# Marine

VOL 1 NO. 3 SEPT. - 1933



A Magazine designed to interest motoring enthusiasts in general and those who own M.G. Cars in particular





ISSUED BY THE M.G. CAR COMPANY LTD., ABINGDON-ON-THAMES BERKSHIRE.

# MaJazine

EDITORIAL

NCE more the Olympia Motor Show is upon us, and the end of the motor racing season draws near.

PRICE - SIXPENCE By Post, Eightpence

> M.G.'s may look back upon the past year with a very high degree of satisfaction, in that they have scored an immense number of striking successes on road and track, both at home and in the more remote corners of the world.

> It is a happy augury for the future of the Magnette and the Magna cars that on their first appearance each type should have scored a sensational victory, the Magnettes running away with the Mille Miglia, and the Magnas with the Brooklands Relay Indeed, it is largely due to the convincing display of the former that Tazio Nuvolari paid us the compliment of electing to drive one of these cars in the Ulster Tourist Trophy Race, while it is interesting to learn, as we close for press, that the Earl of March is to return to the M.G. fold at the wheel of one of the Magna team cars in the B.R.D.C. 500 Miles Race at Brooklands on September 16th.

> We do not want to throw unmerited bouquets on ourselves, and so we will be content to remark the coincidence that the Earl of

March is the President of the Light Car Club, in whose race the Magnas were successful, and at the conclusion of which he paid a very high compliment to their consistent performance.

The M.G. range for 1934 is reviewed briefly on pages 129 and 130 of this issue, and we feel confident that in addition to keeping our legionary old friends we are destined, with these modified models, to make a lot of new ones.

It is being whispered that we are to encounter very determined competition on road and track next year from another factory, and we want to take this opportunity of extending the glad hand to the sportsmen with whom we are eagerly looking forward to doing battle throughout next year.

We assure them that whatever rivalry may exist between us will be rivalry of the very friendliest nature, and we welcome their appearance in all sincerity.

The Olympia Motor Show provides a great opportunity for welcoming friends old and new, and on Stand 103 to those interested in the M.G. tradition will be accorded the usual friendly reception.

We look forward with keen pleasure to meeting once again those M.G. owners who have kept our cars in the forefront in the competition world during the past year, and with no less pleasure do we anticipate the visits of those equally enthusiastic M.G. owners who use their cars for ordinary touring purposes.

And, in addition, we are eagerly waiting for the evening of Thursday, October 19th, when, at the Park Lane Hotel, the M.G. Car Club's Annual Dinner-Dance shall be the means once more of reuniting us with vast numbers of our friends from distant parts.

CONDUCTED BY ALAN C. HESS

> PUBLISHING OFFICE:

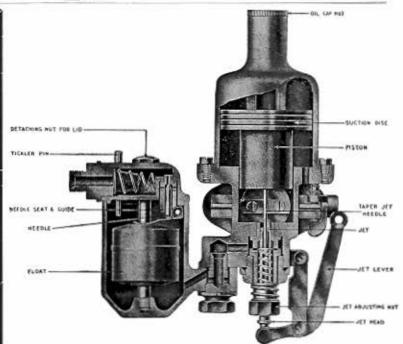
418-422, STRAND LONDON, W.C.2

Telephone : TEMPLE BAR 2122



If your S.U. is not behaving satisfactorily it is due to one of these causes

- I Incorrect mixture
- 2 Piston sticking
- 3 Dirt or water in the carburetter
- 4 Float-chamber flooding



# No. 1 ADJUSTING THE MIXTURE

R UN the engine until it attains its normal running temperature. Then listen to the exhaust while the engine runs slowly. If the engine has a constant uneven beat, this is due to strong mixture. If the exhaust note is irregular and splashy, the mixture is too weak.

Adjust the jet to such a position that the engine idles on the correct mixture. An easy way to do this is to screw the jet adjusting nut up higher than its normal position and then adjust the jet correctly; as the jet adjusting nut actually only acts as a stop to prevent the jet from coming beyond its correct position, it can then be screwed down until it butts up against the jet head. This will be the normal running position with the mixture control set at weak.

A simple way to test for strong mixture when the

engine is idling is to lift the piston up Eslightly, say 1/2 in., and if when this is done the engine runs faster, the mixture is too strong.

If a poor road performance, due to carburation, is suspected, a larger or smaller needle may be tried. The jet control will be found to be helpful in determining whether more or less petrol is required. Should it be necessary to change the needle, this can be done by removing the two screws holding the suction chamber in position, the suction chamber can then be lifted off and the piston removed. At the side of the piston will be seen a set screw. When this is slacked off, the needle can be withdrawn and the new needle inserted The position of the needle is with its shoulder flush with the face of the piston. When replacing, care should be taken that the keyway at the side of the piston registers with the key in the body. Great care should also be taken to see that all machined faces and parts are kept scrupulously clean.



The

# World's Finest Carburetter FITTED STANDARD TO YOUR



THE S.U. COMPANY, ADDERLEY PARK, BIRMINGHAN Side Western (Great Britain): W. H. M. BERGESS, 20(3), Costen Street, Writiminater, London, S.W. Stretcher, Victoria, Volume, Road, Chanter, Duble.



VERY year an entirely fresh set of circumstances seems to arise in the motor racing world, making it a bold venture to attempt any forecast of what might happen during a race of nearly five hundred miles. Nevertheless, a study of form so far exhibited, and reference to performances over the same course last year, get one a fair way towards reasonable suppositions and would, in fact, go even further were it not for the inevitable "dark horses" and the influx of new models.

The Tourist Trophy Race, which is to be run on the Ards Circuit near Belfast on Saturday, September 2nd (a little later than usual, by the way), has attracted thirtyone entries. The list is noticeably lacking in true international characteristics, the nearest approach to this state of affairs being four foreign cars which British sportsmen are to drive and one British car which is to be handled by a Portuguese named Vasco Sameiro. But we need have no fears for the success of

the race because strong foreign born and bred teams are absent. Rather can we congratulate ourselves upon a field that is remarkably open with no isolated "high-spot" likely to run away easily to victory.

Before delving into details of performance, it is as well if we refresh our minds about the race itself, for this year's Tourist Trophy is not exactly similar to the last. The race is to be run over the same course as before.

triangular in shape and 13 2/3rd miles round to a lap. Whereas the total distance in the past has been thirty circuits, this

thirty-five laps or another sixtyeight miles, an addition just sufficient to confound all one's previous reckonings as to petrol and tyre life, and meaning two instead of one pit stop for the larger cars at any rate.

The circuit is a difficult one in many respects, because it involves many really tricky portions where a bad approach or a shade too much speed spells disaster, and the cost of mistakes, heavy as it is in practically every race, is at a premium on the Ards Circuit. But it is a sporting course and a good one from the

#### CARS AND DRIVERS ENTERED FOR THE R.A.C. TOURIST TROPHY RACE

	CLASS 3 (over 3,000 e.c. a	and up to 5,000 c.	r.).
Car.	Driver,	Car.	Driver.
Invicta	A. C. Lace	Invicta	V. Sameiro
	CLASS 4 (over 2,000 c.c. a	and up to 3,000 c.c	1
Alfa-Romeo (8) Alfa-Romeo (8)	Hon, Brian Lewis T. E. Rose-Richards	Alfa-Romeo (S) Maserati (S)	
	CLASS 5 (over 1,100 c.c. s	and up to 1,500 c.c	.).
Riley	G. E. T. Eyston	Riley	C. R. Whiteroft
Riley	C. S. Staniland	Riley	E. Mcl.ure
Alvis (S)	" V. Karachi "		
	CLASS 7 (over 750 c.c. and	up to 1,100 c.c.).	
Riley	V. Gillow	Riley	W. R. Baird
Riley	H. G. Dobbs.	Riley	F. W. Dixon
	6) G. F. A. Manby-Colegrave	M.G. Magnette (S)	E. R. Hall
M.G. Magnette (S	R. A. Yallop	M.G. Magnette (S)	R.T. Horton
	CLASS 8 (over 500 c.c. at	nd up to 750 c.c.).	
M.G. Midget (S)	S. W. B. Hailwood	M.G. Midget (S)	L. Fontes
M.G. Midget (S)	T. Simister	M.G. Midget (S)	H. C. Hamilton
M.G. Midget (S)		M.G. Midget (S)	H. R. Attwood
M.G. Midget (8) Sullivan Special	J. L. Ford	M.G. Midget (S) Sullivan Special	D. K. Mansell
Morris Minor (S) M.G. Midget	R. A. Jensen J. G. C. Low		W. Sullivan

Malazine

viewpoint of technical data, driving skill and the onlookers' fun. It involves a fairly steep hill and a winding descent, a twomile straight and every type of corner, from the smooth sweeping curves that can safely be negotiated all out, to an acute hairpin turn where brakes, steering and transmissions come in for full-time occupations.

The road width is good, giving ample opportunities for passing, and the surface, so carefully doctored each year by the local authorities, is as nearly skid-proof as it could possibly be. A few town halls, butchers' shops, level-crossings and bridges add the additional flavouring which makes any genuine road circuit preferable to a specially constructed course or track.

The competing cars are all of the "production type," in that they must be examples of a series which the manufacturer produces for public sale. Superfluous equipment such as hoods, screens, wings and lamps are removed, extensive internal modification and tuning is permitted, but normally obtainable fuel must be used and bodies must conform to a plethora of

dimensions which international motor law seems to think essential. There is no limit in engine capacity, with the result that the entry list contains small three-quarter litre cars (most of which are M.G. Midgets), and then ranges upwards via 1,100 c.c., 1,500 c.c., 3,000 c.c. and 5,000 c.c., the limits mentioned being taken as the dividing points for classification and for the speeds set by the handicap.

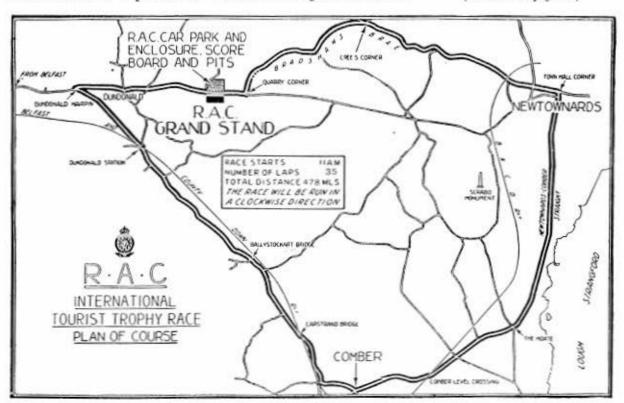
The Tourist Trophy Race is well worth winning, because it is the biggest British race, and the value of securing the coveted Tourist Trophy itself is enhanced this year by the magnificent sum of £1,500 in cash, which Sir William Morris, Bart., has provided. Sir William's gift will be utilised to provide seven money prizes ranging from £300 to £100, an arrangement which is typical of his ever-present desire to stimulate private enterprise and to give encouragement to a large number of competitors.

And now let us look with critical and discerning eye at the entry list. It comprises nine M.G. Midgets, all supercharged models with the exception of the little car which J. G. C. Low ran

last year. Two supercharged Morris Minors, both entered by local motoring enthusiasts, bring the total in the 750 c.c. class up to eleven cars. Next comes the 1,100 c.c. class, with five supercharged M.G. Magnettes entered, all making their first T.T. appearance, and with a particularly businesslike list of well-known drivers. Four 1,100 c.c. Rileys, all unsupercharged, provide the rest of this particular group, and it is interesting to note that F. W. Dixon, who won the small car race in the Isle of Man in July, and who gave such a good account of himself in the last T.T. until he crashed, is appearing again amongst them.

Next comes the 1,500 c.c. class where, perhaps, the greatest surprises may be expected, the Riley Company, this year forsaking their previous 1,100 c.c. contingent and appearing with four light six models to be handled by Whitcroft and Eyston (who finished first and second respectively in the last T.T.), and Staniland and McClure. Class 4 or the 3,000 c.c. group has three Alfa Romeos and one Maserati, all supercharged, and

(Continued on page 121)



THE T.T.—continued from page 118 driven by Hon. Brian Lewis, the Earl Howe, "Tim" Rose-Richards and Whitney Straight (Maserati), a quartette which almost takes one's breath away when one thinks of them all starting off the same mark and then racing for five hundred miles.

Lastly, there are two Invictas of 4,467 c.c. capacity, one of which will be driven by Lace and the other by Sameiro.

The main interest is to see whether the ultimate winner should come from the Midget, Magnette, Riley or Italian stable, the other individual entries being kept in the mind's eye because the unexpected frequently happens in motor races.

Actual placing of similar makes, where they were entered in a previous T.T., provides, by itself, little comparison for this year, because the ratio of the handicap naturally varies as between one year and the next. Reference to individual lap times is more

interesting.

In 1932, for instance, Earl Howe's Alfa Romeo and the late Sir Henry Birkin on a similar make, ran consistently throughout the race and established fastest laps of 9 minutes 55 seconds and 9 minutes 51 seconds respectively. Howe's 9 minutes 55 seconds must be taken in conjunction with his average lap time (including stop for refuelling and tyres) which worked out at 10 minutes 11 seconds. It is reasonable to assume that his car this year will be faster and that this average would drop to "x," which we will assume for the moment to be 10 minutes 0 seconds. The extra distance will mean another stop this year

and a halt for fuel and tyres will occupy about 21 to 3 minutes, or an equivalent of about 5 seconds per lap. This gives us a new average lap time of 10 minutes 5 seconds, and if it be a reasonable assumption, one can say that one of the cars in the 3,000 class will put up a performance somewhere in that region. Brian Lewis has already won the International Trophy and the Mannin Beg, and has finished third at Le Mans behind the factory cars that were undoubtedly a little quicker. "Tim" Richards has now got an Alfa instead of his Bugatti, and Earl Howe is also bringing a new car over for the T.T. The luck of Lewis may hold and the luck of Howe may turn, and "Tim" Richards is a first-class driver. too, so one hesitates to select from the three. Whitney Straight, if he runs, will probably drive very fast, and has already shown that he can stay the course by finishing second in the Swedish Grand Prix, his first real road

The handicap places the 1,500 c.c. Riley and the 1,100 c.c. supercharged Magnettes on the same mark, and if we assume this average lap of 10 minutes 5 seconds for the 3,000 c.c. class, the Class 6 cars would have to average 10 minutes 30 seconds per lap to equal the performance. Likewise, the 1,100 c.c. Riley must average 10 minutes 52 seconds and the 750 c.c. supercharged Midgets, 11 minutes 10 seconds.

Unfortunately, one has no T.T. performance so far for the new Riley Six or the Magnette, but from the tangled skein of evidence in regard to the others, one may be able to sift some data which will permit conclusions to be reached. It is obvious that the Midgets have got a hard task this year if they are going to win, but they may be compensated a little by going through the distance with only one stop for tyres and petrol against a probable and almost certain two where the speeds are greater.

E. R. Hall finished third with his M.G. Midget in 1932, and his average lap time was only 11 minutes 43 seconds, and his fastest lap of the race only 11 minutes 32 seconds. Both figures are a long way from the 11 minutes 10 seconds that we have assumed will be necessary this year if the Alfa Romeos are as quick as we suggested earlier.

But in practice last year Hamilton put his Midget round the circuit in 10 minutes 58 seconds, and Gardner approached very close with a practice lap of 11 minutes 1 second. Cyril Paul during the race lapped at 11 minutes 17 seconds, but we are still calling for a general improvement in race performance, if our presumptions are in any was correct.

The additional penalty of pit stops for the big cars may make a lot of difference to our calculations, and if the tyres will last the small cars for the whole race, then the total stop need occupy only about I minute as against 5 or 6 minutes for the others. This gives us another 8 to 10 seconds a lap to play with, but it seems reasonably certain that if a Midget or a Magnette can come through the handicap to win this year it will undoubtedly have earned the long-lived credit that should, and fortunately does, come to the recipient of top honours in our Tourist Trophy.

# THE 1933 RELAY RACE

"L" TYPE MAGNAS MAKE IMPRESSIVE DEBUT

HE Light Car Club's Relay Race, held at Brooklands on Saturday, July 22nd, resulted in a sweeping victory for M.G.'s, the M.G. Car Club's team of "L" Type Magnas winning at the speed of 88.62 miles per hour in 3 hrs. 6 mins. 35 secs.

This speed was more than 11 m.p.h. faster than that averaged by the winners in 1932, while it exceeded by 7 m.p.h. the speed averaged in 1931.

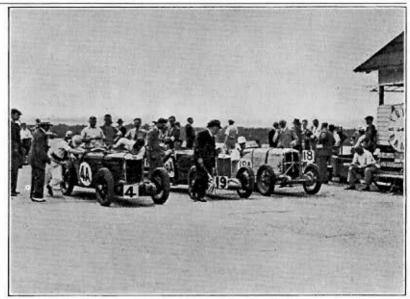
The drivers of the three cars in the Magna team were C. E. C. Martin, G. W. J. H. Wright and A. C. Hess, and the three cars ran the full distance, maintaining exceptionally consistent lap speeds.

In view of the very satisfactory performance of the three cars, readers may be interested to see the speed averaged lap by lap, and these are given below.

It is also interesting to record that immediately after the race



G. W. J. H. Wright "Flat out" on the Byfleet Banking



C. E. C. Martin in 19A, just before the start

these cars were taken to the works at Abingdon, where the racing engines were removed and three other engines substituted, after which they were shipped abroad for the International Alpine Trial, in which they succeeded in winning the team award in their category, as reported on page 145.

The cars are now back in this country, and the "Relay" engines are being re-installed with a view to their running in the British Racing Drivers Club's 500 miles race on September 16th, when their progress will be watched with the greatest interest.

The very successful debut of these cars follows on the triumphant premiere of the Supercharged Magnettes which virtually swept the board in the Mille Miglia, on the occasion of their first appearance last spring.

An interesting innovation was introduced into the Relay Race by the M.G. team's endeavours to establish pit control throughout the race by means of wireless communication. Unfortunately, however, the conditions on the day were unfavourable to give satisfactory results.

Nevertheless, much knowledge of very practical value was gained through the experiments which the team carried out, and it is possible that the control of these cars by wireless may be a feature of their progress in the 500 miles

The provisional results of the relay race are as follows:—

1000	444	E 40.00 TO 100 T	-			
Team. Entrant.			Tin	ie.	Speed.	
			Н	. M.	S.	M.P.H.
1.	19	A. C. Hess	3	6	35	88.62
2.	5	H. F. S.				1-930000
		Morgan	3	14	13	89.01
3.	28	V. H. Tuson				76.37
4.	3	Capt. A. C. R.				
		Waite, M.C.	3	16	6	91.60
5.	16	C. M. A.				
		McEvoy	3	19	25	82.99
6.	14	Burnham				
		Brooke	3	19	51	83.39
7.	8	A. M. Laing	3	23	33	78.95
		G. P. Harvey				
		Noble	3	27	45	81.17
9.	26			28		72.88

Car No	mber 19A.	Driver : C. F	C. MARTIN.	II Car N	lumber 19B, 1	Driver : G. W.	J. H. WRIGHT.	113	Car Nu	mber 19C.	Driver:	A. C. HESS
Laps.	Lap Speed.	Laps.	Lap Speed.	Laps.	I,ap Speed.	Laps.		11:	Laps.	Lap Speed	I I,aps.	Lap Speed
	m.p.h.	1)50	m.p.h.	1558	m.p.h.	3 1 5	m.p.h.	ш		m.p.h.		m.p.h.
1	70.1	16	91.3	1	53.7	16	92.2	ш	1	53.2	16	92.2
2	81.6	17	90.5	2	86.6	17	92.2	11	2	73.8	17	92.2
3	82.3	18	90.5	3	89.7	18	92.2	11	3	83.7	18	91.3
4	83.7	19	89.7	4	90.5	19	92.2	ш	4	88.9	19	90.5
5	87.3	20	91.3	5	89.7	20	92.2	ш	5	91.3	20	91.3
6	88.9	21	91.3	6	88.9	21	92.2	11	6	90.5	21	92.2
7	88.9	22	92.2	1 7	88.9	22	92.2	ш	7	92.2	22	90.5
8	85.8	23	92.2	8	88.9	23	92.2	ш	8	91.3	23	92.2
- 9	85.1	24	91.3	9	91.3	24	92.2	ш	9	90.5	24	92.2
10	86.2	25	91.3	10	92.2	25	92.2	ш	10	92.3	25	90.5
11	86.2	26	90.5	11	93.0	26	91.3	ш	11	91.3	26	90.5
12	90.5	27	93.0	12	91.3	27	91.3	11	12	93.0	27	91.3
13	90.5	28	90.5	13	93.9	28	92.2	ш	13	91.3	28	92.2
14	90.5	29	91.3	14	91.3	29	93.0	- 11	14	91.3	29	92.2
15	89.7	30	83.7	15	93.0	30	83.7		15	91.3	30	93.0

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THE car was designed to fulfil two purposes, (a) to be capable of putting up a really fast lap at Brooklands in short races and (b) to possess sufficient stamina to run for 24 hours continuously at a speed in the neighbourhood of 120 m.p.h.

These requirements are to some extent conflicting and the car is, therefore, an attempt to compromise between the two.

As the cost of a special engine was out of the question, we had to use an existing engine of some sort, and our choice fell on the Napier Lion Aero engine as being about the only suitable British engine capable of producing 300 h.p. continuously with good reliability.

The only drawback is that it is, if anything, rather unnecessarily powerful for the job. At magneto. In the car, however, it is not necessary to use this, as the engine is easily started by pushing the car in second gear and letting in the clutch.

The clutch is a single plate of normal design.

The gearbox is very compact for the amount of power transmitted. This is done by using very high tooth pressures and a very strong tooth form, and is only permissible where the gears are only used for getting away, and not climbing hills. There are three speeds, operated by a small remote control lever. A small parking brake is fitted at the back of the gearbox. No reverse is fitted, as this is only necessary when a car is driven on a public road.

The propeller shaft is universally jointed at both ends. The stresses. The arrangement reduces the stresses in the axle casing, and makes the working conditions of the universal joints much easier. It also maintains the axle position in the event of a broken spring leaf.

The front springs are the normal half-elliptic, shackled at the front end. Short radius rods are fitted under the front axle. These keep the castor angle constant and at the same time simplify the steering layout. They also maintain the axle position in the unlikely event of a broken spring.

The front axle is tubular, made up in three pieces. Steering gear is normal throughout. A worm and wheel steering box is used.

The frame is underslung at both ends, and the major crossmembers are tubular.

The engine is mounted on a

# THE NAPIER-RAILTON BY ITS DESIGNER

speeds of 120 m.p.h. it is running on about half-throttle.

Given its head, on a straight road, the maximum speed would be about 170 m.p.h.

The oil and fuel tanks are of 15 and 65 gallons capacity respectively, and carry supplies for two and a half hours running, at the end of which period it will, in any case, be necessary to stop and change the tyres.

The fuel is fed to the engine by a constant-delivery fuel pump, and the surplus returned to the tank by a separate pipe. This pump is built into the engine.

There are two oil pumps, one to feed the bearings direct from the tank, and one to return the oil from the sump to the tank.

The underside of the oil tank is heavily ribbed, both to strengthen it and to assist cooling.

The engine is water-cooled by a honeycomb radiator in the normal position. Loss of water by surging is prevented by leading the overflow pipe to a separate tank, which is connected by a small bleed pipe on the suction side of the main pump.

The engine can be started by a hand-cranking gear used in conjunction with a hand-starting forward joint also allows for sliding.

The rear axle body is built up in three sections machined from high tensile steel forgings. The axle ratio is 1.66 to 1, with straight tooth bevels. A

differential gear is used. An elektron oil sump is bolted to the underside of the axle casing to increase the oil capacity.

The rear hubs are of fullyfloating construction.

The brakes are on the two rear wheels only, and are cans and rod operated from the pedal. This may seem at first sight a retrograde step. Actually, for track work, the brakes are only used for pulling up after a race or at the replenishment depot. Rear wheel brakes are quite powerful enough for this. also relieves the front axle from the weight of the brake gear, which in itself is all to the good from the point of view of steering and road-holding.

The rear suspension is effected by four cantilever springs, two on each side. The axle is hinged to the rear ends of these four springs, which in this way take all the braking and driving

who also
DESIGNED SIR MALCOLM CAMPBELL'S "BLUE BIRD"

An sub-frame and is three-point

suspended, the two points being at the front. Four frictional type shock-

absorbers are fitted to each axle.

The car is fitted with a dynamo, belt-driven off the clutch shaft, a battery and two headlights, for use in long distance runs necessitating night driving.

The complete car, with tanks empty, weighs 37 cwt.

Some idea of the power of the engine may be got from the fact that even on a concrete surface the driving wheels spin even in second gear if the throttle is opened fully.

The chief factor in any record attempts with this car will be the life of the tyres. This alone will settle the number of stops that will be necessary. The more stops, the faster the car has to go in between, which in turn shortens the tyre life still more, and so on in a vicious circle.

OR the coming season the M.G. Midget "J" model is offered as a two-seater only, on lines somewhat similar to those of the previous

type. The exterior has, however, been vastly improved by the fitting of the latest pattern "flared" wings and running boards. The tourer and salonette bodies have been discontinued. The engine has undergone various modifications, fully floating connecting rods and pistons with controlled expansions are now included in the specification, and the compression has been raised slightly.

The car is available in a number of pleasing exterior



The 1934 Edition of the J.2 Midget, showing the improved flared wings

finishes with leather upholstery to tone; the price remains as before at £199 10s. 0d. ex works, and for those who require a de luxe model, a comprehensive equipment, including D.W.S. fourwheel jacking system, is available for an additional 17 guineas. The price for chassis only is £160 ex works.

The following is the specification :-

Four-cylinder O.H.C. engine, 847 c.c., 57 mm. bore and 83 mm. stroke, Treasury rating 8.05 (£8 tax), twin S.U. semi-downdraft carburetters, rear petrol tank (12 gallons), S.U. petrol pump, Thermo syphon cooling, silencing by Burgess, "straight through silencer.

A four-speed "twin top" type gearbox is fitted with remote control, and transmission through a single plate clutch, Hardy Spicer propeller shaft with metal joints, and three-quarter

MODIFIED A VERY SMART CONTINENTAL COUPÉ MAGNA 1.2 MIDGE LARGER ENGINES AND PRE-SELECTOR GEAR BOXES ON ALL MAGNETTES DE LUXE EQUIPMENT FOR ALL MODELS INCLUDING D.W.S. 4-WHEEL JACKING SYSTEM ALL CLOSED MODELS

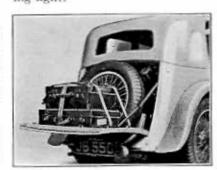
> floating spiral bevel rear axle, road wheels are Rudge racing

WIRED FOR RADIO

AS STANDARD

type with Dunlop tyres. The chassis, with 7ft. 2in. wheelbase and 3ft. 6in. track, is of the well-tried M.G. underslung pattern, and the springs are semi-elliptic, their movement being damped by Hartford shock absorbers. The steering is Marles Weller with transverse drag link, and the brakes are operated by fully enclosed cables with provision for greasing.

The electrical equipment is 12 volt with separate dynamo and starter, and ignition is by coil and fully automatic distributor which give just the correct amount of advance at all speeds. The instruments include 5in, combined speedo and rev. counter, oil gauge ammeter, key-operated ignition switch, lamp switches, and ignition warning light.



Luggage accommodation on the 1934 Magnette Salson. Ample provision is made for every occarion

The M.G. Magna has been so popular during the past season, and has also proved its merits by winning a number of events, the most notable

being the L.C.C. Relay Race, and the Manufacturers' team prize in its group in the International Alpine Trial, that it has been decided to continue as before with only very slight detail alteration. The range which, at present, includes a two-seater, four-seater and

salonette, has been augmented by a Continental coupé. model can be finished in black and yellow, or all black as well as in a number of various colour finishes.



The 1934 Magna "L" Saloon, distinguished by its smart lines

The M.G. Magna specification is very briefly as follows :-

Engine, 6-cylinder O.H.C., bore 67 mm. ×71 mm. stroke, 1,087 c.c., Treasury rating 12 h.p. (tax £12), twin S.U. carexternal oil filter, buretters, separate dynamo and starter, Elektron sump holding gallons, fully floating connecting rods, special pistons with controlled expansion, gear type oil pump and water pump cooling.

Transmission is through a twoplate clutch, four-speed gearbox of twin top type with remote control, Hardy Spicer propeller shaft with metal universal joints, and three-quarter floating spiral bevel rear axle. The wheels are Rudge racing type, and "Fort" Dunlop tyres, 4.50in. × 19in., are fitted.

The chassis is underslung at the rear, also the four semi-elliptic springs, steering gearbox is Marles Weller with transverse draglink operation, the shock absorbers are Hartfords, the rear pair transversely mounted.

The electrical installation is 12 volt, and ignition is by coil and fully automatic distributor. Jaeger instruments are standard, and include a 5in. combined speedometer and revolution counter, oil gauge, ammeter and switch, eight-day clock, oil thermo and dash lamps, also a dash type petrol gauge on closed models, and a petrol gauge fitted on the tank top on open models.

The prices, ex works, of these models are as follows:—

M.G. Magna chassis ... £245 Open two-seater ... £285 Open four-seater ... £299 Salonette ... £345 Continental coupé ... £350

De luxe equipment is also available on all models at an inclusive figure of £11, and on the closed cars a No. 5 Philco radio set may also be had for an additional £21 0s. 0d. (The Salonettes and Continental Coupés are all equipped as standard with an invisible aerial in case it is wished at any time to install a radio set.)

Following the numerous experiments to which this model has been subject for a considerable time, both in the M.G. design department and in the racing field, a new type 1,286 c.c. engine has been evolved, following very closely the lines of the racing car units, but with modifications, making it suitable for the sporting motorist. The new unit develops an unusually high horse-power figure. new type single plate drive clutch, exceptionally smooth in operation, are now standard equipment on all M.G. Magnette models.

The specification in brief is as follows:—

1,286 c.c. O.H.C. engine, bore 57 mm. × 84 mm. stroke, twin S.U. carburetters, special coil and automatic distributor capable of operation at the high engine speeds of which the car is capable "H" section fully floating connecting rods—pistons controlled expansion — external oil filter dealing with all the oil is fitted on the pressure side of the pump—large Elektron sump, engine oil feed by gear type pump, water circulation is by pump, and temperature trolled by R.P. Thermostat, 14 mm, plugs are used instead of the more usual 18 mm. pattern.

Both the long (9ft. 0in.) and short (7ft. 10in.) chassis are underslung, and the springs semielliptic with special slides instead of shackles at their rear ends steering is Marles Weller with special patented M.G. divided track rod.

To ensure chassis ridigity in the long wheelbase models, a special crosswise bracing in the form of an "X" is fitted in the centre between the side members, in addition to the tubular cross members. The wheel track on all M.G. Magnette models is 4ft. 0in. Drive to the rear wheels from the pre-selector gearbox is by Hardy Spicer propeller shaft. Three-quarter floating spiral bevel rear axle and Rudge racing type wheels are fitted with "Fort" Dunlop

The electrical system is 12 volts with large capacity storage batteries, and instrument panels are fully equipped, including separate speedo and rev. counter, oil gauge, water thermometer, ammeter, petrol gauge, dash-lamps and the usual switches; the ignition switch is controlled by a Yale type lock. The saloon body on this chassis calls for special description. It is manufactured under the very latest "Daste" patents, and is of pillarless construction; the sliding roof is fitted with windowlets which give a well-lit interior, and the rear panel of the body folds outwards forming a useful luggage carrier, at the same time allowing the spare wheel to remain in position behind the petrol tank instead of adding to the overhung weight, as in instances when the wheel is folded down with the carrier.

The prices are as follows for

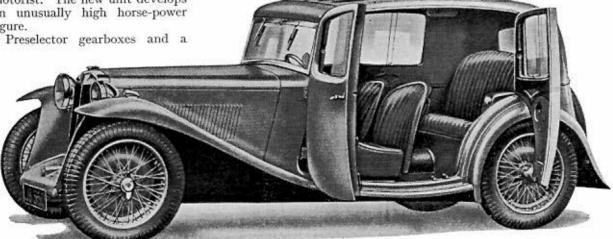
these new M.G. cars:—
Chassis ... ... £340
Open two-seater ... £390
Open four-seater ... £399
Pillarless four-door saloon £445

Ex works.

De luxe equipment for M.G.

Magnette models, £12 extra.

#### THE MAGNETTE SALOON



The new pillarless door construction affords a delightful ease of entrance and exit on this model

# SOUTHPORT'S BIG EVENT

TOMMY SIMISTER (M.G. J. 4)

/IEWED from the Judges' Enclosure, there was a delightful consistency about Tommy Simister's driving in the 100 miles race at Southport.

Before completing the first lap, Simister had overtaken all the other 750 c.c. competitors-both blown and unblownso that to win his class he had only to retain this lead. The M.G. started with a credit allowance of six laps; none of the back-markers could hold it on handicap as he lapped steadily at about 57 m.p.h., taking almost exactly two minutes for each lap.

After he had won the Daily Despatch hundred-guinea cup and the 450 which

accompanies it, I found Tommy about the race, but rather reluctant to accept any credit for

his part therein.

It's all due to the car," he protested, as we discussed sand cornering tactics in Simister's attractive-looking garage Macclesfield. "There wasn't a single misfire all afternoon, and the water temperature didn't rise above 80. After the first lap, when we were doing 5,800 revs,-that's about 89 m.p.h.along the straight, I began to feel very confident that my J.4 would do the trick. On one occasion we actually touched 6,400 revs.-but don't say anything about it to Abingdon, for there they don't approve of such speeds. Still, my experi-ence proves that the J.4 will stand up to any amount of revving; within reason, of course.

"For this little car the 100 Mile Race is merely a pleasant Saturday afternoon's outing. driving to Southport, doing the 50 laps of two miles, and returning to

Macclesfield, didn't feel in the least fatigued.

The M.G. and its driver combine to form a single, extremely efficient machine. Just as soon as you think of a thing, the M.G. has done it!"



" How did you manage to keep so steady at the turns? "I asked. "For some time I was on duty at the Southport end of the course, and I could not help thinking that your tactics saved you several seconds on every lap. Many of the competitors came to a complete standstill at the corners, but you kept moving all the time."

"Well, having ridden or driven at almost every meeting held by the Southport Club, perhaps I've learned a few tricks about sand. In this particular race I kept well to the left on approaching the turns, braking hard and changing to third about 100 yards or so before coming to the actual corner. I kept in third, and then as soon as the car had its nose round, I flicked the gear lever into first, revved to 5,000, changed to second and revved to 5,300, then to third

and about

5,500, and finally up to

DECISIVE WINNER OF 100 MILES RACE

top and 5,800 revs. all the way to within 100 vards of the next corner. By keeping out to the left and then cutting sharp across, hugging

the flags as soon as I round the bend, it is usually possible to avoid the badly cut-up sand which brings many competitors to a stop."

"You tuned the car personally, I

suppose?'

"On the contrary; she was only delivered twelve days before the race. We did about 800 miles on the road, to run-in the engine; then we took every-thing down, and found that nothing beyond the ordinary cleaning and adjustment was required. After re-

assembly we hadn't time to do Simister very willing to chat BY OUR NORTHERN REPRESENTATIVE any testing or tuning. In fact, we didn't arrive at Southport on the day of the race until 2.30 p.m. -and, as you know, the starter's flag fell at half-past three!"

So the J.4 did you pretty well, then, Tommy?"

"I'm delighted with her. She went round the Southport sand course as if it had been a road."

"Did Jackson bother you, when he stuck in the sand and blocked part of the Southport turn?"

"Not in the slightest. realised what had happened to his Sunbeam, and was able to keep to the inside and so corner without any loss of time."

"Had you any difficulty in avoiding other cars at the corner?"

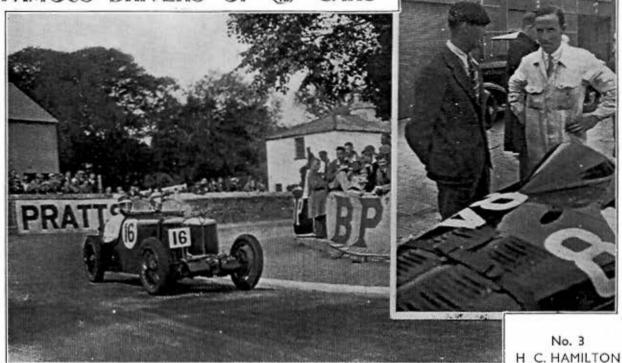
"None whatever. I must give the L4 credit for being an extremely easy vehicle to control, for several other cars were obviously skidding to a very dangerous extent; my only concern was to avoid having my car smothered with sand thrown up by their broadsiding."

'Are you entering for other events this

year?"

" Most certainly —I really bought this I.4 for the Ulster T.T. and next week-end she'll be at Donington, where I've entered another M.G. as well-my favourite J.2."

### FAMOUS DRIVERS OF



ORN and educated in Ireland, H. C. Hamilton came to England in 1922, and served his apprenticeship at the Talbot factory, and is now on the sales staff at University Motors, the London distributors for M.G. cars, where he has been for the last 31 years.

"Hammy," as his friends have nicknamed him, is 28 years of age; he started racing in 1930. Previous to this date he had been a keen motor-cyclist, competing on various occasions at the Kop Hill climbs, and in a number of reliability trials. In the Junior Car Club's Double-Twelve hours race of 1930 he drove a Riley Nine in company with Whitcroft, and finished third.

Probably his most outstanding achievement up to the present was in the 1931 Double-Twelve when, at the wheel of an unsupercharged M.G. Midget he drove solo for the 24 hours, finishing in third place at an average speed of 63.21 m.p.h. In the Ulster T.T. of the same year he set up a record lap for cars of 750 c.c. with a supercharged M.G. Midget.

Mechanical trouble prevented him finishing in the J.C.C.

1,000 miles race of 1932, in which he competed again in an M.G. Later in the season he took the Midget to Germany, and won the class for 750 c.c. cars in the German Grand Prix at Nürburg Ring. He also competed in the French Grand Prix and the B.R.D.C. 500 miles race on both occasions with Bugattis, in company with Earl Howe.

While practising for the 1932 Ulster T.T. in a supercharged M.G. Midget he put up an unofficial lap record at 74.7 m.p.h., but a crash later on, while practising, prevented him from

starting in the race.

Early in 1933, Hamilton, who acted as Earl Howe's partner, shared the wheel of one of the M.G. Magnettes, which competing in their first race-The Mille Miglia (the Italian 1,000 Miles Race), and finished at record speed in second place in the light car category; they also formed part of the Magnette team which won the team prize in the same event.

In the Isle of Man, Mannin Beg race, "Hammy" put up the fastest lap in an M.G. Magnette. During the summer of this year, he spent a period on the Con-

who, since this article was written, has further distinguished himself by knocking six seconds off the lap record for Donington Park, where he also established new times for the standing lap and for a five-laps race.

tinent competing in various events his supercharged M.G. Midget, during which time he was successful in winning the 750 c.c. class in the Eifelrennen at the Nürburg Ring, the German Grand Prix Hill at Friedbourg, setting up a record for the class and making the fastest climb of all cars up to two litres, and a class win and 750 c.c. record at the Reisengebirgs Hill Climb (Germany).

In addition to his numerous achievements Mr. Hamilton has won a number of events at the B.A.R.C. meetings, and holds with an M.G. Midget the mountain course lap record for 750

c.c. cars at 69.28 m.p.h.

In the smaller picture above, Hamilton (fullface) is seen talking to Louis Chiron, while in the larger photograph be is depicted rounding the sharp bend at the foot of St. Ninian's Road, in the Mannin Beg.



"EITHER we flatten out the Alps or the Alps flatten out us!" that was the motto jokingly adopted by the members of the M.G. Alpine team. There was an underlying seriousness about it, however, for it was a real job of work, and failure we could not afford to risk.

The International Alpine Trial is the most exacting reliability test to which any standard touring car can be subjected; it is really, in effect, a five days' race over the worst roads and the highest mountains in Europe, and any car that can even complete this trial must be a pretty sound vehicle.

It has been said for so long that British cars are of no use on the Continent that some of us had begun to believe it. Last year the trial was a comparatively easy affair and nearly everyone who completed the distance won a Glacier Cup—not that they did not deserve them.

But this year the event had been made considerably stiffer; the average speed for the 1,100 c.c. class, for instance, was 42 kilometres per hour—just over 26 m.p.h. Not a very high speed for those of us who average 40 or more on journeys at home. I may say that I was of this opinion myself before the Trial started, but the first couple of hours showed me that it was not

so easy, but confoundedly difficult, to average that speed up narrow lanes and dangerous mountain passes and, just as bad, down them,

This speed had to be averaged up the timed passes, a matter next to impossible with the great majority of cars. And for every ten seconds below that average speed a mark was deducted. It meant driving hard all day, taking every advantage of those all too rare straight stretches for a burst of 70 or so, and, incidentally, any car which is not capable of a quick seventy is not much use in the Alpine Trial.

The M.G. Magna team was entered for the Coupé des Alpes, the manufacturers' team award which was for the team of three cars losing least marks during the event. Against us we had the now well-known team of

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Singer "Nines," and a team of the famous Ballila Fiats; those who remember how fast were the Ballilas in the Mille Miglia will also realise that we were up against a pretty stiff proposition.

We were a merry band of adventurers that crowded aboard the Townsend Auto-ferry that morning. Our team consisted of No. 112, W. E. C. Watkinson and H. A. F. Ward-Jackson, who took a Magna through the trial last year and knew something of what was before them. Then there was No. 113, L. A. Welch. a few years ago motor-cycle trials champion in this country, and who knows the Alps backwards, and his brother, D. F. Welch, who also has had experience in the Alps with motorcycles and three-wheelers. Then there were my husband and myself (No. 114) who had motored in the Alps before, but had never even thought of anything quite so terrific in the way of mountain passes as we were to see later.

The cars consisted of those same M.G. Magnas which, captained by Alan C. Hess, had captured premier position in the Relay Race at Brooklands the previous Saturday. It had been a rush to get them ready, for obviously foreign fuels would be useless with the fairly highcompression ratio used for the track, and the engines had been changed, and wings, runningboards, and screens replaced. But, except for the Bonora quickaction filler caps, all three cars were perfectly standard production models.

The run down was without particular incident, although the heat was terrific and we took full advantage of an opportunity to bathe in a wonderful open-air swimming bath on the banks of the Rhine. And we lost Watkinson!

We went into Italy by way of Switzerland, the minute State of Liechtenstein, and Austria over the Arlberg Pass, just to see how the cars liked the hills.

Then at Merano we heard bad

all round Merano. With our other two cars there was little to do beside draining the sumps and checking over things.

On Monday morning at crack of dawn we were let into the park where the cars had stood under guard all night and given the signal to start. All three cars started up immediately, good augury for the future, and off



Mr. and Mrs. T. H. Wisdom on the beautiful St. Bernardino Pass





news. Watkinson was having trouble, and eventually he limped in at 3 a.m. the next day. And this is the incident which we have discussed and argued about for hours—how did a quarter-inch nut first get inside the induction pipe, and then, after having bent and battered sundry valves, get into No. 1 cylinder? It certainly wasn't there when the cars left the works, and it most definitely was inside when we took the engine down!

Fortunately we met two of the stoutest fellows imaginable in the persons of Messrs. Romegeally and Becker, the Zurich M.G. agents. These two, with the assistance of the rest of us, worked for two solid days and repaired the havoc caused by that accursed nut. We managed to replace the valves, but scored cylinder block and piston heads had perforce to be left as they were. This was bad news for a team with five days of real hard motoring before them.

Still, everyone was having their troubles, and cars were in pieces we went with the first pass just outside Merano's back door. This was the Giovo, the summit towering 7,200 feet above sea level, a twelve mile long climb, fairly steep with innumerable corners and some nasty sheer drops into the valley below.

The Giovo was the indirect cause of many retirements, for at the top most people found that they were well down on the average speed required and accordingly trod hard on the loud pedal. Since the descent of the Giovo is just as difficult as the ascent there were naturally many "phenomenal avoidances"! And then we saw unlucky No. 13, Herr Klotz's Mercedes, upside down in a field.

We had decided on this first stage to find out, if possible, the speed, particularly up the passes, of our friendly rivals, the Singers and the Fiats. The Italians were the chief threat, but although they could go like the wind down the passes, their excellent brakes and road holding being particularly noticeable, we could hold them without exerting the motors.

At Lago di Misurina, a beautiful lake in the centre of the valley, which was the scene of the great Alpine campaign during the war, was the setting of the first control. Five minutes were allowed either way at controls and after that the competitor was penalised one mark per minute up to a maximum of one hour, at which period he was automatically retired.

Then followed numerous passes to the Passo di Pordoi. was the first timed hill-climb. 7,354 feet high and six-andthree-quarter miles long with a loose surface and many bends, not the least of the difficulties of the faster cars being the risk that had to be taken in passing slower cars. Actually we lost two, four and three marks respectively, while the Singers lost a total of thirty and the Fiat team forty-one. We were already in a commanding position although we realised only too well that we had four more days to go and we had to get all three cars through. However many points the other teams lost it only needed one of our cars to go out and we automatically went to the bottom of the class.

That day there were more retirements, Blackstone's O.M. uprooting a boundary stone with bad results for the car, and petrol feed trouble putting an end to the hopes of the Montague-Johnstone's Riley, W. M. Couper's Talbot and Lt.-Col. Macfarlane's Wolseley. T. W. Oxley (Frazer-Nash) went clean off the road on the Pordoi, and in all there were ten retirements. So after 250 miles for the first stage of the trial we were back at Merano again.

The second day's run included a timed climb of the Stelvio, the highest road in Europe, 9,150 feet above sea level. Once again the M.G.'s performed magnificently, and while we lost marks, as did practically every other car, we succeeded in further entrenching our position. It was a difficult climb, for hairpin after hairpin, forty-nine of them in all, followed one after another in rapid succession for eleven

miles, and engines were "revved" flat out in first and second for some 25 minutes before we were amid the snow on the summit. Then we had the Passo della Bernina, the Albula and the Fluela before we reached St. Moritz.

There had been many more retirements that day, but the British cars were doing well and our own team, by reason of their speed up the passes, were in a commanding position already.

St. Moritz is 6,000 feet up in the mountains and the rarefied air, a shower of rain and a cold night in conjunction were not likely to aid easy starting of motors left all night in the open.

As a matter of fact the rarefied air played havoc with carburation, most settings being far too rich and dozens of cars were in trouble from this cause — a few lost five valuable marks through having to make use of the starting handle — but luck was with us, for the Magnas started, as indeed they did during the whole period of the trial, at the first pressure of the starter.

That day we tackled the Julie Pass (7,500 feet), then the 6,700 feet of the San Bernardino and then the Ceneri at a mere 4,150 feet. Then came the Customs through which competitors were passed with all possible speed and we had practically a main road run to Turin, Italy's Coventry. Compared with the previous day's run and what was to follow we had had a fairly easy time.

From Turin to Grenoble we went by way of the Col de Sestrieres, followed by the Col du Mont Genevre across the frontier to Guillestre, a frontier town crowded with very warlike poilus on those manœuvres which, nowadays, last all the year. After the control came the This dreaded Col d'Isoard. pass was certainly the worst of the lot: a military road with an atrocious surface reminiscent of Beggar's Roost, with the camber sloping the wrong way and no barrier at all between the road and the valley hundreds of feet below. We were all glad when the summit was reached without incident. Before us was

the Galibier, the third and last of the timed climbs and certainly the most difficult. Only three cars, a supercharged Bugatti, a supercharged Alfa-Romeo and H. J. Aldington's Frazer-Nash succeeded in averaging the required speed up this pass, so its difficulty will be appreciated.

The Magna team could afford to take things more easily — though all three cars shot up the pass like scared cats — for by now we were leading comfortably, and, bar trouble, the coveted trophy was ours. W. E. Belgrave, who was competing with a J.3 M.G. Midget for the Glacier Cup in the 1,100 c.c. class, had lost only two points and was leading for this award—a particularly fine effort, since he was also upagainst stiff opposition.

The Galibier was not the last obstacle of the day's run, however, for there followed the Col du Telegraph, the Col de la Croix de Fer and then the descent of the Col du Glandon. It was a race against time, for we were all some twenty minutes behind our schedule and this last pass, for those in a hurry, was a fearsome business, and drive as hard as we could few had more than a few minutes in hand at the Grenoble control.

On the following day we set out on the final section, the run to Nice. Once again the run to the first control was comparatively easy. but from Guillestre it was once more a race, the ascent and descent of passes, with their twisting sinuous corners, making high speed quite impossible, and testing brakes, steering and road-holding to the utmost. There was one serious crash, one of the German Rohrs overturning on an S-bend. Many



L. A. Welch and D. F. Welch on Galihier Pass

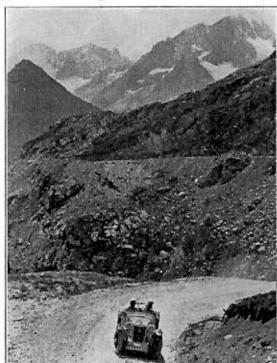
of the British competitors stopped to render assistance — a sporting action which very nearly made them late at the final control.

So eventually we drove along the Promenade des Anglais the finish of the most strenuous reliability trial ever held.

There only remained the final inspection, marks being deducted for cars with bent axles—and there were not a few of these—gears not operative and "dud" lights. None of the Magnas or the Midget lost points on this score. The Magnas, against severe opposition, had won the Coupe de Alpes and the Midget had won, from opposition no less severe, the Glacier Cup.

The cars were in excellent condition, and on the way back to Calais showed that 75 m.p.h. and more was still within their powers even after the five days' "caning" they had received.

The International Alpine Trial is an admixture of the London-Exeter and the London-Land's End quadrupled in severity, the Le Mans 24-hour race and a Donington Park meeting, with the addition of a few passes which cannot be compared with anything else at all. Any car which can get through this trial successfully must be above the average.



# AUGUST BROOKLANDS

THE paddock and enclosures
at Brooklands on August
Bank Holiday presented a
gay spectacle in the glorious
summer sunshine, gents' natty
sports shirtings holding their own
in the array of brightly-coloured
summer dresses. The attendance
was good, and the sport, taking
it as a whole, was good.

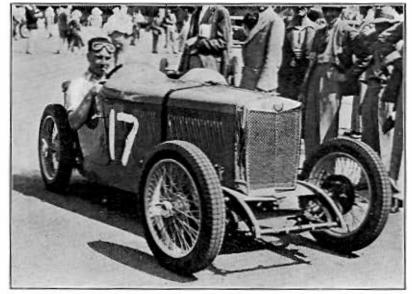
John Cobb's new Napier-Railton, in Stall No. 1, maintained a gallery of admirers throughout the afternoon, the other main feature of interest in the paddock being the fleet of smart-looking M.G. Magnas lined up ready to be driven in the Prewar Brooklands Drivers' Race.

The First Byfleet Junior Short Handicap was the first event in a programme of ten races. Sixteen cars lined up for the start. A. C. Kelway (M.G. Midget) was the limit man, and came round with a substantial lead on the first lap. Kelway managed to maintain his lead throughout the race, although on the last lap J. H. Parsons (Alvis) and Ashton Rigby (M.G.) managed to overhaul several other competitors to capture second and third places respectively. Kelway won by 150 yards at an average speed of 74.48 m.p.h.



S. G. Cummings after his thrilling victory in the Race for Pre-War Drivers

# BANK HOLIDAY



A. C. Kelmay, who scored a run-away win in Race 1

The next race — the Second Byfleet Junior Short Handicap—provided a Frazer Nash win, with quite a close finish. There was a big field for this event also. D. A. Aldington went into first place after M. P. Simpson (Riley), who had been leading for some distance, had retired. Bugattis shone brightly, and provided the danger to the eventual winner. The finishing order was: 1st, D. A. Aldington (Frazer Nash); 2nd, S. Smith (Bugatti); 3rd, R. J. W. Appleton (Bugatti). Winner's speed, 92.59 m.p.h.

The spectacle of a sailor in uniform assisting to push a car to the starting line was an amusing incident in the Byfleet Senior Short Handicap. It probably provided "Ebby" with good subject matter for a wise-crack!

There were three M.G.'s in the race, and although D. N. Letts was among the pace-makers in the early stages, an M.G. success was not registered. It looked very much as though the race lay between Driscoll (Austin) and Dixon (Riley) who was following up closely. Oliver Bertram, however, managed to urge his Delage to its first victory and he proved a popular winner. Dixon and Driscoll were second and third respectively. Winner's speed, 118.05 m.p.h.

The Byfleet Junior Mountain Handicap came next. H. R. Attwood (M.G.) was lying eighth on the first lap, but rapidly improved his position, eventually finishing second. Derrington and Tenbosh (Austin) had arguments with the Fork tubs, and H. C. Vickers (Lea Francis s/c) who had been leading for three laps, had a bad skid at the Fork which cost him the race. The order was: 1st, R. H. Eccles (Frazer Nash); 2nd, H. R. Attwood (M.G.); 3rd, A. W. Kirkaldy (Frazer Nash). Winner's speed, 62.68 m.p.h.

In the Byfleet Senior Mountain Handicap which followed, K. D. Evans (M.G.) retired on the second lap, and the remaining M.G.'s—J. C. Elwes and A. C. Kelway found the handicap too much for them. The result was: 1st, T. P. Cholmondley-Tapper (Bugatti); 2nd, R. H. Eccles (Frazer Nash); 3rd, W. E. Harker (Harker Special). Winner's speed, 63.44 m.p.h.

The main race of the day was the Byfleet Lightning Short Handicap in which John Cobb's car made an imposing and successful debut. The Napier-Railton made other fast cars look positively slow, and the glistening racer fairly shot down the Rail-

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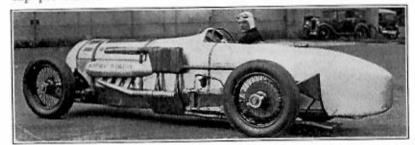
#### AUGUST BANK HOLIDAY AT BROOKLANDS-Continued

way Straight and round the banking. Cobb had rather a hair-raising incident when finding himself unable to pass, and in danger of running on to the tail of E. L. Bouts on the banking. but he eventually went on to win a well-judged race. Kaye Don (Bugatti), who finished second, and Dixon (Riley) drove very good races, but Oliver Bertram (Delage) deprived the latter of third place. Cobb broke the standing lap record in this race, the new figure being 120.59 m.p.h. After the race it was announced that E. L. Bouts had been suspended for the remainder of the meeting for having driven too high on the banking.

The Byfleet Junior Long Handicap provided a win for C. le S. Metcalfe (Abbot Nash), the distances between the winner, second and third being fairly comfortable. Winner's speed, 87.88 m.p.h. W. M. Lloyd Roberts (Talbot) was second, while S. Smith (Bugatti) gained third place.

Then came the Lightning Long Handicap, the Napier-Railton again providing the entry of main interest. Cobb had to carry another 13 seconds handicap in this race, and although not winning, he distinguished himself by coming within an ace of equalling the lap record. The finishing order was: R. R. K. Marker (Bentley); 2nd, R. J. Munday (Munday Special); 3rd, Kaye Don (Bugatti). Winner's speed, 102.98 m.p.h.

H. R. Attwood established an



M.G. win in the next event—
the Byfleet Lightning Mountain
Handicap. Actually, he led
throughout, but the other M.G.
exponents in the race did not
meet with success. T. A. I.
Forbes (M.G.) managed to turn
round at the Fork Bend and
R. E. L. Featherstonhaugh (Alfa
Romeo) engaged in a "spin"
at the same part of the course.
Second and third, respectively,
were L. T. Delaney (Lea Francis)
and R. J. W. Appleton (Bugatti).

The programme concluded with the Pre-war Brooklands Drivers' Race over three laps of the " mountain " circuit. Competitors drew lots for their cars-Magnas supplied by the M.G. Car Company-and after one preliminary lap, to get used to things, commenced serious business, Lieut.-Col. J. T. C. Moore Brabazon led the field round the first bend, but Sydney Cummings soon took the lead and held it to the end. Major R. C. Empson was second, and Capt. F. H. B. Samuelson third. Winner's speed, 53.19 m.p.h.

Left.—John Cobb's magnificent new Napier-Railton car, which was one of the sensations of a fine meeting

# BI-MONTHLY BULLETIN

URING the past eight weeks a number of important developments have taken place in the M.G. Car Club.

In the first place, the whole of the Competitions Committee has been reformed. R. M. Mere has now assumed control as Hon. Trials Secretary, in place

of E. Wood, who has for a long while fought a losing battle against a rising tide of personal work which has now so engulfed him that he can no longer find time to do this very arduous additional job for the Club.

Those of us who know how hard Wood has worked for the Club would like to take this opportunity to thank him. The fact that he remains on the reformed Competitions Committee is one cause for congratulation, while the capture of Mere to fill his place is, indeed, another.

Those serving under Mere on the re-formed Committee are all "as keen as mustard," and we have every confidence in asserting that whatever job they tackle will be done thoroughly and without panic—as befits a Trials Committee.

The full Trials Committee now comprises the following members:—W. C. Barker, A. C. Cookson, R. Mere, J. R. Temple, J. W. Thornley, E. Wood, G. W. J. H. Wright and G. G. Zeigler.

#### THE NIGHT TRIAL

\* #

Results of the Club's Night Trial, run on the night of July 8th-9th, have now been confirmed and we tender our congratulations to F. Rickaby, V. L. Parry and H. R. Winnicott, who all tied for first place, finishing without loss of marks.

#### DONINGTON

Our members enjoyed the hospitality of the Derby and District Motor Club as invited competitors at Donington Park on Saturday, August 19th—and they acquitted themselves right nobly in the racing.



H. C. Hamilton, as every one knows, smashed every kind of record, in Mere's Magnette, averaging 61.7 m.p.h. for five laps in the seventh race which he won in fine style. In the last race he set up a new lap record of 2 minutes 4 seconds at the prodigious speed of 63 m.p.h.

In addition to this, W. G. Everitt brought his Midget home to victory in the first race at 51.5 m.p.h., the same driver running into third place in the fourth event.

R. M. Mere secured a second and a third, while R. R. Jackson bagged no fewer than three seconds and two thirds. J. R. Grice on his Midget was third in two races and C. H. Masters and A. H. Langley both brought their M.G.'s into second place, in races one and three respectively, the latter having the misfortune to turn his car over at Starkev's Corner in the fifth event, injuring his mechanic, R. O. Wilcoxon, well known in connection with the Vale Special concern, although mercifully escaping practically unscratched himself.

To such good purpose did the various M.G. drivers perform during the afternoon, that the M.G. Car Club, represented by H. C. Hamilton, W. G. Everitt and R. R. Jackson, succeeded in lifting the Club Team Trophy with an aggregate of 19 points.

#### THE "ABINGDON"

The Club's "Big Trial" of the year starts from the works at Abingdon on Saturday, September 9th, at 9 a.m. A large number of other clubs will also be competing under our permit, and it is hoped that our own members

will roll up in force to prevent a repetition of last year's undignified lapse, when a visitor "put it across" us on our own ground!

The Trial is one of the most sporting events of the season, and this year will take in such hills as Mutton, Iles Lane, Nailsworth Ladder and Mill Lane, there

being a special test on the sticky

portion of the latter!

The efficient organization of a trial with a large entry is a very exacting proposition, and it is impossible to have too many helpers to assist in marshalling the various hills.

It is particularly requested, therefore, that any members and friends, who may not be competing but would care to take part in the fun, will communicate as soon as possible with the Hon. Trials Secretary, 38, Great Cumberland Place, Marble Arch, London, W.1, offering to lend a hand.

As previously stated, the Trial starts from the Works at 9.0 a.m., there is a luncheon stop at the Bear Inn, Rodboro Common (near Stroud), while refreshments are being provided at the finish at the Works, by courtesy of Mr. Cecil Kimber, the first man being due to finish at about 4.0 p.m.

#### THE DINNER-DANCE

Thursday, October 19th (the Thursday of Olympia Motor Show week), is the date fixed for the Club's Annual Dinner-Dance.

This year the function is to take place at the Park Lane Hotel, and an immensely enjoyable evening is in course of preparation.

Last year's affair was voted "superlative." From this it may be gathered that we are going to have a big job on to better the standard we have set ourselves to beat, but we really do believe that we shall do it—so mind you come along with a cheery party of friends. Remember—Park Lane Hotel, Thursday, October 19th.



#### BI-MONTHLY BULLETIN

(Continued)

#### CLUB TIES

A supply of very tasteful M.G. Car Club ties is now available for members at 5/- each.

These ties, which are of the finest quality silk, comprise a narrow light brown stripe between two thinner old gold stripes on a nigger brown ground, and the ties are so cut that the knot is of plain nigger brown without any stripe.

Applications for ties should be sent, with the appropriate remittance, to the Hon. Secretary, M.G. Car Club, Friars Cottage, Clive Road, Esher, Surrey, without delay, as the supply is limited.

# THE MIDLANDS CENTRE MAKES WHOOPEE

On Sunday, July 9th, a number of members of the Midlands Centre and one or two of the more enthusiastic members of other centres, forgathered by appointment on the outskirts of Birmingham, on the occasion of that Centre's Gymkhana.

The events went off with a real swing and everyone, whether a competitor or a spectator, seemed to have a rollicking time.

The results of the various events staged, were as follows:--

GYMKHANA RESULTS. Sealed Speedometer Run; F. 1. Allen, J2 Midget and W. Irwin, M.G. Six. Tie, two min. error. Musical Chairs . A. B. Langley, J2 Midget, and A. Langley. Kerb Driving: H. Summerfield, Magnette. Bursting Contest: A. May, 12 Midget, and A. Langley. Flag Driving: A. Langley, Singer. Stop and Carry One: A. B. Langley, 12 Midget, and H. Summerfield, Blindfolded Driving : Miss L. Phillips, M.G. Midget. Special Prize for the greatest number of marks : A. B. Langley, I2 Midget, eight marks.

#### INVITATIONS

On Sunday, September 17th, M.G. Car Club members have been invited to compete in two trials. The Berkhamsted and District M.C.C. is running its Berkhamsted-Gloucester Trial on that day, and the Light Car Club its Buxton-Buxton Trial.

The former should appeal to those in the West and South Midlands and South; the latter will appeal to those in the North Midlands and the North.

On the following Sunday, September 23rd, our members have the opportunity of joining in the fun to be provided by that cheery band of enthusiasts, the Sporting Owner Drivers' Club at their Annual Gymkhana, at Home Farm, Sonning, near Reading.

ON SUNDAY, OCTOBER 1ST, M.G.C.C. members may compete in the Cavendish Auto Club's Third Annual 100-Miles Trial. Last year, this event started from the Peggy Bedford Hotel on the Bath Road; it is possible, however, that this year the start may be from Marlow.

We take this opportunity of thanking the Clubs organising the forementioned events for so kindly inviting our members to compete in them. A.C.H.



HE word "reliability," as applied to Club trials, is something of a misnomer nowadays, for reliability is one of the modern car's most outstanding features, hardly neces-Yet the sary to demonstrate. trial reliability increases popularity every season, for even if cars are reliable, the driver can make a grievous error, while his passenger-or pilot, or navigating officer, call him what you willhas been known to err in a calculation !

The reliability trial organiser must lay down certain hard-andfast regulations, otherwise every entrant would qualify for a "gold," with disastrous effect upon the club balance sheet. The first commandment, to be observed by all reliability trial entrants, then, is this: study and digest the regulations. Note why and how penalties are incurred, and the number of marks which a driver loses for breaking this, that, and the next regulation. As for the ones which involve disqualification—underline with red ink and learn them off by heart, Even the most experienced competitor may be caught napping, for, naturally, the regulations vary with each event, and every organiser has his own little traps,

all nicely baited to catch the careless—but not necessarily the novice—entrant.

Next in importance, to the noviate-entrant, at any rate, is the keeping of records. In trial work of any kind, the more quickly you gain experience, the better your chance of being high up in the list of finishers. So during the first few events, insist upon copious notes being taken: notes about the car and its equipment—or lack thereof; about the route, with the times of starting and arrival, and speedometer reading, at each town, check, and control: notes about anything and everything that may come in useful for jogging the memory at a later date.

Then after the trial, this information must be re-written

## W. A. GIBSON MARTIN

and kept as a permanent record to which reference can be made when preparing for another event this or next season.

The third and fourth commandments are concerned with preparation. According to some people, of course, the only preparation required is a cheque in payment of the entrance fees.

It should not be necessaryonly experience proves that it is -to say that the car must be in perfect order, recently greased all round, with sump cleared out and replenished, rear axle and gearbox drained and replenished, cooling system swilled out and refilled, and all the other regular maintenance work carried out, as if for a 3,000 mile tour. Special attention must be paid to those accessories or components, which, if found inoperative at the conclusion of the trial, involve a more or less severe penalty. In some rallies, for instance, marks are deducted for inefficient electrical apparatus, so competitors are advised to fit new bulbs all round, examine all the wiring and renew any parts the insulation of which has been chafed, top-up the battery and grease the terminals, examine all fuses, clean the electric horn mechanism, and adjust if required. Make a list of all the jobs which must be done and then set about each one systematically. Don't run the slightest risk; adopt the old Scots policy, " mak' siccar." So much for preparation of the car.

As for the front seat passenger
—his duties; and to what extent
is he to guide and advise the

Continued on page 164.



#### A WORD TO TRIALS TYROS Continued from page 163.

driver? How best can the route card, maps, town plans, time schedule, watches, pencils, and scribbling blocks be carried? Where is the personal kit to be stowed and what is the most convenient size for suit-cases? The emergency kit of tools must be available at a moment's notice adjustable spanner, plug tester, tyre pressure gauge, two sizes of screwdriver, plug spanner, set of spare plugs, and combined gauge for plug gaps and contact breaker Whe l changing "by numbers," army fashion, will have been practised beforehand; and while the driver obtains iack and wheel brace from their respective positions, the passenger is already at work on the spare wheel fastening.

Every experienced trials competitor has his own particular scheme of organisation, but a beginner will not go far wrong if he takes the following as a basis, making such alterations as circumstances indicate are necessary.

The driver must take command throughout, and accept the sole responsibility for failure success; this implies that nothing of importance may ever be "left to the passenger," and removes all risk of misunderstanding and argument as to "whose fault was that?" Yet after giving careful instructions in every detail, and then relegating duties, the driver is entitled to expect intelligent assistance and practical advice from his passenger.

Have an attache case—of some light-weight material — about 14ins. by 9ins, by 4ins, inside measurements, for the safe custody of all documents, maps, and paraphernalia required en route. During the trial, this attache

case is in charge of the passenger, who assumes responsibility for the safety of its contents. En route he extracts such documents as may be required, replacing everything in the attache case should he leave the car, even momentarily. Articles that constant use, e.g., route cards and a scribbling block-may be carried temporarily in the cubby hole, but only for the time being. as this is too risky a place for anything of value, especially during the night when things suddenly and mysteriously "go missing." Town plans should be fastened in an inexpensive looseleaf binder, or with a strong paper clip, so that after passing through a town the appropriate plan may be removed and placed at the back of the file, thus bringing to view a plan of the next town on the route card. As a scribbling block, there is nothing better than sheets of paper 8ins, by 5ins., fastened to a sheet of thick cardboard (about 9ins. by 6ins., or slightly less) by one of the " John Bull" type of paper clips. As one sheet is filled with notes and writing grows large and very straggly, when the driver is " beating it " along a straight, fast stretch, to make up time before the next control—a slight pressure releases the clip and enables the completed sheet to be placed at the back, bringing in place of it a fresh sheet for further notes.

The fifth commandment insists upon somebody-driver or passenger it matters not-memorising the details of the route.

In the Monte Carlo Rally, for example, competitors should learn off by heart the chief In the London-Edintowns. burgh, memorise the hills, their names, gradients, approximate length and chief features, and their exact position in relation

to each other and the nearest towns. Only by experience does one find out the enormous saving of time and anxiety which results from a properly memorised route.

The sixth—and last, commandment, for I have not sufficient space here to cover every aspect of the subject, deals with that allimportant and vital factor, TIME —in capitals, please Mr. Printer, on account of its influence upon trial results. Too much care cannot be paid to this aspect; and as the result of long and involved preparations for trial driving, I have decided that nothing less than four clocks or watches are essential. everybody cannot be expected to fit four clocks on the dashboard as a permanent feature of the car, so I suggest that two pocket watches should be placed opposite the front-seat passenger, and two opposite the driver; in each case the right-hand watch shows actual time; and the left-hand watch the time at which the car is due at the next control or stopping place. There are ready-made fittings which will ensure these watches being kept steady and in a convenient position, without damaging the instrument-board. In a coupe or saloon, watches are easily mounted above the windscreen, otherwise, instrument-board mounting is the only other alternative.

Of these six commandments, "which is the greatest?" you may ask. For the novice in competition work, I say the first -study and digest the regulations; undoubtedly, ignorance and misunderstanding, more than anything else, lead to disqualifi-And if a competitor cation. digests the regulations, then he is much more likely to make careful preparations—and that, of course, implies the other five

commandments.



The Acerbo Cup Race

ITNEY STRAIGHT put
up a fine show in the
Acerbo Cup Race in Italy,
when he won the 1,100 c.c. class
on his Magnette at an average
speed of of 75.48 m.p.h., covering
102 kilometres in 50 mins. 23.2
secs., against strong opposition.

This success follows close upon his fine performance in the Swedish Grand Prix, in which, driving his Alfa-Romeo, he finished second.

In a cars, w

Here we have Mr. W. E. Belgrave at the wheel of his J.3 Midget, in which he won the 1,100 c.x. Glasier Cup in the recent International Alpine Trial

#### A Trials Success

The London Eagle Motor Club have just announced the results of their London-Salisbury trial. It transpires that R. Napper with an M.G. wins the Salisbury Cup which is the premier award, W. J. Cope (M.G.) the Richards' Trophy and Becket Cup, J. Berry, also in an M.G., wins the Waller Cup, and W. G. Worsfield (Morris Minor) the car Trophy.

#### Nuvolari Again!

Nuvolari has scored another success in the race at Nice, this time driving a Maserati at the average speed of 64.36 m.p.h. over a course of 305 kilometres.

Hon. Brian Lewis (Alfa-Romeo) finished sixth, three laps behind the winner.

#### In Esthonia

In a race for motor-cycles and cars, which took place near Reval

> in Esthonia, an M.G. Midget J.2, driven by Mr. Arno Koch, won its class at a speed of 116.9 k.l.m., and put up the fastest time of the day, beating a Delage which was second at 103.4 k.l.m.

#### Giving Credit-

Attention has been drawn to the fact that mention of the S.U. carburetter was omitted from the list of components fitted to the M.G. Magic Midget, an article on which subject was included in the May issue of this magazine. As a matter of fact the S.U. carburetter has been used in practically every M.G. success.

#### Lap Record

R. T. Horton, with his supercharged "K.3" M.G. Magnette, set up a new record for the outer circuit for cars of 1,100 c.c. at 115.55 m.p.h. during the British Empire Trophy Meeting; the previous record, held by Goutte on a Salmson, had stood since August Bank Holiday, 1926.



The handsome L.C.C. Relay Race Trophy

#### Relay Race Equipment

The equipment of the Magna team which won the Relay Race included Dunlop tyres, Ferodo brake-linings, Pratts petrol, Shell oil, Brittol, Bonora filler-caps, British Jaeger instruments, K.L.G. plugs, Philco transitone, S.U. carburetter, and Lucas electrical equipment.

#### Another Continental Win

News contained in a recent telegram from Liechtenstein states that Mr. R. H. Riley, J.3 M.G. Midget, gained first prize in the 1,100 c.c. class in the Reineck Wazenhausen Mountain Race.



# FAMOUS BRITISH TEST HILLS

No. 2-FINGLE BRIDGE

By H. E. SYMONS

A LTHOUGH used for some years past by several clubs, Fingle Bridge hill was for long included in the routes of the more difficult trials, such as the almost classic "Brighton to Beer" event run by the Brighton and Hove Motor Club.

It is hard to find, long, difficult and narrow. A serious blockage on the hill might cause a delay lasting several hours, in the case of a competition with a big entry. But efficient organization can minimise such risks and, in consequence, Fingle Bridge has now been adopted as a "regular" M.C.C. trials hill.

The usual method of approach is to drive from Exeter towards Moretonhampstead. About 6½ miles out of Exeter one bears right, through Dunsford, making for Drewsteignton. The road is narrow and hilly—a typical Devonshire lane, and follows, roughly, the lovely, winding valley of the Teign.

After the hamlet of Preston the road drops steeply, with a gradient of 1 in 6 or more, from 624ft. to 393ft. in a quarter of a mile. Then, bearing left, one continues downhill for another half-mile to Fingle Bridge itself.

This is set in perfect surroundings. The thickly-wooded banks slope steeply down to the boulder-strewn Teign: the sort of river that no keen fisherman can cross without a longing, backward glance.

I do not know how old is the bridge. It seems almost to have



been built for pack-horse traffic only, for I doubt if a haycart could be drawn across it. With a full-sized car there is scarcely an inch clearance between the hubcaps and the parapet.

Once the river has been crossed the hill rises ahead, slanting left under the trees, to double back to the right after a sharp hairpin bend. So far the hill does not seem difficult, unless the surface is thickly carpeted with fallen leaves, when wheelspin may develop quite low down.

The hill cannot be a mile long, yet in its short length it rises from 360ft, to over 1,000ft, above sea level. In the first third of a mile a rise of 422ft, has to be tackled and the gradient is probably steeper than 1 in 4 in one or two places, such as where there is a very "tight" S-bend (of which three come in quick succession) with a loose, stony surface.

It is its surface that makes Fingle difficult. In winter the dead leaves mix with the soil to form a surface akin to soft soap. In summer the pebbles break away from the dry earth and provide a surface like a sea beach. Something of the apalling surface of Fingle may be apparent to anyone studying the photograph reproduced on this page

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Except on a very powerful car, however, one cannot afford to ease-up on this hill. If the car speed falls too low any extra throttle opening will almost certainly cause a stoppage due to The usual trialswheelspin. hill tactics apply: tyres should be really soft, shock-absorbers dead tight, as much weight as possible concentrated over the rear wheels. Needless to say, "competition" tyres, or new covers with a bold tread, are desirable if a fast and certain climb is to be made.

Like many another famous test hill, Fingle Bridge goes on, and on, and on, long after the "worst" has been apparently negotiated in safety. Therein lies a trap for the unwary. After the hairpins and the stones the road still rises steeply. Failing engines will labour on the upper reaches. The surface is often slimy. So the trials driver may not rest until suddenly his car leaps into daylight, a thousand feet up, by the old earthworks of Cranbrook Castle, and the white, stony track assumes, once again, something of the character of a level road.