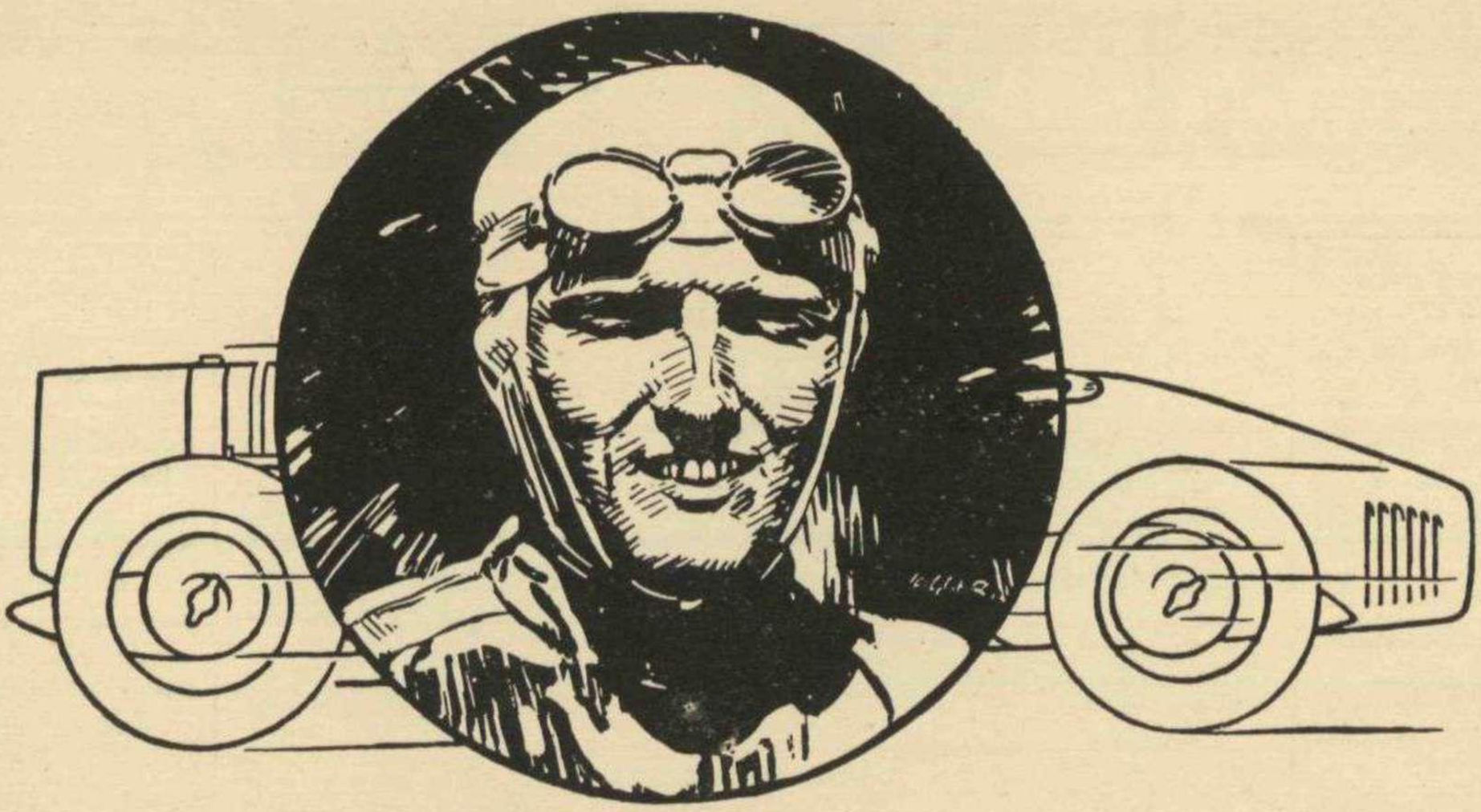


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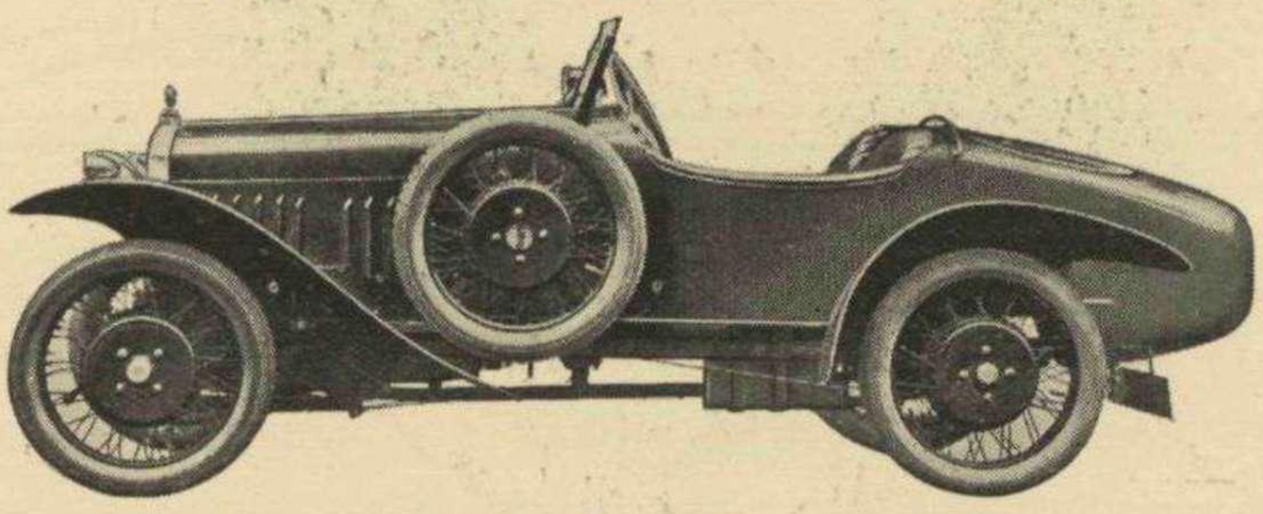
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No. 6. VOL. 3.

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

DECEMBER, 1926.

EDITORIAL NOTES.

Ramblings, Rumours and Reminiscences.

Being Asides About All Sorts of Things.

A WEEK or so since we were reminded that thirty years ago the motorists of this country received their charter of liberty and that henceforth they might go their ways without being preceded by a man on foot carrying a red flag. Therefore on November 14, 1896, the progressive advance in legislation was celebrated by what was termed the Emancipation Day procession from London to Brighton. Now we rejoice to think that we are blessed by a far more progressive body of legislators, for has not the Speed Limit been raised from twelve to *twenty* miles an hour.

Personally I have the greatest respect for our law-makers, but seem to think that there is something wrong somewhere. For example, only a little while ago I was laboriously making my way to a county police court on a stuttering little 10 h.p. two-seater to keep an urgent appointment with the Bench. There was a honk-honk from the rear, and before I could collect my thoughts—I had been wondering what sort of defence I should put up—a whacking great Daimler glided smoothly by at a good fifty.

It was as much as I could do to keep up with it for the next few miles, and then we both slowed down on approaching my destination. A constable on point duty saluted the Daimler and glared at me, for the occupant of the saloon was the Chairman of the Magistrates, who half an hour later relieved me of five of the very best pound notes I had ever earned—and for doing far less than His Worship did every day of the week.

* * *

Writing of magistrates reminds me of another worthy, before whom I was haled for some offence or other. Now, as it happened, this gentleman owned a very antiquated Panhard, which I was repairing at the time. It was a sort of dog-cart affair of the *dos-a-dos* variety, and when riding in the back seats the passengers let down a flap on which their feet rested. Mr. Magistrate came down to the works and I took him out on a trial run to see if we had got all the bits of machinery back properly again.

Now, the rear identification number was painted on the flap, and I managed to forget to fix it up before starting. The owner took the wheel, and yielding to my selection of a test route, drove the car through the thickest part of the town to a point where there was an extra officious police sergeant. My luck was in, and Mr. Magistrate was stopped for not having a rear number showing, and duly had the pleasure of fining himself. A year later I sold him a new car and then pointed out the advantages of the number plate arrangement and confessed to my wickedness. Though the joke was against him, he was forgiving enough to appreciate the humour of the situation, and we parted on the very best of terms.

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EDITORIAL NOTES—continued.

A very important case was recently heard before the Court of Appeal, presided over by the Lord Chief Justice, Mr. Justice Avory and Mr. Justice Salter. Judgment had been give against a Cardiff motor-cyclist on the grounds that a motor-cycle fitted with a hand and foot brake applying separate shoes in the same brake drum did not comply with the Motor Car (Use and Construction) Order of 1904.

This judgment was reversed in the Court of Appeal, when the judges held that the brake drum must be regarded as a part of the wheel and not a part of the brake mechanism, but qualified this conclusion with "diffidence and reluctance."

The importance of the case lies in the fact that had the decision gone the other way, we might have found ourselves in the predicament of having to alter most of the existing systems of four-wheel brakes, for it might be held that since the system included only one compensator, there was only one brake! The whole position appears to point out that a very little knowledge, backed up by a literal interpretation of antiquated regulations, is quite a dangerous thing, and we are reminded of the state of affairs existing with regard to the licensing conditions of public vehicles, where policemen have the authority to condemn any machine for use as a taxi or omnibus, in which the design does not happen to agree with regulations framed by people with no engineering experience whatever.

* * *

One of the most ingenious examples of brake design is that known as the Andre-Len servo brake, which was exhibited by T. B. Andre & Co. Ltd. at Olympia. The idea is so simple and effective that one wonders how on earth it was not thought of years ago, for it produces quite a remarkable servo action by an extremely simple alteration to the actuating mechanism of an ordinary brake. In the case of an ordinary cam applied brake, one shoe tends to pull round against the pivot, thus increasing the contact between it and the drum, whilst the tendency for the opposite shoe is to pull round in the direction of the drum rotation and thus exert a pressure on the edge of the cam, which tends to pull the brake off. In the Andre-Len system, the shoe which normally has a counter servo action is replaced by one of a modified form, the action of which actually increases the efficiency of the brake. This is done by making the shoe in two parts, the inner portion of which is fitted in the usual way, but the outer part is mounted on rollers and is free to rotate within certain limits. Thus, when the brake is applied, the free portion of the shoe follows the direction of the drum and its end comes into contact with the edge of the cam in such a way that the pressure applied by the lever is considerably increased, by a genuine servo action.

I understand that arrangements are being made to supply the new device to fit a wide range of cars, and that full particulars with prices will be issued shortly.

* * *

A great deal of interest is being shown in connection with the proposed race track near Brighton, and from all accounts, the project should be most successful. For some reason or other, the Brooklands track has never quite caught on with the general public, many of whom are not greatly intrigued with the idea of watching cars spinning round and round in the far distance. Of course, the introduction of artificial hairpin bends and similar efforts to excite the spectators have proved an undoubted advantage, but on the whole it seems a pity that such a wonderful place should have been allowed to rank as a very poor attraction compared with, say, some of the racecourses or football grounds.

From such particulars as are available at the moment it appears that the Brighton track will offer quite a number of interesting features, and I learned the other day during a visit to the sight that one very prominent racing driver has stated that in his opinion the course will be eminently suitable as a venue both for forthcoming Two Hundred Miles races and British Grand Prix races, to say nothing of innumerable events of the ordinary kind. It is refreshing also to observe that in the Sussex area we have a large body of very keen sporting motorists and this, coupled with the natural advantages of the site on the Downs, should certainly make for an outstanding success.

* * *

The problem of Christmas presents is again before us, and raids are now being made on the shops where these articles are sold. Every year a great deal of money is expended in the purchase of calendars, ash-trays and things of a nondescript character coming under the vague category of "Xmas Gifts." These things are invariably described by the happy recipients as "Just the very thing I wanted," and everyone wonders where on earth the junk can be housed.

Christmas in modern times has largely degenerated into a festival of indigestion and a transfer of useless articles from one member of the family to another, but it always seems that the ancient habit of making gifts could be much improved if the motoring interests of the community were more closely borne in mind. For example, there are numbers of accessories of all kinds that could take the place of the usually useless gift, for there are few motorists to whom some addition either for the car, the garage, or the driver is not very acceptable. Anyhow, if our readers have not already done their Christmas shopping, the hint is one that is well worth putting into practice.

* * *

ANOTHER FRAZER NASH RECORD.

Just before the closing of the Brooklands Track for the season, Capt. A. Frazer Nash was successful in putting up a new record for the Class G standing mile. This is for cars up to 1,100 c.c. capacity, and consequently the engine of the Frazer Nash had to be modified to bring it within the category. The new record now stands at 71.12 m.p.h.

RALPH DE PALMA.

After a long and varied experience as a road and track racer, Ralph de Palma has recently taken up an appointment as consulting engineer to the Studebaker Corporation of America.

LEADING MOTOR CLUBS.

No. 2.—The Southport Motor Club.



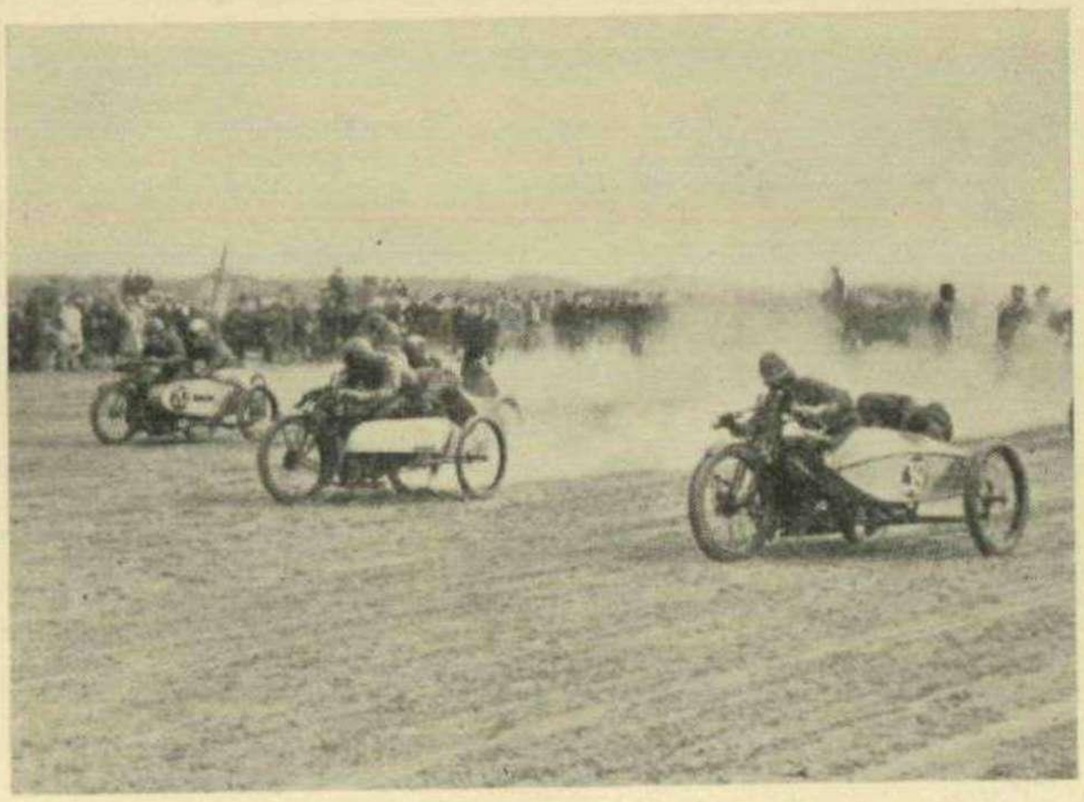
SOUTHPORT RACES USUALLY ATTRACT GOOD ENTRIES.

THIS month we present to our readers another famous club—The Southport Motor British Beach Racing Club. Few indeed, if any of us, are not aware of the activities of this club as pioneers of Sand Racing, and to-day it stands at the forefront of this particular branch of the racing world. However, our readers will, probably, be surprised to find that Southport's races date back to the end of last century, so that in 1903, four years before Brooklands was built, we find that the Southport entry list included names of pioneers now famous, and some even " household ", such as S. F. Edge, The Hon. C. S. Rolls, Harvey du Cros, Sam Wright, Professor Hele-Shaw, Tessier, Bert Yates, Herbert Austin (now Sir Herbert), Syd Girling, Capt. Rawlinson, — Siddeley, Dorothy Levitt, and Eli Clarke are among the English list, whilst continental names are in profusion— D. Citroen, Barush-Blakey, Marquis de Moe, C. Gomez, B. L. Hockenheimer, M. A. Rosenheim. Among the local names which appeared were George Masters (now V.C.) who rode a Bamber motor cycle, Leonard Williamson, who drove a 16 h.p. Lanchester, and T. Hampson on a Vulcan, a car at that time manufactured by himself and his two brothers. Reviewing the meeting in 1903, the " Automotor Journal " predicted an excellent day's " sport " from the 188 motor cars and cycles. The meetings continued but as with so many clubs, interest flagged until the ' great argument ' in 1914 brought all racing to an end.

1919 saw the revival with the present club, and in 1920 an extremely good meeting was held, though this was unfortunately brought to an untimely end by a terrific thunderstorm, a few of the sidecar classes having to be abandoned. We now find more famous men from present day figures, Victor Horsman, George Cowley, Jim Whalley and Brockbank, being more of the ' world's best ' who made their debut at Southport.

Long Distance Races.

In 1922 the first long distance races were held, being over 10 miles, the course consisting of two mile laps with hairpin bends, and in 1923 these were increased to 50 miles; these ' fifties ' are now world famous and the starters always number more than 50 machines, and more often than not over 70 entries are received. In 1924 the club made further progress and the Home Office ban on road races put the club in a most favourable position,



SIDECAR RACING, ANOTHER OF SOUTHPORT'S ATTRACTIONS.

LEADING MOTOR CLUBS—continued.

of which every advantage was taken. The car events in the club's programme began to assume an added importance and a line of twelve starting at once afforded no special excitement, so common did it become. Here, one might mention that massed starts are the rule at all Southport's events—all the entrants starting together at the fall of the flag—such starts are most impressive and produce ' real racing ' for the spectators, as of course, the first past the finishing post wins.

Southport's records are 188 entrants for one meeting and over 60,000 spectators—no mean achievement. The prizes for last season's speed trials (1925) totalled over £380, and some £300 worth of challenge trophies were also presented.



THE MASSED START OF A 50-MILE RACE IS A THRILLING SPECTACLE, WHILE THE SANDHILLS FORM A NATURAL GRANDSTAND.

Famous men who made their initial acquaintance with racing at Southport during the past three or four years are almost too numerous to mention. One's mind reflects on such men as Searle, the Davenport brothers, the Welsbys, Hudson, Patchett, Hanford-Stevens amongst others, whilst the car exponents include the famous Davenport-Spider combination, Miss May Cunliffe, Geoffrey Farrie, C. M. Needham, G. J. Jackson and H. F. Clay, indeed one would have difficulty in naming any prominent racing man who has not competed in Southport's events.

Record Speeds.

During 1926 the club advanced still further when Segrave, after participating during two seasons in the club's race meetings, chose Southport for the successful attempt on world's records with the 12-cylinder Sunbeam.

The Southport Club is fortunate in having the lease of a private shore, not under the jurisdiction of the Board of Trade. The Club thus possesses the finest and the longest stretch of sand available for racing in Europe if not in the world. According to such men as Segrave, Jack Barclay, Parry-Thomas and others the Southport Beach is the fastest and also the safest course in this country.

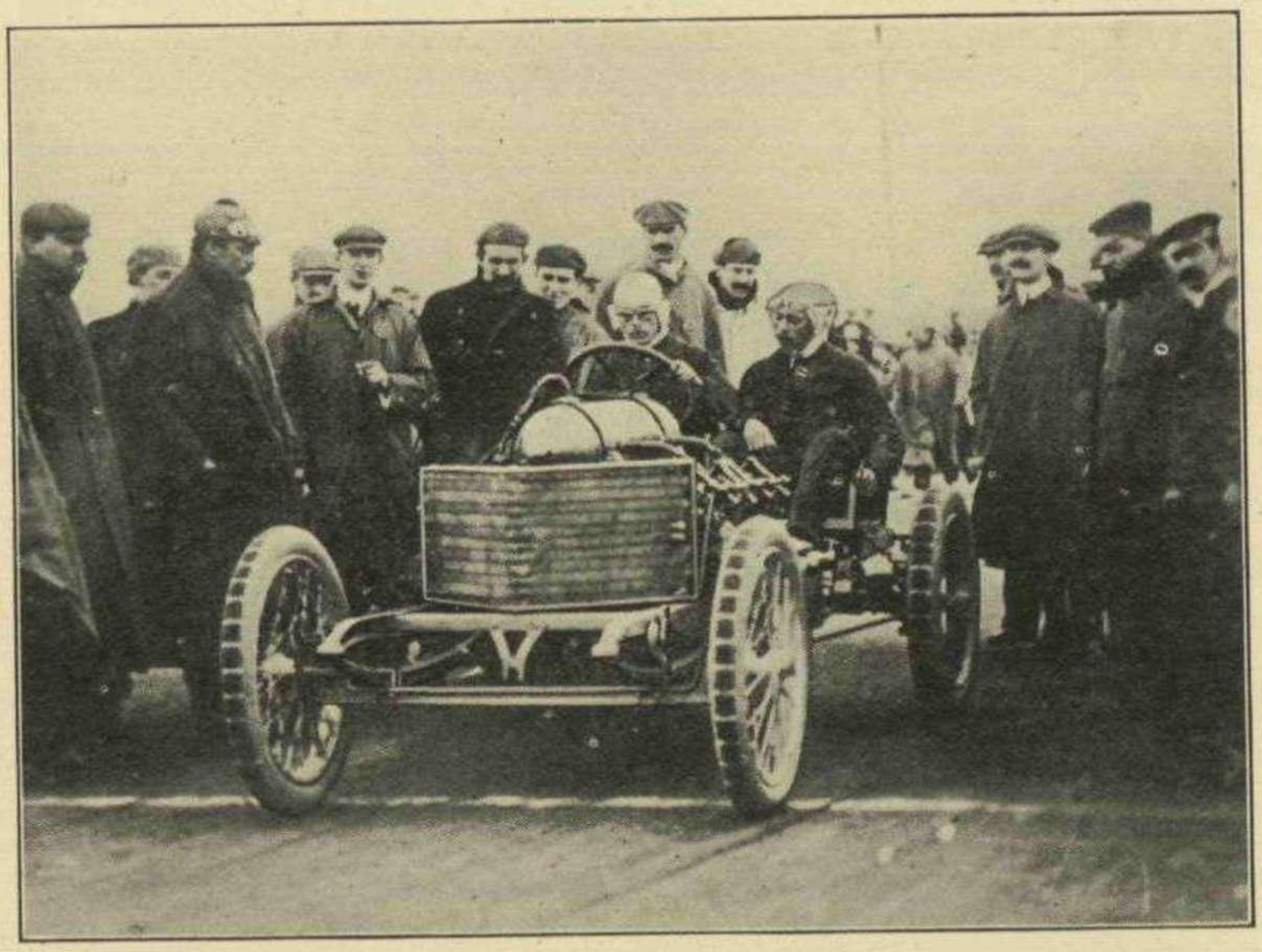
The same year Southport members were the majority of the Amateur T.T. entrants, and they were also profusely represented in the finishers in all three T.T. races. It is doubtful if any club can present a more distinguished list of members, and there is little doubt that they deserve that proud position.

For the past two years no stone has been left unturned by their active and courteous Hon. Secretary, Mr. T. H. Halsall, and we wonder how they will manage without him next year, an efficient organiser and as successful at self effacement as he is at organisation. The Club's Hon. Treasurer, Mr. D. Burns, is one of its oldest members and has always been a staunch supporter.

Next Season's Activities.

The club's programme for next year is now complete and comprehensive, opening on January 8th with a race meeting, followed by the annual dinner and dance. In February Parry-Thomas is to go for his 200 m.p.h. and

LEADING MOTOR CLUBS—continued.



ONE OF THE EARLIEST COMPETITORS AT SOUTHPORT WAS THE OLD 200 H.P. DARRACQ.

will attempt the kilo, mile, 5 kilo, 5 mile, and possibly the 10 miles world's records. His attempt will probably be followed by Segrave on the 950 h.p. Sunbeam in March or April. Other race meetings are on March 12th, April 9th, May 7th, August 20th, October 22nd, with a day for cars only on June 4th, and the championship meeting on September 17th.

Our review would be incomplete if we failed to mention the Reliability side of this club, although there is no doubt that the speed side tends to eclipse the other. Four trials a year are held, and of these the Coast-to-Coast is the important event, and is held each year on the 26th and 27th of December, usually running to Scarborough and back. The entries for the other events leave much to be desired, due in no small measure to the social and other amenities of a resort like Southport.

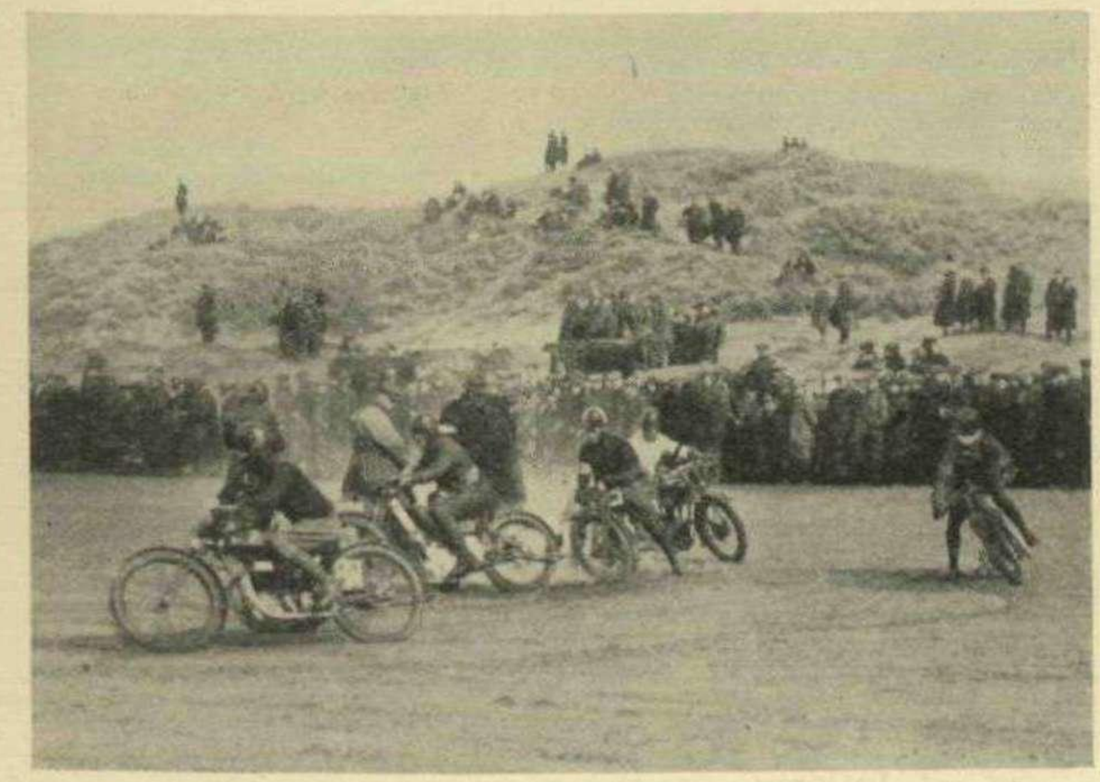
W. S. T.

MOTOR CYCLE RACING IN SOUTH AFRICA.

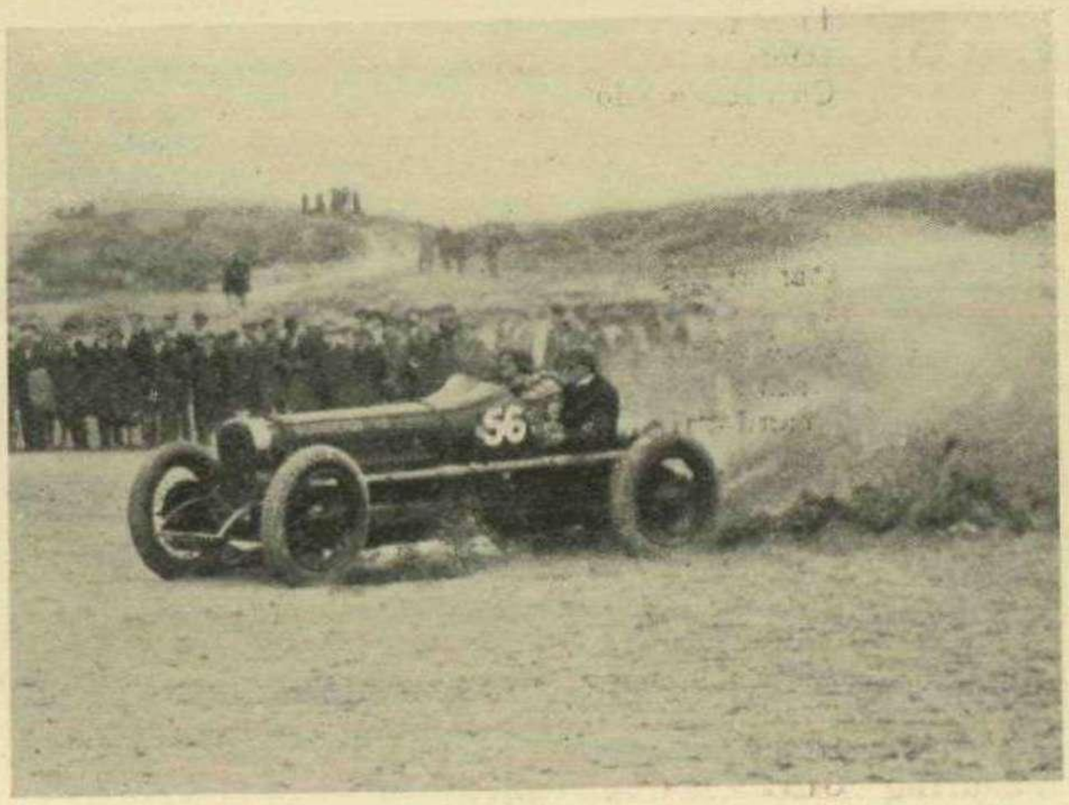
Those T.T. riders who complain of an occasional sheep on the mountain, or of a stray dog in the neighbourhood of Bray Hill, will read with interest the difficulties which beset riders in the recent Pretoria-Nylstroom and back race.

The event was of a handicap nature, 160 miles in length, and was won, on both time and handicap, by C. E. Turner on a $2\frac{3}{4}$ h.p. Raleigh. In a previous event Turner had crashed into a *mounted policeman*—a more formidable object, surely, than all the Snaefell sheep!—and was far from fit for the race. However, he won in the record time of 3 hours 19 minutes, despite several delays on the road due to the traffic and wandering cattle. The third man, also on a Raleigh, tried conclusions with a barbed wire fence—and lost time in consequence.

Motor-cycle racing in the Isle of Man may be considered dangerous, but it is surely a "safety first" pastime as compared with that in the Colonies.



ALL STYLES OF CORNERING ARE SEEN AT SOUTHPORT.



A WELL-KNOWN COMPETITOR CREATING A MINIATURE SANDSTORM.

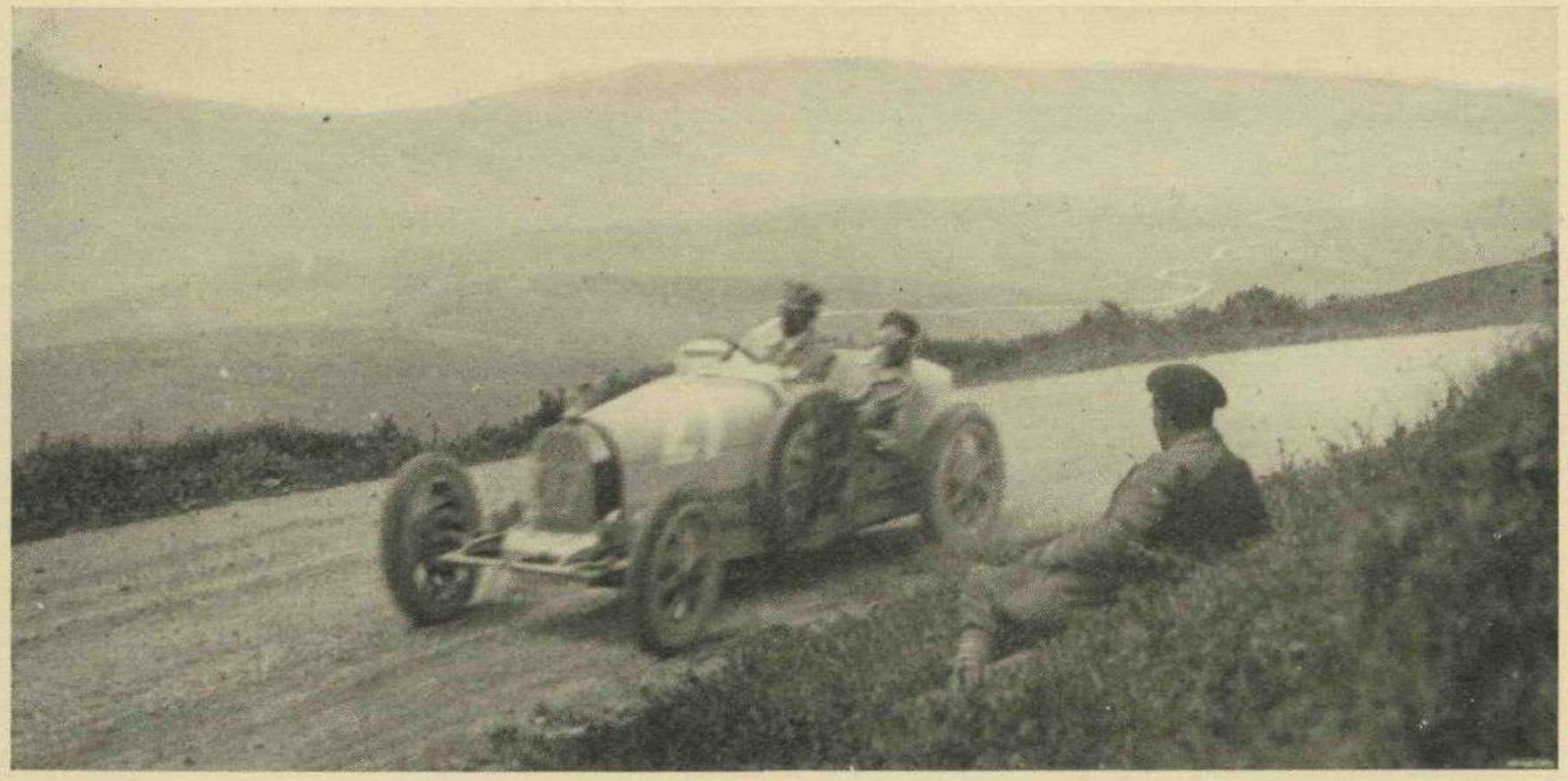
Tabulated Results of Important Races in 1926.

Date.	Event.	Place.	First.	Second.	Third.	Distance in Miles.	Winner's Time.	Winner's Average in m.p.h.
March 28.	Grand Prix de Provence	Miramas	Segrave (Darracq)	Moriceau (Darracq)	Williams (Bugatti)	155.6	1h. 55m. 33-5s.	81.8
March 28	Grand Prix de Rome	Rome	Maggi (Bugatti)	Brilli-Peri (Alfa-Romeo)	Bonmartini (Alfa-Romeo)	187.5	3h. 1m. 25s.	61.8
April 28	Targa Florio	Madonie, Sicily	Costantini (Bugatti)	Minoia (Bugatti)	Goux (Bugatti)	335	7h. 20m. 45s.	45.6
May 23-24	Bol d'Or Race	St. Germain	Senéchal (Senéchal)	Sandford (Sandford)	Marguerite (Sandford)	1205.86	24h.	50.2
May 30.	Grand Prix d'Alsace	Strasbourg	Dubonnet (Bugatti)	Maggi (Bugatti)	P. de Vizcaya (Bugatti)	288.7	4h. 22m. 52s.	72.5
May 31	Indianapolis 500	Indianapolis	Lockhart (Miller)	Hartz (Miller)	Woodbury (Boyle)	400	4h. 15m. 19s.	94
June 12-13	Grand Prix d'Endurance	le Mans	Bloch-Rossignol (Lorraine-Dietrich)	de Courcelles-Mongin (Lorraine Dietrich)	Stalter-Brisson (Lorraine-Dietrich)	1585.99	24h.	66.49
June 27	Grand Prix de l'A.C.F.	Miramas	Goux (Bugatti)	Costantini (Bugatti)	—	312.5	4h. 38m. 43s.	68
June 27	Grand Prix des Voiturettes 1100c.c.	Miramas	Casse (Salmson)	Geudrot (Salmson)	Gubernatis (B.N.C.)	159.2	2h. 25m. 50s.	65
June 27	Grand Prix des Voiturettes 750 c.c.	Miramas	Zubiaga (Austin)	Berthe (Octo)	—	127.4	2h. 31m. 20s.	50.2
June 27	Grand Prix des Voiturettes 500c.c.	Miramas	Enders-Jack (Sima-Violet)	Stanton (Sima-Violet)	—	101.9	2h.17m. 36 4-5s.	44.2
July 3-4	Grand Prix de Belgique	Spa	Boillot-Rigal (Peugeot)	Diels-Caerels (Excelsior)	Georges-de Grady (F.N.) Lagache-Léonard (Chenard-Walcker) exacquo	1425.5	24h.	59.4
July 10	German Grand Prix	Avus Track, Berlin	Caracciola (Mercédès)	Ricken (N.A.G.)	Aeer (Alfa-Romeo)	245	2h. 54m. 17s.	84.4
July 18	European Grand Prix	San Sebastian	Goux (Bugatti)	Bourlier & Senéchal (Delage)	Costantini (Bugatti)	484	6h. 51m. 52s.	70.5
July 22	Spanish Grand Prix (Touring)	San Sebastian	Léonard-Manso (Chenard-Walcker)	Lagache-Pisart (Chenard-Walcker)	Minoia-Morandi (O.M.)	773.8	12h.	64.48
July 25	Spanish Grand Prix	San Sebastian	Costantini (Bugatti)	Goux (Bugatti)	Wagner-Benoist (Delage)	374.5	5h. 35m. 47s.	76.8
August 7	British Grand Prix	Brooklands	Senéchal-Wagner (Delage)	Campbell (Bugatti)	Benoist-Dubonnet Delage)	287	4h. 0m. 56s.	71.61
August 28	Grand Prix de Boulogne 1500 c.c.	Boulogne	Eyston (Bugatti)	Violet (Sima-Violet)	—	278.6	4h. 20m. 43s.	64.13
August 28	Grand Prix de Boulogne 1100 c.c.	Boulogne	Bourdon (Salmson)	Newman (Salmson)	Ivanouski (Ratier)	278.6	4h. 28m. 4 3-5s.	62.37
August 29	Georges Boillot Cup Race	Boulogne	Lagache (Chenard-Walcker)	Léonard (Chenard-Walcker)	de Zuniga (Chenard-Walcker)	371.5	5h.54m.52 3-5s.	65.45
September 5	Italian Grand Prix	Monza	" Sabipa " (Bugatti)	Costantini (Bugatti)	—	372	4h. 20m. 29s.	85.87
September 5	Italian Light Car Grand Prix 1100 c.c.	Monza	Morel (Amilcar)	Duray (Amilcar)	de Joncy (B.N.C.)	248.5	3h. 0m. 32s.	82.6
Sept. 11-12	Italian Touring Grand Prix	Monza	Boillot (Peugeot)	Rigal (Peugeot)	Dosio (O.M.)	1616.7	24h.	67.7
September 12	Grand Prix de Milan	Monza	Costantini (Bugatti)	Goux (Bugatti)	Farinotti (Bugatti)	248.5	2h. 36m. 18s.	95.4
September 25	200 Miles Race 1500 c.c.	Brooklands	Segrave (Talbot)	Divo (Talbot)	Purdy (Bugatti)	200	2h.40m.22 1-5s.	75.56
September 25	200 Miles Race 1100 c.c.	Brooklands	Martin (Amilcar)	Duray (Amilcar)	Morel (Amilcar)	200	3h. 1m. 50s.	66.65
September 25	200 Miles Race 750 c.c.	Brooklands	England (Austin)	Hendy (Austin)	—	200	3h. 27m. 56s.	58.28
October 17	Grand Prix du Salon 1500 c.c.	Montlhèry	Divo (Talbot)	Segrave (Talbot)	Moriceau (Talbot)		1h. 50m. 1 3-5s.	62.6
October 17	Grand Prix du Salon 1100 c.c.	Montlhèry	Duray (Amilcar)	Perrot (Salmson)	Sandford (Sandford)		54m. 12 3-5s.	

MOTOR RACING IN 1926.

A Review of the more Important Events of the Past Year.

By E. K. H. KARSLAKE.



BUGATTI HAS PROVED "CHAMPION OF THE WORLD" FOR 1926.
HERE IS COSTANTINI WINNING THE TARGA FLORIO.

TO most English motor racing enthusiasts, the memory of the year 1926 will remain distinctly paradoxical, for while it marked the first Grand Prix race ever to be run in England, the great continental events of the year received a very poor measure of support. Objections to the rules which govern the big international events, as well as unpreparedness with their new 1½ litre racers, unfortunately caused many of those manufacturers, whom one is accustomed to see in Grand Prix races, being absent from the starting line.

The prospects for the year seemed bright enough. In France Delage, Talbot, Bugatti and Sima-Violet were known to have sets of entirely new 1500 c.c. racers. In Italy everyone was talking of the long expected 1½ litre Fiats, with 6 opposed-piston cylinders working on the 2-stroke principle, which were said to be capable of 11,000 r.p.m., and only to be going to "rev." normally at 5,000. Then Itala had a set of 12-cylinder front wheel drive cars on the stocks, and a team of straight-eight racers might be expected from the O.M. factory at Brescia; not to mention the rumours which were current concerning other famous Italian firms. For one reason or another, however, many of these cars were delayed, and none of the Italians have appeared during the year, while the Talbots have only shown their best form at the very end of the season.

The Championship of the World Races.

The first round for the championship of the world was, as usual, the 500 miles race at Indianapolis. The race attracted 39 entries, including 3 Guyots, 2 Eldridges and a Bugatti from Europe, and gave every promise of being its usual success. Unfortunately, however, the race, whilch was run off on May 31st, was entirely spoilt by rain. The track became so slippery, and the drivers had such difficulty in seeing, that the officials decided to call the race off at 400 miles. At this distance, a Miller special driven by a young and comparatively unknown driver, Frank Lockhart, was leading, and was followed home by Harry Hartz, also on a Miller, with C. Woodbury (Boyle Special) third.

The most unfortunate event of the year was undoubtedly the French Grand Prix. In 1925 this event left the public highway—its traditional setting—to be run on the specially prepared track-and-road circuit at Montlhèry. This year it took place on a track pure and simple, at Miramas, although, in order to attract more entries the officials included an artificial double-loop in the circuit. By the closing of entries at ordinary fees in February, the race had only attracted 6 entries, composed of 3 straight-eight Talbots and 3 two-stroke Sima-Violets. In despair the A.C.F. did all in its power to induce other firms to compete, and by the end of April had added a team each of straight-eight racers from Delage and Bugatti to the list. In spite of this, however, when the race was run off on June 27th, only Bugatti presented himself at the starting line, with three cars driven by Jules Goux, Pierre de Vizcaya and Meo Costantini. Of these the last two were unable to complete the distance of 500 kilometres (312½ miles), owing to trouble caused by the use of an unsuitable fuel, which had been accidentally substituted for their proper spirit When the race was stopped after Goux had finished, Costantini was still running, and so gained the second place.

MOTOR RACING IN 1926—continued.



H. O. D. Segrave winning the Grand Prix de Provence at Miramas.

Prospects for the European Grand Prix, which was run on the Lasarte circuit, near San Sebastian, on 18th July, were considerably brighter, as the Spanish club received twenty-one entries, composed of three cars each from Delage, Talbot, Bugatti and O.M., 4 from Sima-Violet, 2 each from Guyot and Jean Graf and one Eldridge Special. Here again, however, the race was disappointing, as only the Bugatti and Delage teams started. The heat of the day was terrific, and the spectators lay and gasped by the road-side, wishing they had brought three times as much wine, and occasionally braving the Spanish soldiers, to make dashes across the course to the mountain streams for water. The Delages showed themselves the faster cars at the outset, but their drivers, seated so low that they were very well protected from the wind, but not from the heat of the engine, were overcome by the heat, and one by one had to give up the struggle for a time. This allowed Jules Goux to get home first on his Bugatti, covering the 484 miles in 6 hours, 51 mins. 52 secs. (70.25 m.p.h.). The second to arrive was Bourlier (Delage), with Costantini (Bugatti) third; Bourlier's car was, however, later disqualified as it had been driven for a part of the race by Senéchal, who had not been weighed and approved as a driver by the club. Costantini was therefore officially second, and third prize went to the Delage driven by Morel and Benoist, which had finished fourth. The latest development however is a reversal of this decision so that the Delage gains second place after all.

The story of the British Grand Prix, which was run at Brooklands on August 7th is too well known to readers of *Motor Sport*, to need recapitulation here. It provided a win for Delage cars, which finished first and third, while second place went to the Bugatti driven by Malcolm Campbell, and it was undoubtedly the most successful of the races for the World's Championship.

It was hoped that for the Italian Grand Prix at Monza on 5th September, all the European firms who had 1500 c.c. racers completed would enter, with some Americans as well. Actually, however, only 3 Bugattis, 2 straight-eight Maseratis, and a Chiribiri started. The Bugattis had it all their own way, and a comparatively unknown French driver running under the name of "Sabipa," finally carried off the victory, with Costantini second. The race was run in conjunction with a light car race for 1100 c.c. cars, which was won by Morel (Amilcar), with Duray (Amilcar) and de Joncy (B.N.C.), second and third.

By securing 3 firsts and 3 seconds in the five races run for it, Bugatti secured for himself the title of Champion of the World, 1926, by a very wide margin.

The "Free-for-all" Races.

This year a considerable tendency has been evinced to favour the free-for-all type of race, in which any machine of any size can compete. The classic example of this type of race is, of course, the Targa Florio, which took place this year over the Madoine circuit on 25th April. This race is run on an extremely mountainous course in the island of Sicily, and comprises 5 laps of 67 miles each. The course rises from sea-level to a height of nearly 3,000ft., and abounds in hairpin turns. The race this year attracted 36 starters, ranging from an Austin Seven to a big Hispano-engined Itala. The day was unfortunately marred by the death of Count Masetti, who won the race in 1922 on a Mercédès, and whose Delage, No. 13, turned over at a corner on the first round. Victory went to Costantini on a Bugatti, with Minoia and Goux on similar cars, second and third. Materassi's so-called Itala was fourth, Dubonnet (Bugatti) fifth and Wagner (Peugeot) sixth. The official Bugattis, which secured the first three places, had straight-eight engines of 61 x 100 mm. bore and stroke, giving a capacity of 2350 c.c.

Earlier in the season, on March 28th, another race of this nature, known as the Grand Prix de Rome was run on the outskirts of the Italian capital over a distance of 300 kilometres (187½ miles), and resulted in a win for Count Maggi on a Bugatti, who was followed by Brilli-Peri (Alfa-Romeo) and Bonmartini, also on an Alfa-Romeo.

One of the features of the San Sebastian meeting this year was a free-for-all race, entitled the Grand Prix



Lorraine-Dietrich cars were 1st and 2nd in the Le Mans 24-hour race.

MOTOR RACING IN 1926—continued.

d'Espagne, and was run over the same circuit as the European Grand Prix, on 25th July. Entries numbered 10, and comprised 3 Delages, 6 Bugattis, and Segrave's 12-cylinder Sunbeam, which recently took world's records. Three of the Bugattis, driven by Costantini, Goux and Minoia, were 2-litre cars, the other 1500 c.c., while the Delages were 3 of last years 2-litre Grand Prix racers. The Sunbeam led until, on the 5th lap, it broke a front wheel bearing, and victory went once more to a Bugatti, driven by Costantini. Goux on a similar car was second, with a Delage third, driven by Wagner and Benoist.

On 12th September was run the last race of the year of this type—the Grand Prix de Milan—on the Monza circuit. Segrave's Sunbeam was again entered, but again had to retire with mechanical trouble; and once more Bugatti was the winner. Costantini was the first home on a 2-litre super-charged car of this make, with Jules Goux on a similar car second, while third place went to Farinotti, the amateur driver of a Bugatti.

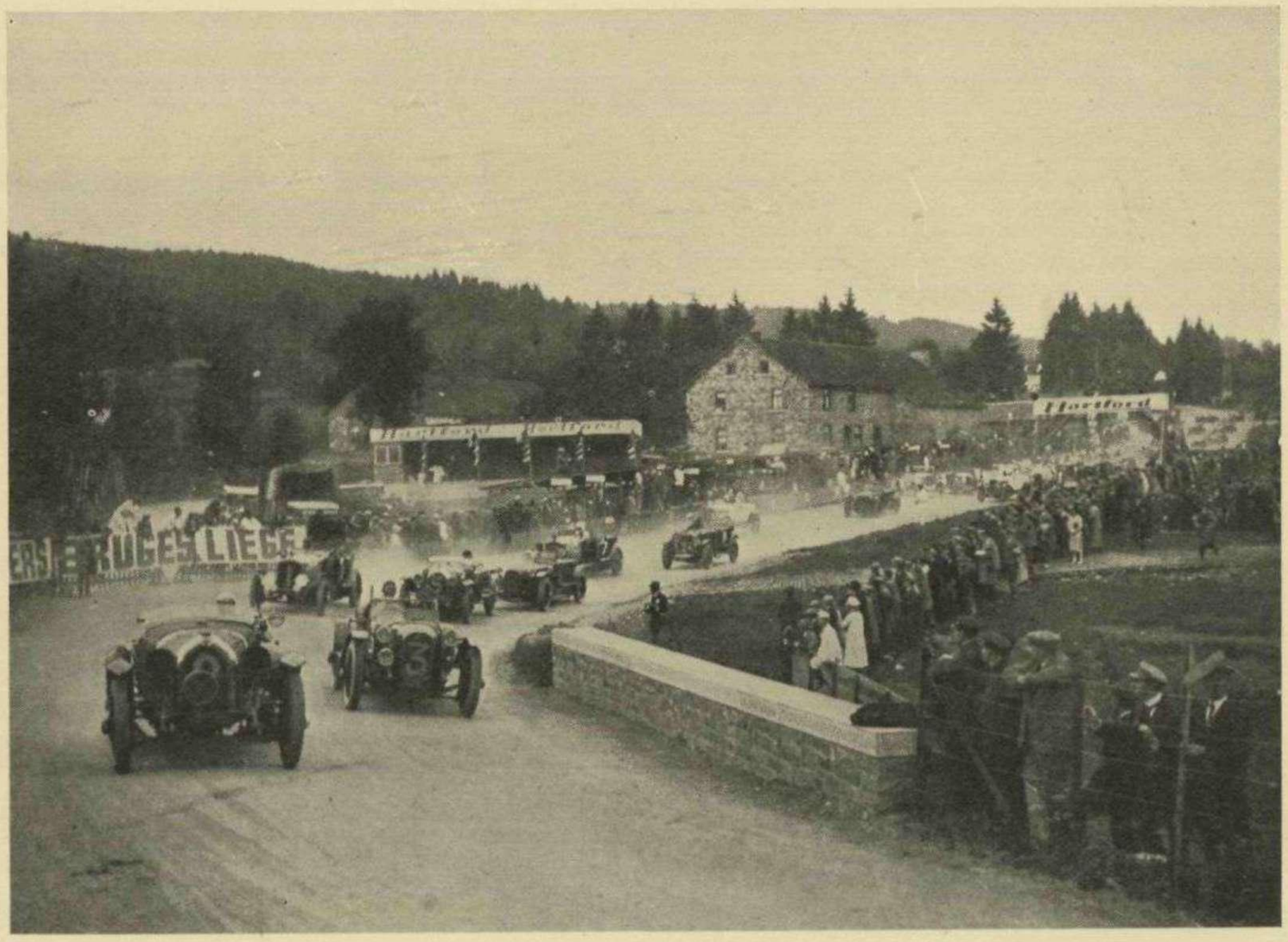
Other Continental Events.

Of what may be termed the lesser continental racing events, there have been a great many this year as usual. Miramas track held its first event, the Grand Prix de Provence, on March 28th, which provided a win for H. O. D. Segrave on one of the famous "invincible" 4-cylinder supercharged 1500 c.c. Darracqs. Second was Moriceau on a similar car built at the Clement-Talbot works, with Williams on a 2-litre Bugatti, third.

The Bol d'Or, which is a 24-hour race for light cars not exceeding 1100 c.c., was run on May 23th-24th, at St. Germain outside Paris, and was won by Robert Senéchal on a car of his own make. Second home was a Sandford, also driven by its maker, while another in the hands of Marguerite, was third. The next important French light car race, the Grand Prix d'Alsace, also for 1100 c.c. cars, marked the first appearance of the new straight-eight supercharged Bugattis of 1092 c.c. One of these cars driven by André Dubonnet was first, with Count Maggi and Pierre de Vizcaya on similar cars, second and third.

The German Grand Prix which was run on the Avus Track on 10th July, was unfortunately marred by several accidents, one of which caused the death of two people in the time-keepers' box, and all of which were due to the rain which made the out-of-date German track very slippery. The race was won by Caracciola on a 2-litre Mercédes, with Ricken on a 3-litre N.A.G. second, and Cleer (3-litre Alfa-Romeo) third.

The Boulogne meeting, which was attended by a large number of English motorists, included, as usual, a race for light cars, entitled the Grand Prix de Boulogne. In the 1500 c.c. class G. E. T. Eyston and J. C. Douglas, both on Bugattis, got home first and second, with Violet (Sima-Violet) third. Unfortunately, however, Douglas' exhaust pipe dropped off during the race, with the result that his car came 6 lbs. under the minimum weight, and he was, therefore, disqualified, following a protest by Violet. In the 1100 c.c. class, 2 Salmsons,



START OF THE GRAND PRIX DE BELGIQUE FOR TOURING CARS HELD AT SPA.

MOTOR RACING IN 1926—continued.



CHENARD-WALCKER WINNING THE GEORGES BOILLOT CUP AT BOULOGNE.

driven by Bourdon and Newman were first and second, with Ivanouski on a 750 c.c. Ratier third.

The last event of the season, the Grand Prix du Salon, was run at Montlhèry on 17th October for 1500 c.c. and 1100 c.c. cars. In the larger class, the three Talbots driven by Divo, Segrave and Moriceau led throughout, and finally finished in that order. In the 1100 c.c. class, the veteran Duray on an Amilcar was the winner, with Perrot (Salmson) second and Sandford (Sandford) third.

Touring Car Races.

In sharp contrast to the events for racing cars proper, the touring car races this year have shown no falling off in popularity. The most important of these is, of course, the Grand Prix d'Endurance 24-hour race at le Mans. The race, which took place on 12th and 13th June, proved to be a magnificent triumph for the 6-cylinder 3447 c.c. Lorraine-Dietrichs, which captured the first three places, all averaging over 100 k.p.h. (62½ m.p.h.), driven respectively by Bloch and Rossignol, de Courcelles and Mongin, and Stalter and Brisson. The second car also won the second biennial Rudge-Whitworth cup, for which it qualified by its performance last year. The contest for the cup is run on a handicap basis, and this year's race was the final round for it.

A similar race known as the Grand Prix de Belgique was run over the Spa circuit on 3rd and 4th July. The greatest distance was covered by an 18 h.p. sleeve-valve Peugeot, driven by Boillot and Rigal, with Diels and Caerels on a big Excelsior as runners up. Two cars, a 1500 c.c. F.N., and an 1100 c.c. Chenard et Walcker tied for 3rd place, as they each covered 1,388.7 miles in the 24 hours.

The third 24-hour touring car race of the year was run at Monza on the 11th and 12th September, and provided another victory for André Boillot on the Peugeot. He covered 1,616.7 miles in the day's running, against 1,585.99 by the Lorraine-Dietrich at le Mans ; the latter, however, still holds the 24-hour world's record for the road as, although the race was run on the road circuit, Monza counts as a track. In the Italian race, Louis Rigal was second, also on a Peugeot, and Dosio on a 2-litre O.M. third.

In connection with the San Sebastian meeting, a touring car race was held on July 22nd. Placing was on a basis of distance covered, the cars being allowed to run for different periods, ranging from 12 hours for the 1100 c.c. Chenard et Walckers to 10½ hours for the big Mercédès. On this basis the winner was one of the little Chenard et Walckers, driven by Léonard and Manso, with a similar car driven by Lagache and Pisart, second ; third greatest distance was covered by a 2-litre O.M. driven by Minoia and Morandi.

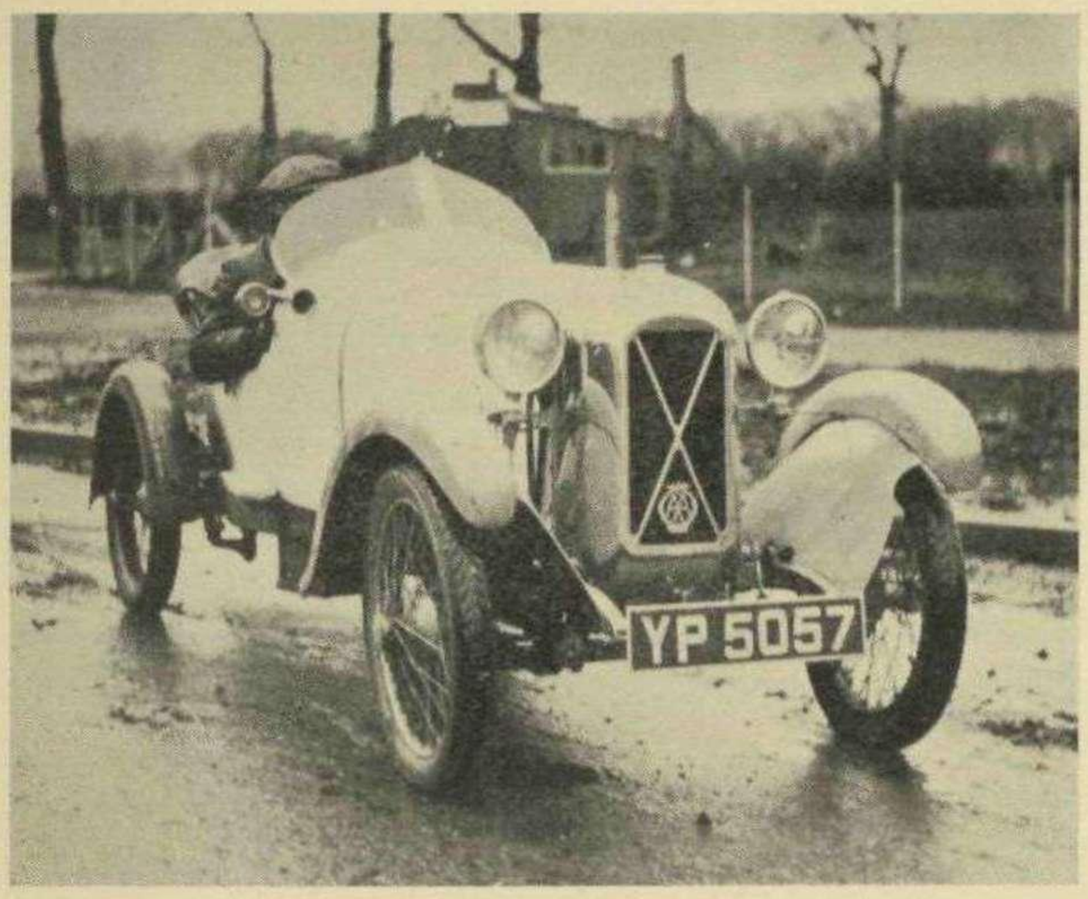
The Georges Boillot Cup race for touring cars has been for some years now a classic event of the Boulogne meeting. This race, which this year took place on 29th August, is also run on a handicap basis, which again allowed a Chenard et Walcker of 1092 c.c. to carry off the trophy, In the hands of Lagache. Léonard and de Zuniga on similar cars were second and third respectively, and so succeeded in achieving a grand slam for this marque.

SEVERE TEST RUNS.

In these days of mass production the road test of the finished car often receives less attention than it should, and it is therefore interesting to note that many of our higher class cars are subjected to most arduous tests before being passed " O.K." Some manufacturers find it difficult to select a suitable test run in the vicinity of their works. Others are more fortunate, and amongst them may be numbered the Crossley Company, which has the tracks and mountains of Derbyshire, often used in reliability trials, at its disposal.

The tests through which each of these cars has to pass would surprise most motorists, and, should they be passengers, would probably terrify them ! The test run comprises eighty miles, mainly in the Peak district, and hills, hairpins and rocky surfaces are all included. Each chassis, before test, is loaded up with sand, equal in weight to the body and full complement of passengers, and it is then driven at speed over one of the most difficult courses it would be possible to find in Great Britain. Where private owners slow down and pick their way, the Crossley testers take the rough, in a definite attempt to discern faults. By the time the run is finished every detail of the chassis has thus received a test which only first-class quality and workmanship would allow.

On return to the works, the tester fills in his report, adjustments, if necessary, are made, and the car is taken out for a shorter final run, by a special tester. It is only by strenuous tests of this nature that manufacturers can be assured of the fitness of the cars for delivery to the public, and it is to be regretted that in some cases " cut " prices do not permit the time and money to be spent on it.



SPORTING CARS ON TEST:

The "Salmson" Grand Sports.

By RICHARD TWELVETREES.

ABOUT this time last year I was able to record some impressions of the Grand Sports "Salmson" gathered during the London-Gloucester Reliability Trial, and also took the same machine through the Colmore Cup Trial as was duly recorded in our issue of March last. On both these occasions the performance of the car, though excellent, was somewhat eclipsed by the interest in the proceedings, for as is well known when driving in Trials there is but little time to make very close observations as to what is going on, apart from trying to keep up with the conditions of the competition.

Therefore, when asked for my views of this famous make, I have only been able to give general impressions, which, though satisfying to some extent, lacked the detail that one should be able to describe on such occasions. Happening to mention this matter to Mr. George Newman, he promptly suggested that I should take one of the new Grand Sports models out on trial, an offer which I readily accepted; though unfortunately the weather recently has not been such as enables one really to enjoy the best from an essentially sporting car.

Weather or No.

Had it not been for my previous experiences with the Salmson, when on both occasions there was plenteous rain and mud, I might have been rather diffident about making a road test at the time, for the possibility of skidding on a more or less unfamiliar machine at about 70 to 80 m.p.h. is apt to be a little disconcerting, but as was discovered later, though a certain amount of skidding is unavoidable, the kind of gyrations indulged in by this nippy little car are of a distinctly controllable nature and do not produce anything terrific in the way of "elevated wind."

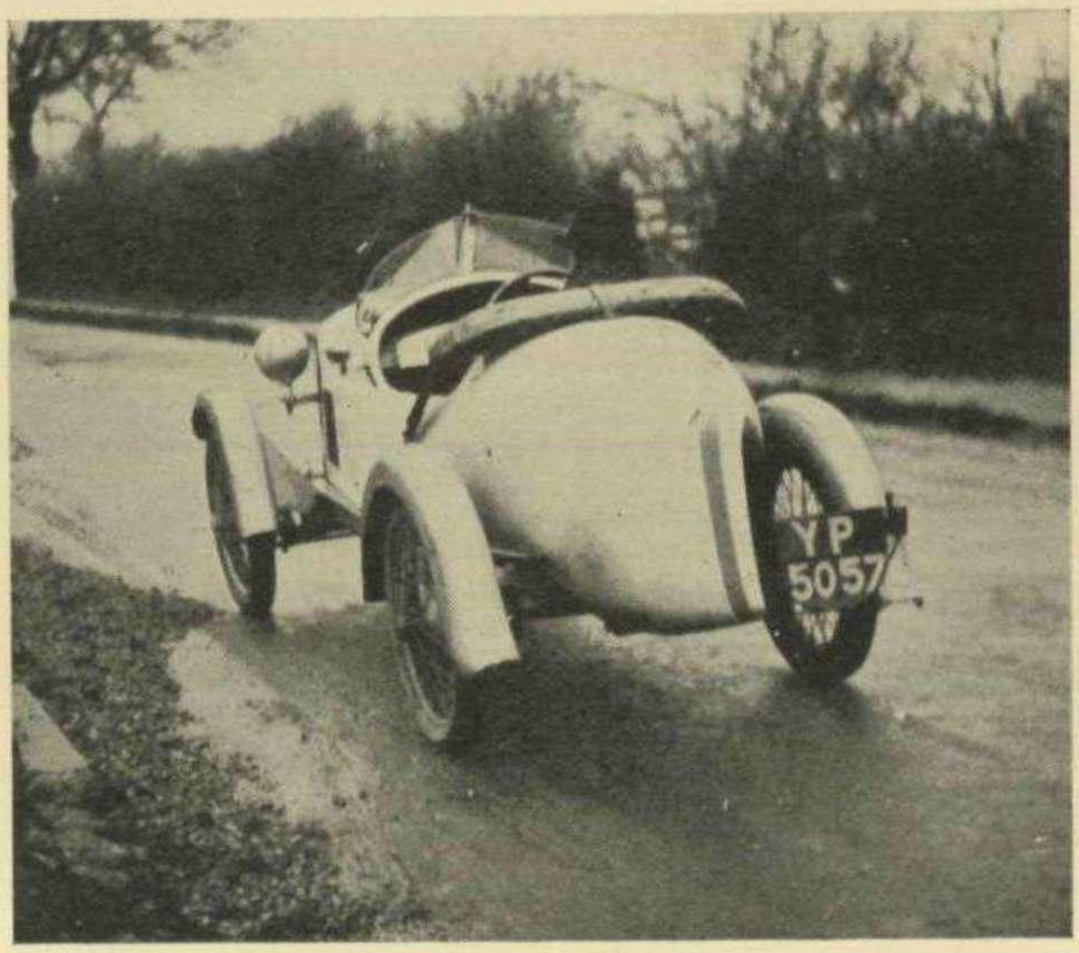
If time and tide wait for no man, it is certain that our recent November storms are no less considerate, so after two attempts at trial runs (with the printers 'phoning every day for December copy), it was a case of a few more pages of Fill-ups or a wetting, so the latter was chosen.

The Grand Sports "Salmson" duly turned up in the pouring rain in charge of Mr. Martin, and in view of the lack of accommodation in the two-seater racing body, our photographer followed part of the test run in his Morgan. Without any disrespect to the latter machine, it had rather a difficulty in keeping up with us on the wet and greasy road. When we stopped for photographs, there was a slight delay, and our camera man eventually hove in sight, with his front wheels looking very sorry for themselves, having come into contact with some obstacle in avoiding another vehicle. I hope to goodness nothing serious happened to his camera at the time!

Unfortunately, our first test was not satisfactory, simply because the weather was too perfectly awful to make any observations at all, save of the remarkably good road-holding qualities of the machine under extremely adverse conditions. We therefore had to abandon the attempt, though on the second occasion we found ourselves but very little better off.

On the following Saturday, despite the pouring rain, we set off ensheathed in Stormguard suits, and in defiance of the elements proceeded to put the "Salmson" through its paces.

Leaving town via the Croydon by-pass road, we had the opportunity of carrying out a fairly good test, though wheel-spin marred the acceleration tests, which, therefore, were not timed, as figures of this kind are of little use unless dead accuracy is ensured. When taking the car over, I found that several improvements had been effected, though as far as one could see there had been no modification of chassis details. For instance, the steering was very much better, and it was only at dead slow speeds that one noticed the absence of a differential.



A NOT UNFAMILIAR VIEW OF THE SALMSON!

SPORTING CARS ON TEST—continued.

Better Mudguarding.

Having vivid recollections of the mud-throwing proclivities of last year's model, I was quite prepared for a good plastering on this occasion, but was pleased to find that the new type of close-fitting mudguards gave a protection, almost comparable with that of a touring car, only a little mud being thrown up when rounding curves at high speed.

If one is content with touring changes of gear—which the sporting driver never is—changes of speed can be effected in silence, but a certain amount of clashing is unavoidable when quick changes are made. Perhaps "clashing" is not quite the right word, but one just has to pull the lever definitely and unhesitatingly into place, regardless of what happens. As a matter of fact, the gears will stand this sort of treatment, as may be gathered from the fact that on the racing machines the same gear boxes have been used for three seasons without any renewals whatever.

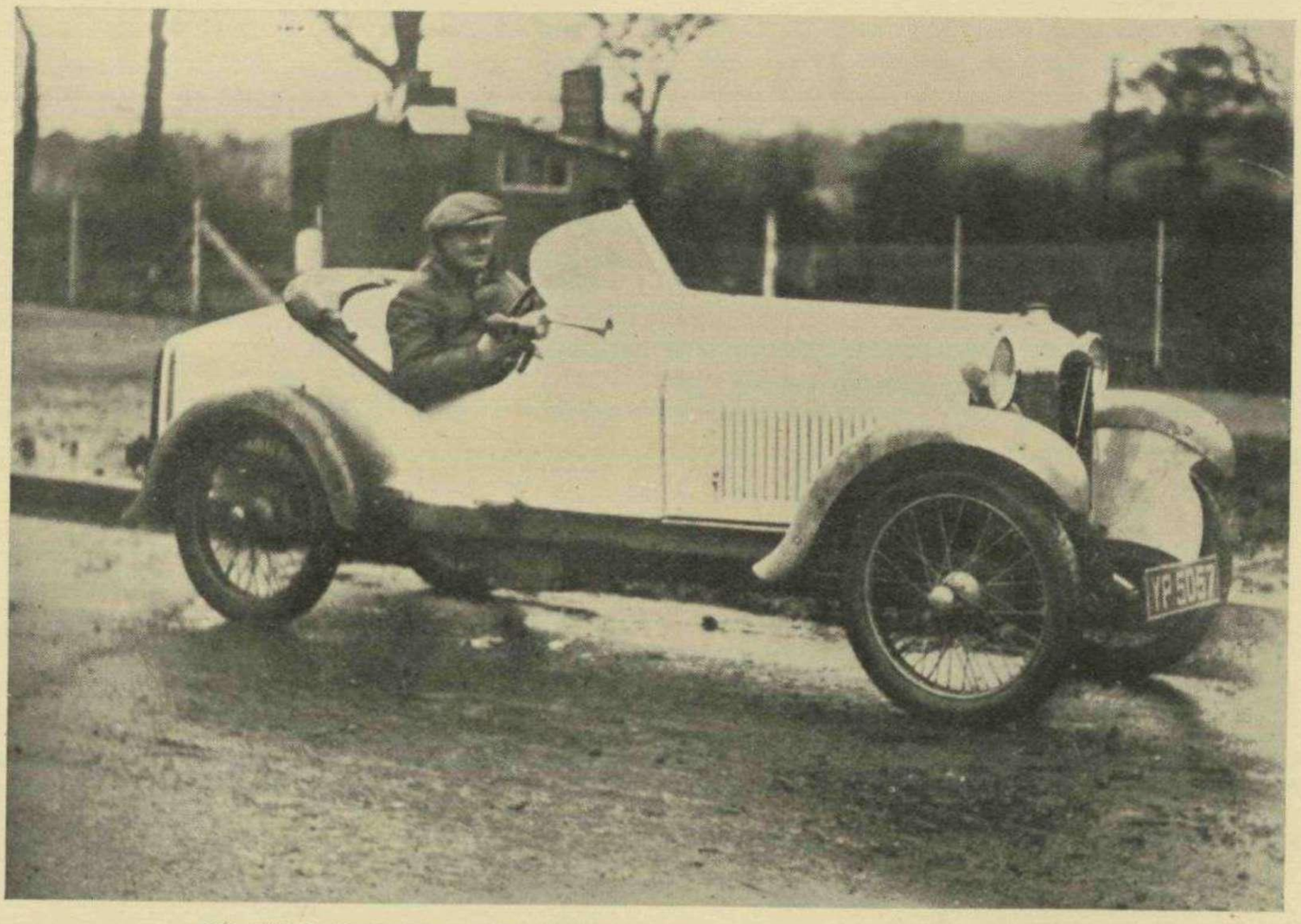
The brakes are very much better in this model, and except over very rough ground the suspension calls for no criticism, and, of course, one expects to sacrifice a little in the way of sheer comfort in a car primarily intended for sporting purposes.

Gear Ratios and Car Speeds.

With the four-speed gear-box the following ratios are provided, which, as will be seen, are admirably selected for sporting use. The first gear gives a ratio of 13½ to 1, the second 7½ to 1, third is 4½ to 1, and top 3¾ to 1.

Actual tests of the maximum road speeds on each gear gave the following results, the speedometer incidentally registering kilometres. On first speed, the engine would rev. up quickly and keep going indefinitely to give a speed of 30 m.p.h. Taking Mr. Martin at his word about the capability of the engine to turn over without distress at high speeds, I kept the car going for at least a quarter of a mile at well over 4,500 r.p.m., with no ill effects, and then with a sharp little tug at the gear lever and the lightest possible touch on the clutch lever, got into second without any difficulty. On this gear the speed immediately shot up to 49 m.p.h., which increased to 65 m.p.h. almost directly the third gear was introduced.

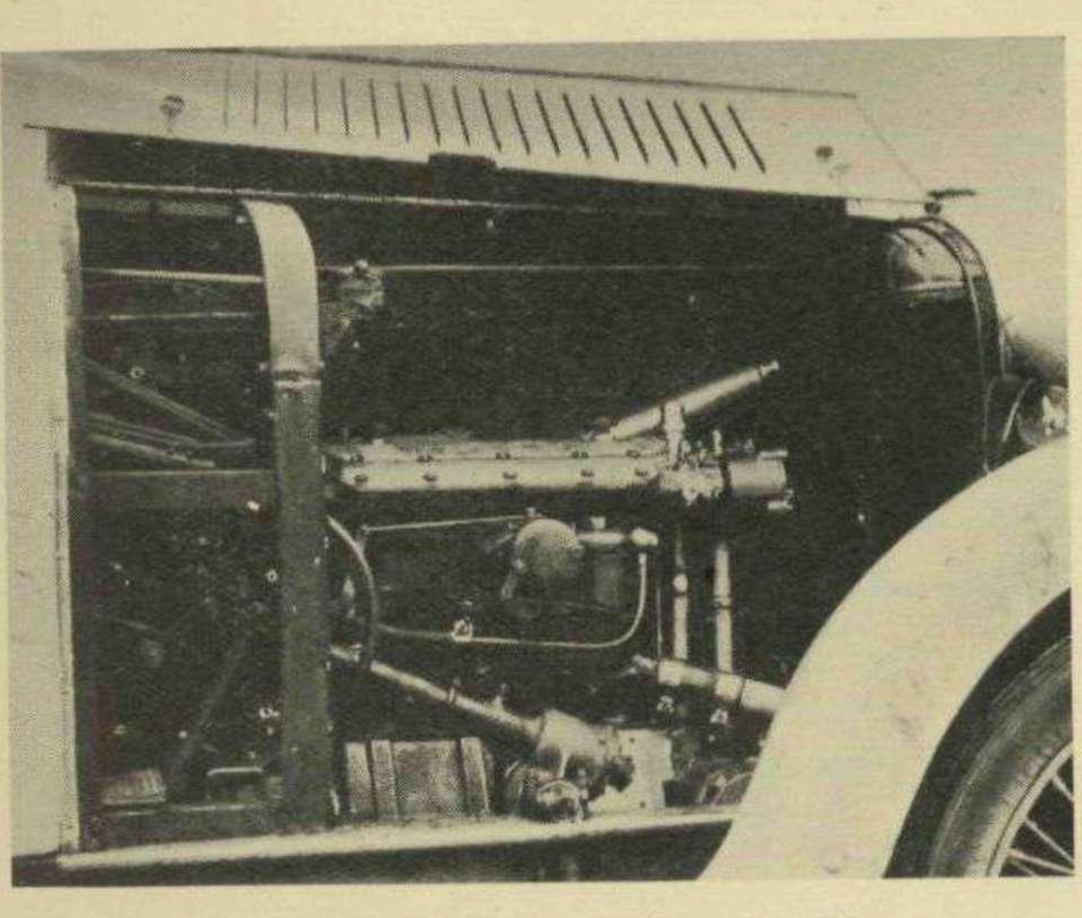
An opportunity for trying the all-out speed came a little later, when under very unfavourable conditions a speed of 84.12 m.p.h. was reached and maintained for half a mile, when traffic conditions called for a reduced rate of travel. Then I discovered that the brakes were really effective and the car was brought back to its touring behaviour with commendable ease.



GREATLY IMPROVED APPEARANCE DISTINGUISHES THE LATEST SALMSON.

The "Salmson" is one of those cars which tends to convince one that road safety is often increased where high speeds, combined with really good acceleration, are available. If one is limited to a maximum of about 55 m.p.h. there is always the chance of getting impeded by coveys of Morris, Clyno and other popular types, which, travelling flat out in endeavouring to pass each other, occupy the greater part of the road. With a nippy car, however, one can streak past easily and then have a clear stretch of road, unobstructed by the somewhat dangerous driving indulged in by owners, who take grave risks in speeding on cars which were never intended for the job.

SPORTING CARS ON TEST—continued.



A VIEW OF THE OVERHEAD CAMSHAFT ENGINE.

A Fast Hill Climb.

From Caterham Valley to Upper Warlingham there is an excellent test hill, known as Succomb, which about three-quarters of a mile in length has a very rough surface, two acute bends and a maximum gradient of 1 in 3. Not having seen its condition for some time, we toured up gently and noted the state of the gulleys, observed the rushing stream which crossed it at one point, then descended to make a timed trial.

Starting from the post at the bottom, which says "Impracticable for motor vehicles," we made a standing start against one of Mr. Spikins' stop watches. Getting away on first to overcome the initial wheel-spin, second gear was introduced after about one hundred yards and the speed increased to about 48 m.p.h., which was maintained without diminution until nearing the hair-pin at the steepest gradient. Then a drop into first was accomplished, and to avoid the retarding effect of the resulting skid the near side wheels were directed into the gulley. The "Salmson," nevertheless, held to its course admirably and finished the climb at a good thirty on first gear, the actual time occupied by the ascent being 60 seconds dead, which by comparison with other makes of sports cars on the same test was remarkably good.

Incidentally, we may mention that Succomb Hill is very convenient as a testing place in preparing cars and motor-cycles for the London-Exeter and similar trials, especially as it is within easy reach of the South of London.

"Salmson" Durability.

Now, with regard to the question of durability in a car so lightly constructed as the Salmson, the unladen weight of which is only 10 cwt. It is obviously impossible to make any definite statement in this connection, as the outcome of a few short trial runs, even though these include participation in two classic reliability trials of the "Chassis Bending" category, but as far as my observations go, I should have no hesitation in describing this car as a very sound and sturdy little engineering job. The actual example I tested had been hammered about on all sorts of demonstrations, besides having been used for practising by various members of the Salmson racing team, so that its early days were by no means spent in pampered luxury. Nevertheless, it showed no traces of wear, either in the engine, frame or transmission, and I am inclined to the view that had it been treated to the careful running-in usually given by a purchaser, it would have put up an even better performance than that recorded above.

HINTS TO "LONDON-EXETER" COMPETITORS.

WITH the decrease of what has been termed the "Trade Element" in our great reliability trials, these events are drawing a still greater number of novices, who previously may have been a little dubious about entering on account of the supposed advantages possessed by professional drivers.

As a matter of fact, the genuine amateur generally has far better chances of success than has the trade driver, who often has to take either a brand new car or a much used demonstration model through the trial. The amateur, on the other hand, has the undoubted advantage of knowing his car thoroughly, and also of having more time to spend on its preparation, being still further impressed with the need of obviating all chances of failure.

Taking things on the whole, the London-Exeter Trial is perhaps the most interesting run of the year, besides being the least expensive. The matter of expense is certainly of some importance where many amateurs are concerned, so perhaps a few hints in this direction may not be out of place. To begin with, the prevalent idea that any car or motor-cycle to be entered needs a thorough overhaul and partial reconstruction to ensure any chance of success, is entirely erroneous. It is perfectly true that good mechanical condition is essential, but competitors are far more often let down by trivial failure than by actual mechanical breakdown..

Another reason accounting for early retirements in this event is that competitors often leave their final preparations until too late, it being a common thing for drivers to turn up at the start in a tired condition, having spent the two previous nights in assembling their vehicles after a strenuous overhaul in hurried conditions.

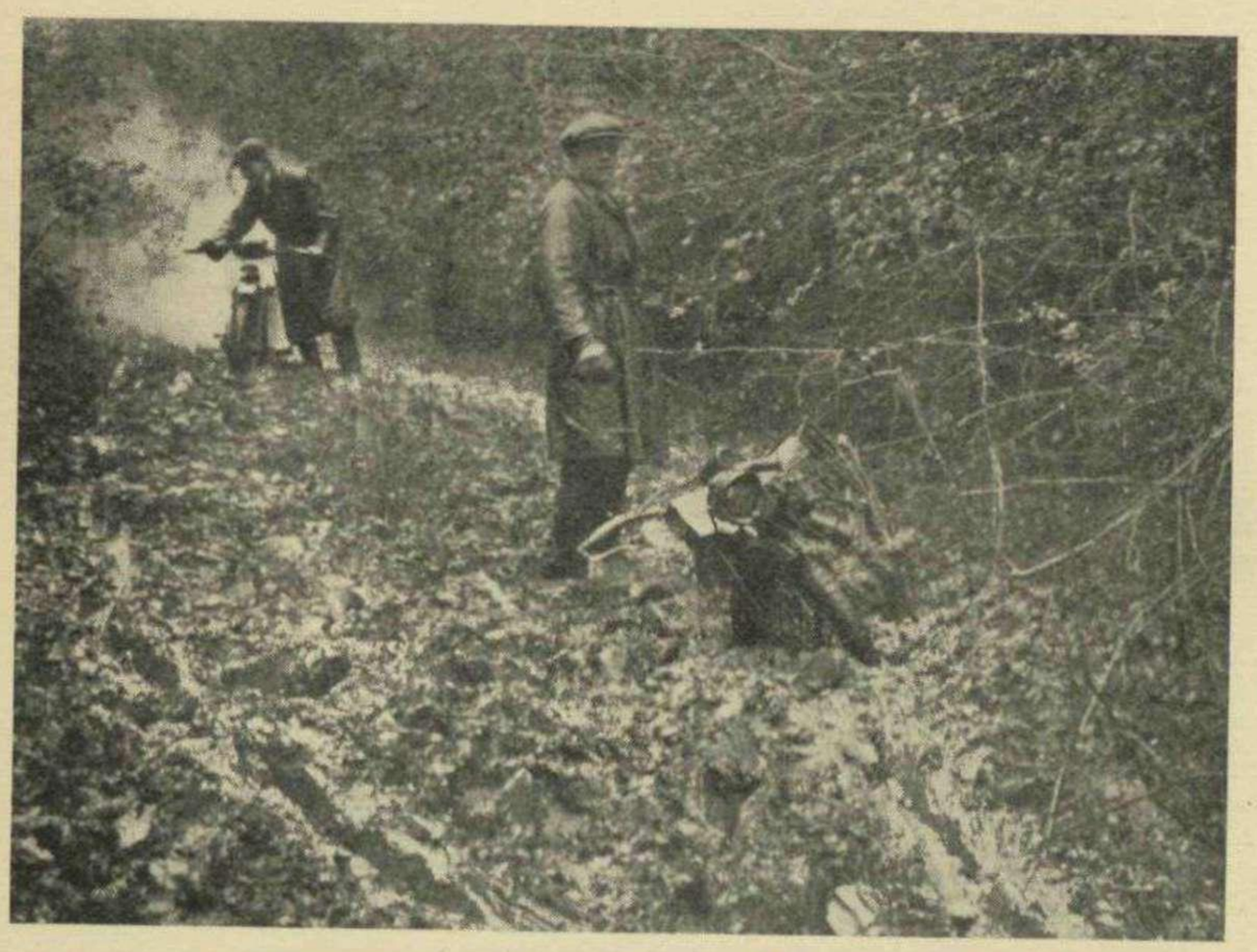
Even after an engine has been de-coked, it seldom gives its best output until a certain amount of steady running has been done, and generally speaking the man who leaves such jobs until a few days before the event is asking for trouble.

Hurried preparations, besides tending to upset one's nerves, are invariably more costly than those carried out under normal conditions, so that good advice with regard to economy is to begin all the smaller adjustments and any necessary renewals in plenty of time.

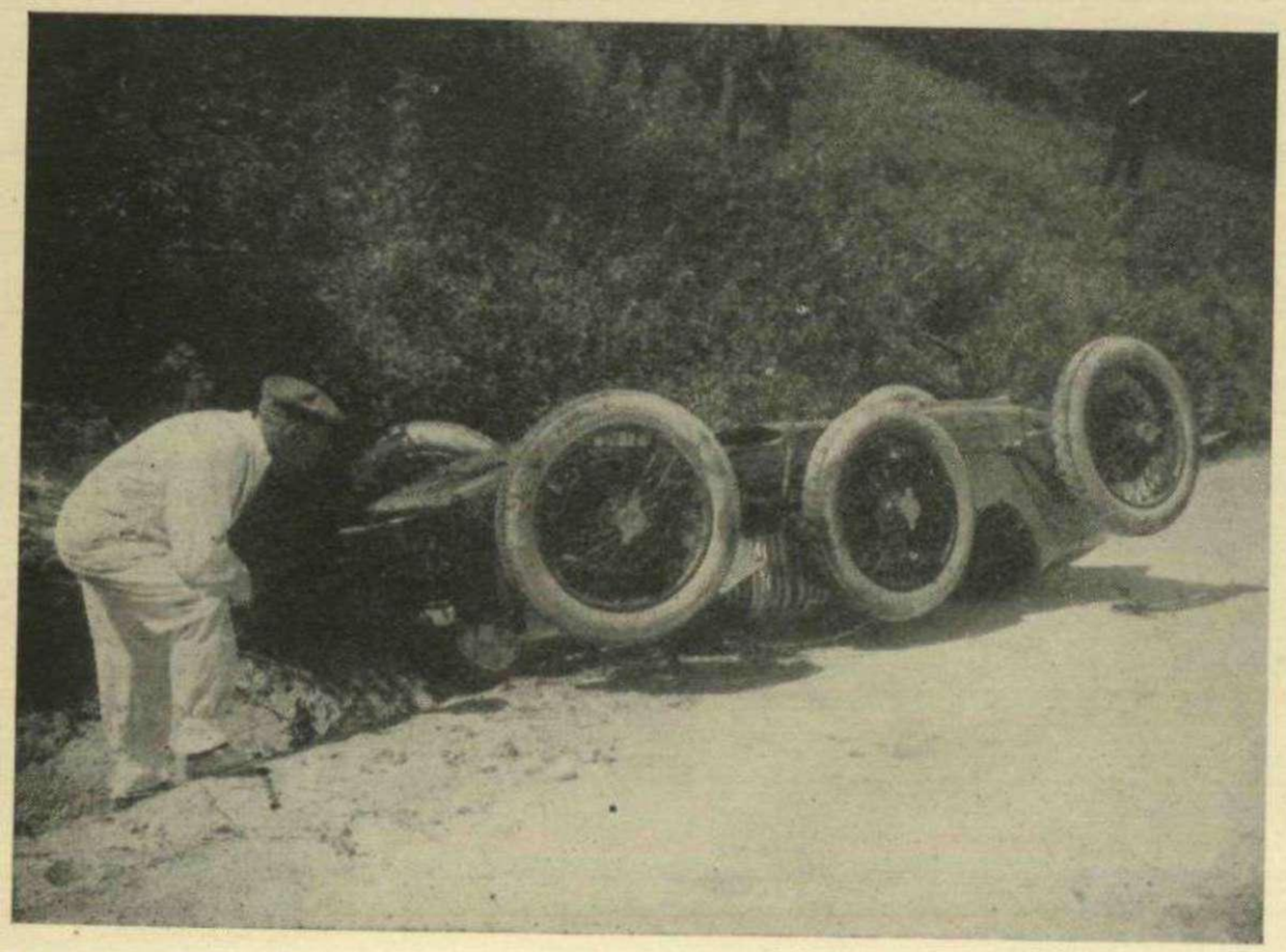
1926 Sporting Ev



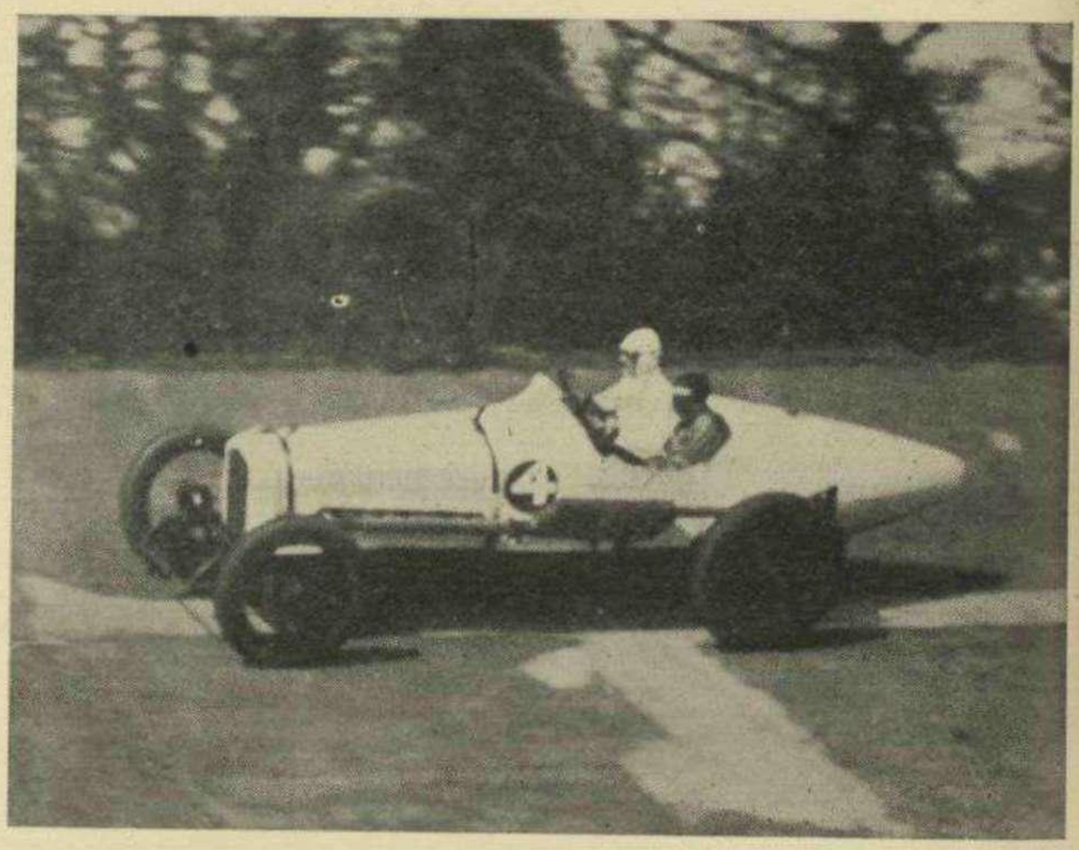
BEACH RACING HAS BEEN POPULAR IN IRELAND.



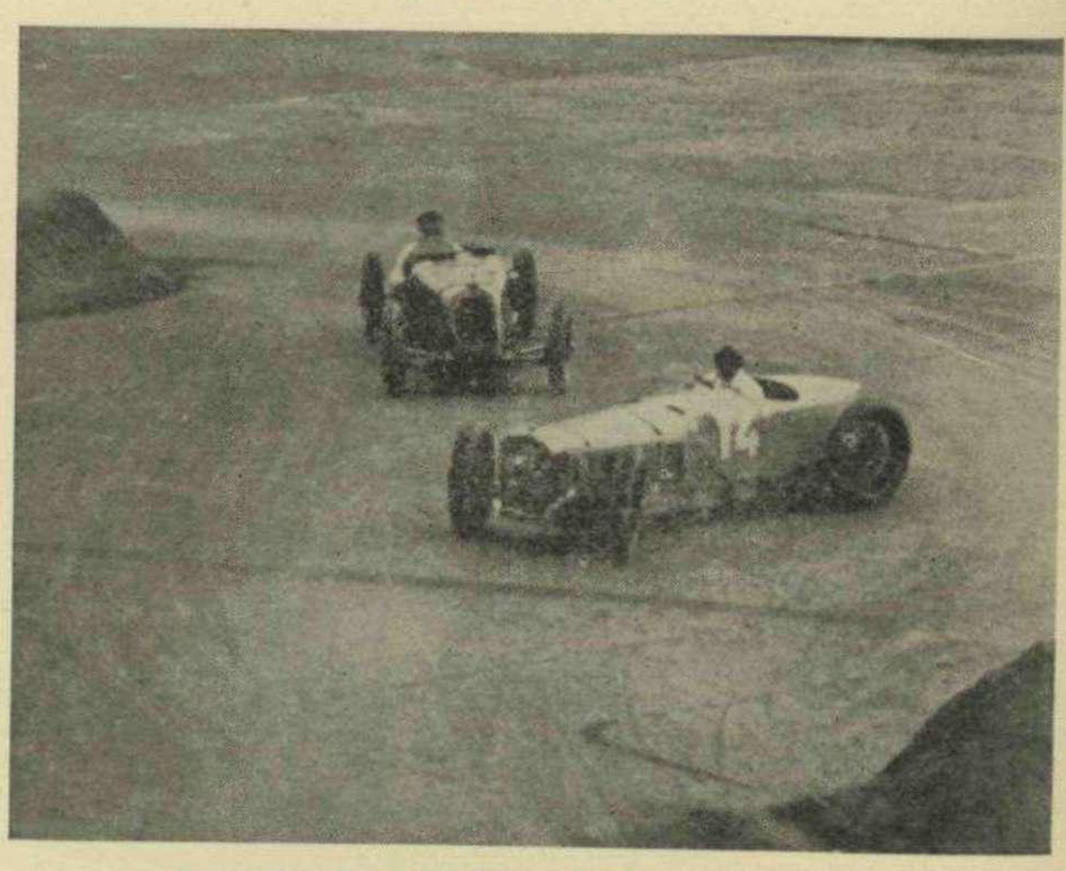
THE COVENTRY A.C.E. TRIAL WAS AS "SPORTING" AS EVER.



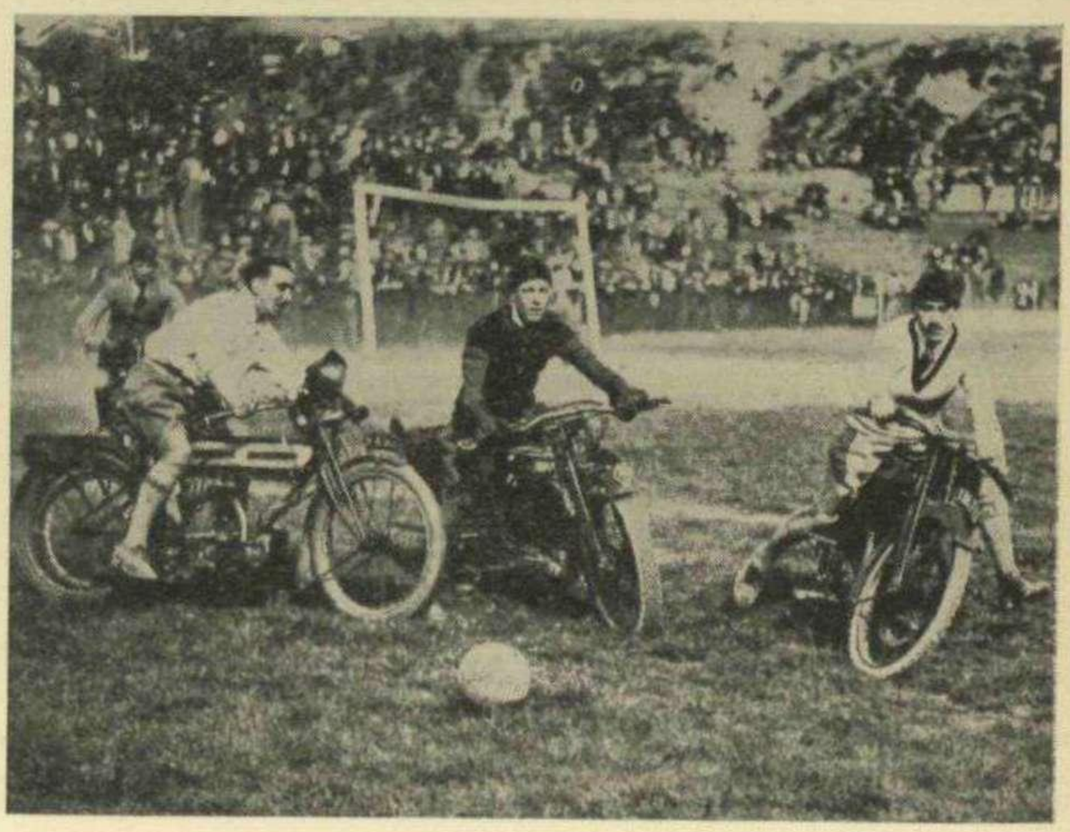
ANOTHER SPORTSMAN'S END. COUNT MACETTI'S CAR AFTER TURNING OVER IN THE TARGA FLORIO.



A POPULAR BROOKLANDS DRIVER, R. B. HOWEY, WHO WAS KILLED AT BOULOGNE.

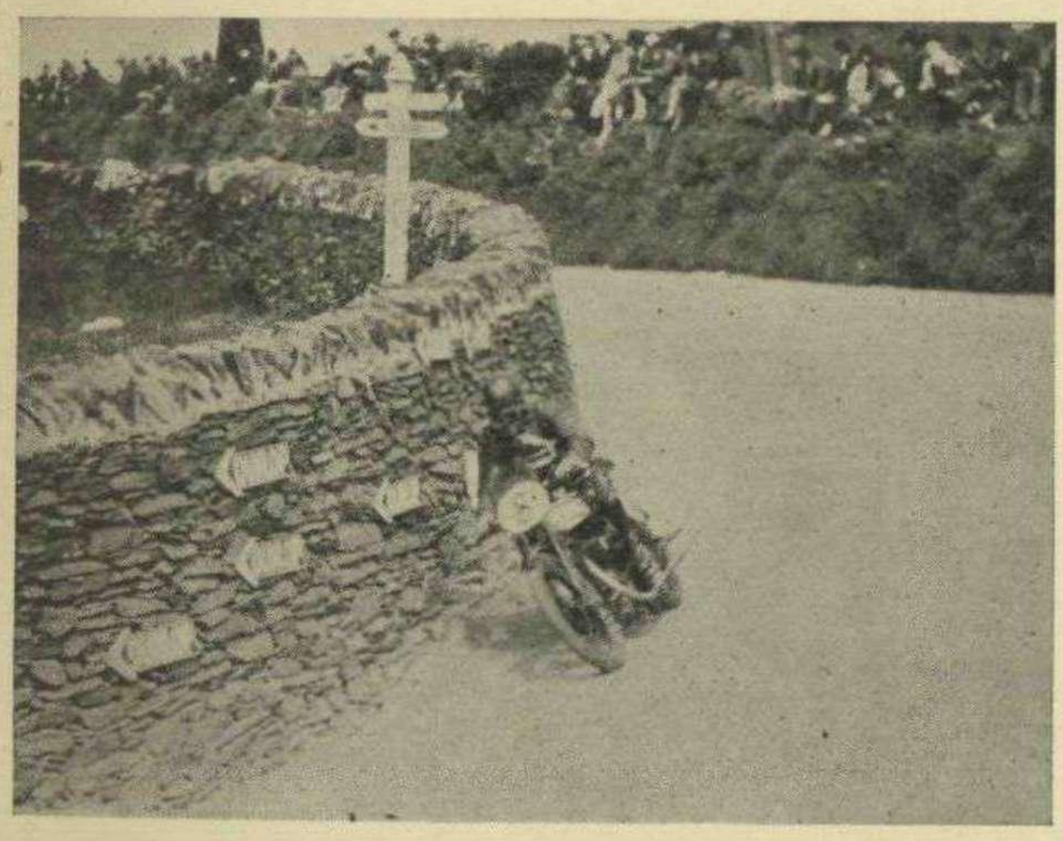


BROOKLANDS "ROAD RACES" WERE INAUGURATED.



MOTOR CYCLE FOOTBALL HAS ATTAINED GREAT POPULARITY.

ents in Pictures



THE SENIOR T.T. WAS WON BY STANLEY WOODS (NORTON).



J. S. WRIGHT (ZENITH) NO. 4 LAPPED BROOKLANDS AT 113 M.P.H.



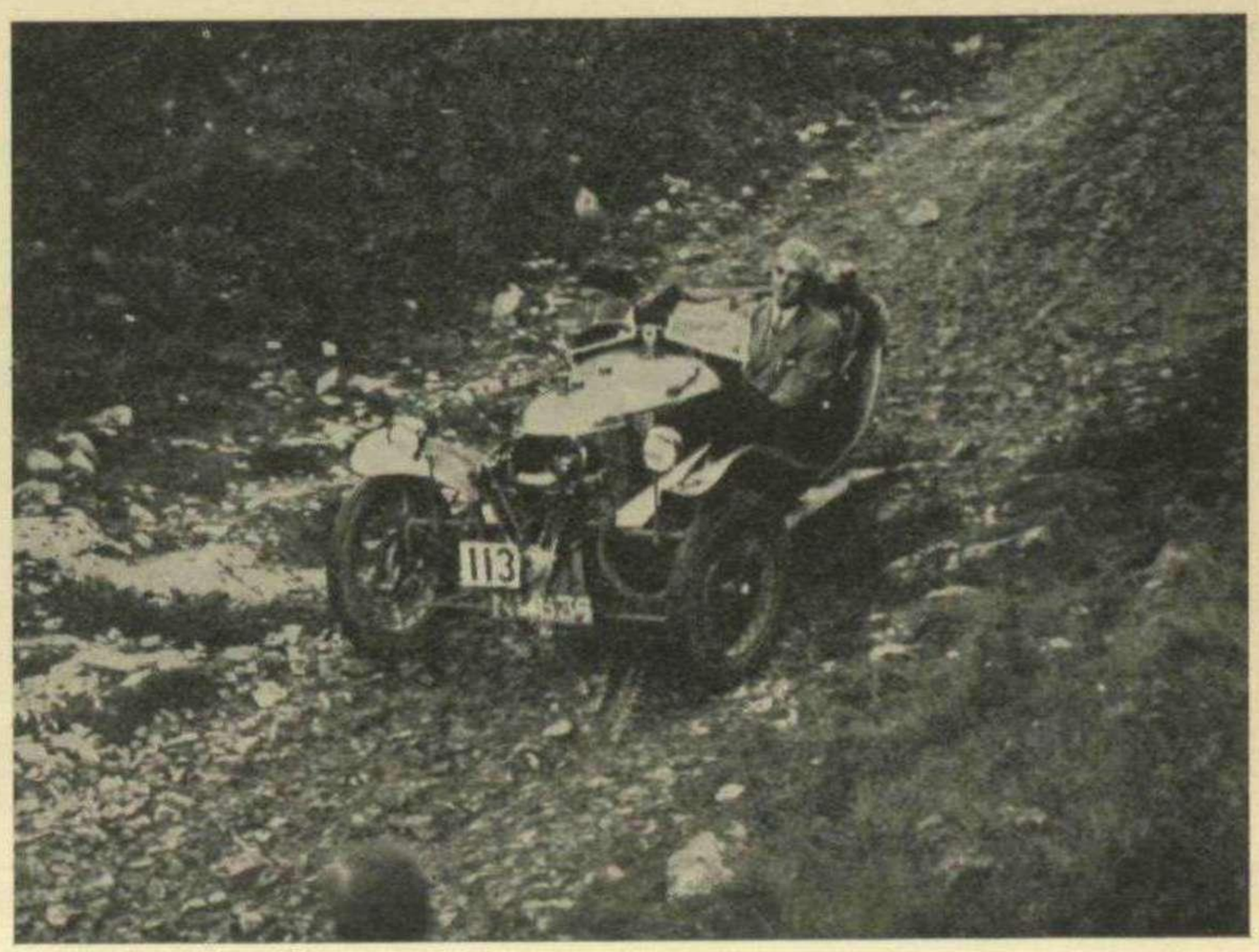
SPORT ON THE CONTINENT HAS FLOURISHED.



CLUB SPEED EVENTS HAVE BEEN CONFINED TO THOSE HELD IN PRIVATE PARKS.



COMPETITORS BOGGED IN THE COVENTRY A.C.E. TRIAL.



INTERNATIONAL 6-DAYS TRIAL HELD IN ENGLAND. G. H. GOODALL (MORGAN).



[Photo: Hay-Wrightson.

MOTORING SPORTSMEN:

Mr. G. E. T. Eyston.

By THE EDITOR.

MR. GEORGE EDWARD THOMAS EYSTON, who during the last few years has figured as a prominent and successful competitor in British and Continental racing events, commenced his practical experience in motoring at the tender age of thirteen years, when, much to the consternation of his father, he became the owner of one of the early Triumph motorcycles. As we discovered during a recent interview, however, Mr. Eyston's sporting tendencies are not by any means confined to the world of wheels, whilst his professional standing in engineering circles is one that may well excite the admiration of those whose activities lie in this direction.

After receiving education at a Catholic School, namely, Stonyhurst College in Lancashire, George Eyston took up a course of engineering at the Seafield Engineering College at Fareham, Hampshire, an establishment possessing a very fine workshop equipment, modern testing appliances and scientfic laboratories. Upon the outbreak of War, Mr. Eyston joined up in the ranks of the Public School Battalion of the Royal Fusiliers and underwent his military training at Epsom. At the end of August, 1914, he was commissioned in the Dorset Regiment, and shortly afterwards was appointed Machine Gun Officer to his battalion, part of his duty being that of Chief Instructor to a Machine Gun School.

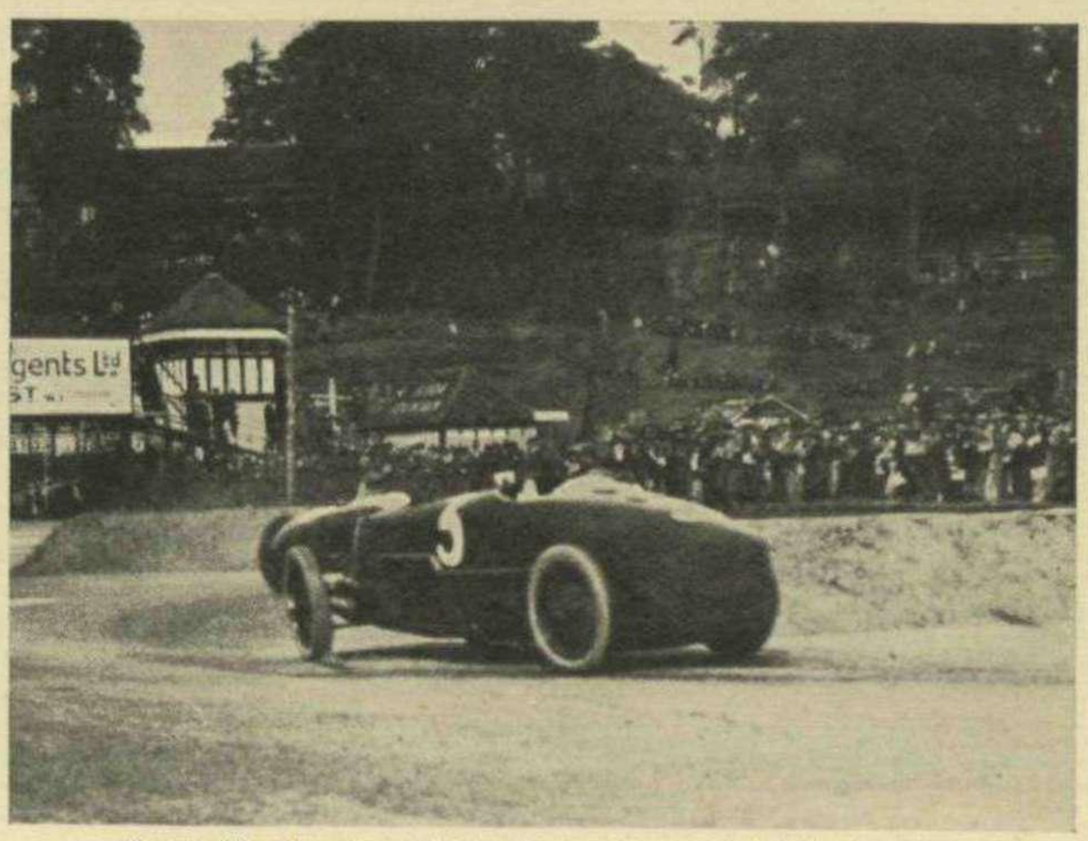
Though doing very good work in that capacity, Eyston shared the general eagerness to be doing something of a more thrilling nature, and after some considerable difficulty managed to secure his transfer to the Royal Field Artillery, and went overseas with the 21st Division and took part in the Battle of Loos in 1915. With the exception of three months spent in Hospital after having a rifle bullet through his leg in an attack at Arras, he remained in France until two months after the Armistice.

During his military service overseas he was awarded the Military Cross for conspicuous gallantry on the field, besides being twice mentioned in despatches. He was on the Headquarters Staff of the 94th Brigade R.F.A., and also A.D.C. to the G.O.C.R.A. 21st Divisional Artillery, his other staff appointments included Staff Captain Reconnaissance XIII. Corps Royal Artillery. He also served temporarily with the Artillery Staff G.H.Q.

The Armistice found Captain Eyston still on the Artillery Staff of the XIII. Corps, on whose front fighting continued up till 11 a.m. on November 11th, 1918. Owing to illness from wounds he was allowed to proceed home for a few days, and took the opportunity of obtaining demobilisation by recommencing his engineering studies at Trinity College, Cambridge, where he passed his examination for B.A. Degree Engineering.

By way of exercise, Eyston took seriously to rowing, and helped to re-organise College rowing, being elected Captain of the First Trinity Boat Club.

He rowed in all races the whole year round, stroking his College Eight, and obtaining a seat in the boat which gained the Headship of the River in the Lent Term, 1921, and also in the Eight which was second on the River in the May races of the same year. By going up four places, this boat gained their oars, and he was



G. E. T. EYSTON PUT UP A PLUCKY FIGHT ON HIS ASTON-MARTIN IN THE GRAND PRIX.

THE CAR THAT WINS

A SELECTION
OF
1926 SALMSON SUCCESSES

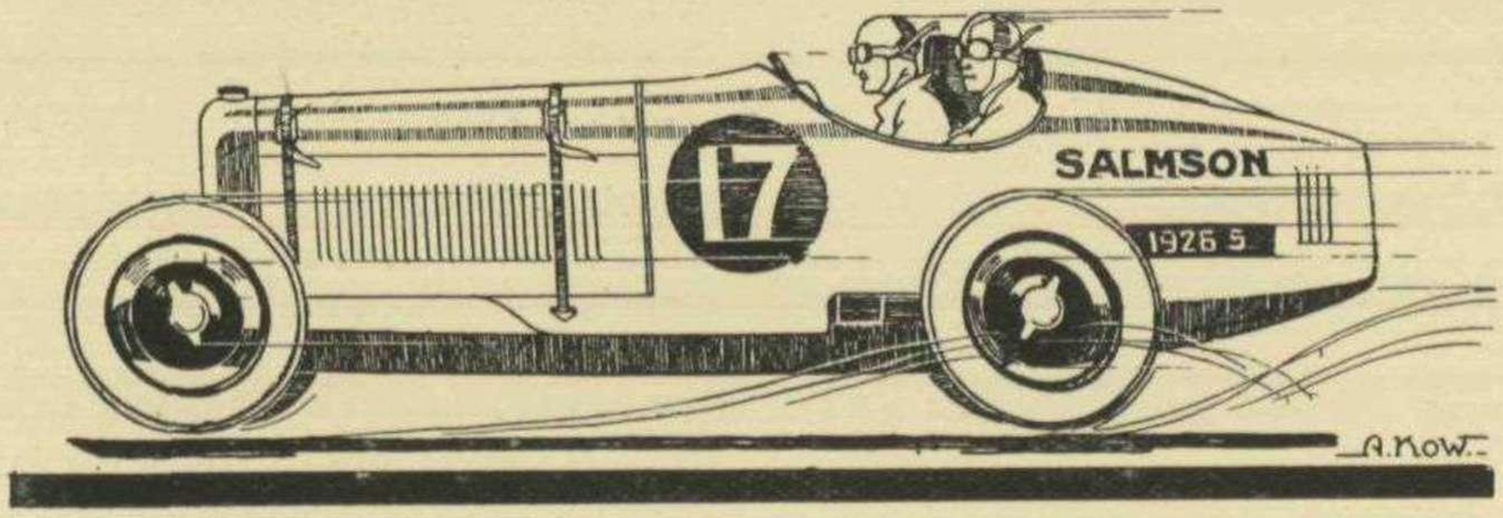
Targa Florio - - -	1st, 2nd, 3rd
Grand Prix de France-Miramas - -	1st, 2nd, 4th
Grand Prix de Boulogne - -	1st and 2nd
Brooklands Easter Meeting - - (Goutte lapping at 114 m.p.h.)	Two 1sts One 2nd Three 3rds
M.C.C. Brooklands Meeting - -	1st and 2nd
J.C.C. 3-hour Production Car Race—	1st Irrespective of Class.

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MOTORING SPORTSMEN—continued.

elected a member of the Leander Club. In 1919 he was spare man to the Cambridge University crew which won the International Eights on the Seine, this crew, which, incidentally, was coached by Mr. Bruce, now Prime Minister of Australia, beating crack crews from nine different nations.

Apart from rowing at Henley in three Regattas, Mr. Eyston achieved victories in sculling in various Thames Regattas.

For four years after leaving Cambridge Mr. Eyston was engaged on the sales staff of an important marine engineering concern, and then started business on his own account with the formation of a company for the manufacture of air compressors. A very large range of these appliances was designed by Mr. Eyston for use in connection with industrial machinery, and their manufacture was also carried out under his direct supervision.

Besides running this business, Mr. Eyston controls a separate firm of his own dealing with artesian wells.

From air compressors to supercharging is a very short step, and the comparatively new development in aeronautical and automobile engineering soon attracted his attention. Professional secrecy debarred Mr. Eyston from allowing much interesting information on the latest developments in supercharging to be published, though we are permitted to state that he is engaged in a consulting capacity on some very important work in the automobile industry.

Two examples of supercharging to his design were exhibited at the recent Motor Shows at Olympia, one being the new Riley and the other the Douglas Motor Cycle. Several examples of the Anzani engine have been fitted with a very successful form of supercharger designed and manufactured by Messrs. Powerplus Ltd., which is one of Mr. Eyston's concerns.

Motor Racing Record.

Though Mr. Eyston took part in various trials and raced a Rudge Motor Cycle on Brooklands before the War, it was not until leaving Cambridge that he became keenly interested in the sport. His two first racing cars were Aston Martins, one being the O.H.V. track racer, which when driven by Mr. H. Kensington Moir led the Talbot Darracqs in the first two hundred miles race, and the other the Grand Prix racer that ran so well at Strasbourg.



G. E. T. Eyston cornering on his Bugatti during the Boulogne Grand Prix, 1926.

Driving his own Aston Martin in the 200 Miles Race of 1923, Mr. Eyston managed to obtain a substantial lead at one hundred miles, but was unfortunate in mistaking a peculiar type of plug trouble for something more serious, and so lost too much time. As it was, he only just missed third place by a few hundred yards, but tied with Joyce for the fastest lap at over 99 m.p.h.

Mr. Eyston has competed with success at a few of the crack hill climbs and speed trials in this country. One of his best performances took place at the B.A.R.C. Whitsun Meeting, 1923, when, again driving his Aston Martin against a large field, he was first in two races and second in another of the three races in which he took part, the lap speeds of the car being in excess of 101 m.p.h.

MOTORING SPORTSMEN—continued.



MOTOR BOAT RACING IS ANOTHER OF MR. EYSTON'S PURSUITS.

An Adventure at Boulogne.

Mr. Eyston tells a very good story of his adventures at Boulogne in 1923, details of which show that he is at least in possession of the virtue of perseverance. Three hours after leaving the boat, and two days before the Speed Trials, he went out practising on the circuit in heavy rain, and misjudging one of the notorious corners, crashed his car beyond all hope of repair—at least, so it would have appeared. Some villagers, who quite expected something to happen at this particular spot, helped Eyston and his mechanic, Gillors, to carry the car bodily into a farm shed, where, whilst kicking his heels with disappointment, Eyston discovered under some debris a disused pit. This find gave him an idea of getting the car speedily repaired, though it lay with twisted front and broken rear axle, also considerable damage to body, etc.

The next thing was to get to Boulogne, some five miles away, and after making unsuccessful attempts to stop cars to give him a lift, Eyston, still in racing overalls, started to *run to the coast*, arriving just in time to catch the boat. His appearance among the passengers created something of a consternation, for he was still grimed and oily, and reaching London at night, he had a few hours sleep before going to the Aston Martin works for replacements. These were sportingly supplied to him at once, and he hurried off by road and crossed the Channel once more, having as rough a passage by the night boat as is possible to imagine. At Boulogne he chartered a car, and then on reaching the farm set to work to re-assemble the Aston Martin, which was accomplished in time to make a final test in the hours of darkness. To crown all, he turned up at the start in time and won his class in the Speed Trials, two days later gaining third place in the Grand Prix des Voiturettes Legeres on another car.

In the following year in the Grand Prix at Boulogne he was leading by about twelve minutes, when another car turned turtle in his path, and in avoiding this he got into a spin, crashed a telegraph pole, and finished by being put *hors de combat*, though he had the satisfaction of making the fastest lap at 62½ m.p.h. whilst driving in a heavy wind with rain and thick mist.

Further successes have fallen to Mr. Eyston this year, beginning with the second place in the Essex Hundred Miles Race, a first and third place at the B.A.R.C. Whitsun Meeting on his Aston Martin. One week before this year's Boulogne meeting he took delivery of the Bugatti, which was driven to second place by Pierre Viscaya in the Grand Prix at Monza. After tuning and some alteration this car was taken to Boulogne, where its owner won the Grand Prix and made the fastest lap. On this occasion the " bag " included the Regularity Prize, the Blackman Trophy, the Cummings Cup for the first Englishman home, and the gold medal of the A.C. Nord de France.

All our readers will sympathise with Mr. Eyston's atrocious bad luck in being put out of action through no fault of his own in the last Two Hundred Miles race, in which he had a very good chance of a place, but, as he says : " It is all in the luck of the game."

His Monza Bugatti, however, has since given a very good account of itself by putting up five new world's records in Class F, namely, the Three hours, the Six

MOTORING SPORTSMEN—continued.

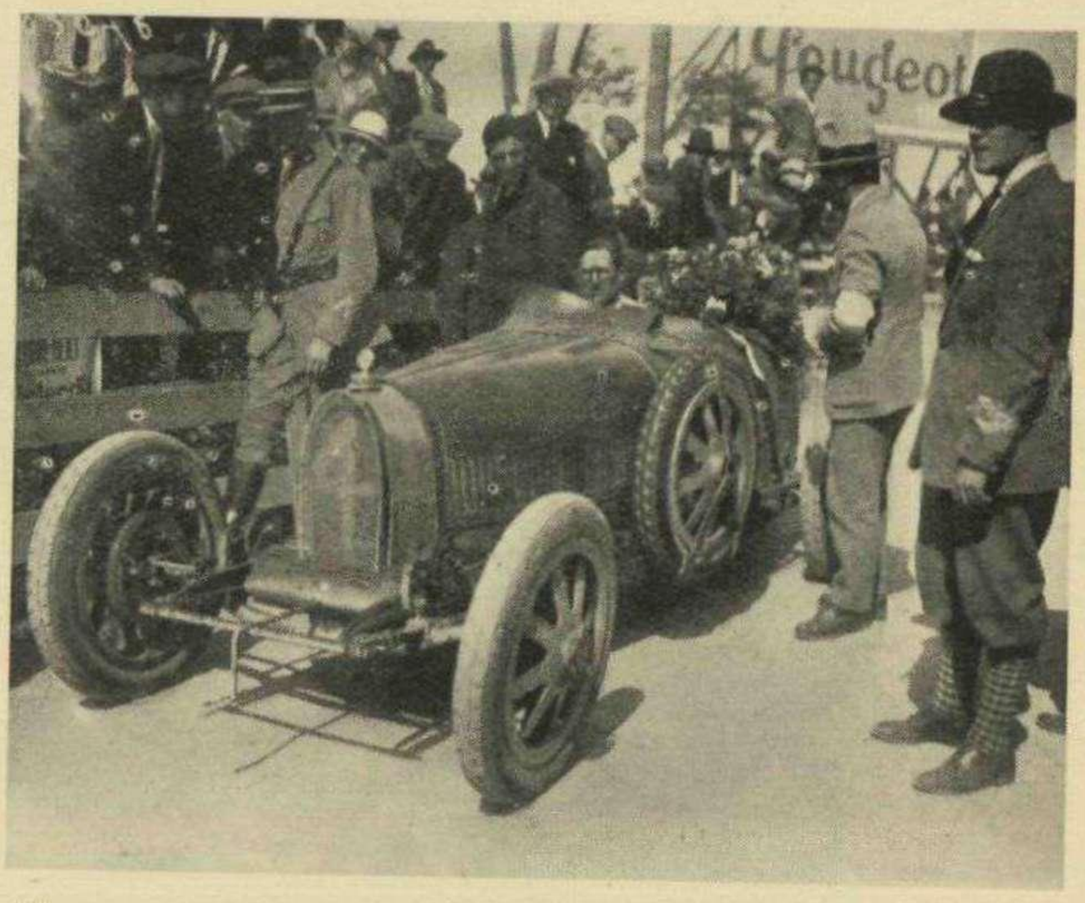
hours, the 500 Kilometres, the 500 miles and the 1,000 miles, in which performance Capt. J. C. Douglas very ably assisted as alternate driver.

A Motor Boat Enthusiast.

For some years Mr. Eyston has been very keenly interested in motor boating, and owns a very fast 1½ litre craft known as " Miss Olga." With this boat he has won several important races at Hythe, Southampton Water and Southend, and was successful in gaining the second place for the Duke of York's Trophy trials, comprising three races, each of thirty miles in length, on the Thames.

He also possesses a pilot's certificate of the Royal Aero Club, and has flown his own machine in races, besides using it for private transport. One fine day, however, an individual professing the intention of buying the machine took it up for a trial trip, but failed to return, no one having any knowledge of his landing, although this machine bore the usual identification marks. The general impression was that this person used his knowledge of flying for the purpose of stealing machines, and certainly made a very good getaway in this particular case ; though we believe Mr. Eyston was secretly thankful for finding so easy a solution to the disposal of a machine that for various reasons had ceased to interest him personally.

Shooting, yachting, fishing and hunting are also included in Mr. Eyston's list of hobbies, but for all that he manages to put in plenty of time at work, which he describes as being " the most interesting occupation of the lot."



EYSTON, AFTER WINNING THE GRAND PRIX DE BOULOGNE.

THE SIX-CYLINDER AMILCAR.

The six-cylinder Amilcar which did so well in the Two Hundred Miles race is now being produced as a standard model in a special department of the factory staffed by racing mechanics. Fitted with a 55 mm. by 77 mm. engine, the new production comes within the 1,100 c.c. class, and will be handled in this country by Boon & Porter Ltd., 159-161, Castlenau, Barnes, S.W.

ROUND THE WORLD ON SIDECARS.

On 30th August last two riders, B. H. Cathrick and J. P. Castley, each mounted on a specially built 8 h.p. B.S.A. and box sidecar, set off from London in an attempt to ride round the world and so to prove that British motor-cylces are the finest made.

The earlier parts of the journey have now been successfully covered, and by the time these words appear the European section should have been completed. When last heard of, the pair were at Vienna, having reached the Austrian capital in schedule time. In Vienna they were met by a large and enthusiastic body of motor-cyclists, were welcomed officially by the President of the Austrian Automobile Club, and were besieged by local journalists. Two days later they set off for Budapest, in good condition and high spirits.

From a point of view of export trade, the more important countries lie beyond Europe, and it is there which the intrepid pair will shortly be visiting. Through Asia, their route leads, by land and sea to Australia, which they cross from Freemantle to Sydney. A sea trip then takes them to New Zealand, which they traverse from South to North before embarking for Valparaiso. The last land stretch is across South America to Buenos Aires, a boat then returning them to London.

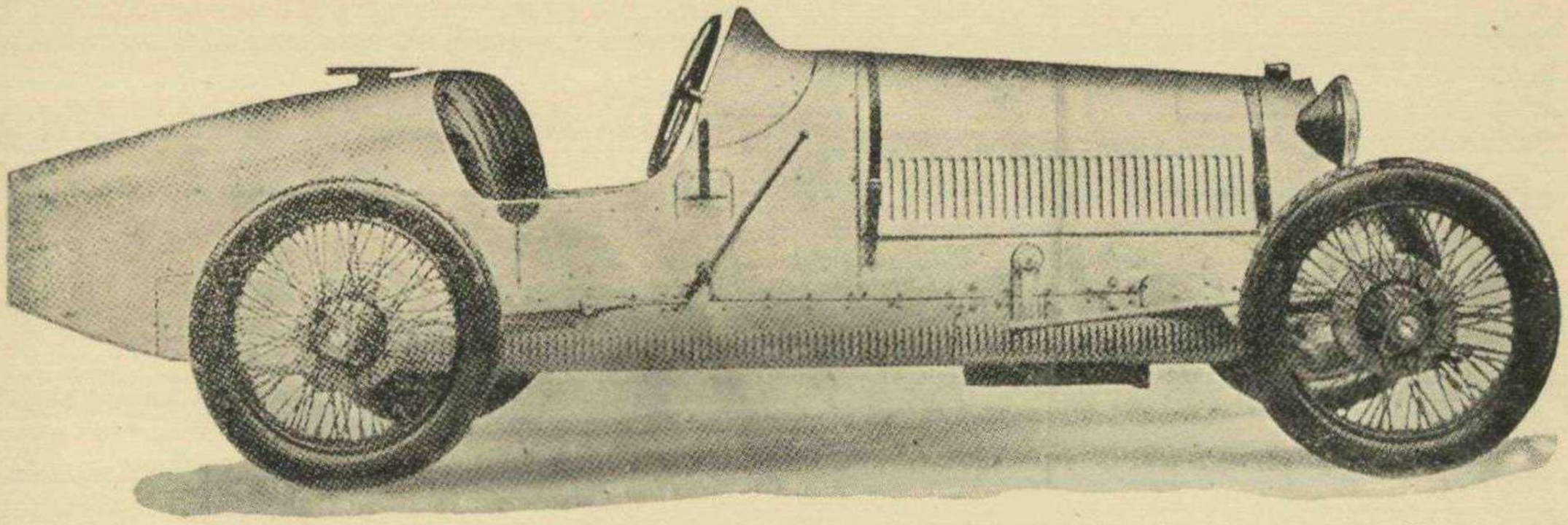
The whole trip is scheduled to take 14 months, and the riders' equipment includes camping kit, rifles and the like. Wild rough country will at times be crossed, and the dangers of the journey can scarcely be exaggerated.

THE FASTEST MOTOR CYCLE ?

Which is the fastest motor-cycle, and what speed will it do ? These are difficult questions to answer, and one must be guarded in one's replies. There is, however, one machine which lays claim to terrific speed. This is the Brough-Superior " Pendine " model, so called by reason of its successes in the Welsh T.T. Races held annually on the Pendine Sands. Each " Pendine " machine is guaranteed to have covered, before despatch to the customer, a flying half-mile on a private road, electrically timed, at over 110 miles per hour.

Although this is probably the highest speed guarantee which is given with any motor-cycle, there are several 3½ h.p. machines which will very nearly approach the " 100 " mark. Moreover, it is not only the very expensive motor-cycles nowadays which are capable of such high speeds. It is said, for instance, that the manufacturers of one fifty pound model obtained excellent results just before the track closed, and that it is quite possible that in the near future they will be guaranteeing a sports model of it which is capable of 100 m.p.h.

It is very rare that such speeds can be reached on the road, but these machines can be run at comparatively higher touring speeds very much more comfortably than those which will do, say, 60 m.p.h. only.



Attractive, Low, Short, Beautifully Finished and Capable of a Speed of Approx. 100 m.p.h.

1½ litre 4 cyl. Grand Prix Bugatti. A real sports car. 4 speed gearbox giving extremely flexible and smooth running with a range of speed from 8 to approximately 100 m.p.h. on top gear.

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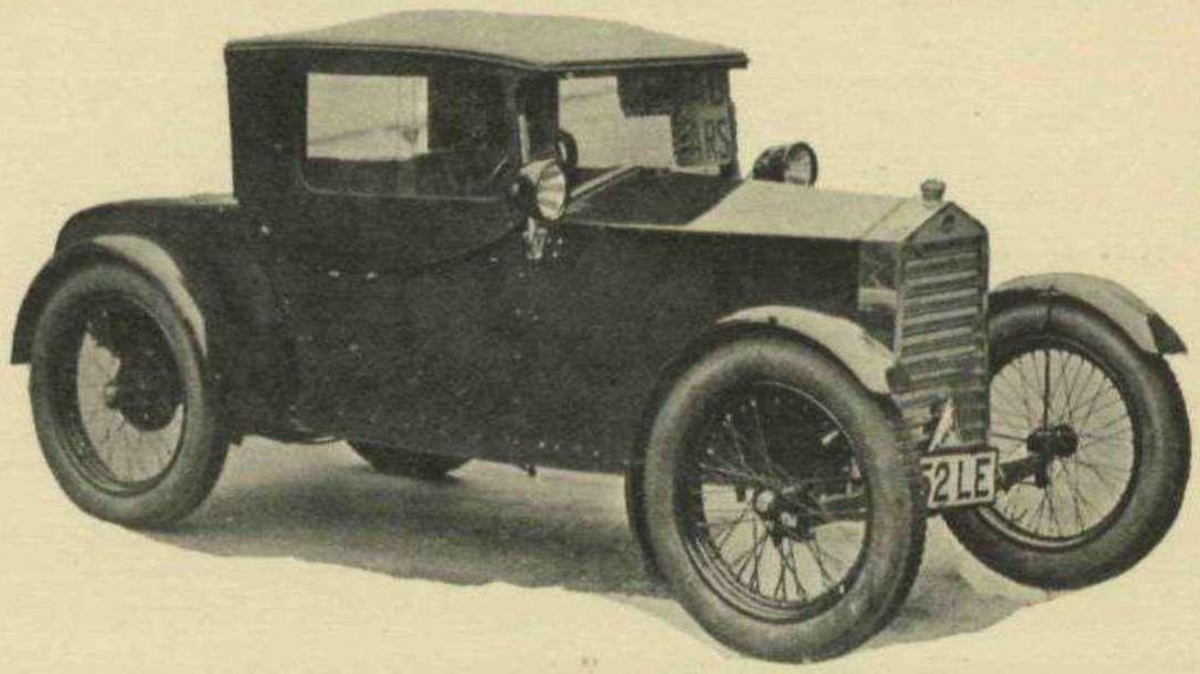
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2 seater—4-9 h.p. — Dunlop Balloon Cord Tyres 27in. x 4.4in.—Lucas Electric Lighting and Starting—Friction Drive—4 Forward Speeds and Reverse—Ample Luggage Accommodation—Finished in Rich Heather Purple with Black Wings and Wheels—Complete with Windscreen, Hood and Full Equipment Ready for the Road. Maximum Speed 40 m.p.h. Petrol, Oil, and Tyre Wear cost less than ¾d. per mile.



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ALL MODELS complete with Balloon Tyres, Windscreen, Horn, Licence Holder, Number Plates, high-pressure grease gun system of lubrication, upholstered seat and seat squab and body built of steel armoured plywood.

All Prices ex Works at London.

NOTE!—The Coupé Top is interchangeable with the Standard Hood, thus the Coupé model can be readily transformed into an open vehicle by the fitting of a hood.

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Mark III Model, with Mechanical Starter	85	0	0
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Mark V Model, with Mechanical Starter and Dynamo Lighting (3 lamps)	92	0	0
Mark VI de luxe Model, with Electric Starter and Dynamo Lighting (3 lamps, bright and dim)	99	9	9
Mark VII Coupé Model, with Electric Starter and Dynamo Lighting (3 lamps, bright and dim)	107	0	0

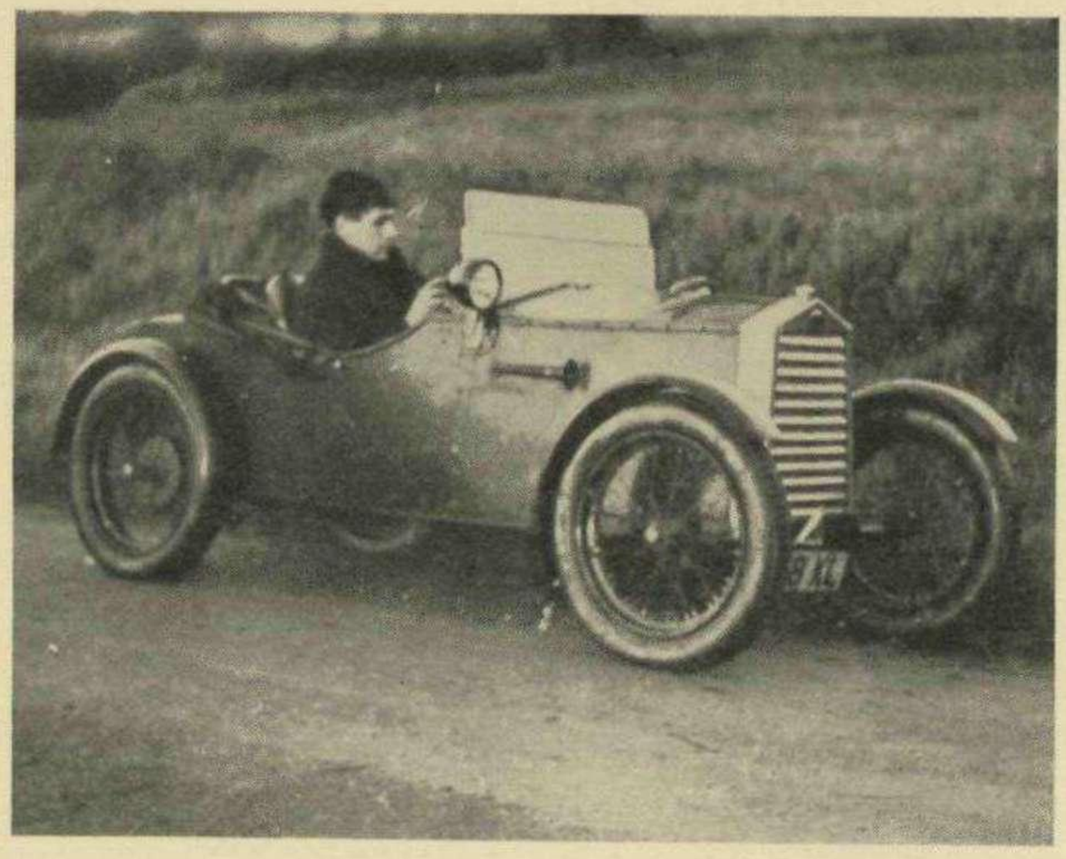
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THE CHEAPEST CAR ON THE MARKET.

Amazing performance of the £99 Nomad.

By the Assistant Editor.

VISITORS to the car show at Olympia may have noticed an attractive little vehicle buzzing about in Maclise Road, close to the railway station. Doubtless in the rush to get inside the great hall itself many forgot to thoroughly investigate this car, so that some notes on experiences with the Nomad, as it is called, should be of interest.

Perhaps the most arresting feature of the Nomad. is the price—£99 9s. 9d., sounding, as it does, so much more interesting than a plain round £100.

Now during the last year or two there have been many attempts on the part of small firms to produce cars at a price somewhere in the neighbourhood of £100. These have failed chiefly because the makers have started with the rather complicated conventional car design as a basis, and, by vigorous skimping and paring have endeavoured to reduce manufacturing costs to the very minimum.

This policy has usually resulted in the production of unreliable, uncomfortable and shoddy cars which have completely failed to find a market; this fact, together with the impossibility of producing the conventional chassis at less than a certain definite cost, have spelt the doom of most cheap four-wheelers.

Messrs. Nomad Cars Ltd. therefore have very wisely decided on a departure from conventional practice, confining themselves to great simplicity of design, thus enabling themselves to turn out a really well equipped car, embodying all the features which ensure a good performance, reliability and utility.

To begin with, the car is extremely light, so that a small engine (350 c.c. Villiers 2-stroke) proves entirely adequate to propel it at a satisfactory speed. Again, the light weight allows the use of friction drive, so attractive in theory, but inclined to give trouble with a car of any weight; a wide range of gears together with a reverse therefore ensures that the car is capable of "going anywhere" and "doing anything." Finally, the equipment soars to the point of luxury by including an electric starter, hood and full dynamo lighting set complete with dashboard lamp!

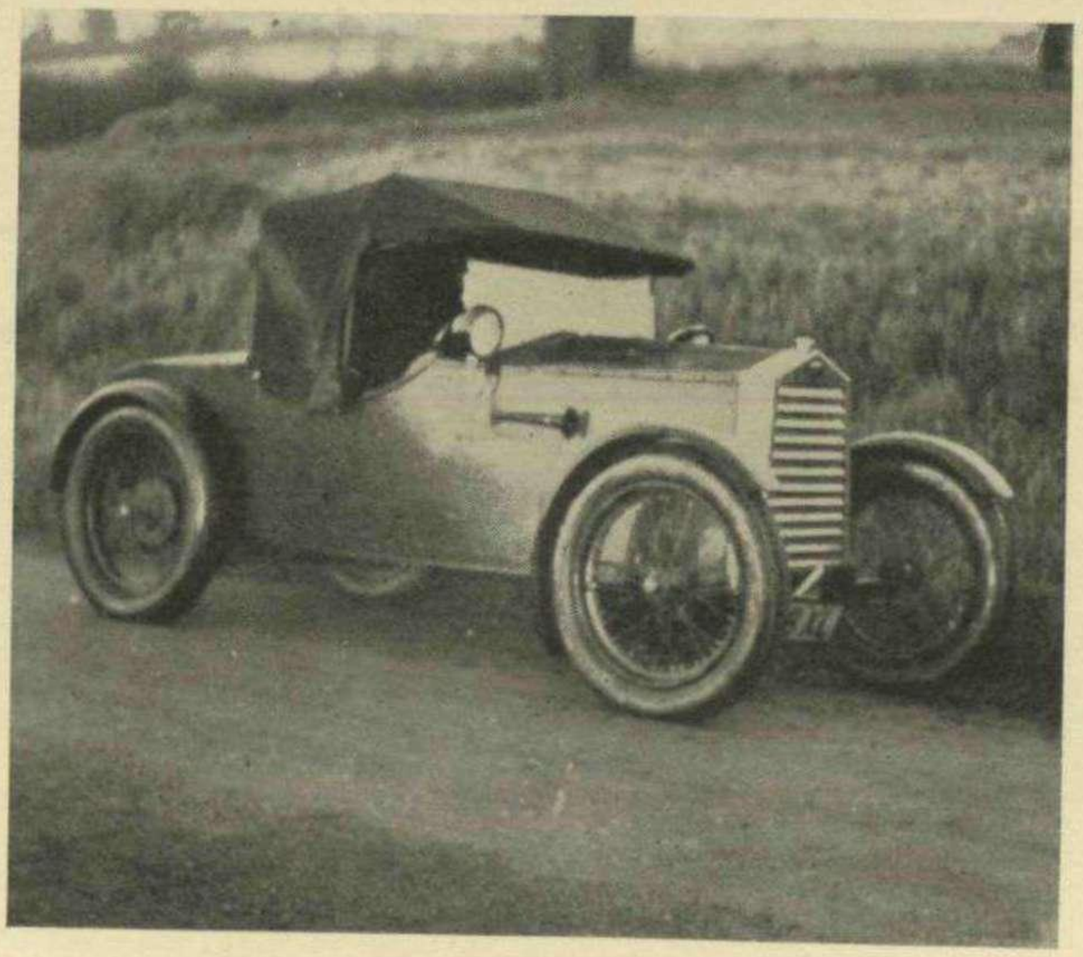
In the interests of simplicity the makers of this amazing little car have taken several bold steps, which are bound to shock the conservative, but which are more than justified in practice. The two startling features of the design are the lack of any chassis frame and the complete absence of any form of spring suspension.

The first is explained by the great strength of the body, which is composed of a special material—steel armoured plywood with the edges protected by channel steel. To the body the plain front axle and the whole rear axle assembly complete with all the "machinery" are rigidly attached. The absence of springs is compensated for by the fitting of very large (27in. by 4½in.) balloon tyres, run at an extremely low pressure, and in practice the car is as comfortable as one could wish.

The controls are conventional, except that the last half of the clutch movement also operates the footbrake, while owing to the rearward position of the works an enormous amount of leg room and luggage space is available behind the dummy detachable radiator.

After a preliminary demonstration by one of the Nomad staff we took over our car from the Fulham works and set out towards Hertfordshire, to try our luck on the inter-Varsity reliability trial course. Having a good knowledge of the country, we had arranged to meet the route markers for this event at Berkhamsted, in order to pilot them round the rest of the course.

During this main road run we drove carefully, for the sake of a rather new engine; however, a few short experiments with the foot hard down showed that there was no reason to doubt the makers' claim of 40 m.p.h.

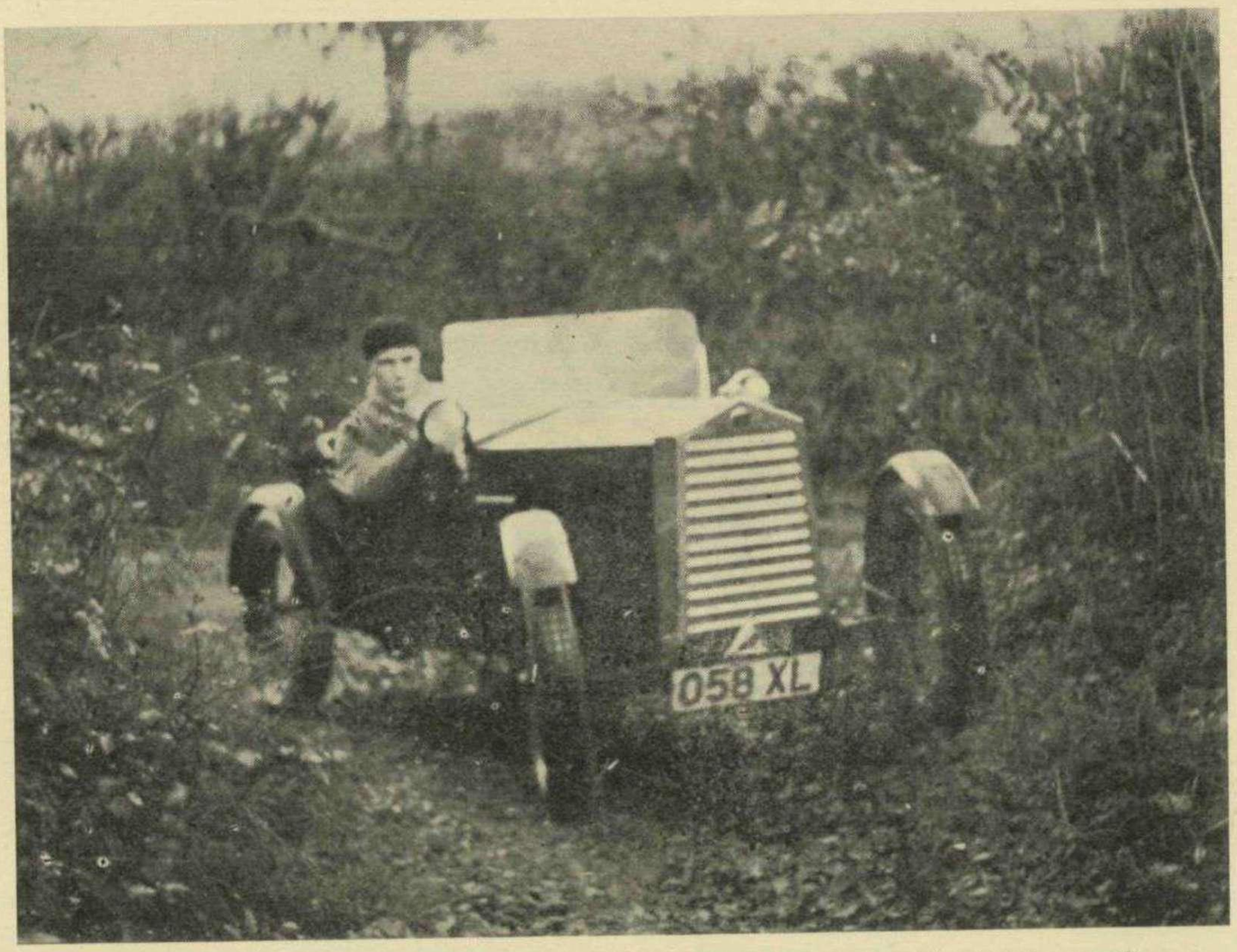


THE SURPRISINGLY EFFECTIVE HOOD CAN BE ERECTED IN ONE SECOND.

THE CHEAPEST CAR ON THE MARKET—continued.

Arrived at Berkhamsted it became evident that the route markers had not yet arrived, so we set off to meet them. Two little known but steep hills in this neighbourhood caused a little trouble owing to the newness of the engine and our lack of familiarity with the Nomad. However, both were surmounted with ease at the second attempt, and it was quite obvious that the power of the engine was improving every minute. Eventually we met our friends, complete with a disreputable three-wheeler of well known type and a popular 4-cylinder car. the whole cavalcade presenting a decidedly bizarre appearance, machines and passengers plastered with mud and blue dye. Some minutes were spent clearing the worst boulders off the famous Tunnel slide at Nettleden, then to everyone's surprise the Nomad we were able to complete the route marking without much difficulty. The three-wheeler by this time was getting rather tired, it had boiled on Duncombe Hill and had wrecked its dynamo on some rough track during the day. However, the Nomad illumination was ample for a fast run home for the night.

On the day of the trial several more ascents of Tunnel Slide were made with a 12-stone passenger, and the journey home from Dunstable (20 miles) was made in sheets of rain and inky darkness in just over 40 minutes. For the purposes of our trial the rain was quite welcome, as it proved that the hood, quickly erected and held by spring hooks, was more than capable of keeping out the most torrential downpour, while the dashboard lamp enabled a watchful eye to be kept on the sight-feed



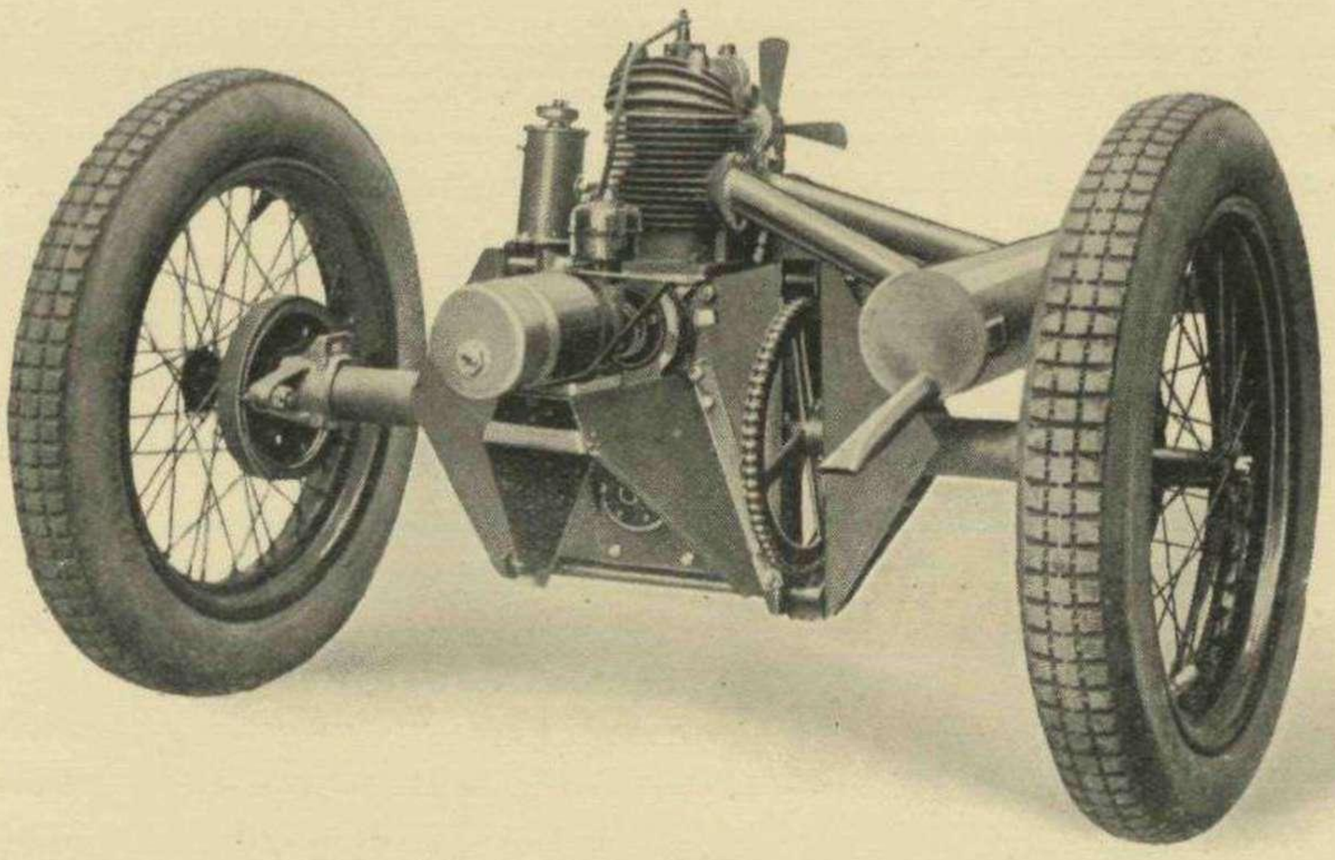
ATROCIOUS SURFACES, STEEP GRADIENTS AND ACUTE CORNERS ARE EASILY NEGOTIATED.

purred up with the utmost ease, the lack of differential preventing any serious wheel spin. For the next fifteen miles of the course the Nomad astonished our companions by its liveliness and remarkable stability on corners; the next hill on the course was Duncombe Farm, consisting of an extremely boggy farm track steepening gradually through a wood, round two sharp hairpins, finally emerging on a rough open common. The Nomad ploughed bravely through the bog, accelerated smartly up the steep portion, and was wrenched round the hairpins at a rousing speed and bumped across the waves of the common in a most refreshing manner. Shortly after this darkness descended over the landscape, but, thanks to the powerful electric lamps on the Nomad, lubrication and other instruments with which the dash is decorated.

The remainder of the trial consisted of pottering and frolicking round all sorts of roads, fast runs on main roads, burrowings through overgrown farm tracks, and sliding round greasy lanes.

The results of these experiences showed us that, when run in, the car was capable of a very good 45 m.p.h. on the level, and could climb any hill likely to be encountered on main and secondary roads, while very few of the more freakish gradients and surfaces are likely to cause any trouble, owing to the superior wheel grip obtained by the weight distribution, large tyres and lack of differential.

THE CHEAPEST CAR ON THE MARKET—continued.



THE NOMAD BACK AXLE ASSEMBLY, COMPRISING ENGINE, TRANSMISSION, STARTER, DYNAMO AND WHEELS.

Cornering is easy and safe with the almost direct gearing, though little self-centreing action is provided. On very rough roads at slow speeds the Nomad feels rather like a car sprung for racing, but at higher speeds comfort is quite normal and the absence of springs is absolutely forgotten.

The gears worked admirably, a particularly useful feature being that it is possible to use ratios between the four notches provided, thus enabling the engine to be run at its most efficient speed under all conditions.

In spite of the completely enclosed engine, no overheating was experienced, although the car was flogged unmercifully throughout our test; the small four-bladed fan apparently worked with the utmost efficiency. A little trouble was experienced with an unsuitable sparking plug, but was easily cured.

During the whole trial we failed to detect any rattle or squeak anywhere in the car, although some of the "colonial sections" produced visible and violent distortion of the frame-work. This distortion causes no trouble as the body is rivetted throughout. The electrical apparatus, including the starter, never gave the slightest trouble, and, finally, the brakes proved the equal of any and the superior of most systems employing only the rear wheels; deceleration was smooth, positive, extremely rapid, and it was almost impossible to skid the car by applying the brakes.

The only two suggestions or criticisms we can make are that the hand brake lever should be fitted so that the driver's knuckles are not barked on the body when applying the brake, and that, if possible, a silent drive dynamotor and separate magneto be fitted instead of the motor and dynamo-coil units at present used for starting and ignition. This suggestion is made purely on the strength of the horrible noise of a Bendix drive, which is really rather an insignificant point.

In conclusion let us emphasise that the Nomad stood up to a far severer gruelling than it was ever intended for, thus proving that as a mechanical and commercial proposition it is throughly sound.

We have no hesitation therefore in recommending this little car to anyone of limited means as an example of thoroughly reliable, economical and comfortable motoring for two, while even the more blasé sportsman will find that for anything except sheer racing, the Nomad will prove remarkably efficient and decidedly exhilarating.



THE NOMAD SNAPPED ON ONE OF THE WILDER COLONIAL SECTIONS.

A TRADE CHANGE.

Mr. D. R. O'Donovan, the record-breaking motor-cyclist, joined the staff of the Raleigh Cycle Co., Ltd., on December 1st. O'Donovan is, of course, famous as a designer and tuner, and he joins the Raleigh Company with the express purpose of speeding up their overhead valve model.

SPORTING MACHINES ON TEST.

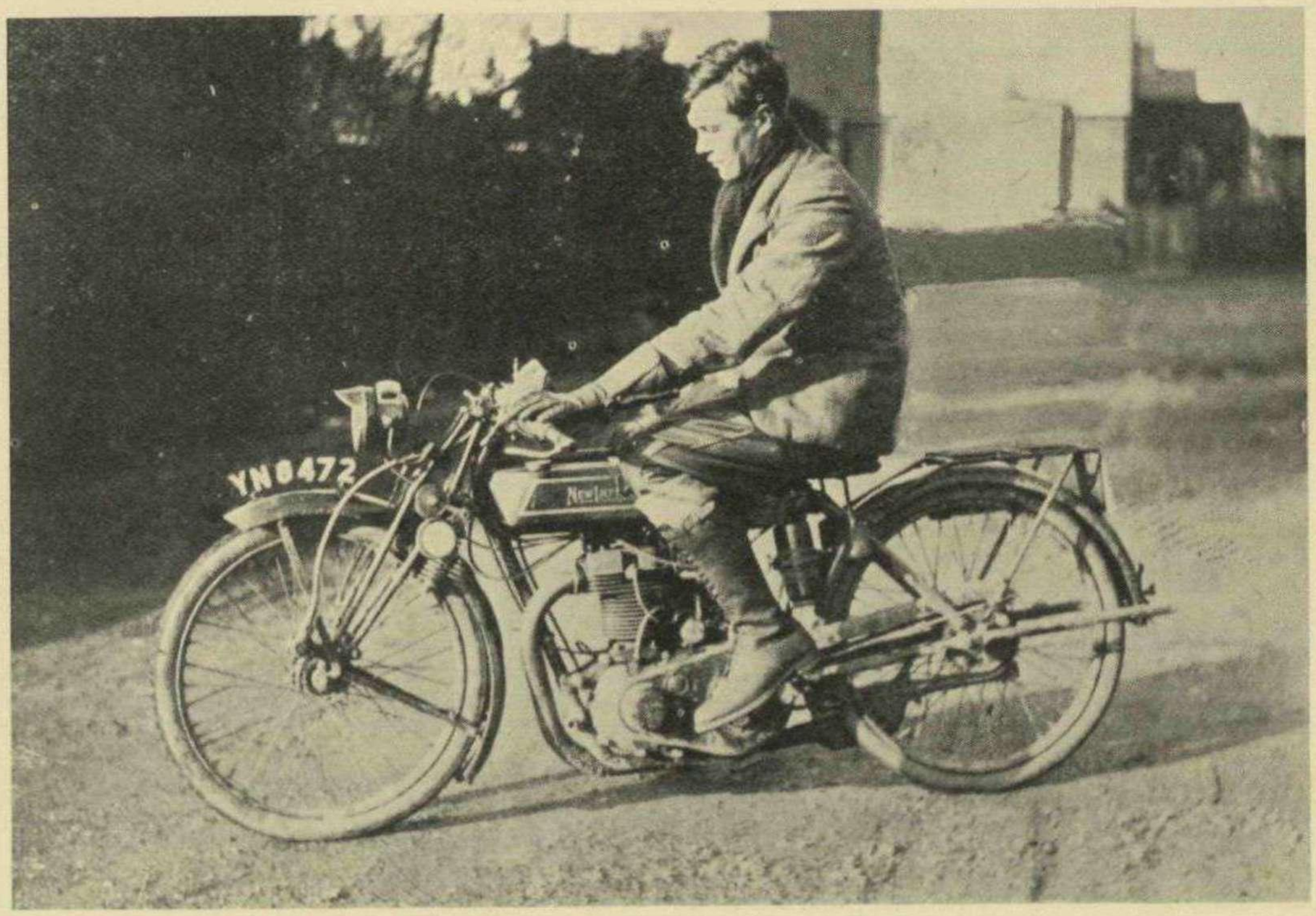
The 250 c.c. o.h.v. New Imperial.

ALTHOUGH there are several smaller sporting machines on the market to-day, some of them distinctly fast, the 250 c.c. engine is really the smallest size that receives any measure of support from the sporting and racing fraternity in this country. Apart from machines fitted with one or other of the proprietary engines, the New Imperial is practically the only o.h.v. four-stroke of this size, and as such commands considerable interest and popularity.

The machine reviewed is a 1926 model, which has been used hard for the past six months without developing any serious trouble, so that it is not surprising that no radical changes have been made in the design of the 1927 New Imperial.

The footrests, fitted in the standard position, were guaranteed to foul the ground on almost every corner, when the machine is driven in the true "sporting" manner, but it was a very simple matter to arrange the same rests in the New Imperial T.T. position, at the forward end of the chain stays. This alteration, together with some padding round the rear end of the tank, rendered the machine far more controllable and comfortable for fast riding. The only disadvantage of this arrangement was that the footrests now prevented the use of the kick starter, but as the engine was, without exception, the easiest single to start that we have ever met, it really didn't matter.

Steering under all sorts of conditions was excellent.



THE NEW IMPERIAL IS ONE OF THE LIGHTEST AND HANDIEST SPORTS MACHINES.

During the earlier months the machine was in our possession some trouble was experienced through the valve gear running dry; this caused the tappet feet to wear unduly. After some thought it was decided to arrange a T-joint in the main oil pipe from the mechanical pump to the engine, thus feeding a proportion of oil to the timing case through a hole drilled specially for the purpose. Since this alteration a great reduction of mechanical noise has resulted, and undue wear of the cam gear has ceased. The only other replacements necessary during a season's hard riding have been two valve guides, one overhead rocker bush, and one back spindle, which snapped in two after some rough treatment.

From all out speeds (just over 60 m.p.h.) to bottom gear mud-plugging in sporting trials the machine proved remarkably controllable, while in the latter class of event its light weight was a great asset, since even the best of machines sooner or later has to be lifted out of a ditch, bog or hedge!

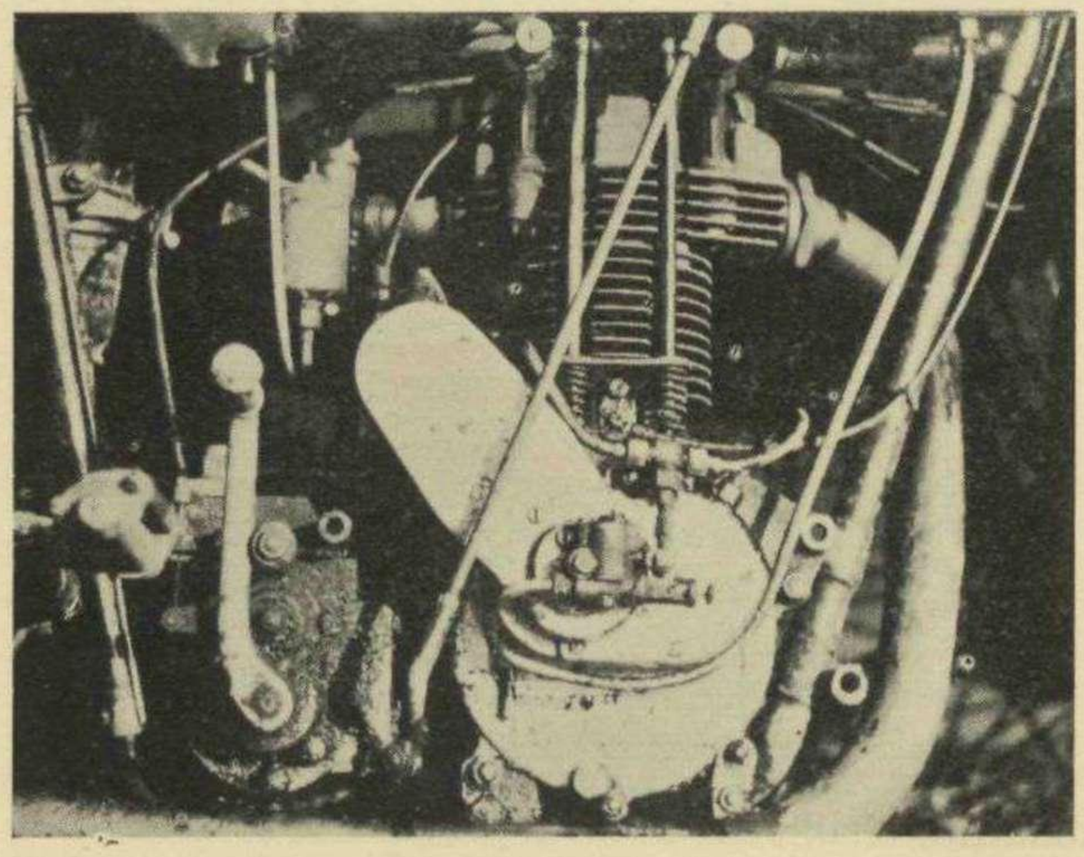
Besides being used in reliability trials, in which it has gained several premier awards, and the even more strenuous business of organising trials, the "New Imp." has won the 250 c.c. class at a North London speed event, and has successfully performed a Devonshire tour, when Porlock was climbed with ease. The only other hill of note that the machine tried was Alms. Result—victory for the New Imperial.

SPORTING MACHINES—Continued.

Fairly close ratio gears were fitted, though a closer set is obtainable for speed work ; for general purposes, however, the wider set are most useful ; any gradient can be surmounted on bottom gear, while 40 m.p.h. is possible on second.

The clutch control is light and the gear change fairly easy ; the angle of the gate, however, and the length of movement on the lever make the change from bottom to second rather awkward.

A shorter travel for the gear lever would ensure " snappier " changes under all conditions.



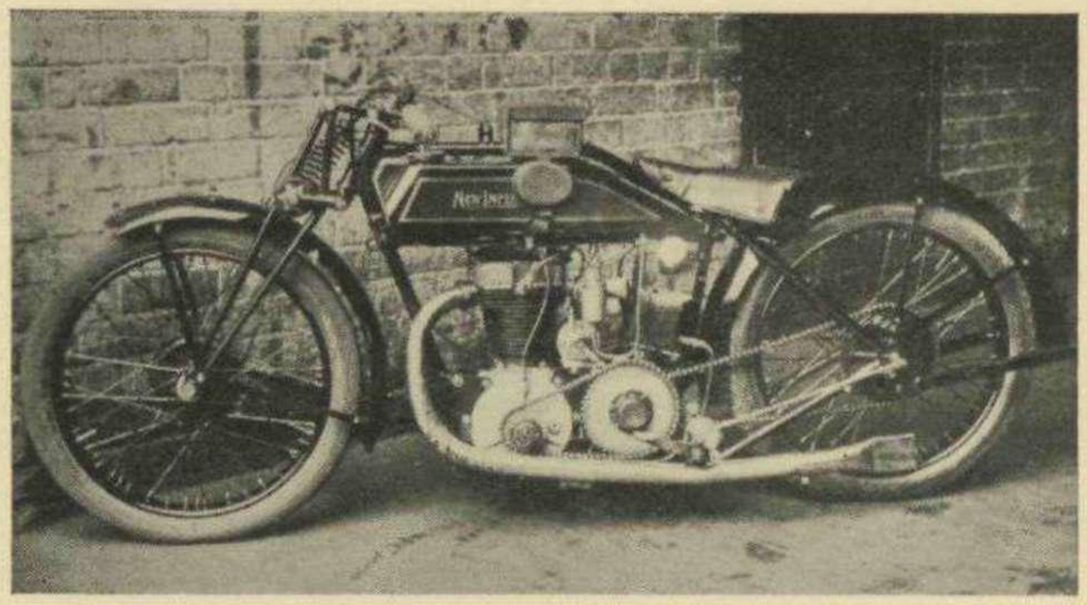
THIS PHOTOGRAPH SHOWS THE ALTERATION TO THE OILING SYSTEM

Quite the most remarkable feature of the engine was the extraordinarily low oil consumption : on one occasion 380 miles were covered on a pint and a half of Castrol R, for which distance the machine was driven hard. This was quite its usual rate of consumption, and under the same conditions petrol was used approximately at the rate of one gallon per 70 miles. A fairly high compression ratio ($6\frac{1}{2}$ to 1) is used, and if one is foolish enough to attempt very slow running on top gear, a certain harshness is experienced, and the ignition lever must be juggled with. However, there is no excuse for neglecting the use of the gear-box on a machine of this type, and its ability to " rev. " should be utilised whenever possible. The brakes at first sight appeared rather inadequate, and many gloomy prophecies were forthcoming as to a complete inability to stop the machine.

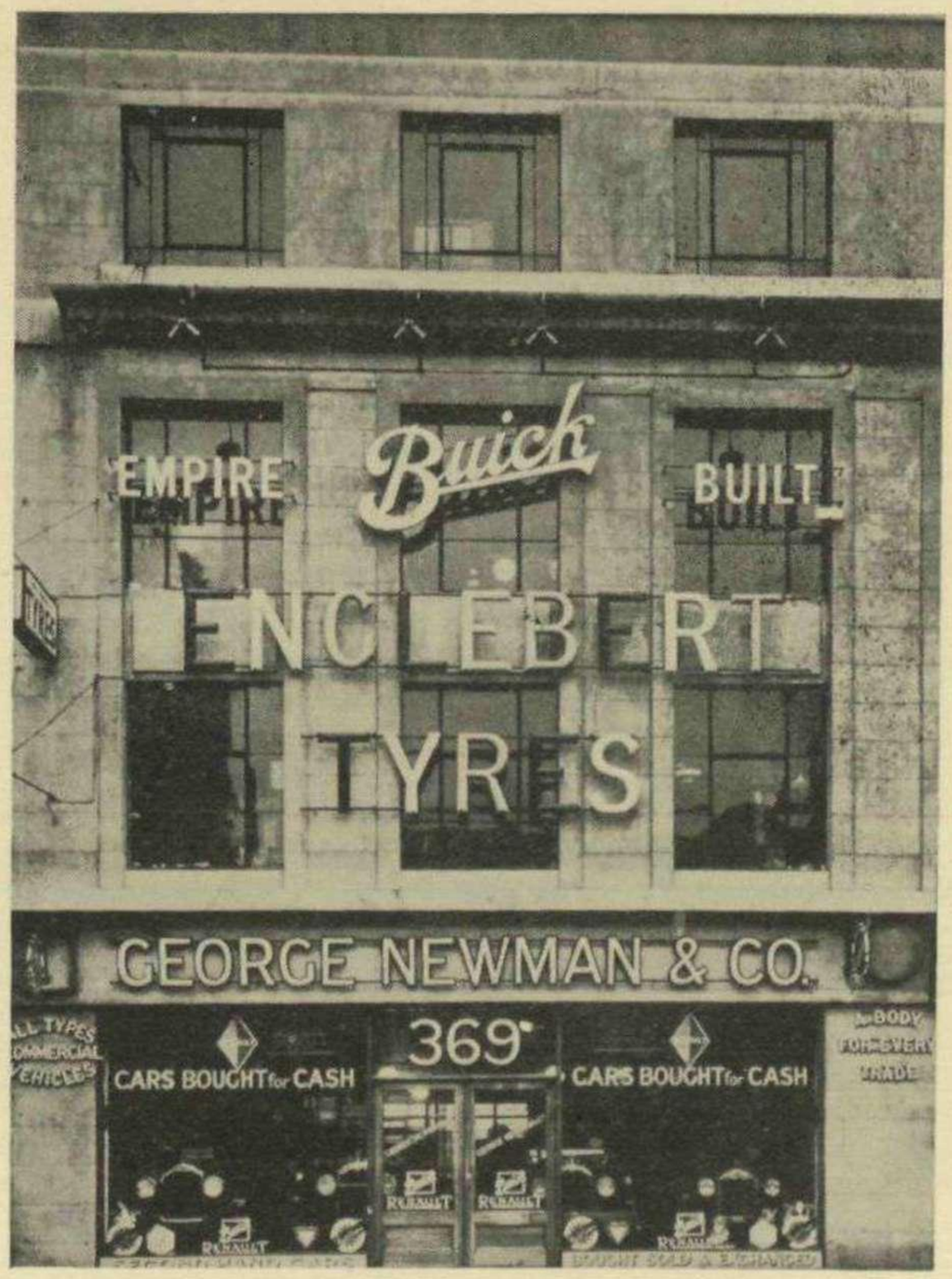
It is only fair, therefore, to say that there was absolutely no cause for alarm, as both brakes were quite surprisingly powerful, the front apparently even more so than the back, in spite of its diminutive size ; neither has any appreciable wear taken place on the shoes or drums.

A certain amount of cleaning has been performed, and in spite of its rough treatment, the finish of the machine scarcely suffered at all.

In addition to such severe treatment as has already been described, and of which the sportsman will appreciate the significance, we must not forget to mention that the New Imperial has emerged unscathed from several football matches and gymkhanas, on one occasion after winning a long jump competition with a leap of about 30 feet. A £43 machine that will stand up to this treatment and yet be fast, pleasant to drive, and reasonably silent, should really be seriously considered by the sportsman who likes a light machine, and a certain criterion of its merits is the number seen on the road to-day.



SHOWING HOW CLOSELY THE I.O.M. RACING NEW IMPERIAL FOLLOWED STANDARD PRACTICE.



ONE OF MR. GEORGE NEWMAN'S SHOWROOMS, WHERE A SELECTION OF SPORTING CARS IS ALWAYS AVAILABLE.

THE NEW DAIMLER "DOUBLE-SIX."

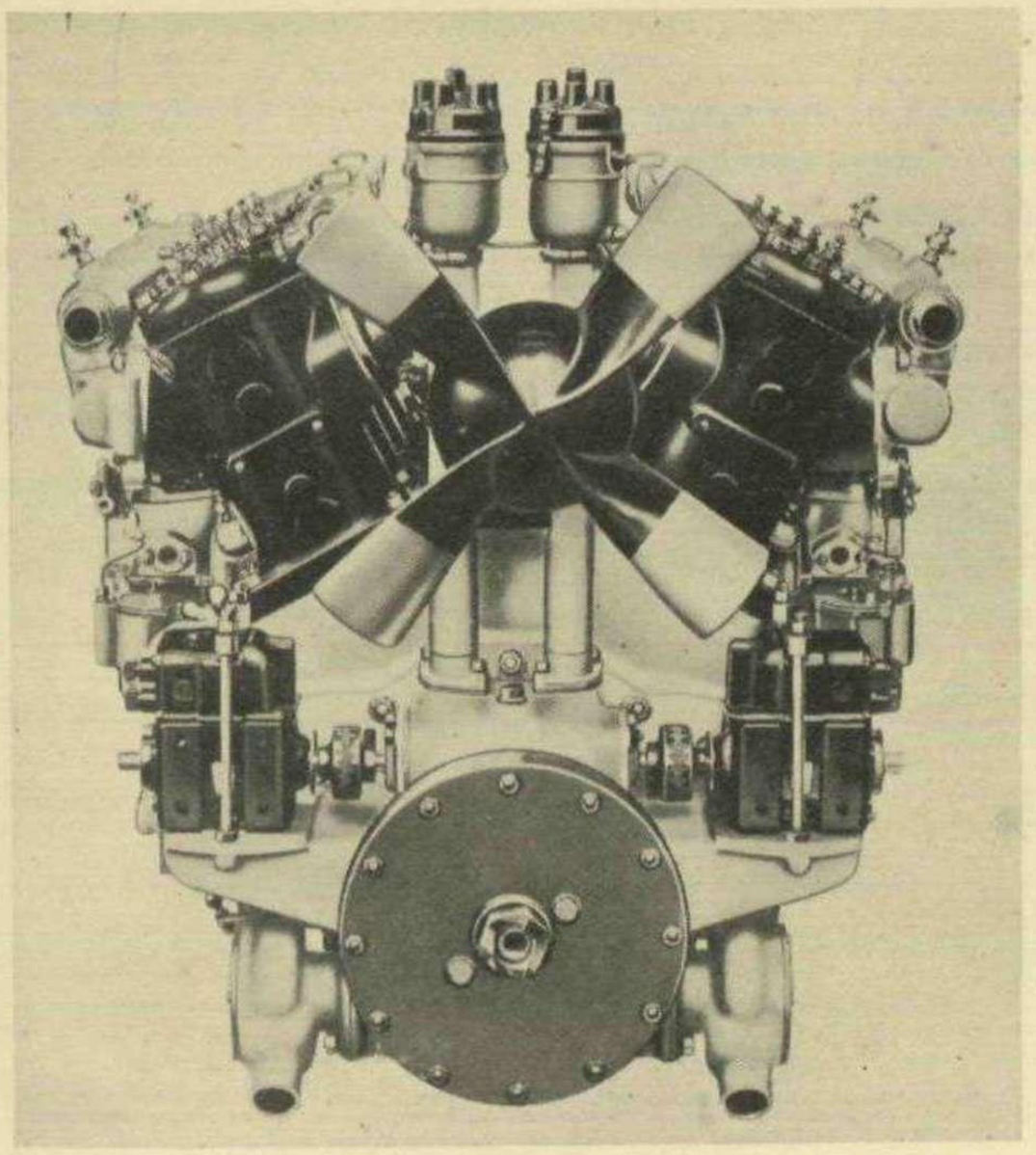
DETAILS OF A NOVEL TWELVE CYLINDER ENGINE BY A FAMOUS FIRM.

THOUGH primarily intended for use in fast travelling vehicles of the luxury class, the new Daimler "Double-Six" is full of technical details that cannot fail to interest the student of design. The new engine has a capacity of just over seven litres and is rated at 49.4 h.p., the cylinder dimensions being 81.5 mm. bore by 114 mm. stroke. The reason for adopting twelve cylinders in place of the already smooth running six-cylinder model is to provide a power unit, which in the words of the makers "runs like a turbine," and in the case of the Daimler sleeve valve principle, the multiplicity of cylinders has been carried out without the usual complications to be found with a twelve cylinder power unit, where the ordinary forms of valve mechanism are used.

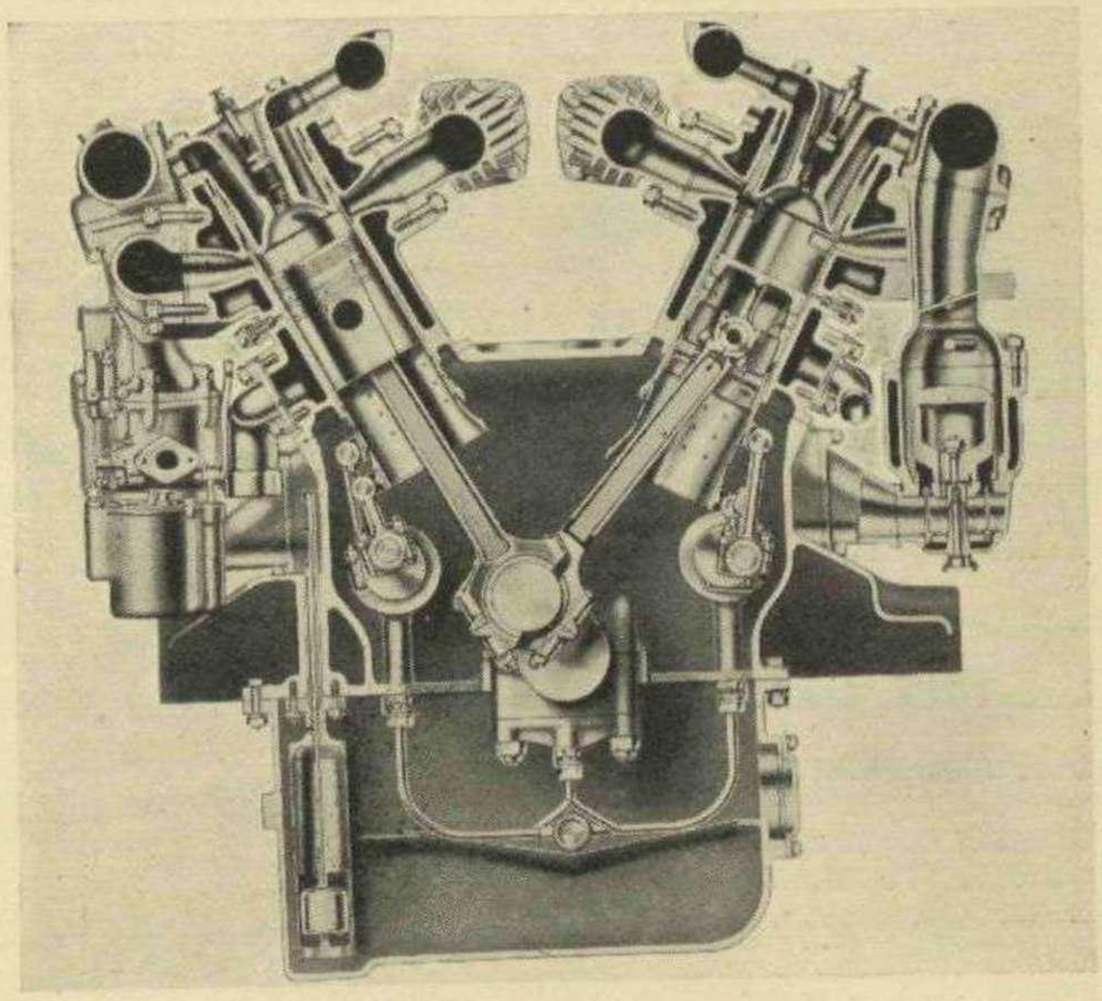
Cast in blocks of three, the cylinders are arranged in banks of six and set at an angle of 60 degrees. Seven bearings are employed for the support of the crankshaft, upon the crank-pins of which the big-end bearings of the "H" section connecting rods lie in pairs, those of the right hand bank of cylinders being forked, thus allowing the diagonal pairs of cylinders to lie in the same transverse plane.

The form of aluminium piston used is very interesting, the skirts being split to well above the gudgeon pins, springs being arranged internally near the bottom of the skirts to ensure a good working fit with a complete absence of piston slap.

The usual eccentric shaft mechanism for operating the sleeves has, of course, been duplicated, and the drive from the crankshaft is carried out in a particularly neat



END VIEW OF THE 12-CYLINDER DAIMLER.
NOTE THE TWO MAGNETOS DRIVEN BY A CROSS SHAFT.



CROSS SECTION OF THE NEW ENGINE, SHOWING METHOD OF OPERATION OF THE SLEEVE VALVES.

fashion. In order to ensure of full lubrication of the sleeves directly the engine is started up from cold, an extra supply of oil is controlled by the priming lever, admitting oil directly to the tops of the sleeves.

To ensure a correct distribution of gases to each set of cylinders, a multiple jet Daimler carburettor is arranged on each side of the engine, the outlets being fed to a cylindrical aluminium casting, through the centre of which passes the water pipe from the heads of the cylinders to the radiator, thus assisting in the vaporisation of the mixture. Furthermore, the arrangement of the carburettors includes the warming and cleaning of the air as it passes to the intakes.

At the front of the engine there are two transverse shafts, the one above the crankshaft driving the two magnetos, whilst a second shaft below the crankshaft operates the impellers of two centrifugal water pumps. A Lanchester torsional vibration damper is arranged, as in the case of the previous Daimler models, and as may be seen from the accompanying illustrations, the details of the engine have been worked out with every consideration for accessibility.

We hope to be able to give fuller details of this new model and impressions of a road test in an early issue.

SIMPLIFIED GEAR CHANGING.

The new gear box demonstrated by Messrs. Lea & Francis, Ltd., recently, has been designed to facilitate gear changing, the gears being of the constant mesh type, the engagement taking place by means of internal clutches, instead of by the sliding wheel method. Though many drivers have deep rooted prejudices against so-called "fool-proof" devices, there is still a great deal to be said for improved gear engagement, especially where quick driving is concerned.



Round the Clubs



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ASHFORD, Kent	Captain G. Maund, New St.
BARROW-IN-FURNESS, Lancs.	W. A. Singleton, 114, Sutherland St.
BASINGSTOKE, Hants.	Percy Watson, 1 and 2, Winchester Rd.
BLACKBURN, Lancs.	R. Jackson, 24, Cecelia Rd., Feniscliffe.
BLACKPOOL, Lancs.	T. Sharples, Rawcliffe Hall, via Garstang.
BLOXWICH, Walsall	Horace R. Millington, Wallington Heath.
BODMIN, Cornwall	W. H. Jenkin, Bodmin [Rd.
BOURNEMOUTH, Hants. ...	A. G. Cullwick, 6, Belvedere
BRIGHTON, Sussex.	Lieut.-Commdr. John Havers, 35, Lansdowne Place, Hove.
BRISTOL, Glos.	T. D. Corpe, Hill View, Churchill, Somerset.
BROMLEY, Kent...	F. Wilson Smith, 32, Hammeltor Road.
CAMBRIDGE, Cambs.	C. A. C. Birkin, Jesus College
CARLISLE, Cumberland ...	F. Rowlands, "Douglas House," Nelson Street.
CARMARTHEN, Carmarthen. ...	J. Jones, Nelson Hotel.
CLECKHEATON, Yorks. ...	F. A. Brown, "Hill-Crest," Whitcliffe.
DERBY	Mr. M. A. McEvoy, Vicarage Lane, Duffield, Nr. Derby.
DEVIZES, Wilts.	G. H. Oliver, 18 and 19, The Brittox.
DOOARS, India	H. Marshall, Esq., Matelli T. E. & P.O., Jalpaiguri,
GRAVESEND	S. J. Gillis, "Comines," Wrotham Road.
LEAMINGTON SPA	E. B. Nelson, Riplingham.
LINCOLN, Lincs.	A. L. Musham, 22, Hartsholme Drive, Swanpool.
MANCHESTER	E. O. Spence, Esq., 11, Liverpool Rd., Deansgate.
NEWCASTLE, Staffs.	E. Willan, 42, Grey Street.
NORTHALLERTON, Yorks. ...	R. D. Hudson, Old Bark House.
OTLEY, Yorks.	J. H. Holmes, The Garage, Station Road.
OXFORD, Oxon.	W. Mathews, 6, St. Aldate's.
PATELEY BRIDGE, Yorks. ...	G. Kingham, Colton Croft, Burnsall.
READING	S. W. Woollan, Caversham Motors, Ltd.
SCARBOROUGH, Yorks. ...	J. G. Bayne, 36, Trafalgar Sq.
SHEFFIELD, Yorks.	H. W. Ogg, 12, Southbourne Road, Broomhill.
STROUD, Glos.	W. E. Hayward, Bideford, Bisley Road.
TAUNTON, Som.	P. V. Hare, The Parade.
WOLVERHAMPTON, Staffs. ...	H. L. George, "The Homestead," Old Fallings Lane, Fallings Park.

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.

Scott M.C.

A very successful autumn meeting was held at Henley recently. Lunch was taken at the Stoner Arms, and was followed by a competition for the best kept machine. Mr. Harry Langman judged the machines. The results were :—1, J. C. Cole ; 2, Brooks ; 3, Pullen.

A "Bottle" T.T. was held as a surprise competition in an adjoining field. Bottles were placed at intervals of five yards, and competitors had to ride in and out, circuits being timed by a stop-watch. The results of this were :—1, T. Howle, 22secs. ; 2, A. H. Wilkinson, 23½secs. ; 3, C. V. Patrick, 24secs. ; Sidecars : 1, R. D. Satchell, 34secs. ; 2, J. H. Culver, 35secs. ; 3, F. L. Woodgate, 45secs.

Staveley and D.M.C. and L.C.C.

An exciting scramble was held recently on the moors near Stoney Middleton, competitors being required to ride three times round a 4 mile circuit. Medals were awarded to the three whose speed came nearest to 20 m.p.h. The awards were as follows :—1, J. Threlfall (4.93 h.p. Sunbeam) ; 2, H. Bradely (3.50 h.p. A.J.S.) ; 3, J. Hack (4.90 h.p. Norton).

Amateur M.C.

The above club have decided to present certificates to all those competitors who finished with 100 marks in the Club's recent half-day sporting trial, with the result that Nos. 22, 23, 25, 27, 28, 30, 33, 34, 35, 36, 37, 38, 39, and 40 all gain certificates.

The annual London-Bournemouth-Ripley trial held recently was a great success. Out of an entry of 80 competitors there were only 14 retirements and no non-starters. The results are as follows :—

Gold Medals or Silver Cups : W. T. Cato (Scott) ; T. W. Probert ; T. A. Thatcher.

Silver Medals : W. A. White (P. and M.) ; C. Cunningham (P. and M.) ; W. A. Alsford (Sunbeam) ; L. Sandford (Enfield and Sc.) ; L. H. S. Swilft.

Bronze Medals : L. G. Fox (Triumph) ; H. J. Hawkins (A. J.S.) ; L. Western (Norton) ; J. J. Wale, E. Cato (A.J.S.) ; G. E. Cooper (B.S.A.) ; W. G. Burge (B.S.A.) ; J. Baldwin (B.S.A.) ; S. C. Belham (Harley-Davidson) ; E. B. Todd (Rudge) ; E. W. Northam (A.J.S.) ; A. W. Jones (H.R.D.) ; B. J. Cook (B.S.A.).

Special Sidecar Award : L. Sandford (Enfield and Sc.).

Team Award : F. Thatcher, L. Sandford, W. Faire, L. Weston.

ROUND THE CLUBS—continued.

West Bromwich M.C.C.

It is of interest to note that at a special meeting of the Sandwell M.C., the West Bromwich M.C. Football Club and the West Bromwich and D.M.C., held at the Sandwell Hotel, it was decided to amalgamate the three clubs under one heading of the West Bromwich M.C.C. The following officers were elected :—President, J. B. Stagg ; Chairman and Hon. Treasurer, R. B. Greatorex ; Vice-Chairman, E. A. Prince ; Hon. Secretary, N. W. Bassett ; Hon. Football Secretary, D. H. Brindley ; Hon. Trial Secretary, G. Sharratt ; Hon. Social Secretary, W. C. Johnson.

Uxbridge M.C.

In a trial held recently for the Bayliss and Reeves Cups the course was of a fairly easy nature. The chief obstacle was a two-mile Colonial section over an old Roman road. The results are as follows :—Bayliss Cup and Silver Medal : Jordan. Reeves Cup and Silver Medal : Hickson.

Summerfield M.C.C.

The above club held an open reliability trial recently over a 40 mile course, and the awards are as follows :—

Gold Medal : H. J. Lardner (3.49 A.J.S.).

Silver Medals : H. J. Barnes (3.49 Douglas) ; W. Reeves (499 Rudge) ; C. Yarnell (22.49 New Imperial).

Consolation Prize : G. Allbrook (24.9 B.S.A.).

Bearwood Amateur M.C.C.

The results of the winter trial was as follows :—

President's Cup : G. Evans (4.90 Norton).

Cope's Cup : H. Walters (w.e8 A.J.S.).

Organ Cup : W. Smitten (5.50 Triumph and Sc.).

Gold Medals : A. Jackson (1.75 Own Norman) ; W. A. Jacomb (499 P. and M.).

Silver Medals : A. Iddles (4.93 B.S.A.) ; A. Bray (348 Douglas).

Bronze Medals : A. Parked (3.48 A.J.S.) ; and P. Priddis (4.90 Norton).

North Liverpool M.C.

The results of the Bray Cup trial are as follows :—

Bray Challenge Cup : J. E. Wade (4.98 A.J.S.).

Two Miles Trophy : G. Bramwell (499 P. and M.).

Shipton Gold Medal : R. Sergent (4.94 James and Sc.).

Gold Medal : A. L. Shipton (4.94 James).

Silver Medal : A. Allen (3.48 Coventry Eagle).

Bronze Medals : B. L. Houghton (4.99 P. and M.), R. W. Hodson (4.90 Norton).

Certificates : S. B. Jones, S. E. Cumble, A. H. Shipton, H. J. Shipton, H. J. C. Robinson, C. Sieds, W. T. Miller, M. Cohen, L. Rogers, J. Harthill, F. Machie.

London Eagle M.C.

The results of the Winter main road trial are as follows :—

Gold Medal : A. Bales (B.S.A.).

Silver Medals : E. Hughes (Rudge), J. Gaisford (Triumph), Major Chater-Lea (Chater-Lea), L. Bunyan (Morgan).

Bronze Medals : E. Benham (Rudge), A. Rickards (Royal Enfield), G. Gibbons (Rex-Acme).

Cardiff M.C. and C.C.

The results of the Webber Cup Trial are as follows :—

Webber Cup : A. Thom (Scott and Sc.).

Kenvin Rees Cup : R. Edmonds (Chater-Lea and Sc.).

Cardiff Garages Cup : A. Thom (Scott and Sc.).

Gold Medals : A. Thom (Scott and Sc.). J. E. Kettle (Scott and Sc.), G. E. Gregar (B.S.A.), R. Thomas (Chater-Lea and Sc.), H. E. Evans (Sunbeam), G. S. Brundell (Enfield and Sc.), W. H. James (Ariel and Sc.).

Silver Medals : T. H. Dayson (Scott), C. H. Baron (Triumph), A. Lennox (Rudge), A. C. Mapstone (Ariel), W. H. Jones (P. and M.), P. J. Foster.

Bronze Medals : L. F. Robertshaw (New Gerrard), S. Street (Raleigh), A. G. Lane (A.J.S.).

Eckington and D.M.C. and LC.C.

At the annual dinner held at the Royal Hotel, Eckington, the following awards for the season were presented :—

James Cup and Gold Medal : S. Ayres.

Gold Medal : B. Ripon.

Silver Medals : C. B. Marshall, J. Douds, C. Shinwell, A. Green, H. Shirtcliff, J. Shinwell, A. Harris, and H. Staton.

Ridgeway Cup and Gold Medal : J. Douds.

Gold Medal and Two Wireless Valves : H. Shirtcliff.

Silver Medals and Sparking Plugs : H. Bradley, S. D. Marshall, J. Douds.

Gold Medal and Hill Climb : L. Marples.

Hove Sporting M.C.

A timed freak hill-climb was held on Perching Borsted, near Fulking, recently. The fastest time for the day was made by W. Stringer (4.90 Norton), who completed the climb in 46 secs. E. Cosh made the next best time, and the third place was awarded to R. Firth-kettle (4.90 Norton).

Kent M.C.

The trial for the Spencer Apps Trophy was held recently, and the following are the results :—

Spencer Apps Trophy : A. F. H. Tunbridge (3.49 Calthorpe).

Club Cup : R. Berrow (3.49 P. and P.).

Gold Centre Medal : B. H. Brayne (9.89 Harley Davidson and Sc.).

Silver Medal : J. G. Mackie (3.49 New Imperial).

Bronze Medal : F. Codd (3.49 Raleigh).

Novice's Silver Medal : Burden (2.48 Raleigh).

Novice's Bronze Medal : L. Hilyard (4.98 Marchless and Sc.).

Team Prize : Kent M.C. " 2 " Team : Messrs. Berrow, Brayne, and Tunbridge.

IF YOUR CLUB REPORT IS NOT INCLUDED IN THIS ISSUE, ASK YOUR "HONORARY DISTRICT AGENT" TO SEND US HIS COPY EARLY!

ROUND THE CLUBS—continued.

Liverpool M.C.

There were 31 entries for the sporting trial run over a mixed course, consisting of " rough stuff " and main and secondary roads, starting at Chester. Only three riders failed to face the starter. Many competitors lost their chance of gold medals on Maes-y-Sain and Alt-y-Bady, and only eight clean climbs of the first-named hill were recorded; the successful riders being C. H. Joynson (4.9 h.p. Norton and sidecar), H. Morten (4.9. h.p. P. and M.), E. Brook (5.5 h.p. Ariel), A. D. Elgar (3.46 h.p. Rudge-Whitworth), P. G. Thomason (4.94 h.p. Triumph), J. B. Donaldson (4.93 h.p. B.S.A.), Sgt. S. W. Sparkes (4.99 h.p. Rudge-Whitworth), and G. Edmunds (3.48 h.p. Raleigh). On Alt-y-Bady there were also eight clean climbs, E. F. Dackers (3.48 h.g. Raleigh) had a spill just outside Maes-y-Safn village, which caused him to retire with a buckled back wheel. His team mates S. Higson and G. Edmunds, sportingly retired in order to give him assistance. After lunch the course led along the shores of Bala Lake to Dolgelly, and back over Bwlch-y-Groes, which caused no trouble. Conquering Hero, although in a very wet condition, was climbed by all the remaining 20 competitors.

The Classification trial, run over an easier course having the same start, lunch stop and finish, was divided into three sections, namely—expert, general and novice, and attracted 20 starters. There were three observed hills—Maes-v-sain (easier side), Bwlch-y-Groes and the Old Horse-Shoe Pass, Llangollen, only one of which claimed no failures. G. W. Prior (4.99 h.p. Rudge-Whitworth and sidecar) failed on Bwlch-y-Groes, while L. A. Clarke (6.80 h.p. Zenith and sidecar) was baulked at the very foot by a non-competing car. He was allowed to stop while the car extricated itself from its difficulties. All the starters finished. Final results will be announced at a later date.

Hon. secretary, L. H. Lumby, 10, Seaton Road, Wallasey.

Raleigh M.C.C.

The fifth Trial in connection with the President's Cup was held recently. The route consisted of 57 miles of Derbyshire lanes and grass tracks and two water splashes. The following are the results :—

Best Solo Performance of the Day : C. Tansley (3.49 Raleigh).

Best Sidecar Performance of the Day : G. W. Hartwell (7 Raleigh and Sc.).

Second Best Solo Performance : 1. F. Wallis.

Second Best Sidecar Performance : F. Sirrett.

Knock M.C.C.

The closing event of the season took the form of a combined sporting reliability trial for prizes presented by the Motor and Motor Cycle Traders' Union; also to decide the holder of the Gunning shield, which is awarded to the member securing the greatest number of points in club events. The course was 42 miles long and only 4 of the 15 starters failed to finish. The results are as follow :—

1, C. Duffin (4.99 h.p. Triumph); 2, T. Stewart (4.99 h.p. Triumph); 3, F. G. Duffin (3.50 h.p. P. and P.); 4, tie between S. Q. Osborne (4.99 h.p. Rudge) and C. Johnston (4.90 h.p. Norton). Gunning shield : Tie between C. Duffin and F. G. Duffin.

Sydenham and D. M.C.

A bogey hill-climb was held near Otford lately. L. Lancaster (4.90 h.p. Norton) was awarded a gold medal for the best performance, J. Hanson (3.48 h.p. Velocette) gaining a silver medal. A. F. H. Tunbridge (3.48 h.p. Calthorpe) crashed on his first attempt, but made the fastest time of the day on his second run and was awarded a silver medal. The next event, the President's trophy trial, will take place on November 7th, and is open to all clubs in the South-Eastern Centre A.-C.U.

Hon. secretary : S. E. Burlington, 50, Half Moon Lane, Herne Hill, S.E.24.

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