
D. R. O'Donovan ... ... Driver, A. Denly	Norton	588
C. G. Pullin ... ... Driver, L. Parker	Douglas	596
F. W. Dixon	Douglas	596
K. G. R. Bagshawe	Norton	490
C. G. Pullin ... ... Driver, R. N. Judd	Douglas	596
G. H. Tucker	Norton	588
D. E. Calder	O.E.C.-Temple ...	496
P. Emerson	O.E.C.-Blackburne ...	600
R. M. N. Spring	Norton	588
R. M. N. Spring ... ... Driver, C. S. Staniland.	Norton	588

CLASS G up to 1,000 c.c. — **LIMIT 10.**

ENTRANT.	MACHINE.	C.C.
J. S. Wright	Zenith J.A.P. ...	976
M. A. McEvoy ... ... Driver, G. W. Patchett	McEvoy J.A.P. ...	976
B. T. Allen	Brough-Superior-J.A.P.	976
R. E. Humphries	Brough-Superior-J.A.P.	976
E. C. E. Baragwanath ...	Brough-Superior-J.A.P.	976
F. A. Longman	Harley-Davidson ...	988
G. L. Parkes	Zenith-J.A.P. ...	976
H. J. Knight	Zenith-J.A.P. ...	976
C. F. Temple	Temple	996
C. T. Ashby	Zenith-J.A.P. ...	976

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A "*British*" CAR OF SUPER EXCELLENCE



10 h.p. 4-speed "BURGHLEY" Sports, Long Chassis F.W.B.	...	**£285**
12/22 h.p. „ „ „ „ „	...	**£295**
12/40 h.p. „ „ Super Sports, Long Chassis F.W.B.		**£385**

The "LEA-FRANCIS" Chassis is well-known for its excellent design, beautiful finish, economical running, wonderful reliability and hill-climbing capabilities, while the marvellous and unique successes achieved are alone a testimony to its quality.

The "Burghley" and other Models may be purchased on Deferred payments over 12 months.

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Roomy two-seater with two doors, concealed dickey, rear of body decked with polished satin walnut planking, top to dickey rises slightly and slides back on tail, forming neatly upholstered back to dickey seat. There is ample room for luggage in dickey and tail. The beautifully splayed wings set off the graceful lines of the car.

The rear squab of front seat folds forward, behind which spare wheel, tools, etc., are stored. Hood of finest waterproof twill is entirely concealed when down, can be raised without leaving car and folds away in recess over which fits a waterproof cover of similar material. Rigid side curtains opening with doors, stored under seat when not in use.

Specially fitted exhaust. Batteries are slung to chassis, easily accessible on removing seat. Specially raked and adjustable steering. Sloping "V" wind screen. Polished mahogany facia board containing clock, speedometer, locker and full lighting and starting equipments. Electric horn.

STANDARD COLOURS.—Grey or Black with Scarlet splayed wings and lines, Drab with Tobacco Brown wings and lines, Primrose with Black wings and lines, any other colours to choice.

Steel Disc Wheels—except on Super Sports Model, which is fitted with Dunlop wire wheels.

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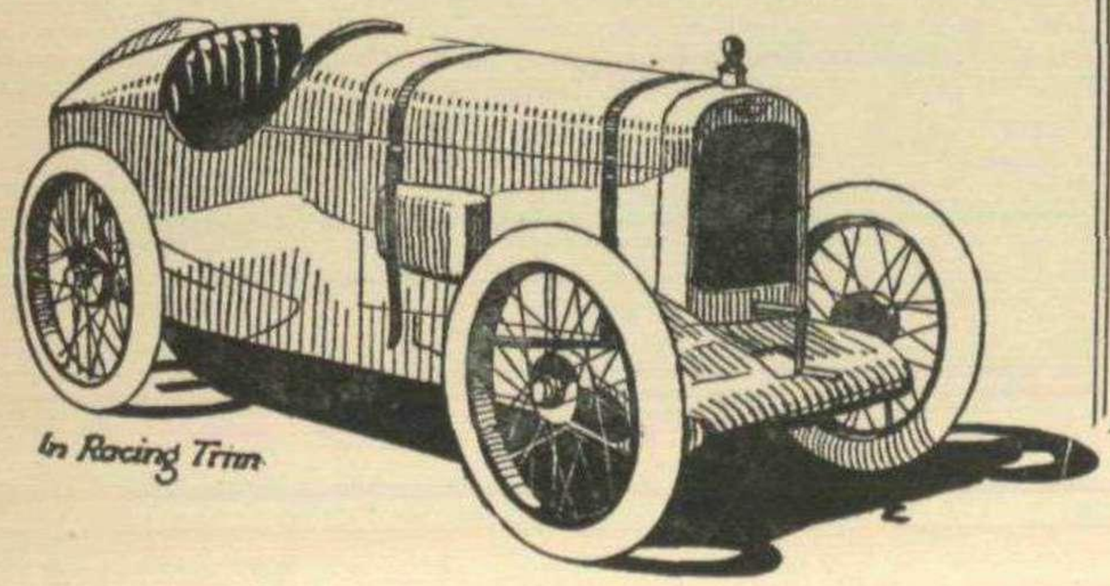
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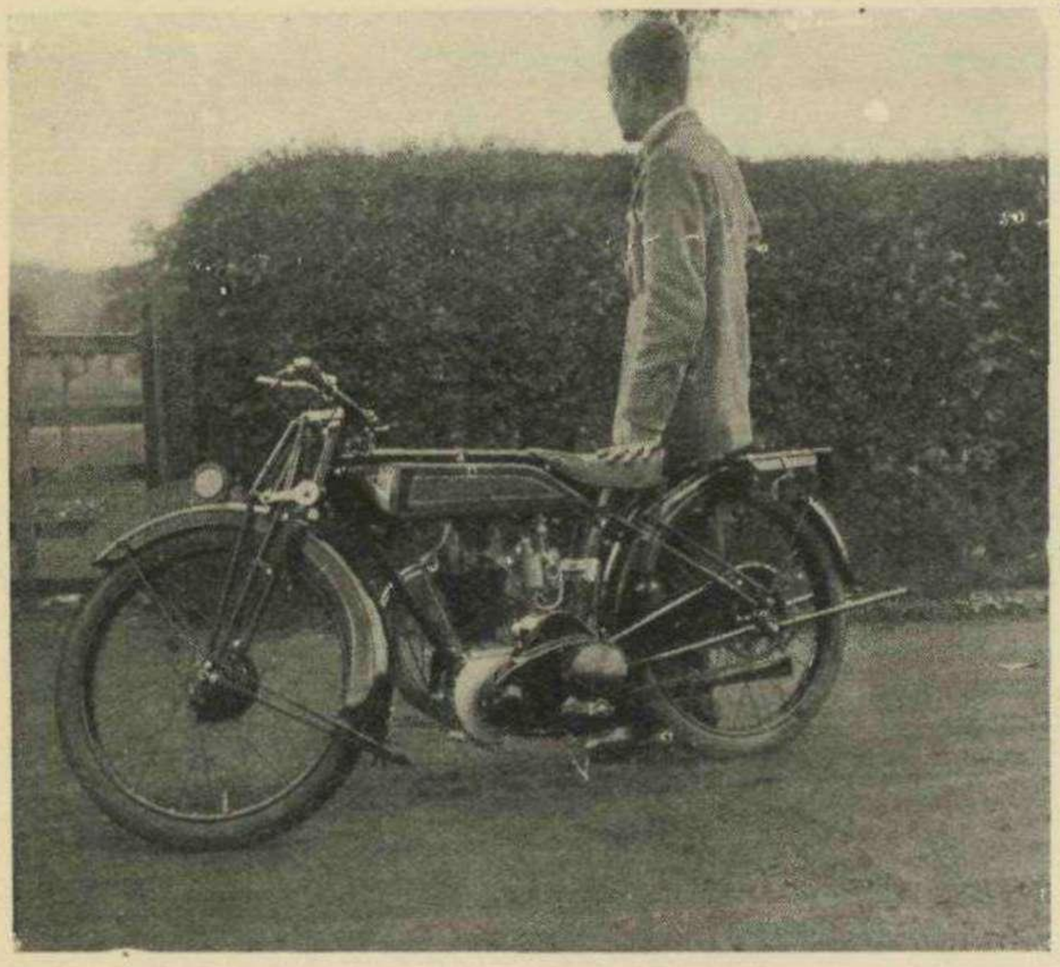
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SEMI-SPORTS CUP MODEL	... ...	**£185**
BROOKLANDS SUPER-SPORTS (*as illus.*)		**£265**

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LONGBRIDGE, BIRMINGHAM.

London: 479-483, OXFORD STREET, W.1. *(near Marble Arch*



SPORTING MACHINES ON TEST.

The 346 c.c. o.h.v. Royal Enfield.

BY "PAUL SADLER."

OF recent years it has not been customary to associate the name of Royal Enfield with anything connected with the sporting and racing side of motor-cycling; since the war the firm have concentrated mainly on large sidecar outfits and small two-strokes. However, it must not be forgotten that in pre-war days there was an attractive little 350 c.c. V-twin made by the Enfield concern, which was ridden into third place in the 1914 Junior T.T. It is said, "Once a racing firm, always a racing firm," so that it is not surprising that the Enfield concern, two years ago, reintroduced a 350 c.c. Sports machine, and even entered unofficially in the Junior Race of 1925, when Stanley Woods lost fourth place through crashing and breaking his handlebars on the last lap, thus compelling the marshals to stop him, in the interests of safety.

The 350 c.c. model tested by *Motor Sport* is based very much on the T.T. machines, but is fitted with a single port J.A.P. engine adapted to the Enfield mechanical pump lubrication, a very neat system, involving only one external oil pipe. The frame is neat and fairly low, while the Terry saddle, semi-T.T. handlebars, and adjustable foot-rests ensure a comfortable riding position. A Sturmey-Archer 3-speed gear-box is fitted having a gate change mounted low down the saddle tube. This position necessitates bending well down when changing gear by hand, while the nature of the gate renders foot-changing difficult. A different position for the gear-lever is, therefore, desirable, if such could be arranged without causing the lever to foul the riders' knee in any of the notches.

Provided the carburetter be flooded, the engine will start first kick every time, but if this is neglected, starting is not quite so certain. Once running, the engine, by virtue of a well-tuned B. & B carburetter, continues to run at an incredibly slow tick-over rate with the throttle lever shut. This tick-over is not confined to idle running of the engine, but is also apparent when crawling along the level on top gear, a habit not to be encouraged, but nevertheless an interesting experiment.

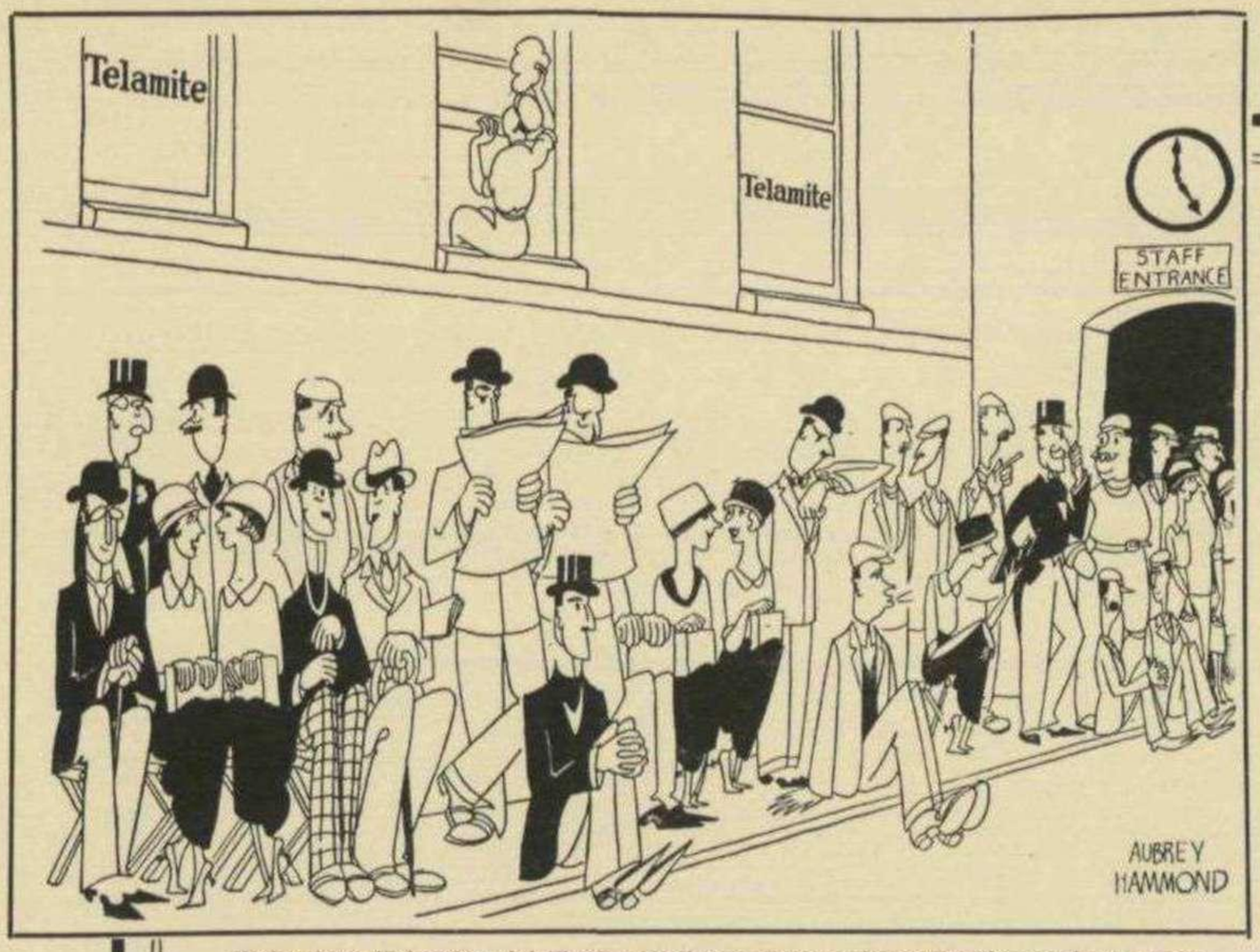
The next feature that impresses itself is the extraordinary silence of the exhaust at small throttle openings, it being quite impossible to hear the engine when crawling through London traffic; even when the throttle is opened suddenly, the noise is very moderate, and not at all in keeping with the excellent acceleration of which the machine is capable on the lower gears. Fairly close ratios are provided, and about 45 m.p.h. is attainable on the second gear, after which a change up soon puts the speedometer needle between the 60 and 65 m.p.h. marks.

At all speeds the steering is delightfully steady, without being heavy, and a light touch only is needed on the bars even at high speeds. Cornering and road holding seem to be well up to the average, and hill climbing, of course, must not be mentioned in connection with a modern o.h.v. three-speed machine.

Reverting to the lower end of the scale again, it is possible to balance the machine without "wangling" the bars at a genuine snail's pace and turn round "feet up" in the narrowest spaces, a manœuvre which was accomplished several times before admiring crowds (mostly newspaper boys!). At these low speeds the Enfield rubber-block cush-drive system effectually damps out all transmission shocks. The clutch, too, is very sweet and the control very light; the whole machine



THE ROYAL ENFIELD IS A REMARKABLY HANDY MACHINE.



Tales from Telamite: (3) Enthusiastic workers waiting for the works to open.

REFLECT on the feverish anxiety of Telamite workers to meet the demand for Telamite! You can readily imagine no lining could ever possibly leave the Telamite works were it ineffective in use.

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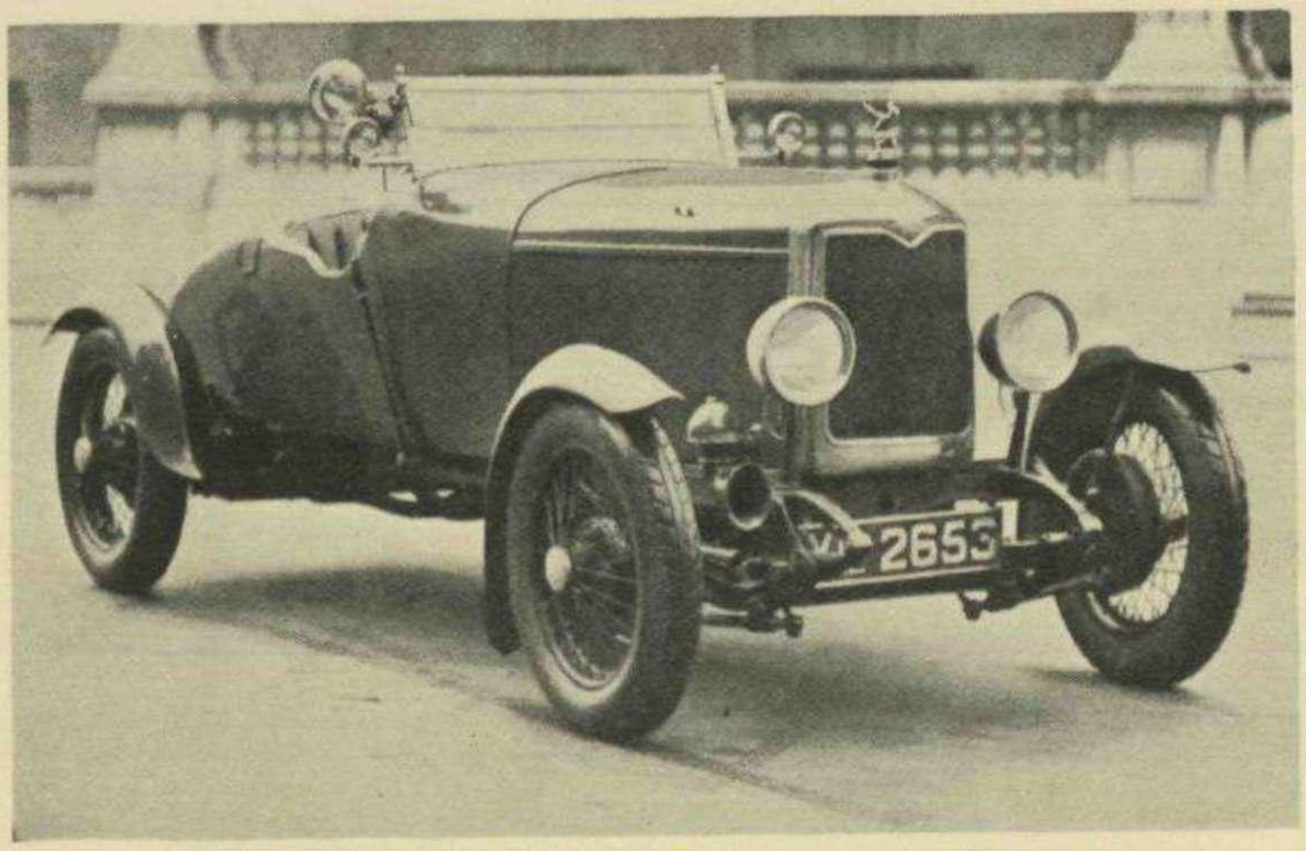
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SPORTING MACHINES ON TEST—continued.

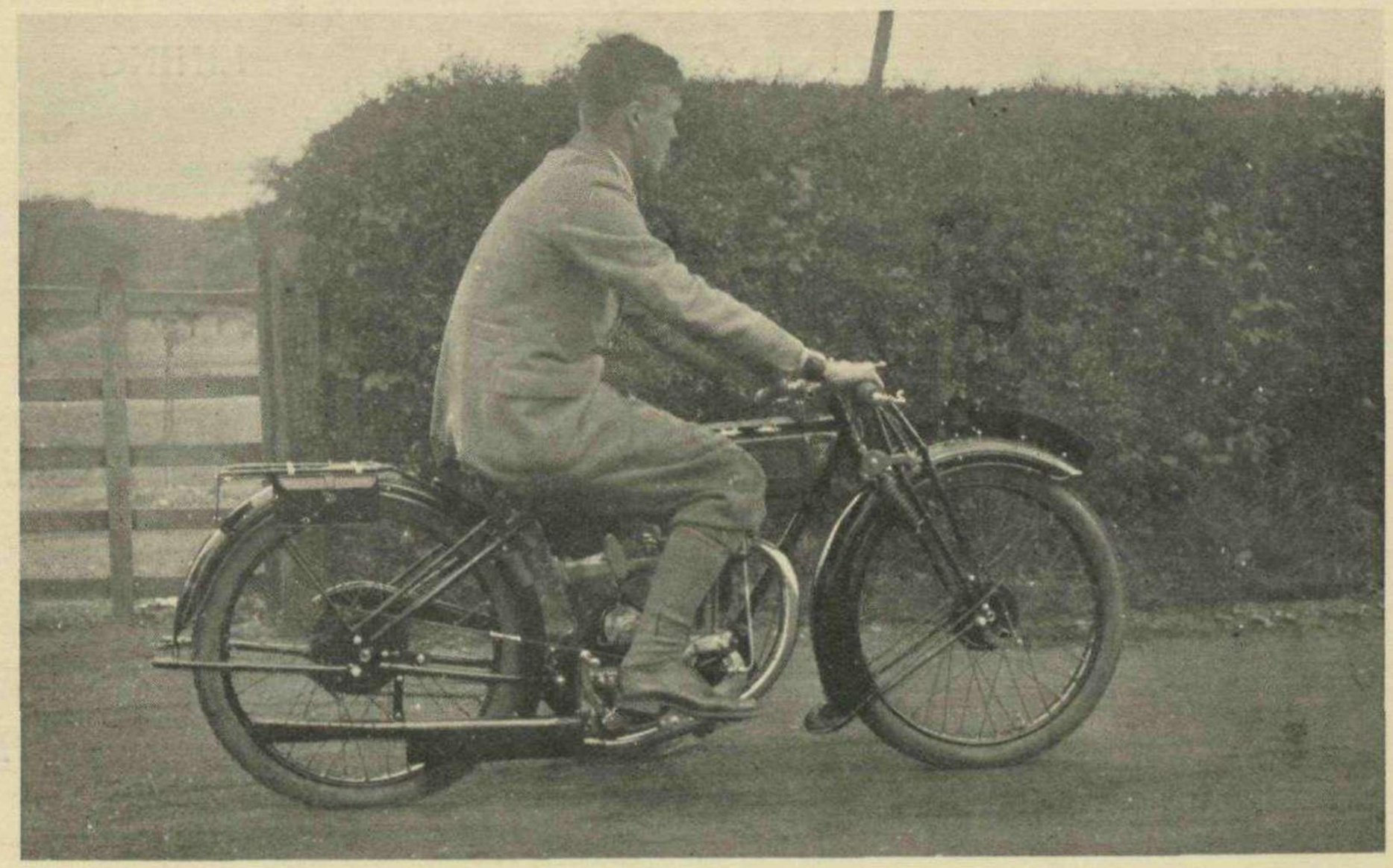
in fact gives a most soothing impression, owing to its silence, docility, easy steering and light controls, so different from the average small sporting machine. The writer can at last almost understand that it is possible to fall asleep on a motor-bike ; now that he has ridden the Enfield.

Both internal expanding brakes are powerful (the previous paragraph must not cause readers to forget that the Royal Enfield is fast, and needs good brakes), but the rear one must be treated with respect if it is desired to apply the brake smoothly. The pedal for the rear brake is rather high above the footrest for comfortable operation, but this could easily be altered by the owner if the makers do not change it in the near future.

The machine in question was fairly new, and as it was driven rather fast, the oil supply necessary proved rather excessive for the sparking plug, when slow running was indulged in. Towards the end of our test the oil supply was cut down, and there was no repetition of our only involuntary stops, due to oiled plugs. Under the circumstances no check was made of the oil consumption, but the Enfield covered approximately 90–100 miles to the gallon of petrol, which is quite satisfactory for a sports machine, driven fairly fast. At one period of our test the overhead valve gear developed a squeak, which was traced to the cups on the push rod ends. The rockers themselves are provided with grease cups, but there is no positive means of lubricating or retaining lubrication at the point mentioned, though frequent oiling cures the trouble.

In conclusion, the Enfield is one of the best finished and most pleasant machines to handle that we have ever come across, and at £50 represents really remarkable value for money, since there is nothing shoddy or "mass produced" about the machine or its accessories.

At the conclusion of our test the machine was running better than ever, and apart from the oiled plug episode, the tools were never touched.



A Comfortable Riding Position is a Feature of the Royal Enfield.

T. T. TIT-BITS.

The return of the Rudge to the T.T. Races is very welcome, though it is a pity that the entries are not direct from the factory. This make will always arouse tender memories in the hearts of pre-war motor cyclists, both by reason of its fine performance in the 1913 and 1914 races, and by its being the real forerunner of the modern sports single of good performance. In the 1913 Senior, Rudge-Multi machines at one time stood first, second and third, Abbott eventually finishing second only 5 seconds behind "Tim" Wood, on the Scott, this being the closest finish ever witnessed in the island.

The first week's practising revealed a few surprises, most of the old-timers performed well, but contrary to expectations, the continental riders seemed quite at home on the course. This was particularly true in the case of P. Ghersi, on the Guzzi, whose second lap was accomplished in 39 minutes approximately. Later in the week the Bianchi, 350 c.c. machine, lapped at 62 m.p.h.

A few crashes took place. Roy Charman broke his wrist as did G. Himing, and neither will be able to ride. Alec Bennett showed good form on the Velocette, lapping at 64 m.p.h.

TUNGSTONE'S Original and Reliable basic principles of Design with all parts entirely Machine Constructed and Plates Pasted by Machinery Creates—Electrically and Mechanically—important practical improvements which are based upon the first lead-acid Accumulator invented by Planté in 1859 and improved by Faure—Swan in 1881.

Tungstone (patented) All British Accumulator is practically Foolproof

Originally Designed and entirely Machine Constructed and Plates Machine Pasted on accepted Engineering Principles and Workmanship. Standardization. Interchangeability. Simplicity and Accessibility are applied to all individual parts and Plates which can be removed for inspection.

No Wood Separators used between Plates or in Cells. No Celluloid or Ebonite Containers used.

Each Plate fixed firmly and independently in the Acid resisting Metal Container

High Pressure Die Cast Plates cannot be buckled or short-circuited in service.

Entirely of British Origin and Workmanship

TUNGSTONE
Pure Lead Grid
Accumulator

The Paste by Machinery is Riveted in and through the Lead Grid or Plate.

No sediment space is required or provided in the Acid Proof Metal Container.

Metal Container Lids not sealed. No outside creeping, sweating or spraying of Acid.

Entirely of British Origin and Workmanship.

The only ALL metal portable lead acid Accumulator in the World without Wood or Celluloid—primary causes of many troubles

Robust Machine made Plates permit charge and discharge at continuous high rates with safety. No buckling of Plates. No fire or explosion risks charging above normal rates. No frothing, foaming, or excesive heat. Negligible internal resistance. Sulphation troubles reduced to a minimum. Tungstone Metal Container (patented) die cast in one solid piece, seamless, leakproof. Will outlive many sets of Plates. Practically of everlasting wear. Creates a World's record in High Pressure Die Casting.

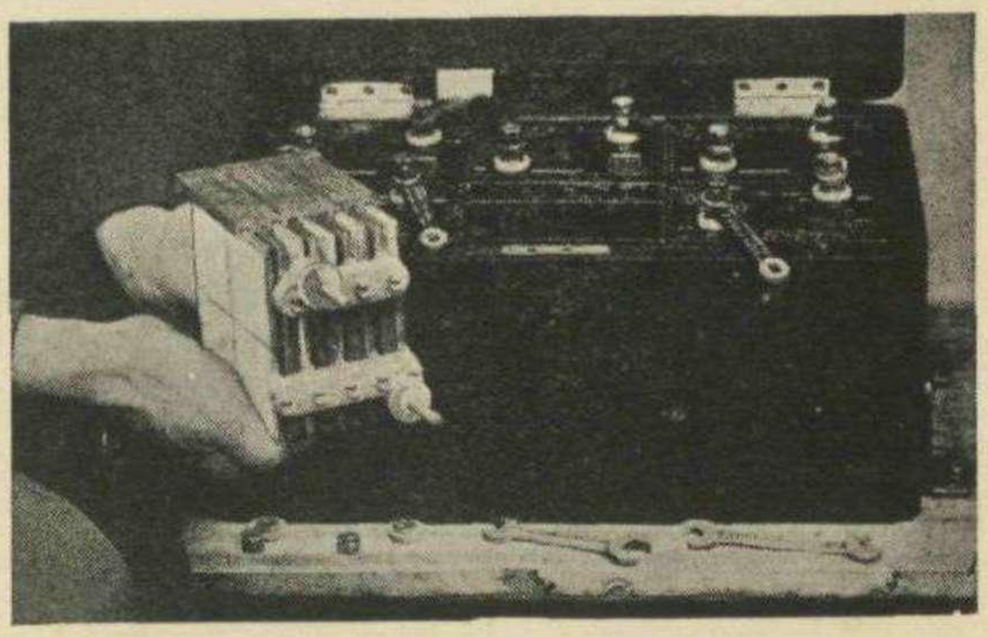
The following letter from an enthusiastic motorist, entirely unknown to us, appeared in the "Daily Sketch," February 12th, 1926:

"I have had a 6-volt battery of this make under a gruelling test on three different types of car during the worst winter weather. It has never failed to start the heaviest engine on a cold morning; it has even driven the car on the self-starter for more than a hundred yards; and other brutal ill-usage, including an accidental short-circuit across the terminals, has failed to impair its efficiency.

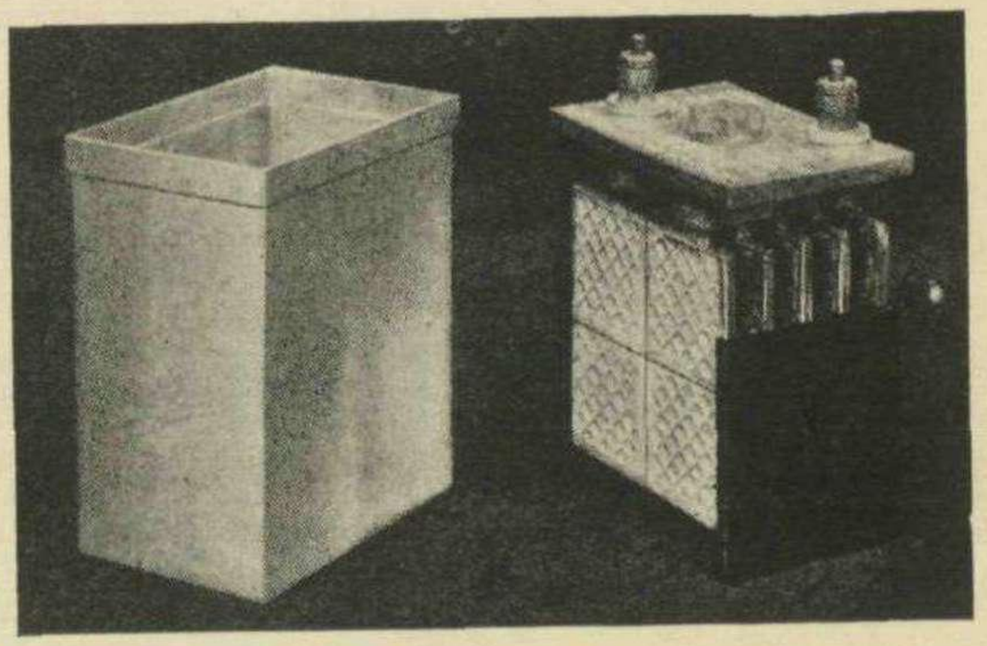
There are many ingenious ideas in the construction of the battery, but its robust performance is what appeals most strongly to the user."

Standard 12 volt Starting, Lighting and Ignition Battery, 9 Plate Cells, 4" × 4", 50 actual amp. hour at 20 hour rate regularly charged by a 12 volt 12 amp. Lucas Dynamo after two years' experimental road work, completed in 10 days 1,600 self-starting tests of a 15.9 engine, including an intermittent series of starts from cold in winter—without previous cranking. During the test the battery was subject at intervals to dead short-circuiting tests by momentarily placing thick copper rods across outer terminals. Plates did not buckle. Battery continued to do work as usual. The Battery was a fixture on Running Board.

Tungstone adopts advanced manufacturing policy selling High or Low Tension Plates Individually or in Batteries in a dry partially charged state.



Nine Plates removed from 2-Volt Cell showing the method of fixture of Bridges to Plates in a close and immovable contact.



Nine Plates resting on Ebonite Plate Spacers which securely and tightly fit into the 2-Volt acid resisting Container shown on left. Ensuring an unhampered flow of the electrolyte. No wood used, creating acid obstruction, internal resistance, excessive heat, possible fire, and permanent acid impurities—the primary causes of many troubles and shortened life of plate. Metal Container can be re-used for many sets of plates.

All Plates after being fully formed are given a first charge partially completed, making them electrically safe, reliable and workable. In this advanced electrical state the risk to Plates getting damaged or their life shortened or creating other first charging troubles are reduced to a minimum. The makers first partial charge can be completed on bench or car. Plates in their dry partially charged condition can be sent through the post to any part of the World without acid or kept in stock for future use.

Apply for Copy, sent post free, 80 page Illustrated Booklet entitled—
"Photography tells the Story of the Tungstone Accumulator."

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Round the Clubs



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Honorary District Agents are appointed by "Motor Sport" to further the interest in the sporting side of motoring and motor cycling.

We give on this page a list of the Honorary District Agents already appointed. Through these Honorary Agents we keep in touch with local events in all parts of the country, and with their co-operation we hope to increase the popularity of motor and motor cycle sport. Honorary District Agents will be pleased, whenever possible, to give assistance to motorists and motor cyclists desirous of taking part in local events.

If you have any difficulty in obtaining "Motor Sport" in your neighbourhood, the nearest Honorary District Agent will inform you how you may obtain it.

SURBITON MOTOR CLUB.

The Club will hold its second Race Meeting of the season at Brooklands on Saturday, June 19th, commencing at 2 o'clock. There will be six events as follows:—

1. Junior Short Handicap, 5½ miles.
2. Junior Long Handicap, 8¼ miles.
3. Lightning Short Handicap, 5½ miles.
4. Lightning Long Handicap, 8¼ miles.
5. All-comers' Handicap (closed event to members of the Surbiton Club), 4 laps.
6. 50 Miles Handicap for Cars up to 3,000 c.c.

Awards for first five events will be silver cups for the winners, and prizes valued according to number of entries for second and third.

A 50-guinea Cup is offered for the winner of event 6, and valuable prizes for 2nd and 3rd.

A limited number of entries only will be accepted for the 50 Mile Race, and those interested should apply at once for entry forms to the Hon. Organiser, F. W. Barnes, Rex House, St. Andrew's Square, Surbiton.

MID-BEDFORDSHIRE MOTOR-CYCLE CLUB.

The above Club recently held a 50-Mile Non-Stop Trial over a semi-sporting course.

Results:—

Silver Medal - - - T. Allen (494 c.c. Triumph).
Bronze Medal - - - S. A. Hunt (498 c.c. A.J.S.).

On July 10th and 11th a 20-Hour Run—the Bedford-York-Bedford—will be held.

Starting at 10 p.m., the outward journey will follow the Great North Road, while the return journey will be made *via* the Peak district.

The entrance fee is 5s., and bronze medals and certificates will be awarded for standard performances.

Four other clubs have been invited, and a large entry is expected.

HONITON MOTOR-CYCLE AND LIGHT CAR CLUB.

The third event of the above Club drew a record entry and proved a huge success. The premier award was the Morrish Challenge Cup, and Club Medal. The course was a double circuit of real "cup" stuff, and its difficulties were added to by heavy rain. Only three men succeeded in completing the course without footing, and the results showed a very small number of awards. The principal observed point was designated "Danes'

ROUND THE CLUBS—continued.

Doings," a long, winding lane nearly a mile in length, with every kind of surface and difficult gradients. The nine observers stationed there had full cards. A secret check at the end of this section on the first circuit proved to be wisely planned. Another point which caused a lot of anxiety was Hayne Water, a splash with very little water, but possessed of an atrocious bottom.

Results were as follows :—

Morrish Challenge Cup.—G. Savage (B.S.A.). Runner-up. R. A. Stickland (Scott); Silver Medals: J. Hann, S. Tremaine, W. J. Wheaton; Bronze Medals: J. Eddy, L. Ellis, F. Knill.

The runner-up actually tied with the winner, both retaining full marks and without time error, but the smaller engine capacity was the deciding factor.

A. C. ROBERTS, " Enfield," King's Road, Honiton.

SALE AND DISTRICT MOTOR CYCLING CLUB.

After several days' heavy rain the trial for the President's Cup was run on Sunday, April 18th. Nearly thirty riders faced the starter and were sent away at minute intervals. The first toll was taken at a Colonial section called Spuley, which was literally a sea of mud. So bad was the going that by the time Taxal, the first hill, was reached, 40 per cent. of the entry had retired.

Performances on Taxal varied, but the palm must be given to H. Wheeldon (490 H.R.D.), for his sure and steady climb. G. Twyford (490 James) failed twice, as did H. Desborough (349 B.S.A.). A failure by G. Astbury (499 Ariel) was also unexpected. More arduous going followed to the lunch stop at Buxton, where an hour and a half's respite was allowed. Three miles from lunch came the tit-bit of the day :

This was Blackamill Hill, a long rough but not too steep rise sheer from the river bank. The severity of this terror can be gauged from the fact that the entire band of survivors failed. H. Wheeldon and G. Astbury made gallant attempts, the latter no doubt aided by the special tyre he had fitted on the back wheel.

Three more observed hills and a straight run home brought the tired competitors back to Sale Hotel and the finish.

PROVISIONAL RESULTS.

President's Cup	H. Wheeldon (490 H.R.D.)
W. E. Hill's Cup	J. H. Thomason (349 Rudge Sc.)
Gold Medal	G. Astbury (499 Ariel)
Silver Medal	P. G. Thomason (499 Triumph).
Bronze Medal	T. Ward (348 Douglas).

The Hon. Secretary's address is:—Mr. N. S. Smith, 6, Springfield, Sale, Cheshire.

The recent Chairman's Cup Trial started from the Sale Hotel; the course led *via* Styal and Wilmslow to Bollington, where the competitors were led by devious routes to Kettleshulme. During the next seven miles competitors had to traverse three observed hills, a non-stop section, and a time check. On the first (christened " Sphairlyesy ") the only two competitors to lose any marks were—

17, T. Galway (499 Rudge), who footed; and
19, G. Roscoe (249 Velocette), who balanced;

the remainder went up quite easily.

After passing " Goldsgon Farmhouse," what proved to be the worst hill of the day was encountered—" Upushit Bank "—which accounted for the loss of 20 marks to many competitors.

Two Famous Miniature Racers for Sale

90 m.p.h. Winner of 200 MILES RACE.

SPECIAL CUP MODEL AUSTIN 7 SPORTS £185.

THESE cars are two of the famous Racing Austins designed by E. C. Gordon England, which are making small-car history.

They have both done 90 m.p.h. and lapped at 85 m.p.h.

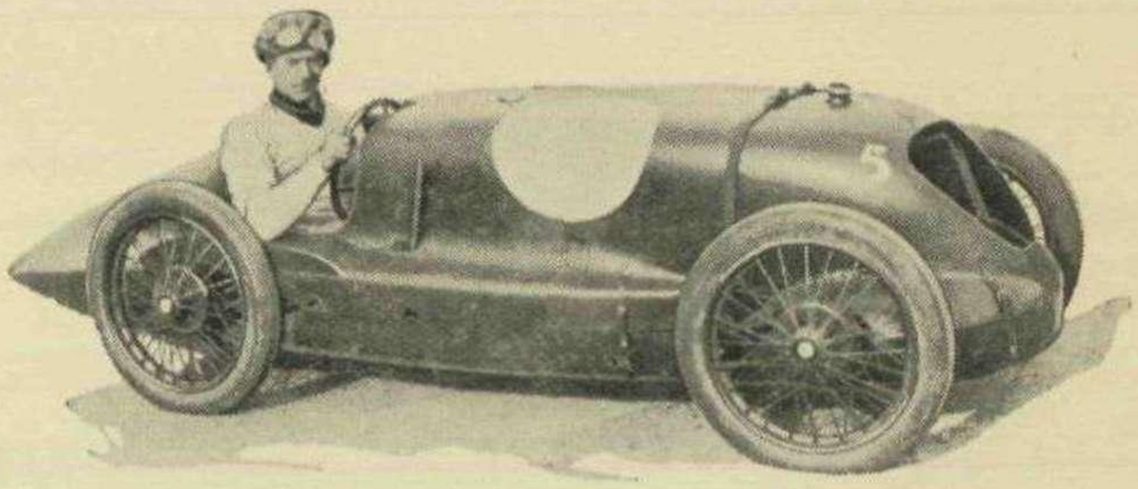
They have won several firsts at Brooklands Meetings, including the 200 Miles Race, 1924 and 1925, and a large number of records up to 100 miles.

First in the Cyclecar Grand Prix de France, 1924, and have established records for 500 miles and 6 hours at Montlhery.

Both cars have exceptionally large brakes fully compensated, the very low seating position and underslung main tanks make very fast cornering possible, and give amazing stability at high speed on the track. Both cars guaranteed in first-class mechanical condition throughout and perfectly tuned for this season's work.

Fuller particulars, or inspection, any time by arrangement.

Price - £295 Each



Get your Standard Austin 7, £149, from the Experts.

GORDON ENGLAND LTD.,

THE AUSTIN SPECIALISTS,

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(50 *paces from Bond Street Tube*). *Telephones : Mayfair* 6378-9.

ROUND THE CLUBS—continued.

After passing the time check—the position of which at the top of this hill caused nearly all the competitors to lose marks—only three at this point preserved clean sheets :—

7, J. H Thomason (346 Rudge Sc.) ; 9, G. Astbury (497 Ariel) ; 16, H. W. Desborough (349 B.S.A.)

From the open check second-class roads led to Beeston Mount (re-christened "Beestovamount") *via* Pott Shrigley ; and owing to the wind having dried the surface somewhat did not live up to its name. Incidents noted, however, were the fast and steady climbs of J. B. Donaldson, P. G. Thomason, G. Astbury, H. Wood, T. Ward, S. W. Heywood, and H. W. Desborough. Of the sidecars, J. H. Thomason climbed well, but not so well or fast as M. Gavson (346 New Imperial Sc.) who rather startled the locals who had assembled on the hill to see the fun. V. Rocca here charged the wall and dislodged a number of stones, much to the amusement of the aforesaid locals ; he also baulked J. Walton, who returned to the foot, and climbed with the loss of 10 marks for balancing.

More second (and third) class roads led to "Sphairlyard," which, however, gave no trouble, and competitors finally arrived at Rudyard for the lunch check, where several were found wanting when asked to produce their watches, one or two being checked 20 minutes late !

Ravensclough was the next hill, and owing to overhanging trees the surface had not dried thoroughly, and one patch of mud cost H. W. Desborough and A. L. Richardson 10 marks each.

Mow Cop was taken by coming down New Mow Cop, and a left hairpin on to the steepest part of the old hill. This did not trouble those who took it slowly, and the observer went home with practically an empty book. Main roads, and an uneventful tea check taken at the "Angel Hotel," Knutsford, finished the day at the Sale Hotel, at 6.30, where the results given below were announced a few mintues after the arrival of the lastman.

Award.	*Won by*	*Marks lost*
Chairman's Cup	G. Astbury (497 Ariel) - - - -	Nil
Gold Medal - -	P. G. Thomason (494 Triumph) - -	27½
Silver Medal -	M. Gavson (346 New Imperial Sc.) - -	35
Bronze Medal	H. Wood (499 Triumph) - - - -	42½

Best performance by a Passenger Machine : J. H. Thomason—25

OXFORD MOTOR CLUB.

On May 20th a Tennis Tournament was held at the Hotel Beau Regard, Shillingford. The winners were Miss Ward and Mr. L. A. Welch. In the evening a Dance was held at the hotel.

On May 22nd a Motor Cycle Football Match took place between this Club and the Reading Motor Club at South Park, Headington, in connection with the British Legion Fete, resulting in a win for Reading by three goals to two, after an exciting game.

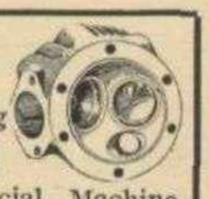
The Oxford Motor Club are again entering a team in the Maudes Amateur Inter-Club Team Trial to be held on June 5th.

A Golf Section is being organized in connection with this Club, and the first match is fixed for June 5th ; all members who replied to recent letters sent out with regard to this section will receive particulars in a few days.

Hon. Secretary, W. Mathews, 6, St. Aldate's, Oxford.

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