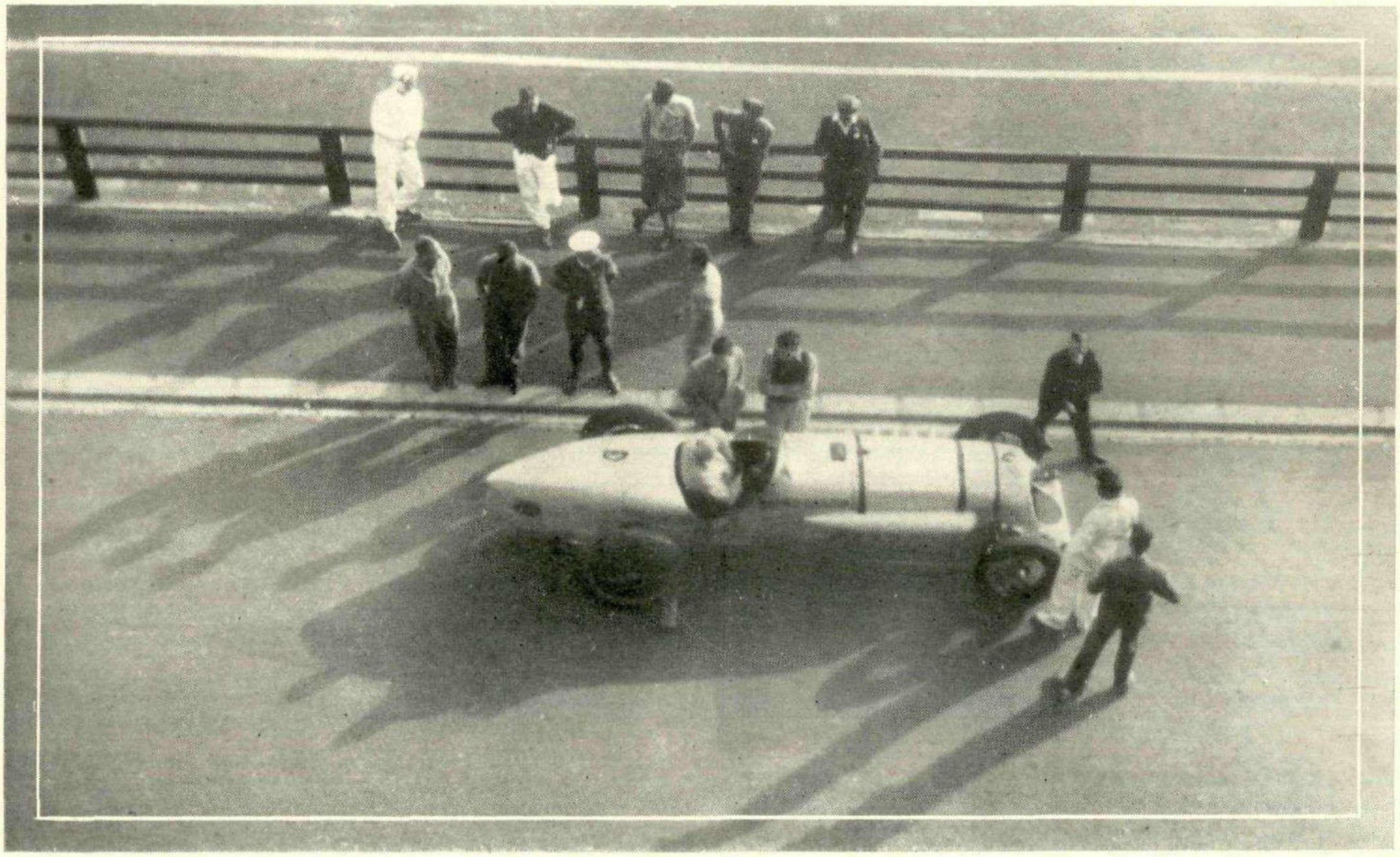
Vol. XXII No. 6 RAYMOND MAYS FASTEST AT PRESCOTT June, 1946

# MOTOR SPORT

INCORPORATING Speed

ONE SHILLING MONTHLY



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Best Performance - - L. Parker

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Best over 1,500 c.c. - - L. Parker

**SUNBAC—Colmore Trial**
Colmore Cup - - - K. N. Hutchison
Bernard Norris Cup - - S. H. Allard

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Best Performance - - L. Parker.

**BRIGHTON & HOVE M.C.—Spring Trial**
Spring Trophy (best performance) D. G. Silcock

*A catalogue is available on request.*

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## WET AT PRESCOTT!

**Raymond Mays (E.R.A.) makes f.t.d. Whitehead's E.R.A. next fastest. Perfect organisation and a big crowd. H.R.G. the fastest sports car.**

HEAVY rain failed to "wash out" the first Bugatti Owners' Club Prescott Speed Hill Climb on May 19th. Indeed, all the old, familiar sights were witnessed again by a large crowd of enthusiasts—feverish attempts to start racing machinery in the muddy paddock, the crowd cautiously making its way up the slippery paths to favourite vantage points, the re-packing of mud-covered racing cars and the unbogging of spectators' saloons after the meeting.

In spite of the horrid conditions, it was an extremely enjoyable meeting and the organisation was 100 per cent., the programme finishing about half-an-hour ahead of schedule. Entries were wisely limited to 80, and amongst the non-starters were Allard's Allard, Blomfield's Invicta, Richards's Riley, Gilbey's Alfa-Romeo, Jason-Henry's Bentley, Giron, who bent the Maserati in practice on May 4th, Mansfield's M.G., Salvadori's M.G., the Watkins'-Nash, Miller's Riley, Geoffrey Taylor's Alta, Ripley's Talbot and Jason-Henry's Riley—we suggest reserves next time. Donald Parker brought a "Brooklands" Riley and his Ford V8-engined Aston-Martin (the latter with s.v. head on the off-side and o.h.c. on the near-side), but, after a series of incidents in practice, the stewards excluded him.

Due to the wet course not a single record fell. In practice, under kinder conditions, Raymond Mays took the 2-litre E.R.A. up in 49.6 sec. His differential casing then split but his mechanics rushed from Broadway to Bourne and back on the Saturday night and fitted a new casing, so that the black E.R.A. was on the line on Sunday.

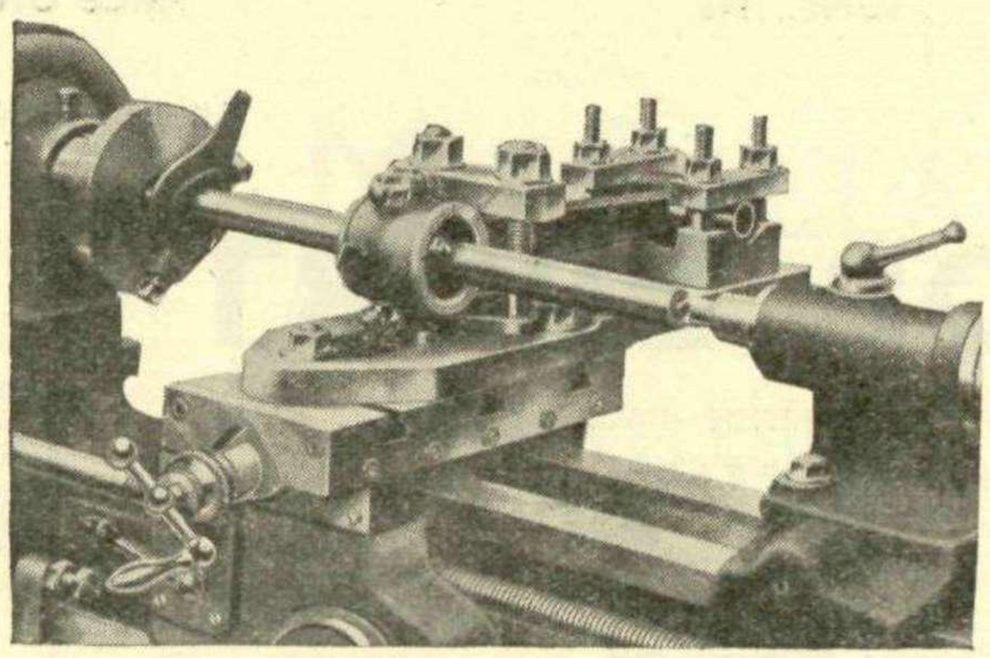
After Eric Giles, Col. G. M. Giles and Earl Howe had opened the course in a Type 57 Bugatti, the veteran cars came up. Peter Clark was fastest, in the 1914 Mercédès, now in authentic white finish, and carried his wife with him on the first run. Rodney Clark in the Bugatti "Black Bess," which Clutton drove to the course, was very impressive, and Bolster's beautiful 1911 Rolls-Royce equally so in a different manner.

For a new driver, Newton did very well to win the 1½-litre sports class with the ex-Baillie-Hill Meadows H.R.G., using a noticeably earlier cut-off for Orchard corner than Chambers on the Le Mans H.R.G. Claridge was second in this class, using a Frazer-Nash composed virtually of a G.N. chassis with 1936-type Gough o.h.c. engine. Lind-Walker's Type 37 blown Bugatti was third, the exhaust noise grand and the driver making determined changes with the outside gear-lever. Maltby (Riley) left the road near the finish on his second run, while Mrs. Gerard (Riley) drove splendidly, making a determined upward change after the start. Abecassis, on two consistent runs, won the medium sports class for Alta; Heath, a new man, driving very well in his Alta for second place. Flather was fastest of the various 328 B.M.W. exponents and very able through the Esses. Of the big sports cars, Bear deserved his class win, his ex-Le Mans blown 4.9 Bugatti being a handful on this course, even in the dry. Johnson, in his ex-Connell Darracq, using his sliding tactics to excess, was second, and Hutchison, getting real revs., being usefully brutal with the gear-lever and really driving his V8 Allard, richly deserved his third place. Hutch's was the best Allard climb. Silcock screamed his tyres and wasn't very fast; Parker was rather wild, touching the inside barrier at Orchard corner, and Lady Mary Grosvenor just toured up. Garland was disappointing in the ex-Gerard 3½-litre Delage, and Scott-Moncrieff found his 5,350-c.c. Bugatti saloon too large for the hill. Mrs. Rodney Clarke did two nice ascents in the Type 49 touring Bugatti "Poppy."

So to the racing classes. Two 500-c.c. cars ran, Strang's 499-c.c. H.R.D.-engined, Fiat-500-chassis Strang 500, and Lones's 496-c.c. Tiger Kitten. The latter has a well-finned one-cylinder J.A.P. engine in an Austin Seven chassis, using an Austin Seven gearbox, an upside-down Austin "Ulster" front axle, and a cut-down "Ruby" Austin radiator grille. These two cars proved conclusively that 500-c.c. cars are amply fast enough to hold the spectators' interest, and Strang scored a splendid victory, his time being 59.05 sec. against Lones's 59.1 sec.

Of the 750-c.c. racing cars, the Dowson Lightweight, when it was finally unbogged, easily beat Wharton's well-handled M.G.-engined, Austin Seven-chassis Wharton-Special—56.1 sec. against 58.45 sec. Marcus Chambers's single-place Austin Seven boiled furiously on its first run and nearly left the road on its second ascent.

Whitehead's E.R.A., really motoring and doubtless aided by a Z.F. differential, won the 1½-litre racing class in 52.4 sec., and made fastest ascent of the second-runs. Gerard's white E.R.A. was 1.05 sec. slower for second place, and Ansell, selecting the left-hand side of the road for starting and still getting much spin, completed the E.R.A. domination of this class. Raymond Mays, on what can only be put down as a typical Mays's ascent, recorded 51.7 sec. on his first run, easily fastest time of the day. He wore blue overalls and a cap—how nice to see the famous black E.R.A. in full cry once again! His second run, in 53.8 sec., also bettered all other class ascents. Bob Cowell, with the black, all-independent, ex-Mary Grosvenor Alta, made unsensational, well-judged runs,



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keeping a steady throttle through the Esses, and was rewarded with second place—54.8 sec. Harrison's ex-Dixon silver Riley, emitting much smoke and resounding on the over-run, was third.

Peter Monkhouse, with the road-equipped Type 51 Bugatti, won the big racing class on a truly polished ascent—it actually looked slow in comparison with Whincop's run in a sister car, which was actually over 2½ sec. slower. Peter's second run, however, was much slower than his first. Northway's old "Spook," now very neatly Mercury-powered, was second—54 sec.—in spite of a bad slide at Orchard corner, well held. Northway then chuntered up fast on a fearless ascent, a fine show. Bear, using his brakes purposefully before Orchard, was third, driving his twin-rear-tyred Type 51 Bugatti splendidly. Kenneth Evans was disappointingly slow with the *monoposto* 2.9 Alfa-Romeo, although cornering well, and Hutch just failed to better his previous time. Whincop did a very neat change-down while dicing out of the Esses. Yates slid badly from the start with the Maserati, Giron crashed and was very cautious, and Wallington's "half Bimotore" 2.9 Alfa-Romeo spun its wheels a lot and snaked on the straight bits, clocking an identical time on both runs. No extra runs were used to decide the Handicap Class, but Mrs. Gerard's excellent run with the Riley won her this additional prize, with Flather's B.M.W. second and the Mercury-Nash third.

Considering the weather there were few incidents, and new drivers did not get into difficulties. Mortimer's Alta showed excellent acceleration, Williams was restrained with the ex-Hunter 1½-litre Alta, Hampshire came out of Orchard wide with the 1½-litre Maserati on a very fine run, and A. R. Parnell handled the famous 1½-litre Delage very effectively. Davenport displayed fine get-away from corners with the ex-Dixon Riley. Vaughan made a very skilled recovery from a series of nasty slides at Orchard with the Becke-Powerplus. Parnell put his 1½-litre Maserati carefully through the lower bends, but was excitingly vicious at the Esses, and here Peter Monkhouse actually accelerated hard. There were no real accidents, although Tony Crook slightly dented his "328" B.M.W. when he hit the bank at Orchard, and Fry's A.C. Six-engined Kaiserwagen, a car with fierce get-away, left the road at the same place, recovered, and broadsided at the Esses.

The B.O.C. deserves the very greatest credit for getting the cars up probably quicker than at any other sprint event, announcing times very promptly indeed, and keeping the course efficiently marshalled. The loudspeaker system was made full use of to address marshals, spectators and competitors, and a few minutes after descending the hill at the conclusion of this well-run meeting we were handed a programme with all the times inked in. Congratulations, Eric Giles! Other clubs please try to copy! Earl Howe broadcast thanks to all helpers.—W. B.

**RESULTS**

VETERAN CARS*.—1st, P. Clark (1914 Mercédes), 61.5 sec.; 2nd, R. Clarke (1913 Bugatti), 63.5 sec.

SPORTS CARS UP TO 1½-LITRES.—1st, E. Newton (H.R.G.), 55.3 sec; 2nd, G. Claridge (Frazer-Nash),

56.8 sec.; 3rd, G. Lind-Walker (s/c. Bugatti), 56.95 sec.

SPORTS CARS—1½ TO 3 LITRES.—1st, G. Abecassis (s/c. Alta), 56.25 sec.; 2nd, J. Heath (s/c. Alta), 56.9 sec.; 3rd, D. Flather (B.M.W.), 57.1 sec.

SPORTS CARS OVER 3 LITRES.—1st, K. Bear (s/c. Bugatti), 55.7 sec.; 2nd, L. Johnson (Darracq), 56.3 sec.; 3rd, K. Hutchison (Allard), 57.7 sec.

RACING CARS UP TO 500 C.C.—1st, Strang (Strang 500), 59.05 sec.

RACING CARS, 501-750 C.C.—1st, J. Dowson (s/c. Lightweight-Special), 56.1 sec.; 2nd, F. Wharton (s/c. Wharton-Special), 58.45 sec.; 3rd, M. Chambers (s/c. Austin), 61.1 sec.

RACING CARS, 751-1,500 C.C.—1st, P. Whitehead (s/c. E.R.A.), 52.4 sec.; 2nd, F. Gerard (s/c. E.R.A.), 54.04 sec.; 3rd, R. Ansell (s/c. E.R.A.), 54.45 sec.

RACING CARS, 1,501-2,000 C.C.—1st, R. Mays (s/c. E.R.A.), 51.7 sec.; 2nd, R. Cowell (s/c. Alta), 54.8 sec.; 3rd, T. Harrison (Riley), 56 sec.

RACING CARS OVER 2 LITRES.—1st, P. Monkhouse (s/c. Bugatti), 53.5 sec.; 2nd, J. Northway (Mercury-'Nash), 54 sec.; 3rd, K. Bear (s/c. Bugatti), 54.3 sec.

HANDICAP.—1st, Mrs. Gerard (Riley); 2nd, D. Flather (B.M.W.); 3rd, J. Northway (Mercury-'Nash).

PRIZES.—£50 *and Silver Cup:* R. Mays (E.R.A.), fastest time. £10 *and Silver Cup:* P. Whitehead (E.R.A.), second fastest time. £10 *and Silver Cup:* J. Northway (Mercury-'Nash), fastest unblown car. £10 *and Silver Cup:* E. Newton (H.R.G.), fastest sports car. £5 *and Silver Cup:* Mrs. Gerard (Riley), fastest lady-driver. Also silver cups to class-winners, etc.

**Formula result not yet available.*

## PRESCOTT POSTSCRIPT

"Bira," Baron, H. L. Brooke and Rowland were interested spectators.

Whitehead's Alfa-Romeo was started on the starter as the flag fell.

Silcock kept his Allard's radiator covered until the moment of get-away, and Chambers had his pipe removed from his mouth on the line.

Stafford-East was attending to Bear's three Bugattis. Bear wore tennis shoes and Bugatti-blue overalls.

Earl Howe came in his V12 Lagonda. Great enthusiast that he is, he watched all the afternoon from divers vantage points, in spite of the rain.

Johnson's Darracq was boiling on the line and purposely took to the grass as it left the start, close to the right of the road.

Len Parker used two pairs of glasses and goggles before he could see properly where he was going—did we say it was wet?

Garland (Delage) professionally lowered his goggles after leaving the start.

Lones changed *the* plug of Tiger-Kitten before the start. The car has Austin Seven wheels and, we believe, 3.50 x 19-in. tyres.

Strang's motor-cycle gearbox in the Strang 500 allowed him to make rapid gear-changes.

In the racing Alta Abecassis was into second gear at the start in two car's lengths, using the engine's urge low down to good purpose to avoid wheelspin in bottom gear.

The ex-Seaman Delage was handle-started at the line.

Mud was a problem in many ways, and Mays's mechanics thoroughly wiped the wheels of the black E.R.A. before it left the line.

The rear wheels of Dowson's Lightweight looked to lean inwards.

Weir thoroughly warmed the Monaco M.G.'s transmission before his run.

Lund's blown PB M.G. had competition rear tyres. Those using twin rear wheels were: Mortimer, Abecassis on the racing Alta, Yates, Gerard, Ansell, Whitehead, Bear on his 3-litre and Type 51 Bugattis, Davenport, Northway, Williams, Cowell, Vaughan, Woodall and, of course, Raymond Mays.

Mays's fuel smelt beautifully of "boot polish" and Woodall, whose twin-blower "Shelsley" Frazer-Nash was sick (of mis-firing), nearly gassed us with exhaust fumes.

Adams's Bugatti has a twin o.h.c. Anzani engine and used small rear wheels to reduce its gear-ratio, while Mansell's M.G. was an ex-"Musketeer" T-type.

In spite of the rain, Mrs. Gerard looked as unruffled as ever. She made fastest time of the ladies—incidentally, did she recover her umbrella which, ladylike, she mislaid during the afternoon?

## "ALL THE TIMES"

| | | |
|---|---|---|
| R. Mays (E.R.A.) | 51.7 | sec. |
| P. Whitehead (E.R.A.) | 52.4 | ,, |
| F. Gerard (E.R.A.) | 53.45 | ,, |
| P. Monkhouse (Bugatti) | 53.5 | sec. |
| J. Northway (Mercury-'Nash) | 54.0 | ,, |
| K. Bear (Bugatti) | 54.3 | ,, |
| K. Bear (Bugatti) | 54.4 | ,, |
| R. Ansell (E.R.A.) | 54.45 | ,, |
| R. Cowell (Alta) | 54.8 | ,, |
| Major Vaughan (Becke-Powerplus) | 55.25 | ,, |
| E. Newton (H.R.G.) | 55.3 | ,, |
| D. Hampshire (Maserati) | 55.6 | ,, |
| R. Parnell (Maserati), G. Abecassis (Alta) | 55.65 | ,, |
| Capt. Woodall (Frazer-Nash) | 55.85 | ,, |
| T. Harrison (Riley) | 56.0 | ,, |
| J. Dowson (Lightweight) | 56.1 | ,, |
| A. Whincop (Bugatti) | 56.1 | ,, |
| Capt. Yates (Maserati) | 56.15 | ,, |
| K. Bear (Bugatti) | 56.2 | ,, |
| G. Abecassis (Sports Alta) | 56.2 | ,, |
| L. Johnson (Darracq) | 56.3 | ,, |
| C. Mortimer (Alta) | 56.7 | ,, |
| G. Claridge (Frazer-Nash) | 56.8 | ,, |
| J. Heath (Alta) | 56.9 | ,, |
| G. Lind-Walker (Bugatti) | 56.95 | ,, |
| D. Flather (B.M.W.) | 57.1 | ,, |
| J. Fry (Kaiserwagen), K. Hutchison (Allard) | 57.7 | ,, |
| K. Evans (Alfa-Romeo) | 57.95 | ,, |
| T. Crook (B.M.W.), P. Whitehead (Alfa-Romeo) | 58.2 | ,, |
| Lieut.-Comdr. Silcock (Allard) | 58.3 | ,, |
| G. Claridge (B.M.W.), F. Wharton (Wharton-Special), R. Wallington (Alfa-Romeo) | 58.45 | ,, |
| G. Tyrer (B.M.W.), Mrs. Gerard (Riley) | 58.5 | ,, |
| P. de Pycroft (S.S.), Y. Williams (Alta) | 58.6 | ,, |
| A. Parnell (Delage) | 58.7 | ,, |
| T. Wagner (S.S.) | 58.8 | ,, |
| D. Monro (Invicta) | 58.85 | ,, |
| M. Chambers (H.R.G.) | 58.95 | ,, |
| C. Strang (Strang 500) | 59.05 | ,, |
| H. Lones (Tiger-Kitten) | 59.1 | ,, |
| M. Chambers (Austin) | 59.2 | ,, |
| G. Crossley (B.M.W.) | 59.25 | ,, |
| G. Slater (Riley) | 59.25 | ,, |
| J. Weir (M.G.) | 59.45 | ,, |
| L. Parker (Allard) | 59.5 | ,, |
| E. Lund (M.G.) | 59.6 | ,, |
| Ruck Keene (Alfa-Romeo) | 59.65 | ,, |
| Davenport (Riley) | 60.7 | ,, |
| D. Greig (Frazer-Nash) | 60.75 | ,, |
| R. Holder (Riley) | 61.05 | ,, |
| R. Maltby (Riley), P. Clarke (1914 Mercédes) | 61.5 | ,, |
| G. Mansell (M.G.) | 61.8 | ,, |
| J. Bowles (Austin) | 62.8 | ,, |
| D. Monro (Invicta) | 63.3 | ,, |
| P. Garland (T.T. Delage) | 63.45 | ,, |
| R. Clarke (1913 Bugatti) | 63.5 | ,, |
| Lady Mary Grosvenor (Allard) | 63.95 | ,, |
| L. Leonard (M.G.) | 64.8 | ,, |
| Lady Mary Grosvenor (Riley) | 65.4 | ,, |
| C. Clark (Bugatti) | 65.6 | ,, |
| G. Sumner (M.G.) | 65.75 | ,, |
| D. Adams (Anzani-Bugatti) | 66.4 | ,, |
| Mrs. Clarke (Bugatti) | 67.65 | ,, |
| J. Bolster (1911 Rolls-Royce) | 68.96 | ,, |
| D. Scott-Moncrieff (Bugatti) | 74.6 | ,, |


**1935**

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# *Reports of Recent Events*

## N.L.E.C.C. CLOSED TOURING TRIAL

This was won by G. P. Taylor's PB M.G. Midget, which lost 10 marks. Fifteen started, and Rivers-Fletcher (Alvis), Edgar (Alvis), Snelling (Riley), Bacon (M.G.), Hartridge (Rover) and Sanderson (M.G.) took "Premiers."

## VINTAGE S.C.C. OF AUSTRALIA'S EASTER SPRINT

*Held on an airstrip 30 miles from* Sydney, 29 cars competed, and 700 souls spectated, the club benefiting by £60, equal to a year's taking from subscriptions and entry fees. F.t.d. was a tie between Najar (TB M.G.) and Duckett (R-type *Anzani-engined Bugatti), who took* 18.5 sec. for the s.s. ¼-mile. Other victors : 750-c.c., Lyell (Austin "Special"), 23.4 sec.; 1,100-c.c., Jeffrey (T.T. M.G. Magnette), 19.3 sec.; 2-litre, MacKinnon (A.C. Six-engined Frazer-Nash), 20.7 sec.; unlimited, Buick-Special, 18.7 *sec.* Fastest vintage car : Crouch (blower Bentley), 19.5 sec. Other good times : Ford V8-engined Riley "Gamecock," 19.5 sec.; Durham (Ford "Special"), 19.9 sec.; Dent ("30/98" Vauxhall), 20.9 sec.; Pritchett ("30/98" Vauxhall), 21.9 sec.; and Cook ("30/98" Vauxhall), 22.4 sec. Knock-out winner : King (Ford V8-Riley).

## CIRCUIT OF IRELAND TRIAL

A. J. Bell's Riley Twelve took the Premier Award, the class winners being this Riley, McDowell's Riley saloon, and Pentland's Citroen saloon. Team prize : Gallagher, Johnston (Alfa-Romeos) and Montgomery (M.G.). Ladies' Award : Miss Brice (Singer). Castlereagh Trophy : *J. Richmond (H.R.G.).*

## JERSEY M.C. AND L.C.C. EASTER SAND RACES

Seven thousand folks attended. The 5-lap race was lost by C. G. Benett's 3.7-litre Benett-Special, by "half-a-wheel" to Le Gallais's 1½-litre Hybrid. Benett reversed things in the 10-lap race, winning by ¼-mile from Le Gallais, with a 3-litre Sunbeam third.

## WEST OF ENGLAND M.C. NOVICES' TRIAL

Results :—Hands Trophy : J. Perry (1½-litre Fiat saloon). Bartlett Trophy : Mrs. Melhuish (Singer). Runners-up : Brunyee (Austin Seven), Bullivant (Riley). First-class awards : Murton (H.R.G.), Harrison (Austin Seven), Ellis (Standard).

## THE NAISH HILL-CLIMB

Due to deterioration of surface, this once-famous Bristol M.C. and L.C.C. hill had to become (temporarily, we believe, and hope) a social venue on May 4th. However, sports and touring cars were timed up the course, with the following results : 1st, L. Parker (Allard V12), 54.9 secs. ; 2nd, A. W. Morrish (s/c P M.G.) 58.4 secs. ; 3rd, J. Fry (ex-Macdermid Lancia Aprilia Special) 58.4 secs. ; 4th, J. Appleton (Allard) 58.7 secs. Social events followed. The Macdermid Special was the afternoon's attraction, naturally. It has the Aprilia engine just ahead of the rear axle and two seats forward in an abbreviated cockpit over the front axle. The radiator is amidships, using ducted cooling, and the gearbox is Bowden-actuated. Fry was not in the least bothered by the forward driving position, but found the light weight insufficient to work the Lancia front suspension.

## DARLINGTON AND DISTRICT M.C. CONSISTENCY TRIAL

A 33-mile course in Swaledale attracted a good field. Dr. Kiszely (Humber 20) made best car performance, in his first event ; 2nd, J. Richmond (H.R.G.), 3rd, H. Gray (M.G.).

## E.C.C. OF G.B. EASTER TRIAL

Winners : Saloon cars : F. G. Taylor (Hillman *Aero Minx) ; sports cars : G. R.* Holt (P-M.G.).

## S.S. FASTEST AT BO'NESS

The first post-strife speed hill-climb at Bo'ness—the Scottish Prescott—took place on May 11th. F.t.d. went to N. Bean's Jaguar, in 40.0 secs., but Clarkson managed 40.8 secs. on a run in which the Alexander-Special hit the bank, and Thorne, with the same V8-engined car, finally clocked 40.1 secs. The record-holding Riley single-seater was not very fast. Interesting runs included a Salmson-engined Frazer-Nash, the ex-Nuvolari T.T. M.G. Magnette, and the smaller Alexander-Special, which was a bored-out 1,088-c.c. Ford Eight 2-seater with chain-driven Zoller supercharger. Thorne's class-winning M.G. was a T-type with triple-belt-driven Marshall blower. Results :—

Class 1. Up to 750 c.c. Unblown : No starters.

Class 2. Up to 1,100 c.c. Unblown : J. V. Howden, 1,089-c.c. Riley, 42.2 secs. ; J. Brown, 1,089-c.c. Riley, 42.4 secs. ; J. F. Cunningham, 1,089-c.c. Riley, 42.6 secs.

Class 3. Up to 1,500 c.c. Unblown and 1,100 c.c. Blown ; I. B. Page, 1,287-c.c. M.G., 41.3 secs. ; Harry Soutar, 1,088-c.c. Alexander-Special, 44.2 secs. ; I. McLardy, 1,352-c.c. Lancia, 45.6 secs.

Class 4. Up to 3,000 c.c. Unblown and up to 1,500 c.c. Blown : K. M. Thorne, 1,292-c.c. M.G., 41.7 secs. ; J. Spence, 1,292-c.c. M.G., 41.7 secs. ; P. Grant, 2,664-c.c. Jaguar 100, 42.1 secs. ; P. M. Goodall, 1,911-c.c. Frazer-Nash-B.M.W., 44.0 secs.

Class 5. Over 3,000 c.c. Unblown and up to 3,000 c.c. Blown : N. A. Bean, 3,485-c.c. Jaguar 100, 40.0 secs. ; J. L. Frazer, 3,622-c.c. Allard, 41.5 secs. ; G. F. Simpson, 3,622-c.c. Ford, 48.3 secs.

Class 6. Over 3,000 c.c. Blown : W. R. L. Thorne, 3,622-c.c. Alexander-Special, 40.1 secs. ; R. K. N. Clarkson, 3,622-c.c. Alexander-Special, 40.3 secs. ; J. G. R. Watson, 3,622-c.c. Watson-Special, 42.0 secs.

Fastest Time of the Day : N. A. Bean, 3,485-c.c. Jaguar 100, 40.0 secs.

Fastest Family Saloon : I. McLardy, 1,352-c.c. Lancia Aprilia, 45.6 secs.

## M.M.E.C. AND SUNBAC SPEED TRIAL

This event was held on an enterprising course at the Austin aerodrome. Again, many interesting cars ran, notably the blown J4 M.G.-engined, Austin Seven chassis Wharton-Special, the Hudson-engined Skinner-Special, an M.G. with blown Austin Ten engine, a Talbot-engined Salmson, etc. The "special" builders have clearly been busy. Fastest time of the first runs was made by Parker's Allard, but Gerard really got the E.R.A. going in the second half, to set f.t.d. at 28.2 secs. Results :—

Fastest Time of the Day : F. R. Gerard, E.R.A., 28.2 secs.

Fastest Special or Racing Car : F. R. Gerard, E.R.A., 28.2 secs.

Fastest Special subject to Handicap : E. Lloyd Jones, Skinner-Special, 30.4 secs.

Fastest Open Car : L. Parker, Allard, 30.6 secs.

Fastest Open Car subject to Handicap : F. R. Gerard, Riley, 32.6 secs.

Fastest Closed Car : J. L. Brain, Vauxhall, 41.4 secs. ; E. Highway, Triumph, 41.4 secs.

Fastest Closed Car subject to Handicap : F. D. Woodhall, Aston-Martin, 42.4 secs.

## MARSEILLES G.P.

Maserati scored another victory in a post-war Grand Prix when Sommer's 1½-litre won the Marseilles G.P. over the Prado circuit. He won by a lap, after a drive lasting 1 hr. 20 min. 37.7 secs., averaging 59.23 m.p.h. for the 35 lap (approx. 80 m.) race. Sommer also set the fastest lap at 62.4 m.p.h. (2 min. 9.5 secs.). Plate's Maserati was 2nd, followed by Grignard's unblown 3½-litre Delahaye, Ruggieri's Maserati, De Graffenried's Maserati and Pozzi's Delahaye.

## THE LAWRENCE CUP TRIAL

In heavy weather the first post-war Lawrence Cup Trial of the N.W.L.M.C. was organised by the Hutchisons on Bagshot Heath. A number of special tests and many of the old favourites in the way of hills were featured. Results are not yet available as we write this "Stop Press" report. Sydney Allard's Allard was not running well, but nevertheless performed outstandingly. Red Roads had to be taken both straight up and *via* a very difficult "S"-turn ⅔rds of the way up. General impressions : Appleton, pipe in mouth, had a nice run up in the Allard, and Mallock's Austin Seven made a splendid straight-up attempt, failing at the very top. Oscar Moore's 328 B.M.W., *smoking considerably, failed early, as* did Biggs (Riley) and Birkett (Austin), amongst many others, including Denyer (Lea-Francis). Braid wuffled his Ford V8 Special up the straight climb. Uglow's H.R.G. and Leslie Johnson's 328 B.M.W. *climbed fast, the latter with* Tommy Doman as his passenger, but Johnson was bothered by gearbox trouble on other sections. Price had very tough luck when his Price-Special V8 took the "S" only to spit and stop thereafter. Parker's Allard *and Appleton's sister car* failed early on the "S" ascent, but Potter got up clean. Best's blown M.G. made light work of the straight climb in spite of an occasional misfire, and Terry's Terryford, steaming contentedly, was hectic but successful through the "S." Delingpole's H.R.G. failed at the very top.

# *Hutchison (Allard) Fastest At Fordingbridge*

## *Best Aggregate Time by Sydney Allard (Allard)*

THE Southampton M.C., assisted by the R.A.F., deserve every possible credit for their organisation on May 12th, when they put over a speed hill-climb on a private venue at Fordingbridge. The course, a very loose-surfaced gravel road winding over the downs, was possessed of a tricky bend just before the finish and, as the sports and touring cars (racing machinery was barred) made their ascents with dust clouds welling out behind, it was all very reminiscent of a sprint event of the early nineteen-twenties. Because the crowd could see almost the whole of the hill from the natural banks beside the road, hardly a soul had to be warned away from dangerous areas. Ambulance, breakdown lorry and a most efficient loudspeaker car were present, and times were very promptly displayed on a blackboard near the start after each run, while the cars were brought to the line very efficiently. Each competitor made three runs and the aggregate time counted for results—a good scheme, ensuring each ascent being made at speed and introducing a certain reliability factor.

Amongst groups of competitors there was interesting competition. Of the big cars, Alan May's " 30/98 " Vauxhall, blushing under Elstree honours, and effectively Burgess-silenced, tried the Allards of Silcock, Allard, and Hutchison very hard. Allard opened with 31 secs., Hutchison 31.8 secs., Silcock 33.0 secs., and May with 32.0 secs. On their second runs, times improved to 30.0, 30.6, 31.0 and 32 respectively, while Parker's Allard did 30.4 secs. The third runs promised to be exciting. Allard had one cylinder cutting out, due to bending a valve through over-revving on his second run, but promised to keep his foot flat down round the top bend—he now has four double-choke Stromberg carburetters in action and was using a 4.1 to 1 top gear. Keeping in 2nd gear all the way after the start, he clocked 30.4 secs. on a grand run, but Hutchison, with the original Allard, still Bugatti-tailed, but newly-cowled at the front, L.M.B. axle working hard, returned 29.8 secs., fastest run of the day. Silcock was slower, 31.2 secs., but May clipped the Vauxhall's time down to 31.4 secs. The honours, on aggregate times, went to Allard, with a special f.t.d. cup for Hutchison. Lady Mary Grosvenor's Allard misfired, and no one else came near these times except Oscar Moore's left-hand-drive 328 B.M.W., with schoolboy passenger, 33.0 secs., and Parker's Allard, which did 30.4 secs.

In the 1½-litre class Hay's Anzani Frazer-Nash, Jenkinson's Meadows Frazer-Nash, and Denyer's famous Lea-Francis had some ding-dong battles, but two blown M.G. Midgets of Wilcocks and Best were running beautifully, and the latter was appreciably faster. The third runs of these men came out as : 36.0, 35.2, 34.8, 33.4 and 36.6 secs., respectively.

Hartwell's ex-Cowell 2-litre Alta made one fierce run, but later suffered plug trouble ; Way's B.M.W. coupé was running badly, and Morrish's blown M.G. had an expensive blow-up. The touring cars were naturally very slow, but an exception was Secretary Pearson's little Morris Minor Special, with T-type M.G. engine. Altogether an excellent day's sport. Results :—

CLASS 1. SPORTS CARS : UP TO 750 C.C.—R. Ruppell (Austin), 59 8.15 sec.

UP TO 1,100 C.C.—D. Wilcocks (M.G.), 34 12.15 sec. ; J. Dyer (Riley), 37⅘ sec. ; H. Bryant (M.G.), 40 11.15 sec.

UP TO 1,500 C.C.—D. Wilcocks (M.G.), 34 9.15 sec. ; A. L. Denyer (Lea-Francis), 34 13.15 sec. ; D. Jenkinson (Frazer-Nash), 35 13.15 sec.

OVER 1,500 C.C.—S. H. Allard (Allard), 30 7.15 sec.; K. Hutchison (Allard), 30 11.15 sec. ; L. Parker (Allard), 31 1.5 sec.

CLASS 2. NON-SPORTS CARS UP TO 8 H.P.—Miss Clarke (Morris), 71 7.15 sec. ; G. Pease (Fiat), 72 4.15 sec.

UP TO 12 H.P.—Lea (Ford), 55 sec.

UP TO 16 H.P.—Hanwell (Lancia), 39 9.15 sec. ; R. G. Harris (Rover), 44 6.15 sec.

OVER 16 H.P.—R. Way (Frazer-Nash-B.M.W.), 35 sec. ; V. S. A. Biggs (Riley), 36 13-15 sec.

### *BE PREPARED*

JUNE 1ST.—See you at Shelsley Walsh, Britain's first international post-war event.

JUNE 8TH.—Vintage S.C.C. members invited to an air display and party at Elstree aerodrome.

JUNE 15TH.—Cambridge University C.C. hope to hold a series of circuit races at Gransden Lodge aerodrome, near Cambridge. If so, this will be the first post-war circuit racing.

JUNE 29TH AND 30TH.—M.C.C. shake off the war inertia with rally, dinner-dance and driving tests at Tredington, Shipston-on-Stour. Entries close June 3rd.

### FORDINGBRIDGE FLASHES

Rumfitt's smart 4½-litre Bentley 2-seater experienced rear wheel judder at the start.

Knight's " 12/50 " Alvis, home-bodied, was very stark, sounded well, but wasn't very rapid.

Both Price (Price Special), Hay (Frazer-Nash) and some of the M.G.s had " moments " at the top bend.

Hartwell's white, special-bodied Sunbeam-Talbot ran well.

The ex-Phoenix, lowered " 30/98 " and Hayes's " 30/98," with naval crew, made pleasing, if sedate, ascents.

Richmond changed down neatly on his Lagonda Rapier, which had a nice crackle to its exhaust.

Lady Mary Grosvenor's Riley " Sprite," driven by her friend, had one rear spring shackle above, and the other shackle below, the rear cross-member.

Dyer's very brief Riley Nine and V. S. A. Biggs's Riley were there to remind us of the old Southsea days.

Miller drove an unblown " 2.3 " Alfa-Romeo saloon with " aerodynamic " saloon coachwork.

Mrs. Pearson made courageous ascents with a radio-equipped and apparently standard Morris Eight tourer.

Wilcocks's M.G. was a Powerplus-blown J-type with Solex carburetter, outside exhaust system and a large number-disc on the body.

Best's M.G. was a Marshall-blown P.B. with home-made plywood body and fabric bonnet.

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### *LETTERS FROM READERS*

—*Continued from page* 136

Sir,

We have never had an article on the Riley 12/6 engine; I should think Peter Berthon could write a most interesting one as he was responsible for the development of the " White Riley " from the standard product.

I believe the limiting factor was the water-cooled centre main bearing, as it is of very large diameter and rubbing speeds got too high. It was for this reason that the E.R.A. and Freddy Dixon's engines had that peculiar roller centre main bearing. Nobody has ever revealed what b.h.p. Dixon got out of the long-stroke 2-litre engines, but it must have been colossal as he lapped during a " 500 " at 132 and was timed to lap at 135 in practice. As it takes over 180 b.h.p. to push a " 2.3 " Alfa round at 129 (record lap for a " Monza ") Dixon's engine must have been very nearly as good. No doubt his frontal area was a good bit less than that of the 2-seater Alfa body.

I am, Yours, etc.,
H. K. HARDY.

Glinton,
Northants.

* * *

Sir,

I have read your May issue with interest, and, in fact, always do when it is possible to obtain it.

Unfortunately, in your article " Monkhouse Makes F.T.D. at Elstree," you state that Peter Monkhouse won the match race with the fastest motor-cycle. I would like to point out to you that this is not so, the actual times in this match race were :—

M. D. Whitworth, 348-c.c. Velocette, 16.2 secs.

P. Monkhouse, 2,263-c.c. Bugatti, 16.4 secs.

I should be obliged if you would correct this error in your next issue.

I am, Yours, etc.,
V. LOVETT, *Hon. Sec.*
*Watford & District M.C. & L.C.C.*
Wembley Park, Middlesex.

# *RECIPE FOR A 70-m.p.h. "CHUMMY" AUSTIN SEVEN*

IN the not so distant but now all but forgotten past, George Chaplin had considerable success in trials and club speed events at Brooklands with a somewhat special Austin Seven tourer of 1924 vintage, known, for an unpublishable reason, as "Mr. Flea." There is nothing especially remarkable in that, except that for a touring-bodied, unblown Austin Seven, "Mr. Flea" was inordinately fast—such as covering nearly 60 miles in an hour during an M.C.C. high speed trial at Brooklands. Moreover, the car was used on the road and was decently reliable, only once breaking its crankshaft (1⅛ in. of course) and once running a big-end, both times during trials. Being curious to know how this was done we called on Mr. Chaplin.

He opened his scrap-book and there was "Mr. Flea"—an ordinary, early "Chummy" Austin Seven, rather startlingly finished in Chaplin's coaching colours of yellow and brown, with strip front wings reminiscent, if we may be pardoned the comparison, with those on old "No. 7" Bentley, no running-boards, but with its back wings intact. The screen was composed of two top panels, arranged so that one acted as bottom panel and both would open out. The driver sat lower than normal, and, of course, had fitted a bonnet strap. Two aero screens inside the standard screen frame came later, justified by the increasing speed.

Having tuned motor-cycles, particularly a Rudge, Chaplin took up car competitions with an A.B.C. This gave so much expensive trouble he sought a cheap utility car, and about 1926-7 bought the Austin, hoping for a quiet life. But the urge was too great, and he went in for competitions. Its successes are imposing. We find it first in the 1928 M.C.C. High Speed Trial, doing 51.3 miles in the hour and 18 laps instead of the 15 minimum to collect a gold medal. In a J.C.C. Night Trial a silver cup for best performance with Miss Sander's Austin came to hand and a gold medal in the "Exeter" followed. Chaplin took a Singer "Porlock" through the "Land's End" of 1929, then the "Chummy" did 17 laps in the hour to gain a "gold" in the M.C.C. High Speed dice. In the J.C.C. Members' Day trial over a stiff "road" course at Brooklands the Austin took another "gold." In 1930 another High Speed Trial "gold" came home in the J.C.C. event, "Mr. Flea" also finishing second in a one-lap race, doing the standing lap in 2 min. 51.4 sec. Incidentally, "Mrs. Flea," Chaplin's 1928 "Chummy," ran at this meeting, in the hands of Latham-Booth, but was disqualified. Chaplin himself drove "Mrs. Flea" at the Brighton and Hove Brooklands meeting, but returned to the faster "Mr. Flea" for the M.C.C. event, covering 20 laps in the hour (55.96 m.p.h.). A silver medal in the M.C.C. Derbyshire Sporting Trial followed. Apart from this two other "golds" in M.C.C. classic trials and sundry lesser awards should be mentioned. Chaplin had a break in the early part of 1931, to organise a team of amateur-owned and driven "Ulster" Austins in the "Double Twelve"—but that is another story.

The "Chummy," now completely stripped, came out again for the 1931 Relay G.P. and, the team's "B" car retiring at once, covered 80 laps before the race ended. That year, also, the Austin did 59.49 miles in the hour on "M.C.C. day," and 21 laps in the Brighton and Hove High Speed Trial, 17 only qualifying drivers for a "gold." 1932 produced a special award in the J.C.C. "hour" and two consecutive laps in the Relay Race at 73.24 m.p.h., one lap at 73.78 m.p.h. and the standing lap in 2 min. 40 sec. That was about the last competitive appearance of "Mr. Flea," for Chaplin sold her to a garage at Cheam when he acquired his 1931 orange blown "T.T." Austin Seven in 1933.

What, then, did Chaplin do to achieve these results? The answer, as so often before, is: nothing startling; mainly careful assembly and low overall weight. The engine was a magneto-ignition unit with the original small crankshaft. Chaplin cut off flush the ends of all the valve guides and fitted Terry "Aero" double valve springs. The tiny updraught Zenith carburetter he threw away, substituting a horizontal 26-mm. Solex on a buffer-ended, straight manifold of approximately 1 1/16-in. internal diameter. Standard Austin valves, tappets and pistons were retained but the engine was carefully assembled. As far as Chaplin can recall he used a 105 main jet for speed and a 95 for touring, with a 60 compensator, and ran on Vacuum castor oil and 50/50 petrol-benzole fuel. No advantage being apparent in fancy crankshafts, Chaplin used a standard one, but Geoffrey Taylor sent down a couple of Alta alloy heads, so these were tried out and retained, that having inclined plugs over the exhaust valves apparently giving the better results. It gave a compression ratio of 6.2 to 1. Champion R1 plugs, or sometimes K.L.G.246, gave every satisfaction. For a long time the button oil-indicator was deemed adequate, but eventually a gauge reading to 10 lb./sq. in. was obtained from a Morris and this showed 4 lb./sq. in. on castor oil and 2½ lb./sq. in. on mineral oils. A camshaft from a blown Austin was fitted in the later stages. The usual B.L.I.C. magneto of the period was retained and, also as usual, threw its rotor away on occasion. The chassis had the normal 3-speed gearbox and 4.9-to-1 back axle, but 26 x 3-in. tyres gave a high ratio and were retained for what Chaplin refers to as "flattery," low-pressure tyres lowering the ratio slightly, for trials. The early square-door body was of aluminium and the car weighed in the region of 6 cwt.

That is about all Chaplin did to get his performance. A lap at over 70 m.p.h. means at least 80 m.p.h. down the straight, and while you would not get this speed very often on the road, a "Chummy" Austin Seven able to do an easy 65 and cruise at least 15 m.p.h. faster than any of the many aged "Chummy" models still on the road, is, even in 1946, a rather happy thought. Perhaps that is why we went to see George Chaplin. You may retort that an early Austin Seven would be quite unmanageable at such velocities. Chaplin thought the same, and even before hotting-up his car he attended to its chassis. Two large friction shock-absorbers from a breaker's were somehow hung on the frame to damp the rear axle movements and proper castor action was obtained by packing out the front-axle radius arms with ⅛ to ¼-in. thick D-washers, so tilting the king pins. An extra star washer was employed for the front damper and the steering steadied by means of one of the proprietary friction dampers then on the market. Later the chassis was wire-braced, aircraft fashion. That, then, is the story of "Mr. Flea"—the idea of building a replica may, or may not, appeal to you.

Incidentally, apart from his Austin activities, Chaplin successfully drove an A.C. Six in the 1927 M.C.C. High Speed Trial, took a Ford V8 through the 1933 R.A.C. Rally, an S.S.I. through the 1934 Rally, an A.C. through the 1935 Rally, and drove an L.M.B. Ford V8 in one J.C.C. High Speed Trial. But he says he got the greatest fun and excitement from the 1924 Austin "Chummy." We can well believe it.

## THE PASSING OF THE KNIGHT

In days of old,
When knights were bold,
(And motors weren't invented),
Your gallant's need
Was but a steed,
And he galloped the road contented.

But now, alas,
If he would pass
Upon the King's Highway,
Beset by fools
And their myriad rules,
For his passage in gold he'll pay.

In those bygone days,
No great arrays
Of ministerial splendour
Blocked the road;
Our traveller strode,
No dues had he to render.

Now, great wars fought,
And his "freedom" bought,
He's shackled hand and foot.
A million slaves,
In their Government caves,
Are gathering in the loot.

Now sore the plight
Of our once gay knight,
Though his coach may be swift and sure;
He may travel far
In his modern car,
But not as in days of yore.

If your way you'd wend
On the road, my friend,
Now gird your armour on;
Still ride you may,
If the price you pay,
But in freedom? No, that's gone!

E. E. P.

# BRDC BULLETIN

WITH so little prospect of being able to race at home, many members are planning to take part in at least one Continental event this season, and as their keenness is more than matched by the enthusiasm of race organisers who are all extremely anxious to attract British entries, it seems quite certain that we shall be well represented in at least some of the more important international races.

Although conditions are by no means normal as yet, many of the difficulties that up to a few months ago faced would-be competitors have now been overcome. For example, transportation is no longer a problem. Cars may be shipped by any of half a dozen different routes to the Continent and, if desired, forwarded to their destinations by rail or, if a suitable truck is available to carry the car, the journey may be made by road, for trucks can now be transported on the pre-war Dunkirk train ferry which, for some considerable time past, has been plying daily between Dover and Calais conveying military vehicles across the Channel—the falling off in this traffic has made available a limited amount of accommodation to meet civilian requirements. Special racing fuel is readily available, and as for petrol, it is unrationed in Switzerland, visitors to Belgium may obtain coupons for their full requirements (by making application to the Burgomaster, Service des Carburants, at Ostend), and in France, coupons for 33 gallons are issued on disembarkation.

It is possible that a few of our drivers will compete in the Grand Prix des Frontieres on June 9th, but the first major event likely to attract a fairly representative British entry is the Belgian Grand Prix to be run on the following Sunday, June 16th. This will consist of three separate races for sports cars up to 1,100 c.c., up to 2 litres, and up to 4½ litres, and each will be run over 35 laps of a new 3.700 kms. circuit in Brussels (Bois de la Cambre-Avenue Franklin Roosevelt). Superchargers are allowed, but supercharged cars will be rated at double their actual capacity. Probable British entrants include T. A. S. O. Mathieson or Lord Selsdon (4½-litre Talbot), C. G. H. Dunham (2-litre Alvis), and St. John Horsfall, J. C. Elwes and T. G. Clarke (all with 2-litre Aston-Martins).

The following month the Grand Prix Automobile des Nations for 1,500-c.c. racing cars will be run at Geneva over an interesting 1.85 kms. course. Entries are likely to include Raymond Mays, Billy Cotton, Ian Connell, Peter Whitehead, R. E. Ansell, R. M. Cowell and F. R. Gerard, with E.R.A.s, George Abecassis (Alta), R. Parnell (Maserati and Delage, the latter to be driven by R. M. Arbuthnot), and T. A. S. O. Mathieson, with a new Bugatti which he hopes to receive delivery of early in July. It is also probable that "B. Bira" will drive an E.R.A., to be entered by H.R.H. Prince Chula Chakrabongse, K.C.V.O.

It is possible that some of these cars will also run in the Albi Grand Prix scheduled for the previous Sunday, July 14th. Regulations for this event are not yet available, but it is known to be a race for 1,500-c.c. cars as in previous years, and will be run in two heats, each over 18 laps of the fast 8.900 kms. circuit. Prize money is generous, a total of half a million francs being offered, which is equivalent to about £1,050 at current rates of exchange.

### Le Mans Fund

It has been decided to close this fund, recently opened by the club for the benefit of the Automobile Club de l'Ouest in response to their appeal for subscriptions to help restore the installations of the Sarthe circuit on which the famous series of Le Mans 24-hour races were run. It will be remembered that these installations were almost completely destroyed during the war, mainly by Allied bombing.

First list of subscriptions, amounting to £211 3s. :—

| | £ | s. | d. |
|---|---|---|---|
| W/Cdr. Woolf Barnato ... | 105 | 0 | 0 |
| Dr. J. D. Benjafield ... ... | 26 | 5 | 0 |
| J. Barclay, Esq. ... ... | 10 | 10 | 0 |
| Bentley Drivers' Club ... | 10 | 10 | 0 |
| H. W. Cook, Esq. ... ... | 10 | 0 | 0 |
| S. C. H. Davis, Esq. ... | 5 | 0 | 0 |
| T. Fotheringham, Esq. ... | 5 | 0 | 0 |
| Rt. Hon. Earl Howe, P.C., C.B.E., V.D. ... ... | 5 | 0 | 0 |
| T. A. S. O. Mathieson, Esq. ... | 5 | 0 | 0 |
| H.R.H. Prince Chula Chakrabongse, G.C.V.O. ... ... | 5 | 0 | 0 |
| Major A. W. Jones ... ... | 5 | 0 | 0 |
| W. A. R. Cook, Esq. ... ... | 2 | 2 | 0 |
| W. M. Couper, Esq. ... ... | 2 | 2 | 0 |
| F. C. Clement, Esq. ... | 2 | 2 | 0 |
| Major Evan R. Greg ... ... | 2 | 2 | 0 |
| Dr. S. D. Sheare ... ... | 2 | 2 | 0 |
| H. B. Metchim, Esq. ... ... | 1 | 1 | 0 |
| Stanley Sedgwick, Esq. ... | 1 | 1 | 0 |
| R. F. W. Potter, Esq. ... | 1 | 1 | 0 |
| Capt. Michael Kenyon ... | 1 | 1 | 0 |
| C. J. L. Mertens, Esq. ... | 1 | 1 | 0 |
| M. T. U. Collier, Esq. ... | 1 | 1 | 0 |
| Mrs. Muriel Sutherland ... | 1 | 1 | 0 |
| Major C. A. Hartridge ... | 1 | 1 | 0 |

Subscriptions should be sent to D. J. Scannell, Clarendon Court, Maida Vale, London, W.9, cheques being made payable to "The British Racing Drivers' Club, No. 2 A/c," and crossed /& Co./

Final list of subscriptions will be published next month.


## WHAT GOINGS-ON DOWN AT LIGHTWATER!

Those Happy Little Men are now surrounded by the most awe-inspiring collection of fast transport. Amongst others, Alta, E.R.A., Delahaye and several very potent Specials are seeking new owners.

From time to time the peaceful atmosphere is shattered by a sound reminiscent of tearing calico, while a lingering odour of racing fuel mingles with the scent of pine trees, indicating that the time is fast approaching for another fortunate individual to taste the joys of driving a really well-prepared car.

Some interesting and unorthodox new chassis are rapidly taking shape and will soon be causing alarm and despondency amongst those types who can recognise all cars on sight.

With all this activity time is still found for modifications and repairs to enthusiasts' motor cars, and more and more people are finding the type of car they want at surprisingly reasonable prices down at Lightwater.

**COWELL, WHITTET & CO.**

**WHINLANDS WORKS, MACDONALD ROAD, LIGHTWATER, SURREY** **Tel. : Bagshot 338**

# 500-c.c. Hints and Tips

**A talk by Francis Beart before the Hants and Berks M.C.**

★

AT a recent meeting of the Hants and Berks Motor Club, Francis Beart gave a talk on 500-c.c. racing engines, based on his experience as a successful motor-cycle tuner. In view of the great interest which has been shown in Class I racing since it was first suggested in MOTOR SPORT in 1941, permission has been obtained for much of this hitherto confidential tuning " gen " to be published here.

Beart has concentrated his attention on the 500-c.c. o.h.c. Norton engine, which can be tuned to produce 45 b.h.p. on alcohol fuel without sacrifice of reliability. Engines of this type can be bought secondhand for about £30 at the present time.

The first stage in building up one of these engines is to true up the upper face of the crankcase by means of a surface plate and a mandrel through the main bearings. Attention can then be given to the built-up crank assembly.

Polishing of the flywheels and connecting rod has not been found worth while, but no tolerance should be allowed on the truth of the crankshaft. The wheels may be trued up in a scrap crankcase, a four-foot tommy bar being used for the final tightening of the crankpin nuts. In balancing the assembly, Beart has balanced 50 per cent. of the reciprocating masses for road racing, reducing this item to as low a figure as 38 per cent. for track work. With the crank assembly installed in the crankcase, there should be negligible end float. The camshaft drive bevel gears should have about 5 thou. backlash.

The oil pump should deliver at 30 lb./sq. in., using castor oil. The circulation rate is approximately 40 gallons per hour at 6,000 r.p.m., and oil temperatures should be kept below 70° C. as a precaution against frothing.

The 500-c.c. Norton engine is of 79 mm. bore, and Martlet pistons (cast) or forged RR59 pistons can be used satisfactorily. A piston crown 5 mm. thick is used, three narrow-section Wellworthy piston rings (two compression and one " Superslot " scraper), having 15 thou. gaps and 20–25 lb. radial pressure. A $\frac{5}{16}$-in. wide band protects the top piston ring. A $\frac{7}{8}$-in. diameter gudgeon pin is a tight press fit into the piston, wire circlips providing endwise location. Clearances used with a Martlet piston are 8 thou. at the bottom of the skirt, 12 thou. below the scraper ring, and 25 thou. at the top band, virtually no running-in being necessary. Using J.A.P. fuel with 1 per cent. of castor oil added, a 14-to-1 compression ratio was used.

With moving parts as described here, a speed of 6,000 to 6,200 r.p.m. can be maintained throughout a 100-mile race. Power falls off above 6,500 r.p.m.

If petrol-benzole fuel is to be used, an alloy cylinder barrel is desirable in the interests of satisfactory cooling. With alcohol fuel the iron cylinder barrel is satisfactory, although it is, of course, heavier. Much the same considerations enter into the choice of an iron, bronze, or aluminium cylinder head, with the added point that inlet valve seat wear is rather rapid with a bronze head. The cylinder head has a ground joint with the block, and the correct torque for the holding-down bolts is 22 lb./ft.

The inlet port diameter is 1 $\frac{5}{32}$ in. at the carburetter. The inlet valve seat should be as narrow as possible, and the exhaust valve seat 1 mm. wide. Full-length bronze valve guides should be used, the exhaust guide having a chromium bronze bush and 1$\frac{1}{2}$ thou. clearance. Standard Norton valves are satisfactory, a flat-headed exhaust valve being better than the tulip variety.

The valve collars may be lightened somewhat, and polished to prevent cracks forming. The loading of the hairpin valve springs should be adjusted until valve bounce is just prevented. Standard port shapes are satisfactory, but internal polishing does no harm and the inlet pipe can be lengthened if extreme valve overlap is to be used.

Standard Manx Norton cams are perfectly good, and have been used for motor-cycles lapping at over 115 m.p.h. The timing used with a long exhaust pipe terminating in a Brooklands silencer is: inlet 35° b.t.d.c. to 68° a.b.d.c., exhaust 60° b.b.d.c. to 40° a.t.d.c. With an open exhaust system the exhaust valve can open and close 10° earlier. Using a megaphone on the usual 1$\frac{3}{4}$-in. diameter pipe, the timing which has been used is: inlet 52° b.t.d.c. to 55° a.b.d.c., exhaust 70° b.b.d.c. to 30° a.t.d.c.

Suitable tappet clearances are 0.009 in. inlet and 0.025 in. exhaust.

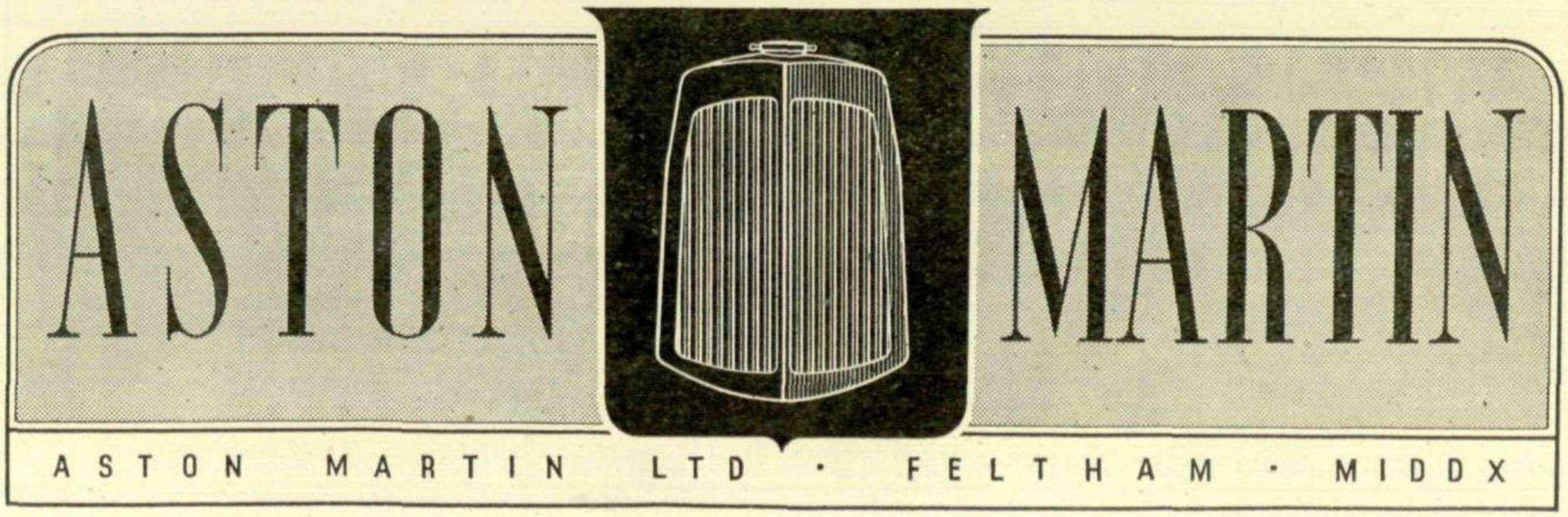
A needle-type Amal carburetter of the flange-fitting type should be used, having a No. 5 slide for J.A.P. or racing Ethyl fuel. Using a 14-to-1 compression ratio and 32° ignition advance, a 1,200 jet and 120 needle jet are approximately correct. If a larger main jet than 1,200 is used the needle jet must be drilled out.

Fuel consumption, in the case of a motor-cycle lapping at 110 m.p.h., is 18–20 m.p.g., with an oil consumption of 200 m.p.g. The maximum fuel flow through a single Amal float chamber, with drilled-out passages, is 5 gallons per hour.

As regards transmission, the Norton clutch and gearbox have been satisfactory with fairly heavy sidecar outfits. The close-ratio gearbox gives ratios of 1.0, 1.1, 1.33 and 1.77.

A few interesting details were given of the car which Myles Rothwell built for attacks on Class I records. This car was fitted with a 1932 T.T.-type J.A.P. engine, with 9-to-1 compression ratio and developing about 38 b.h.p. The Brooklands lap speed, with all-enclosed body, was almost exactly 90 m.p.h.

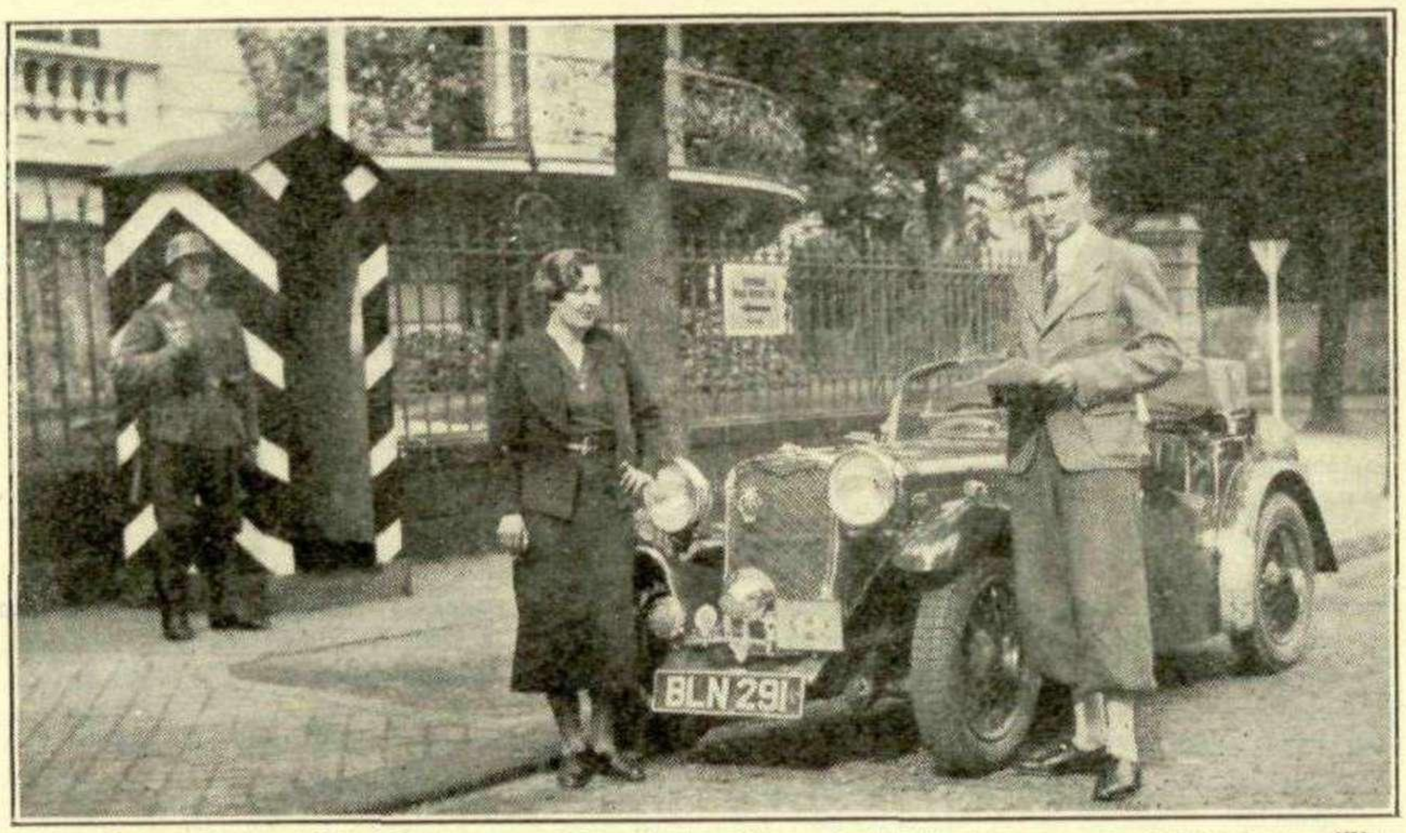
As regards other engine types, Beart obviously regarded the Norton as the safest bet for an amateur Class I car, but there are other possibilities. A factory-tuned Triumph twin at present holds the class lap record at Brooklands. A tuned Ulster Rudge with 10$\frac{1}{2}$-to-1 compression ratio has lapped at 110 m.p.h. Overhead camshaft B.M.W. engines can improve on Norton power outputs, but not so the unblown push-rod models normally available in this country. The dirt-track J.A.P. is light and cheap and has a possible output of about 40 b.h.p. Various other single and multi-cylinder motor-cycle engines are available, but none seem to combine the performance and durability of the Norton. The latest T.T. units developed about 50 b.h.p. on petrol/benzole fuel, and the International model sold to the public was virtually the works racing job of an earlier year.



# A BRITISH OLYMPIC?

*Miss Betty Haig makes a suggestion*

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*Miss Betty Haig at the Cologne control of the Olympic Rally in pre-war Germany. The car is a 1½-litre Singer, built for Norman Black to drive in a Monte Carlo Rally, and able to do a timed 83 m.p.h. Incidentally, Miss Haig wishes to share the expenses of trials participation with a fellow enthusiast.*

WE have recently heard the news that the next Olympic Games are to be held in London in the summer of 1948. Two years seems a fairly long time to look ahead, but by then we can hope that some of the upheavals of peace may have settled down and we will have begun to enjoy returning prosperity. As a car owner, it is nice to look forward, at last, to petrol and tyres off the ration, new models off the drawing boards, and with the coming of the International Olympic Games, the final thawing of the paralysing foreign travel restrictions. This will seem to some of us like the end of the Great Ice Age!

What a unique opportunity for Great Britain to attract to this country the youth of other nations and to display to the citizens of the future our products of craftsmanship. Foremost among these, and of great interest to our foreign visitors, will be our new cars. In the old pre-war days, the superior finish of our coach-work, upholstery and shining accessories, always had a certain appeal for the young continental; possibly by 1948 we shall have something to show them that will be really worthy of British engineering ability.

One of the finest ways to attract to this country the motoring enthusiasts of the world and to show them our latest models in action, would be by the organisation of an International Olympic Rally. Before the war, British rallies did not attract foreign entries, though many British drivers crossed the Channel to drive in the Continental events. A well-organised and amusing Olympic rally might bring the limelight to this country, and in future the three big R.A.C. rallies would, in turn, attract some of the Continental drivers. Those of us who drove much on the Continent during the 1930s, saw something sadly resembling the rise and fall of the popularity and prestige of British motor-cars. In the early days what wonderful publicity all those M.G. successes gave us in Continental races, hill-climbs and speed trials! Here was a car very much like the model which could be bought by the ordinary driver of limited means, and many M.G.s, Singers and other popular cars were to be seen with foreign number plates. In those days, to own a small British car was just the last word in glamour and *chic*!

Then, somehow, after about 1936, the evolution of British car design seemed to stand still, or even to regress. Possibly in this country the 30 m.p.h. limit regulation was, among other evils to progress, beginning to make its influence felt. British firms ceased to take any active interest in competitions, and our new models began to appear faintly out of date. Possibly they looked a little old-fashioned, with their functional lack of streamlining; perhaps they were a little heavy, with a 950-c.c. sports two-seater weighing nearly 16 cwt. Sometimes their cooling arrangements were inadequate for long climbs in the Alps. Their suspension, too, was not as modern as it might have been for either comfort or speed, by the standards of the new Continental cars. In any case, we just dropped back, while B.M.W.s, Lancia "Aprilias" and various Fiats just forged ahead in popular favour.

In 1936, when the last Olympic Games were held at Berlin, the Germans organised an event which was known as the "Olympia Automobil Sternfaht." In this, competitors started from controls situated all over the world, converging upon Germany, where they all followed routes of their own choosing, checking in at set controls at certain hours. A reasonable average speed was set and points were given for the number of controls covered within the time of the rally, which was from the 22nd to the 30th of July. Competitors were thus encouraged to visit every part of the country. The event attracted 125 entries, drivers coming even from America. The many experienced British trials and rally organisers could, with a little official co-operation, improve on the last Olympic rally. The controls should be situated in many parts of England, Scotland and Wales, thus giving competitors a wide personal choice of any towns that they might wish to visit. At the finish, where the routes converge, there would be a reception of welcome for the foreign drivers, after the final speed and acceleration tests.

In the German rally, the finishing control was on the Avus track. This made a fine spectacular point for the arrival, in a few hours, of cars from all over the world. The whole thing was well staged, with officials who spoke many languages to welcome the drivers and give advice and directions, beneath the great banners with the five coloured Olympic Rings (and other well-known devices!).

The British Rally could include a few tests to improve it from a sporting point of view, possibly a speed hill climb, as well as some acceleration tests on a class handicap. If well advertised abroad, the rally should collect some very interesting entries from other countries.

As a final attraction, what a great thing it would be if, by 1948, we should be able to show the world a new, modern race-track, which would stand out as the finest in existence and a worthy successor to the traditional Brooklands! Here would be a magnificent finishing control for the International Olympic Rally of Great Britain.

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## A VINTAGE ENTHUSIAST?

The Bishop of Exeter, Dr. C. E. Curzon, addressing the Diocesan Association for the Care of Friendless Girls last month, said: "As regards the motor car . . . well, it has become a sort of travelling bedroom. I won't say more."

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The "bored-out" Allard we referred to in the Elstree report was Sydney Allard's own car and has, we are informed, a Mercury engine.

* * *

J. Lowrey, B.Sc., has joined the technical staff of the *Motor*.

* * *

The first model car open race-meeting is due to take place at Eaton Bray track on Whit Sunday.

# PARIS–BORDEAUX

*by*

## "BALADEUR"

"PARIS—BORDEAUX! The very name conjures up old memories, grim and fierce, and thrilling fights amongst those whose names are now almost forgotten, but who, on the old Paris—Bordeaux road, struggled in years past for the title of 'King of the Road.'

"It all began in the days before motors were thought of and when the cycle held its own as the most rapid form of road vehicle. . . . Their course was fleet and the pace was fierce, but it was all on the same old fascinating road, and, as a grand finale, Paris to Bordeaux was the first and, as it eventually turned out, the last stage of the last great inter-country race from Paris to Madrid."

Thus Charles Jarrott. And extraordinarily well, really, in those few sentences does he conjure up the almost legendary fame of the heroic days of motor-racing. And yet, curiously enough, there is in them a strange, and doubtlessly entirely unconscious, misrepresentation. The first and last stage of Paris—Madrid was run, like the cycle races of yore, from Paris (or rather from Versailles) to Bordeaux; but for nearly half the distance it was run over a totally different road.

Not that there was anything peculiar about the road taken by the competitors in that ill-fated race of 1903: they simply followed Route Nationale 10, which is the direct road from Paris to Bordeaux. What, on the face of it, is difficult to understand is why the original cyclists went so improbable a way. From Versailles, instead of striking south-west along N10 towards Bordeaux, they seem to have taken the road due south to Limours, which was, I believe, elevated about fifteen years ago to the status of a Route Nationale, but which used to be known as simple Chemin de Grande Communication 6. It is a picturesque but hilly, winding road if you want one; and from Limours you have to pick your way across country by Dourdan on to G.C71 and N191 to Etampes and the Orléans road, N20. From Orléans you run along N152 in the valley of the Loire, as if to see the Chateaux, by Blois to Tours, where at last you get on to the Bordeaux road, 237 kilometres by the direct route from Paris.

Probably this strange détour was all done to avoid the *pave*, for C. N. and A. M. Williamson, who unquestionably knew their French roads, make one of their characters in "The Lightning Conductor," published in 1902, describe the direct route to Orléans by Etampes as "practically impassable for automobiles" on this account. Major Stevens admittedly still makes it in his "Motor Routes of France" of 1909; but, as against this, "Les Grandes Itinéraires du Baron Pierre de Crawhez," of about the same date, says of the direct Bordeaux road that the "itinerary is easy to follow and the road admirable." Was this because the *pave* had been improved or merely because the Baron on his 80-h.p. Panhard et Levassor had run fourth among the heavy cars in the first stage of Paris—Madrid?

At any rate, five motor races in all were run from Paris to Bordeaux. In 1895, when the return journey was also made, and 1898, both on the "old" road; and in 1899, 1901 and 1903, the last of which should have been the first stage of Paris—Madrid, by the direct route. Therefore, as it is my intention, at the risk of inducing nostalgia for the roads of France as I have known them, and of suffering vain regrets for the roads of France as Levassor and De Knyff, Charron and Fournier, Gabriel and Louis Renault knew them, to make an imaginary journey from Paris to Bordeaux, marking the places which are famous for the happenings of half a century ago, it is necessary for me, as it will be seen, to make two journeys from Paris as far as Tours, one by the old road, the other by the new.

The start, then, is at the Place de l'Etoile and the date is June 11th, 1895. Half Paris, those who are interested and those who are merely curious, have assembled at the Arc de Triomphe to witness the departure of the *voitures automobiles* on their long journey. The Michelin's Peugeot named "l'Eclair" has already been in trouble in the Avénue MacMahon, not as usual because its owners would insist that it was possible to use pneumatic tyres on a car, but simply on account of water in the carburetter. The crowd was derisory. "They're trying to go to Bordeaux and they can't even get up to the Arc de Triomphe," remarked someone caustically. But they got there eventually.

The Bois de Boulogne being considered, like Hyde Park, too elegant for the smelly autocars, we must follow the rest of the competitors down the Avénue de la Grande Armée and then over the bumpy *pave* to cross the river at Suresnes. Climbing the hill on the other side, No. 16 Peugeot, driven by Koechlin, stuck, but got going again, which was just as well as it eventually finished third. So we can get on to the Place d'Armes outside Louis XIV's great pretentious palace at Versailles.

Too literal translation of foreign languages is, I have always thought, rather a cheap manner of producing a humorous effect. In this instance, however, I can be spared any accusation of indulging in it, for the following quotation from *Le Velo* is taken word for word from "Notes on Motor Carriages," published in 1896, by John Henry Knight, who was probably the first Englishman to build a petrol-driven motor-car and whose book was certainly not meant to be funny.

"At Versailles there was considerable excitement. All the cafés had been crowded; *voitures automobiles*, other than those contesting, were there in considerable numbers, and were going on the road to carry provisions for those engaged in the contest.

"Upon the Place d'Armes, a tent with flags and the insignia of the Touring Club of France is arranged for the control. In this tent are those members of the committee who are appointed to superintend the start.

"Each carriage as it arrives is placed in position. At 11.45 only nineteen out of the twenty-five carriages are in their places, besides the two bicycles automobiles.

"The crowd at this time has increased; those in charge have difficulty in preserving order; fortunately no accident happened.

"It is exactly 12.5 when the order is given to start."

The first car away was the Peugeot No. 15, driven by Rigoulot, the company's chief engineer, and we can follow him in imagination threading his way through Buc and chugging up the hill beyond the village. In imagination, too, we can picture the cars going out in 1898 for the massed start of the "Criterium des Entraineurs," in single file, all passing strictly forbidden, with De Knyff at their head, followed by Charron and Girardot, on their 6-h.p. Panhard et Levassors, painted blue, white and red respectively. See them halt at the top, and hear the two blasts of a whistle, one blown as a warning, the second as a signal for the cars to leap away on their long journey to Bordeaux.

Not far down the road to Chateaufort and the De Dion Bouton steam brake of 1895, driven by the Comte de Chasseloup Laubat, has passed Rigoulot's Peugeot, and at Limours, 22 kilometres from the start, is still holding the lead, with Amédée Bollée the Elder, captain of a crew of seven on board his veteran steam omnibus, lying second. Even the petrol cars, which with their little 3 or 4-h.p. engines could ill afford it, were loaded up in many cases with a plethora of passengers. And at this stage most of them were thoroughly enjoying the novel experience. A reporter from *Le Journal* had managed to get on board the Wincke and Delmer No. 37 and was ecstatic about it.

"Our carriage," he writes, "is the most elegant, and at the same time the most comfortable, of them all; but without delay I must introduce to you the crew. On the box, grasping the tiller in a manner fit to inspire in us every confidence, is Frédéric, an expert mechanician, and his assistant, a good Belgian named Léopold, after his King; in the carriage, standing upright on the front seat like the captain of a ship on the bridge, is Paul Thuillier, the well-known cyclist, who has been over this road several times before, on his bicycle, and knows every rut in it. Thuillier is our pilot, and also

*Continued on page* 126

# *The Genius Lanchester*

EARLIER this year Dr. F. W. Lanchester died in Birmingham at the age of 77. Thus it is opportune to review the history of the company which Dr. F. W. and his brothers formed at the very beginning of the Industry. In doing so one encounters such genius of design, such sanity of purpose and such perfection of detail as to engender a feeling of pride that cars bearing the name of Lanchester emanated from a British manufacturer.

Frederick Lanchester built his first horseless carriage in 1895, and it ably reflected the skill and foresightedness that was to develop apace in subsequent cars. Indeed, this initial Lanchester possessed features peculiar to itself and yet so satisfactory and ahead of their time as to feature in all subsequent Lanchester models, even those produced after the Kaiser War.

This first Lanchester was a very short wheelbase, flat-twin, air-cooled vehicle of 6 h.p. It was cooled by a fan, had wick carburation and was partially balanced by reversed flywheels, while transmission was by planetary gears and steering by tiller, features of later Lanchester models. It had final chain drive and bucket-type seating. This car ran before the passing of the Act of 1896.

The next car which F.W. built had a 2-cylinder opposed engine of the double crankshaft type later to become so famous. This arrangement was adopted to overcome vibration. Worm final drive replaced the chain but H.T. ignition was retained. Lanchester's third car showed another great advance, having magneto ignition and clutch and brakes as on his later production models, and a long wheelbase and double suspension; the worm drive and other characteristic features were again retained. A later version of No. 3, with further detail improvements, took a gold medal in the Richmond trials in 1899.

In 1901 Lanchester completed the model with which he went into production, introducing more speeds, making minor improvements to the engine and abandoning the double suspension for a new system of springing in conjunction with a notably long wheelbase. Models of 10, 12, 14, 16 and 18 h.p. were introduced (the larger engines being water-cooled), a system of standardisation being adopted to ensure interchangeability of parts. The smallest engine gave its maximum output at 750 r.p.m.

So ingenious was the design and construction of these early Lanchesters that it is absorbing to examine the 10 h.p. in some detail.

The horizontally-opposed cylinders were finned and cooled by two centrifugal fans made up from aluminium sheet and driven by friction wheels which were held against the flywheel by a pair of spring-loaded metal straps. Each fan ran at five times engine speed and drew air through wind scoops on each side of the car, and delivered it into a casing set round the cylinders, the hot air being exhausted into a chamber isolated from the engine. So effective was this cooling that the makers used a standard car engine to drive machinery in the coach-building department at Armourer Mills, and this engine ran satisfactorily in spite of operating under most adverse conditions.

Two crankshafts were mounted one above the other and carried in plates uniting the cylinders on each side—there was no enclosed crankcase of the usual sort. Each piston was coupled to the crankpins by three connecting rods, two going to one pin and the remaining rod to the opposite pin. As one piston ascended the other descended, and two power strokes occurred one revolution and none the next, the torque effect being a cross between that of a single and normal two-cylinder engine. Each crankshaft carried its own flywheel and the action of the connecting rods was such that these revolved in opposite directions. This resulted in perfect engine balance and also obviated side-thrust on the cylinder walls. In order to offset free play occasioned by wear, the crankshafts were geared together to keep them in perfect step, as it were, for they also carried balance weights to offset the inertia of the reciprocating parts—this gearing, incidentally, was not a feature of car No. 2.

Because there was no crankcase, lubrication had to be carried out in a special manner, but Lanchester was quite equal to the problem. Lubricant was contained in a tank carried on two pillars screwed into the cylinders. Along the bottom of this tank were a series of ports from which pipes conveyed the oil to the working parts of the engine. A spindle running longitudinally through the tank and driven by worm and spiral gear from the half-time shaft, had a series of depressions cut in it corresponding to the ports and thus, as it revolved, oil flow through the ports was controlled. The tank pillars themselves were hollow and fed oil to the cylinders, where it accumulated in a hollow in each piston and ran to the gudgeon pins. The big-ends received their supply centrifugally from the main bearings. Ignition, carburation and valve gear were equally unconventional, for Lanchester held in contempt current automobile practice and sought perfection unafraid of complexity. Each cylinder head contained only one valve, this being operated by a form of o.h. camshaft. This valve served as both inlet and exhaust, a feed-valve in an adjoining chamber determining which passage communicated with the main valve. The feed-valve, in other words, shut either the inlet port or exhaust port communicating with the main valve. It was operated by an inertia governor, so that up to a certain engine speed the valve functioned normally, but if the speed tended to become excessive the governor blade missed making contact with the valve, which then failed to uncover the inlet passage, so that the engine missed a firing stroke. This happened regularly about nine revolutions out of ten, keeping engine speed within decent limits. The governor itself was extremely ingenious and overcame the sluggishness and tendency to "hunt" often experienced with centrifugal governors. It consisted of two levers, one directly driven from the mainshaft, the other floating in such a manner that at high rates of oscillation it caused the trip for the valve to move out of line and fail to open the valve. This action was further controlled by springs, one tensioned by a hand control and the other by the accelerator, so that accurate control of the speed at which the governor operated could be obtained. It seems probable that Lanchester adopted one poppet valve for both inlet and exhaust with a view to letting the mixture cool the valve, as was done many years later in the Monosoupape aero-engine.

For ignition, a flywheel magneto was used, in conjunction with L.T. type plugs making and breaking within the cylinders. One flywheel carried two bar magnets and these revolved round an armature supported by the mainshaft and consisting of four coils wired as two coils in series to give independent circuits.

Even in 1904 it was possible to state that six years' experimenting had gone into the igniters. These consisted of a hollow steel plug screwing into the cylinder and carrying the insulated ignition wire. The exposed end of the igniter carried a strip steel spring which bore at one end on the ignition wire, the other end being actuated by a "tweaker" formed on the engine camshaft. Current from the flywheel magneto was conveyed to the igniters through insulated steel rods and spring clips, no wires being used. When the ignition wire was in contact with an anvil at the inner end of the igniter plug, current flowed not only through the wire but also through the igniter spring and "tweaker." As the "tweaker" overran the spring the current flowed only through the wire and anvil and then, as the spring broke contact here, a strong spark resulted. It was claimed that this "double break" allowed sparking even if the internal contacts were dirty. If the spark occurred only between spring and "tweaker" the time had come to adjust the gap between wire and anvil, which was effected by moving the bracket round in relation to the igniter, for which purpose an adjustable worm on the former engaged teeth on the body of the latter. The igniters were screwed hard down on to their seats in the cylinders by most ingenious threaded locking handles which, by engaging grooves in the cylinder bosses, enabled the igniters to be screwed home or released by a slight back and forward movement of the handles. These handles were insulated and remained in place on the engine after the igniters had been secured. The ignition timing was normally fixed, but automatically retarded itself for starting.

As with Lanchesters right up to (and I believe for a short while after in some instances) the 1914-18 war, the carburetter was a wick vaporiser, warmed by air drawn from longitudinal pipes passing through the silencers. The petrol tank formed the main cross-member of the chassis and the vaporiser was above it. Fuel was fed from tank to vaporiser by a hand pump, the ringed handle of this extended directly upwards to a position beside the driver. It is interesting that no automatic feed was provided, the pump requiring a stroke or two every few miles, although the vaporised tank held

about a gallon of fuel. Lanchester's preference for a wick carburetter was on account of its ability to cope with almost any grade of petrol and its immunity from the adverse effects of water, except in considerable quantities. Even the fuel gauge was typical of Lanchester—a rod, with a metal saucer at its lower end which normally sank but which could be lifted clear of the fuel, emptied by spinning the rod between finger and thumb, and then floated on the surface of the fuel, so indicating the level by the length of rod exposed.

The engine was set transversely across the car, between the front and rear seats. At right angles below it and driven by helical gears from the lower crankshaft, was a countershaft carrying the clutch and epicyclic gear trains. The driving gear was keyed to a hollow shaft which carried one member of the cone clutch, and inside this shaft ran a free shaft, which carried the other clutch member, and a universal joint coupled to the final-drive propellor shaft. Direct drive was obtained through the clutch and intermediate speeds by locking the drums of the appropriate epicyclic train. The clutch could be moved over to function as a transmission brake, this, curiously, being a *lubricated* cast-iron drum. The clutch was controlled by a central lever via a pair of parallel shafts, geared together and operating a ball-thrust block. The rear axle was of Lanchester worm type, soon to become famous, the worm being of steel, with a 45° angle, mating with a phosphor bronze gear. This axle was in marked contrast to the chain drives then popular, and the car was said to coast "like nothing else in existence except a free-wheel bicycle." Steering was by a right-hand tiller, the lever of which was shaped so that the driver's arm rested along it. As late as 1919 such steering was offered as an alternative to wheel control. The suspension of the 1901 Lanchester, too, was employed for a very long period, particularly in its application to the rear axle, and was used also by Siddeley-Deasy under royalty. It consisted of full cantilever springs all round, having radius arms beneath them to take torque reaction, and links above them to locate the axles laterally.

The central engine position allowed of a decking between the seats on which luggage could be carried. Between the front seats was located the control panel of the car, reminiscent of that of a ship, on which were carried two gear-levers working in separate quadrants and having ratchet handles for locking them in varying positions, a gear-change trigger, the fuel pump ring, two levers for setting each cylinder's governor, and the vapour-regulating lever for the carburetter. Gear-changing was really rather a business and it is surprising that the driver remembered the petrol lever every few miles. Bottom gear was obtained from second gear by first raising the trigger lever, then moving the low-speed gear lever to its free position and then fully forward. To obtain second gear the lever was set forward, but with the trigger lever set horizontal. To go into top gear the low-speed lever was moved to its free position and then the high-speed gear-lever was moved forward, so engaging the clutch to give direct drive.

To gain access to the engine the front seats and decking could be removed. A leather apron was fitted ahead of the front seats and the rest of the "body" was made up of the rear compartment, entered through a door in the rear panel and obtainable, if desired, with a detachable brougham top. Mudguards were either "streamline" folding type running end-to-end of the car, or of separate pattern. Cars supplied to the War Office had a reversible hood for the tonneau, which could be swung forward in front of the passengers to serve as a non-transparent screen in a storm!

That, then, was the original production-model Lanchester. Although design was by no means stereotyped in 1901, a current description of the Lanchester comments that: "... the car is an education in all that is ingenious in design. The very originality of the whole construction is, in itself, most fascinating, and although differing so widely from the usual automobile practice, the ever-increasing popularity and success of the car demand interest and attention. The car differs (from others) in appearance, in detail and in many places in fundamental principle, even making a new, and hitherto an uncopied, departure in motor-car construction ..."

In short, the early Lanchester was the essence of unconventionality. But it was one of these cars which captivated Kipling and by 1904 many notabilities were using them, including the Marquis of Anglesey, His Grace the Duke of Portland, the Most Hon. The Marquis of Zetland, and Major Lindsay Lloyd, R.E., on behalf of the War Office. One satisfied user wrote to the makers, of his car: "Its only fault is side-slipping on greasy roads and this, I understand, is *common to all pneumatically-wheeled cars*"—which must have pleased Mr. Dunlop and his colleagues no end!

As the years went on, Lanchester dropped some of his unique features of design, but the originality remained. Just before the Kaiser War popular models were the 20, 25, 28 and 38-h.p. cars. The first two 4-cylinder, the latter two 6-cylinder. The cylinders were now in-line and had two valves in each head. However, these valves were unusual in being set horizontally, one on each side, and in being operated by long rockers rising vertically in a plane with the cylinder bores from a camshaft on each side of the engine. These camshafts were above the crankcase and, while the cams were enclosed in oil reservoirs from which the lower ends of the rockers protruded, the shaft itself was exposed. The valves were closed by long leaf springs placed outside the rockers with their lower ends bolted to the cam-cases. Gone were the counter-rotating crankshafts and L.T. ignition. Instead, a beautiful, forged shaft ran (on the "six") in seven white metal bearings having tinned brass shells, while a "magneto-machine" provided H.T. ignition. Steel pistons were used and, thus early, Lanchester machined and balanced their nickel-steel connecting rods. Gone was the comic system of lubrication, a horizontal, gear-type, submerged pump driven from the crankshaft providing pressure lubrication—even to the little-ends via passages in the con. rods, which wasn't bad for 1912. A separate pump fed the gearbox, clutch and brakes; although early cars relied on the engine pump for these parts, a second pump feeding oil back to the crankcase. The engine now occupied a normal position in the chassis but Lanchester still evaded a bonnet, for the front passengers set their feet down either side of the engine and the decking between them carried the famous "ship's control panel," now carrying two lubricating "tell-tale" buttons, Bosch dual coil, throttle and ignition levers and vaporiser regulator. The wick-vaporiser was retained but petrol feed from the 16-gallon tank beneath the driver's seat was now automatic, although the pump was merely driven by spring belt from the engine. The patent "spin-the-saucer" fuel gauge remained.

The flywheel was on the front of the crankshaft and the 3-speed and reverse epicyclic gearbox was now located normally behind the engine. Direct drive was still via the clutch, and this was now of the multi-disc type, with numbers of "interns" and "externs" (lovely description!) engaging one with the other, the brake now being separate and also of multi-disc type. The engine crankshaft extended through the gearbox to drive the driven clutch discs. An ingenious gear control was devised, whereby the shank of the gear-lever slid on its shaft to select the required gear or apply the brake, movement of the lever then effecting the actual operation. This was subsequently discarded in favour of a right-hand lever in a visible gate and a normal clutch pedal, the pedal being depressed as a gear was selected and then released to effect the change. The clutch was not, of course, a clutch in the ordinary sense, disengaging automatically and only being used when top gear was required.

Tiller steering could be had as an alternative to wheel-steering, up to the war, and naturally the full cantilever suspension, improved in detail, and the worm final-drive was still a feature of all Lanchesters.

These remarkable designs were, of course, the work of Fred Lanchester, but just prior to 1914, George took a hand, evolving a side-valve, 40-h.p. 6-cylinder car with a normal bonnet. Half-elliptic springs replaced the Lanchester cantilevers at the front, but the 3-speed epicyclic gearbox, with the clutch behind it for direct drive, was still found behind the new engine. 78 b.h.p. was developed, at 1,800 r.p.m., from a capacity of 5½ litres. A Smith carburetter was used.

After the 1914-18 war a similar chassis was used to accommodate the new o.h. camshaft 40-h.p. engine of 6-litre capacity, which gave 96 b.h.p., and still drove via an epicyclic box and worm rear axle. Later the 21-h.p. car was added to the range, but this had a sliding-pinion gearbox and the old series really terminated with the straight-eight 30-h.p. car of 1930. These post-war Lanchesters were referred to in MOTOR SPORT for October, 1945.

Fred Lanchester's early designs were certainly amongst the most brilliant

*Continued on page* 127

# THE REAL HISPANO-SUIZA

SOME time ago I became aware of the fascination of an "automobile Hispano-Suiza" and compiled some notes which appeared under the heading, "What Had the Hispano?" (Oct., 1944). Now, I having, through the generosity of Mr. Lycett, aided and abetted by Cecil Clutton, been able to acquire a most excellent specimen of the "Alphonso XIIIth," model 15T, I am able to dwell happily on what an earlier generation of motorists would have insisted was the *real* Hispano-Suiza.

The company making these cars was founded in 1904 to exploit the patents of a Swiss engineer, M. Birkigt, by a group of influential Spanish citizens. In 1905 unit construction of engine and gearbox was pioneered by Birkigt and this has been a Hispano feature ever since. The original cars were built at Barcelona and in 1907 a Swiss concern was permitted to manufacture under licence. Ostend, Boulogne and Mont Ventoux saw Hispano-Suiza cars victorious during 1910, and this seems to have set seal to the manufacturer's fame, for in 1911 a move had to be made to larger premises on the Sagrera estate and a branch factory was opened at Levalbois-Perret in France. Then, in the spring of 1914, a "manufactory" was built at Bois-Colombes, in the suburbs of Paris, and the Hispano-Suiza took on its French nationality. In this country, prior to 1914, a service depot was maintained at Fulham, and a showroom in Shaftesbury Avenue.

The early catalogue was something of a work of art, with its coloured cover, announcing these cars as "The Queen of the Road," and its two beautiful coloured plates from paintings by René Vincent, one showing an "Alphonso" Hispano on the road, the other a more sedate *coupe-de-ville* "at the mansion." There was also a photograph by Branger of H.M. King Alphonso XIII setting out for the Prado in his sporting 2-seater 15T.

Altogether a publication which should have succeeded in its aim to "help to strengthen the confidence of our clients in our manufactures." Naturally, considerable space was devoted to the unit construction and the absence of a sub-frame—"*cuirasse systeme Birkigt.*" The range of models offered before the Kaiser War, in the days of the "real Hispano," was rather complex. In the first place, there was the L-head, s.v., 4-cylinder 12-h.p. of 80 x 110 mm., priced at £320 as a 9-ft. chassis, and £340 in 9 ft. 10 in. form. Then we come to the T-head cars, the 4-cylinder, 15-h.p. 80 x 130-mm., the chassis of which cost £375 and £395, respectively, in like lengths, and the 15.9-h.p. 80 x 180-mm. 3,614-c.c. sporting "Alphonso XIIIth," the short chassis of which had a wheelbase of 8 ft. 8 in. and cost £425, and the long chassis a wheelbase of 9 ft. 10 in., costing £465. There was also a 4-cylinder, 30-h.p. T-head car of 100 x 150 mm., offered in 9 ft. 10-in. and 10 ft. 8-in. wheelbases, at £540 and £570 respectively. Next we come to the "De Luxe" range of o.h. camshaft cars, all 4-cylinder, of 80 x 130, 90 x 150 and 100 x 180 mm., each of which was available in 8 ft. 8-in., 9 ft. 10-in. or 10 ft. 8-in. form, chassis prices ranging from £500 to £730. All chassis prices were less tyres. These models featured a tyre pump on the gearbox (another Birkigt patent), as did the "Alphonso," and Rudge Whitworth wheels figured on most types. The "De Luxe" models were distinguishable from the others by their slightly pointed radiators, the fillers for which were rearward extensions with the caps beneath the bonnets, just as found in 1946 tinware.

The "Alphonso" is the most interesting model from our viewpoint and was an excellent performer in its day. The catalogue does not quote speed, but obviously it was rather faster than the 30-h.p. model, for which 66½ m.p.h. in long, and 70 m.p.h. in short, open form, was quoted. It was also lighter, the short chassis weighing approximately 13 cwt., the long approximately 15 cwt. The steering was inclined at 32°, against 45° for the tourers, and the oil tank lived alongside the chassis, whereas it had been moved to the cast-alloy dash on the "de luxe" cars. The "Alphonso" had originally a 3-speed gearbox and ½-elliptic springs all round, but for 1914 a 4-speed box is specified, although the catalogue makes no mention of suspension—my own car has ¾-elliptics at the back and is 4-speed. The original multi-plate clutch was eventually changed for cone. Tyre size was 815 x 105 for the short or "normal" chassis, 820 x 120 for the long. The long chassis had a 4 ft. 3-in. track—3-in. increase over the track of the short-chassis car. No gear ratios are quoted, but those of my car are, roughly, 3.25, 4.25, 6.0 and 11.5-to-1. However, Bridcutt has a choice of five axle ratios for his car.

Alas, I know of only three examples of "Alphonso" Hispano-Suiza still with us, plus one in Australia. My own car is a 1913-14 long-chassis car, rebuilt by McKenzie for Forrest Lycett. I believe he found it at the Phoenix Green Garage and certainly Peter Wike was one of the former owners. John Seth Smith used the car regularly in 1945 until his untimely demise in an aeroplane accident. The body is a 3-seater, of particularly solid construction, bringing the weight up to 30 cwt. An S.U. carburetter was used at first, but the proper 3-jet Hispano is now fitted, but Autovac fed; there is dynamo lighting and electric starting.

W. A. Hill has a 3-speed, short-chassis, 1912 car with non-standard 4-seater body, in good order, safely stored away. It has a 3-to-1 top gear and weighs about 19 cwt.; the carburetter is now an S.U. This car was first licensed in 1923 and was apparently laid up the following year. J. W. Burnand then did some 16,000 miles in it from 1932-1937. A Southport gentleman next acquired it, rebuilding the body and fitting cycle-type wings, etc. He died before using the car and E. S. Maiden saved it and sold it to Hill, who ran it at one Crystal Palace meeting and has, in all, driven it about 300 miles. Incidentally, Maiden quotes the b.h.p. as 64 at 2,300 r.p.m., and says the type first came to England in the winter of 1911.

The remaining example is the really beautiful 1912, 3-speed, short-chassis car of H. O. S. Bridcutt. He bought it from Fuggle quite recently and its earlier history is obscure, although Brooklands racing is mentioned. He has now put the car into really first-class order and built on it a very reasonable replica of the doorless, 2-seater sporting bodies often fitted to the short-chassis cars.

E. K. H. Karslake owned a 1912 model in the thirties, but it has long since been broken up, although the engine survived a spell in a boat and still exists. Does anyone know of any others? The "Alphonso" is in every sense of the word a great car and, as Karslake said in one of the several excellent articles he wrote about them: "The joy of 'Alphonso,' however, is not when he is barking joyously on the indirect ratios—a thing which many a modern car can do as well—but when that high gear is engaged, and one sweeps along with the engine just turning over comfortably."

Today we think of them as exciting propositions. But thirty years ago the makers observed: "After twenty years of stupendous evolution, the automobile has come to be recognised, with the railway and the telegraph, one of the necessities of modern life"—a thing present-day politicians seem so often to overlook.—W. B.

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*THE GENIUS LANCHESTER*

—*Continued from page* 126

contributions to British automobile engineering. It is pleasing to recall that F. W. Hutton-Stott preserves excellent examples of 1903 12-h.p. 2-cylinder, 1908 20-h.p. 4-cylinder, and 1913 38-h.p. 6-cylinder models. He also has a 1924 21-h.p. and 1930 31-h.p. Lanchester, a few of the post-war cars are still seen on the road, notably Keith Alderton's 1924 "21."

[Since writing the foregoing, I have had the pleasure of taking tea with Mr. and Mrs. George Lanchester. Mr. Lanchester confirmed the suspicion we had that the public's apathy towards the unconventional went against the old Lanchesters; hence the sliding-pinion gearbox on the "21." Even so, i.f.s., hardened cylinder-liners and front wheel brakes were experimented with well ahead of their time by Fred Lanchester. George Lanchester is still a firm believer in rear-engined cars, properly designed and using a horizontal engine set laterally. He considers motor-racing the finest sport in the world, but of little use for research purposes. It is not generally known that he has lapped Brooklands at 115 m.p.h. in one of the two racing Lanchester "Forty's" that were built. It is very pleasing to be able to record that both he and Mrs. Lanchester are very well and that Mrs. Lanchester takes as much interest in her husband's activities as ever. Lanchester's hobby of carving walking stick handles with a penknife is, of course, pure craftsmanship, and more evidently so, even, than is his association with motor-cars. Their present car is a Lanchester Fourteen.—ED.]

# SOME MEMORIES OF WARWICK WRIGHT

## *Experiences at Brooklands and Elsewhere*

THE recent death of Warwick Wright was a real loss to the motoring world, and as an employee of his in the days gone by I can recall a happy association.

I have mentioned elsewhere the fine running of the Minerva cars in the *Circuit des Ardennes* of 1908, in which "Mr. Warwick" and a present peer of the realm played great parts. Warwick Wright and his motor-racing companions were fearless sportsmen, and I marvel now at the risk involved in handling the cars of those days at 100 m.p.h.

At Brooklands the "bumps" were very much in evidence and "Mr. Warwick's" handling of his 100-h.p. Darracq, acquired from Huntley Walker, was masterly. This car had a large phosphor-bronze cone clutch, which allowed of very little slip, and he used to get away to a flying leap.

The transmission stood it well (it had a live axle). Altogether, this was a fairly efficient car and the low-tension magneto, with make-and-break contacts inside the cylinders, gave good results. I remember "Bosch" Bennett, of happy memory, undertaking to fit a high-tension magneto, with advantages, but we did not get the results expected, and reverted to low tension again.

One of our troubles with this car was to keep the engine oil-tight as the pistons were so large and crankcase pressure difficult to keep down, with the result that "Mr. Warwick" (as we knew him) and his mechanic used to have an oil bath at high speed.

The experience of lapping Brooklands at round about 100 m.p.h. and perhaps passing or being passed by the roaring black Fiat "Mephistopheles," was in those times something to be remembered.

The Darracq finally broke a camshaft which pierced the crankcase, and although we made a good repair in those early days of aluminium welding, it was never the same again.

This car had cast-iron pistons of approximately 6½-in. dia., hollow connecting rods, overhead valves, comparatively small tyres and, of course, rear-wheel brakes only. Tyres were poor at that time and only frequent changes made continued high speed possible.

About this time (1908) Warwick Wright, Ltd., changed from Minerva to Metallurgique, and he and Oscar Cupper drove these last-named cars at Brooklands, notably in a match with Napiers, entering cars of 26 and 40 h.p. I think we would have walked away with these events but for a last-minute change of axle ratios. These hurried changes were a whim of Oscar Cupper and more than once caused failure.

To use a present-day phrase, "it can now be revealed" that the 40-h.p. racer was camouflaged as a touring car and entered as such in a Tourist Trophy race in the Isle of Man, but without success, as another last-minute axle change was made.

We entered three Metallurgique cars for the "Four Inch" race in the Isle of Man, but had real hard luck, Oscar Cupper turning over at speed and injuring himself and his mechanic Brandt. "Mr. Warwick" had timing gear trouble, but what happened to the third slips my memory.

A Hutton (Napier) car was victorious in this race after a magnificent performance, and I have always thought it regrettable that Napiers abandoned car manufacture.

**The time should have come to look ahead, but to some of us the future seems so confused as to justify prolonged consideration of "The Good Old Days." Thus we hope, before it is too late, to recapture some of the atmosphere of earlier times by occasionally publishing reminiscences of those who were active participants in the Sport years ago. In the article which follows, E. Shield looks back nearly forty years, to the time when he assisted the late Warwick Wright at Brooklands and elsewhere.—Ed.**

The only damage to Oscar Cupper's car was a broken steering wheel and change-speed lever, and after changing the wheel I was towed back to Douglas after the race by "Mr. Warwick" in the 40-h.p. camouflaged racer, at a hair-raising speed, and on pulling up he said: "Good God, Shield, I forgot you were there!"

By the way, one of the Hutton cars was the subject of a remarkable repair, which was successful in that the car started in the race, but with what result I could not now say. A pair of cylinders broke off completely just above the holding-down studs. This was probably due to the abnormally long stroke and high compression, and happened during practice. The Hutton mechanics set about what appeared to be an impossible job. They tapped the crankcase approximately 1-in. Whitworth at an angle, and fitted diagonal studs on either side through a top plate with suitable taper packings to hold the cylinders down. This proved quite successful, and it was the finest emergency repair I have ever seen, considering that under those circumstances sleep was always an unknown quantity. I would like to think that at least some of those concerned see this 36-year-old appreciation.

The race, later, for touring cars provided some queer happenings, as the bodies, in some cases, were so very "touring" that at least one was disqualified for dropping its lead "make-weight" ballast through the floor of the car.

These events were always accompanied by the greatest good humour and assistance was always mutual.

It can be gathered that these were wonderful times, and I hope the spirit which prevailed will be recaptured in the future.

Later on Warwick Wright entered a special Metallurgique ("Billiken") for a race meeting on the sands at Saltburn in Yorkshire, and we put up a good show, but at that time the Talbots were outstanding and took the honours.

At that meeting, the car which was most striking was actually a "hotted-up" model-T Ford, and to see that car, with its central steering, streaking across wet sand at 90 m.p.h. was unforgettable. The extraordinary howl of the exhaust from its obviously special engine was remarkable.

One great difficulty was to keep the cars from sinking in the sand when stationary, and a car like Aspinall's huge De Dietrich had to be kept on the move. With the lighter cars, boards under the wheels were sufficient. Here again assistance was mutual, although it appeared at one time that the De Dietrich would have to be abandoned to the incoming tide.

The Talbots at that time were extremely fast and their speed of 102 m.p.h. on wet sand a great achievement.

Looking back, it seems remarkable that we experienced so few mechanical failures, and it should be remembered that all engines had to be hard-started. This speaks well for the Bosch magneto of those days, which was almost universal, with the notable exception of the low-tension ignition of the old Darracq.

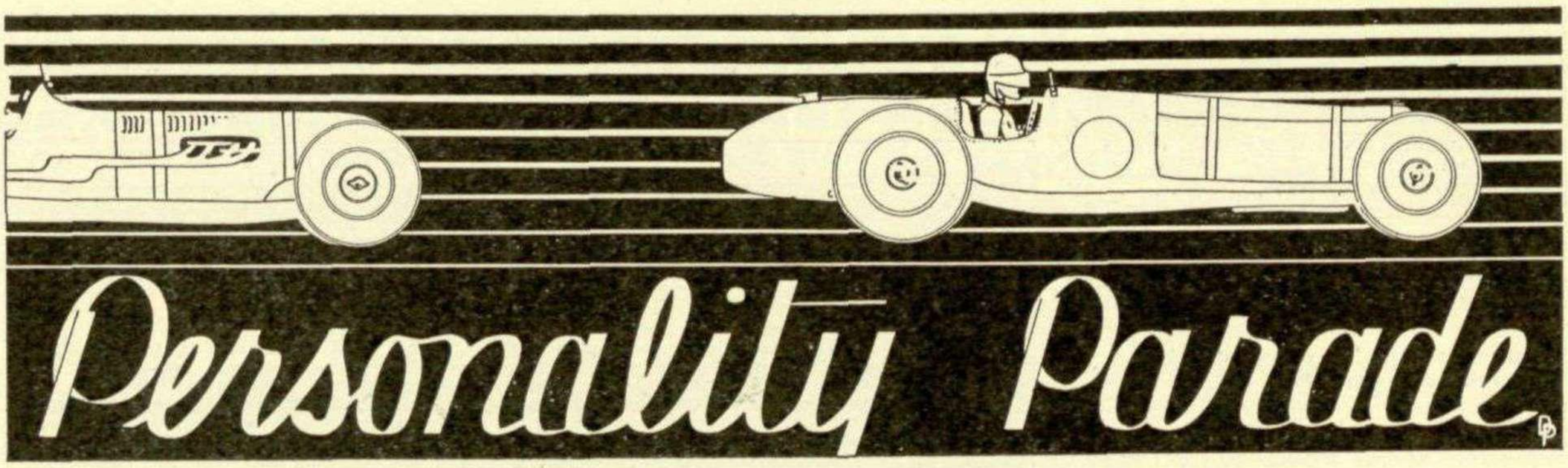
It is interesting to recall that we had some sparking plugs with small air-valves incorporated, which under some circumstances undoubtedly gave better results.

Our Metallurgique had four exhaust valves per cylinder, with one very large inlet. The engine also had steel pistons (very light), steel connecting rods, and was capable of very high speed.

The experience of clinging to the tail of this car, with Oscar Cupper driving at speed, up the Zig-Zag at Saltburn, remains with me yet.

Names come out of the mists: Percy Lambert, Dario ("Dolly") Resta, who, magnificent driver though he was, was killed at Brooklands (which is perhaps as he would have liked it), and poor Herman, badly mutilated by the spokes of his broken steering wheel when he turned over and off the track.

They were great men . . .




**A Series of Interviews with Personalities famous in the Realms of Motoring Sport**

## No. 6—Col. Goldie Gardener

GOLDIE GARDENER commenced his racing career with a "Gordon England" Austin Seven in 1929, later graduating to one of those very fast 750-c.c. M.G.s which were first raced unsupercharged. In one of these remarkable little cars he achieved third place in the under 1½-litre class in the Irish Grand Prix of 1931. In 1932 he had the distinction of being the first to lap Brooklands at over 100 m.p.h. in a 750-c.c. car.

Driving in conjunction with Dr. Benjafield he attained a third place in the 1934 B.R.D.C. 500-mile race, this time in a blown 1,100-c.c. M.G. K3-type Magnette.

But it is in his record-breaking exploits that he has earned justifiable fame. At a time when a certain section of the Continentals were regarding this country as decadent he took, first of all, the special single-seater Magnette and later a fully streamline development to Germany, and on sections of Autobahn shattered international records in the G. and F. Class. The national prestige value of these exploits was tremendous, and the Germans, then at the peak of their high-speed motoring achievements, freely acclaimed this worthy success.

The ultimate records as they now stand are as follows :—

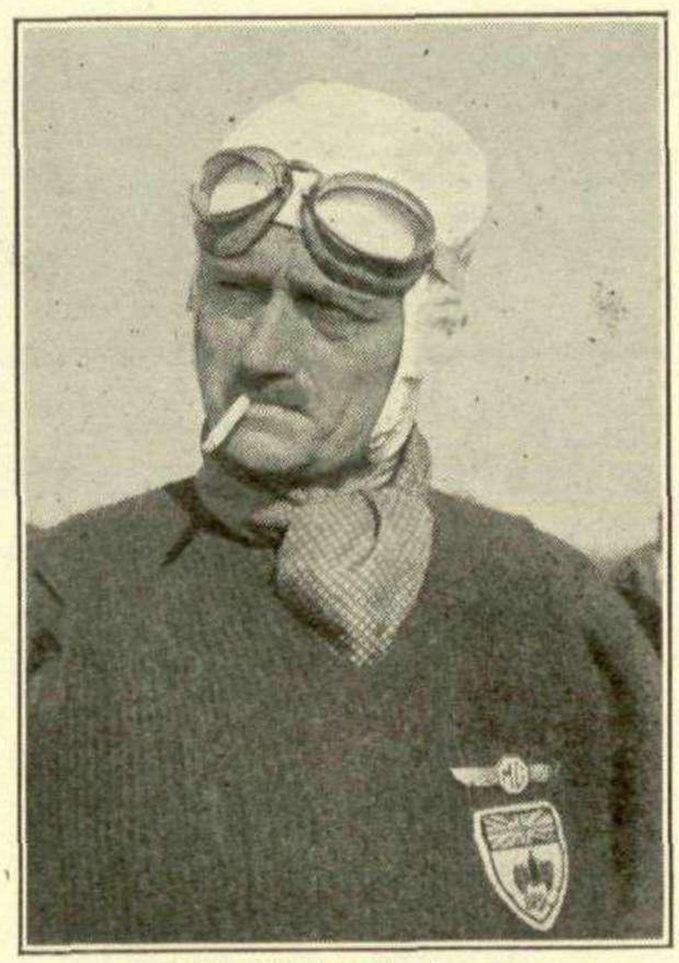
*Speeds achieved on the Dessau-Leipsig Autobahn, June, 1939 :*

Class G. (1,100 c.c.) :—Flying Kilometre, 203.5 m.p.h.; Flying Mile, 203.2 m.p.h.; Flying Five-Kilometres, 197.5 m.p.h.

Class F. (1,500 c.c.) :—Flying Kilometre, 204.2 m.p.h.; Flying Mile, 203.9 m.p.h.; Flying Five-Kilometres, 200.6 m.p.h.

The only unpleasant sensations that Gardener can recall on his record-breaking runs were whilst going under the bridges which crossed the Frankfurt-Darmstadt Autobahn. On approaching them at around 200 m.p.h. the feeling was that he could not get under and the tendency was for him to duck his head.

We were pleased to learn that Goldie Gardener has big plans for the not too distant future. Readers will be interested to hear that the M.G., having survived the war by a small margin (many of its spares were destroyed in a fire at Abingdon), is now being rebuilt and a 750-c.c. engine is being installed. Gardener has a host of spies reconnoitring for a suitable venue to attempt the H.-Class record. He is hoping, if possible, to find a suitable place within the Empire.



*Col. Goldie Gardener.*

Still using the 6-cylinder layout, the bore and length of stroke being the same, *i.e.*, "square," a low C.R. is being employed with a very high boost. The method of carburation has not yet been decided upon, but a new system of petrol injection is under consideration. According to this scheme the fuel is injected into the manifold between the supercharger and the engine. A metering device, controlled by a radio valve which analyses the exhaust gases, increases or decreases the mixture strength as is necessary. It is not intended to alter the chassis or body as they have given such outstanding stability. A remarkable thing is that the body, as designed by Reid Railton and produced by E. G. Brown without any wind-tunnel testing, gave such a high degree of stability at speed and such a low drag-coefficient.

However, a small amount of cleaning up is to be effected, notably to the windscreen, which is now to become a cockpit cover according to the latest practice on fighter aircraft. Gardener is also toying with the idea of cowling off the cooling-air intake whilst actually on the measured distance.

It is hoped that 150 m.p.h. will be exceeded with this smaller engine, which suggests about 135 b.h.p.

Amongst Goldie Gardener's other achievements we find :—

1936 : Winner, Locke King Trophy, Brooklands.

1936 : Officially lapped Brooklands' Outer Circuit on 1,100-c.c. at 120 m.p.h.

1936: Brooklands' Outer Circuit 1,100-c.c. record, 124.5 m.p.h.

1937 : Officially lapped Montlhèry at 200 k.p.h. and awarded Gold Button.

1938 : Awarded Segrave Trophy for greatest achievement on land, sea or air.

1938 : Awarded a special B.R.D.C. Gold Star.

During the war Gardener commanded R.A. M.T. Training Batteries and later he became the Deputy Chief Instructor at the R.A. Mechanical Traction School. In 1944 he went overseas on Field-Marshal Montgomery's General Staff in the 21st Army Group. He was demobilised in September, 1945.

Throughout his army life in this country he has used his very smart 1½-litre M.G., with utility bodywork, for going on leave.

His views on improving motoring as a Sport are largely concerned with the attitude of the Government. Motor racing, he feels, should be given some national support—whilst it remains entirely up to private enterprise it will never get very far. On the Continent they are allowed to use the public highway. If anybody ventured on to the road in a racing car over here they would be howled down. Manufacturers will naturally be loath to sponsor a racing team if they are not to achieve general approval. Motor racing and the use of sports cars tend, in this country, to be

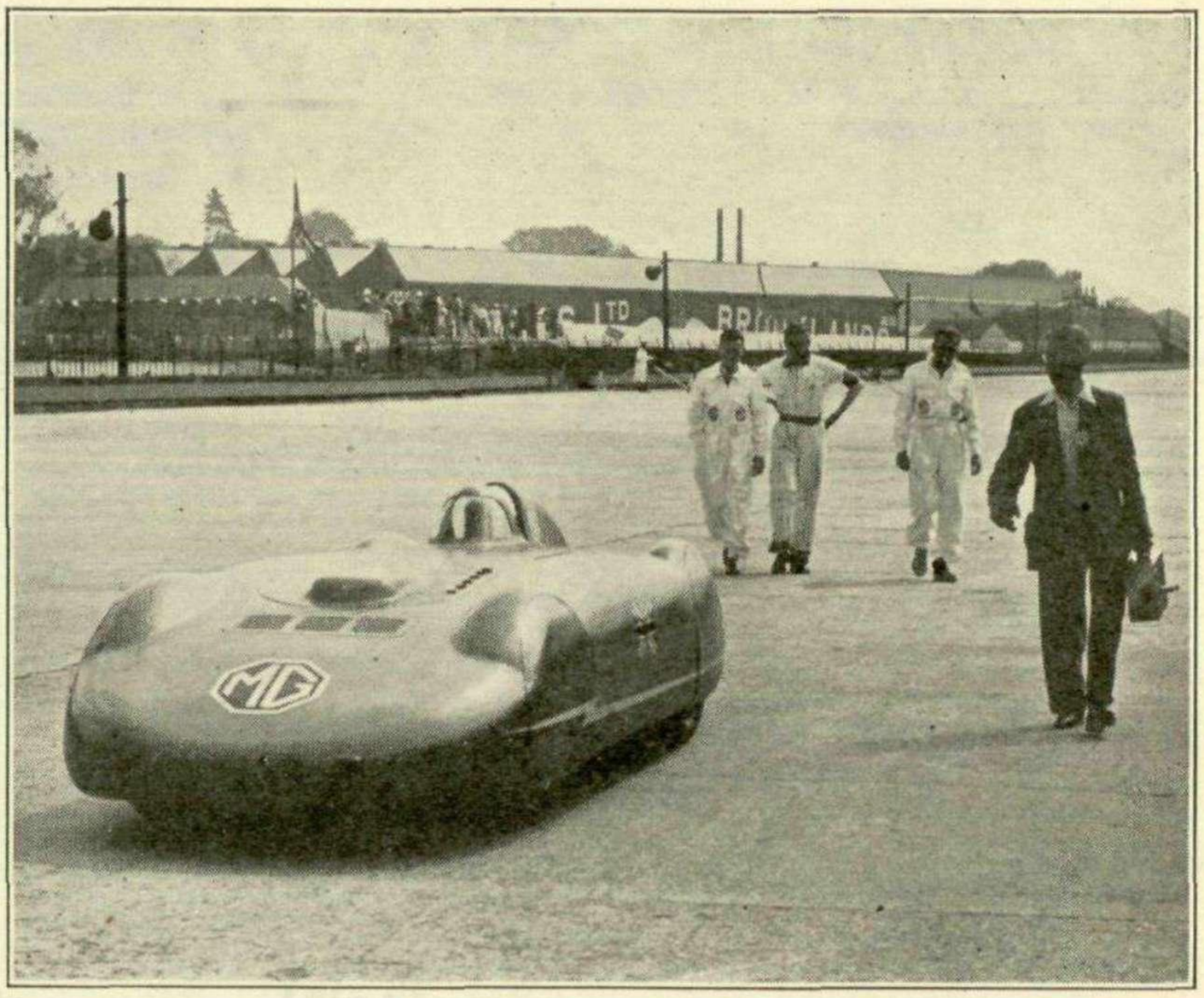
bound up with the accident figures. Accidents are not due to fast driving, but to the fact that our roads are not mainly suitable for motor travel. How many accidents ever occur on an Autobahn? Hardly any!—because people are not allowed to walk on them. It would be interesting to know the number of accidents which occur on the few real motor-roads that we do possess over here.

On the subject of horrifics Goldie Gardener has been involved in some spectacular contretemps.

One in particular which stands out in his memory occurred in 1931. He was racing on the Ards circuit in a Montlhèry 750-c.c. M.G. His was the smallest car in the race and at a point on the Comber section, just after the bridge, where there is a right-hand bend, an S.S.K. Mercédès-Benz (the largest car in the race), power-sliding with blower " in," locked its front nearside wheel in Gardener's offside front wheel. Gardener was hauled along in this condition for some yards when the wheels became unlocked, only for his front wheel to engage the rear wheel of the Mercédès. When he finally became disengaged, he was thrown to the left and ended up in the ditch in an inverted position. Neither he nor the passenger were hurt in this *melange*. However, the M.G. was bent in all places.

Asking his advice for those who are newcomers to racing, Gardener remarks: " I started on a motor-cycle, but whereas there is no parallel in control, it teaches you road sense. Don't start on a small car and work up. Start on a machine of the size that you intend to continue with. The driving technique on different sizes of car is very great."

Major Gardener is running up the engine for test purposes in the middle of June. He will be sailing in the last week of July for Italy where he will make an attempt for the record on the Brescia Milan Autostrada.



*Brooklands, August, 1938—Under way.*

*RUMBLINGS—continued from page* 131

There is to be inbuilt ventilation and radio. These sound to us like motor-cars worth waiting for.

Rolls-Royce Ltd. have introduced the " Silver Wraith," most imposing of the moderns. It has an entirely new engine with o.h. inlet and side exhaust valves, reminiscent of the rare 4-litre Bentley, the Ricardo engine of which, we believe, was quite surprisingly efficient. The front independent suspension is by a new system of helical springs with hydraulic damping. The gearbox retains r.h. control and has synchromesh on the three higher ratios, and the famous Rolls-Royce mechanical-servo braking is retained, with Girling front linkage, and hydraulic actuation at the rear. Equipment includes heating, screen de-mister and de-froster, and radio. Mulliner, Park Ward, Hooper, Gurney Nutting and James Young bodywork is available on this magnificent chassis, which is priced at £1,855, plus purchase tax. The touring limousine by Hooper will set you back £4,409 1s. 8d. when purchase tax is included. We hope to include details of the 1946 H.R.G. elsewhere in this issue and trust the Gordano will emerge ere long.

* * *

**Continental Fashion**

It took a temporarily vanquished country—France—to hold a proper motor-race after hostilities had ceased, and on Easter Monday another was held at Nice, with practically all the old glamour of a Continental road race. It is now a matter of history that Gigi Villoresi won the race in a 4-cylinder 16-valve Maserati, at 64.65 m.p.h., covering the course in 2 hr. 0 min. 4.7 sec. His refuelling stop cost him three whole minutes and allowed Sommer's 3-litre Type 308 Alfa-Romeo to pass into the lead. However, Villoresi re-passed and finally finished a lap ahead of the Alfa. Chaboud and Grignard were next home, in 3½-litre Delahayes, with Ruggeri's 16-valve Maserati behind them. Chiron, in an unblown 4-litre Talbot-Darracq, had much plug trouble and could not better sixth place. Schell retired after an " incident " with the big Maserati; Etancelin likewise after trouble with his 6-cylinder Maserati, and the tail-enders comprised Veret's " 2.3 " Alfa-Romeo, Pozzi's 1½-litre Maserati, Bianchi's " 2.3 " Bugatti and Louveau's Maserati. The distance was 129.5 miles for blown, and 120 miles for normally-aspirated, cars. Sommer did fastest lap, at 68.56 m.p.h. There was also a race of 89.8 miles for 750-1,100-c.c. blown and 2½-litre unblown cars, won by Scaron's Le Mans, streamline 1,100-c.c. Simca-Fiat, at 53.56 m.p.h. Brunot's Riley was next home, in front of Kneppert's 1½-litre Bugatti. 100,000 people spectated. Over here we had a ¼-mile sprint . . . . !

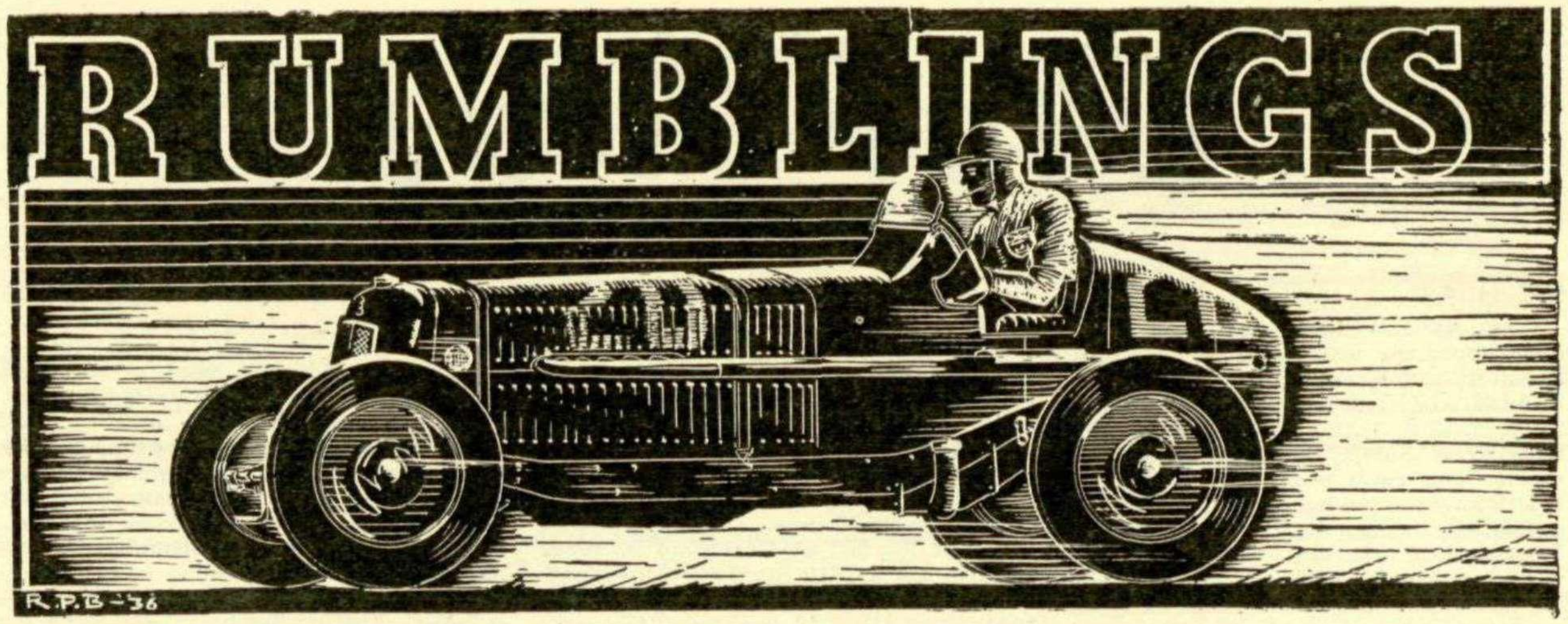
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**Odd Spots**

Foulis have reprinted " Wheels at Speed," by Prince Chula, a well-illustrated account of " B. Bira's " first racing season. Russell has introduced yet another publication, the *Model Mechanic*, a 1s. 3d. monthly, part of which is devoted to model petrol-engined racing cars.

The Marquis of Aylesbury still possesses a solid-tyred Trojan.

Bear broke the back-axle of one of his Bugattis at Elstree.




**At Caterham**

Calling in to see Marcus Chambers at Caterham the other day, we found that L.M.B. Ltd. have an excellent man on their staff, in the person of Culling, who was with Lagonda's racing department in 1928, then joined Sir Henry Birkin in the hey-day of the blower Bentleys; has worked in the racing section of Aston-Martin's and, of later years, been with E.R.A. and—*Auto-Union*. When war came Culling got to Berne and so back to his own country. When we were introduced to him he was happily dismantling a Mk. IV Villiers supercharger from a client's open 4½-litre Bentley. He also helps Marcus with his *monoposto* Austin Seven, but, well as this motors, it must seem tame to Culling, who was in De Havilland's jet-engine department during the war. His own car is a s.v. Aston-Martin 2-seater. L.M.B. Ltd. intend to specialise in the fitting of Rootes blowers of Sir Giles Godfrey manufacture (for which they are agents); they have a neat standard installation for the Ford Ten. L.M.B. i.f.s. for the smaller Fords, and an overdrive for those building rapid Ford Tens, are other lines of theirs. A Gough-engined Atalanta 2-seater, a blown Morgan "4/4" 4-seater, a Rolls-Bentley and various Fords were receiving attention in the works, and the H. G. Symmon's L.M.B. and Ballamy's Alfa-cowled 10-h.p. L.M.B. are, or were, for sale.

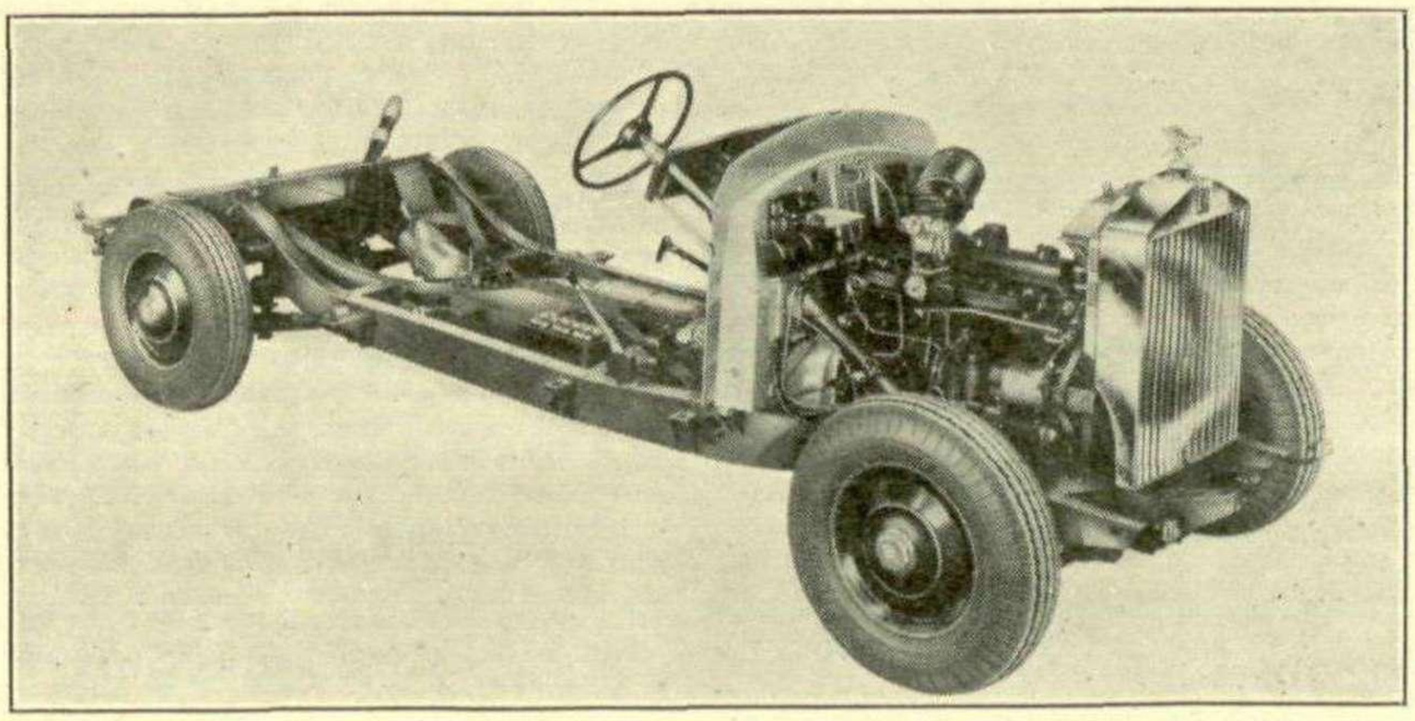
Marcus was putting the finishing touches to the 1908 Hutton, in readiness for some stern veteran motoring, and the firm's breakdown car is the 37.2-h.p. Hispano-Suiza once owned by Ken Ballamy. Leslie Ballamy has apparently resigned and set up as an independent consulting engineer.

* * *

**More New Models**

Confirmed Chain Gangsters may be somewhat aghast at such features of the specification of the new Frazer-Nash as bolt-on disc wheels, synchro-mesh gearbox and a crab-track "the wrong way round." But, reading between the lines, it seems that the new cars may have taken a leaf out of B.M.W.'s book and possess all those Continental characteristics which sportsmen find desirable, in a car so British as to be made at Bristol with the co-operation of the Bristol Aeroplane Co., Ltd. A 66 x 96-mm, 2-litre, 6-cylinder, 4-bearing engine with push-rod-actuated inclined o.h. valves in hemispherical combustion chambers, and three downdraught carburetters above the alloy head, make one think a bit. This engine goes into a chassis having the traditional high gear ratios (top 3.9-to-1), independent front suspension by a transverse spring, a 9 ft. 6-in. wheelbase, front track of 4 ft. 3¼ in., rear track of 4 ft. 6 in., and a cunning free-wheel operative in bottom gear only. The closed bodies are apparently rather special, great attention having been paid to the reduction of wind sounds. A close-coupled saloon and cabriolet are planned and a maximum of 90 m.p.h., a comfortable cruising 78, all with a cross-country thirst for fuel of 24 m.p.g., are spoken of. Then, built in small numbers only, there will be a streamlined sports 2-seater able to exceed 100 m.p.h.

*Continued on page* 130



*The most imposing of the moderns—the 25/30-h.p. Rolls-Royce "Silver Wraith." Like the rare 4-litre Bentley, it has its inlet valves overhead, its exhaust valves at the side.*

# Club News

## WE HEAR

Lieut. R. K. Darby, R.N.V.R., now home from the wars, says he managed to run a 540K Mercédès-Benz for a while, in Java, and that local enthusiasts used to meet at a banked oval motor-cycle track every Sunday morning for a little racing—you can't suppress the Sport! A Delahaye set the lap record at 20.6 sec., and a Jeep managed 21.4 sec. A typical line-up shows various Fords and the victorious saloon Delahaye. An interesting car seen by Darby was a 402 Peugeot saloon, the all-metal roof of which would hinge back into the very large bulbous tail.

Those who seek to own a defunct make of car are notified that a 1921 Albert (the Gwynne Eight's big brother) was for sale in Birmingham. It is said to have done only 9,000 miles, having been laid up since 1933, and to have the polished aluminium 4-seater body. Yet another early small car offered for sale recently in sound order was a 1925 o.h.c. Wolseley 2-seater—its engine, of course, is the forerunner of that in the o.h.c. M.G.s and was derived, as to its valve actuation, from the Hispano "Viper" aero engines which Wolseleys built during the Kaiser War. A. B. Price hopes one day to rebuild a 1927 12/22 Lea-Francis, for which he has a spare 10.8-h.p. engine. O. A. Batten, who learned to ride a motor-cycle in 1915, using a Zenith Green with Gradua gear and square-finned cylinder, asks can anyone find him a Zenith Gradua for old-time's sake? Skerman has acquired the one from the Pickering farm.

From Amsterdam comes a letter taking us to task over the statement that the 327 B.M.W. uses the 328 engine—apparently the 327 has the 2-litre two-carburetter 55-b.h.p. engine, and it is the 327/328 which is endowed with the three-carburetter, inclined-valve 80-b.h.p. engine. With cabriolet body and normal wheels, that is, but with cabriolet body and centre-lock wheels this car becomes, like the open 2-seater, a 328. Thank you, Mr. Loyens! But we are still wondering in which model we rode! Querico has opened a tuning establishment at Brighton, his first clients being the Whincops, whose Types 51 and 43 Bugattis went in for attention. Arthur Baron intends to lead the easy life for a while and may dispose of his Type 51. Pattenden is now a father—congratulations!—and Peter Williams has acquired his Type 43 Bugatti.

W. D. Harwood has a 1928 Salmson, and Ralph Neville enthuses over a Gwynne Eight "hip-bath" which he fetched from the Chiswick works in 1923. The engine was rebored at 95,000 miles and given new Aerolite pistons. New 710 x 90 tyres were fitted just before the war and Neville has another set re-treaded. He has toured all over France in the car and never experienced boiling. The only alteration from standard is a Zenith in place of a Claudel-Hobson carburetter, and Neville threatens to enter for the next Ramsgate "Concours." He says the Gwynne does 45-50 m.p.g. and "if the clutch were of plate type it would be perfect." We know—we've grappled with a couple of Gwynnes and their cone clutches! Are there any other cars of this breed in use? queries Neville, who saw his last at Grantham in 1939. He also has a 1910 Stanley steamer and a 1902 Gladiator for V.C.C. events, but needs some 810 x 90 or 815 x 105 covers. His own car is a 1931 Riley Nine "Monaco," which has given "fifteen years' perfect service."

Capt. Durie has decided to concentrate on one-make activities and has a fine 1930 "International" Aston-Martin and four "Marston" Sunbeam motor-cycles. He invites enthusiasts to visit him at 20, Cluny Drive, Edinburgh, 10. Incidentally, he has formed a very high opinion of the 1934-5 Hillmans. His motor-cycles include 1925 350-c.c. "Sprint Special" and 1926 500-c.c. "T.T. Replica" Sunbeams, and one of the first chain-drive o.h.c. 350-c.c. A.J.S. machines. Durie is anxious to try the new Aston-Martin and favours the Vincent H.R.D. amongst modern motor-cycles. That £55 Rolls-Royce mentioned last month turned out to be a 1912 "Silver Ghost" and you will be glad to know it has been bought for "film work and processions."

Miss Betty Haig wants to meet someone who will enter trials with her, sharing the driving and expenses. She is, of course, a fully-qualified rally driver and her address is: Twitten Orchard, Nutbourne Common, near Pulborough, Sussex. G. Briand has started up again as a Hispano-Suiza specialist and had one of the rare 27-h.p. Spanish Hispanos in his keeping last month. S. H. Whitehead hopes to put a diesel engine into a rear-engined Crossley, convert a late-model Trojan to steam propulsion and modify a chain-drive Trojan, *a la* Scroggs, for trials participation. W/O R. P. Wingfield has acquired a 1937 Alta which appears to have been used for three months and then to have been stored. Its registered number is EGP903, which sounds very familiar—any clues, please? A 1910 25-35 h.p. Fiat, sound as to chassis, awaits a new owner on the Winchester road. A twin-cam 1925 fabric-bodied sports Salmson was for sale in London last month, for £55.

Interesting cars seen in London have included several early "12/50" Alvis, one a beetle-back 2-seater with Brooklands silencer on an inside exhaust system, a s.v. 1½-litre Riley saloon and a flat-radiator, open "14/40" M.G. Mac-Lagen's touring G.N. has gone to an enthusiastic home in Huddersfield. A friend of Ralph Strachan's was seen last month in a G.P. Salmson with Amilcar body and told us a South London garage man is running a saloon Salmson. The Straker-Squire Six at Brixton is still in one piece. Whincop uses a Hillman Minx-engined Wolseley "Hornet" as a hack.

A 10.8-h.p. very angular Clyno fabric saloon has emerged from twenty years' storage in London, with 7,000 miles on the speedometer and new Michelin balloon tyres, and a 1924 open Humber Eight has been seen at Hounslow. Does anyone know anything about a *sports* 4-cylinder Austin Twelve, seen several times on the Great West Road near London? Apologies to Cyril Mann, whose time was omitted from the table which concluded the Elstree Speed Trial report last month. His S.S. did a very fine run in 18.4 sec. and should have tied with Parnell's racing Riley in our list.

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## THE CIVIL SERVICE OUTLOOK

From the *C.S.M.A. Gazette* for April:—"My other love was mine own. A green and cream sports Singer. She had all the things a proper sports car should have—tonneau cover, Ashby steering, Rudge wheels with a doggy little copper mallet in the toolbox. Also, I remember, she had an o.h. camshaft, and there was an awful day when I dropped the timing chain into the sump . . ."

★

## CLARIFICATION

J. Lowrey takes us to task in connection with our recent statement that the Colmore trial clashed with a smaller trial run by the Hants and Berks Club. He says the permit obtained for the latter event was an earlier one than that which the R.A.C. issued for the Colmore. And their little trial *did* lose a few entries to the Midlands classic. But, sir, we were taking the R.A.C. mildly to task, not club secretaries.

★

## ENTHUSIASTS

Mrs. Sheila Johnson, of Tickhill, near Doncaster, in fighting a case against her husband for two motor-car wheels, revealed that said wheels belonged to a Frazer-Nash. She originally had an S.S. which was exchanged for a Frazer-Nash and this subsequently changed, plus £150, for the present 'Nash, which was a wedding anniversary gift. Her husband's cars were named in the *Daily Express* as including Bentley, Lagonda and Riley. You will be glad to hear that Mrs. Johnson got her wheels!

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## N.W.L.M.C.

The old-established North-West London M.C. has come to life again—good news. Future events to include the Coventry

Cup and Gloucester trials. The vice-presidents are Dr. Vaughan and F. H. Whittingham, and K. N. Hutchison is captain and press representative. Leslie Johnson is vice-captain, Dargue is treasurer, and the committee is composed of Messrs. Kopenhagen, Fitt, Johnson, Andrews, Haesendonck, Bond, Ripley and Warburton. Hon. secretary: A. G. Imhof, 112, New Oxford Street, London, W.C. (Museum 5944).

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## COVER PICTURE

This month's cover picture is a unique view of John Cobb and the Napier "Lion"-engined Napier-Railton on the seafront at Brighton, on the only occasion when it competed in a speed trial. The picture is effective by reason of its simplicity and fresh angle of approach (in both senses). It is the work of R. Rider Haggard, of Wallington, who now uses "a Super Ikonta and all the latest gadgets," but who took this one when he was fourteen, with an old Ensign box-camera of about 1924 vintage!

★

## SPORTS CAR CLUB OF AMERICA

An ambitious club rally was planned, to Indianapolis, for the 500-mile Race on May 30th. The club's journal, *Sports Car*, continues to give news of British cars, the Jan.-Feb. issue containing details of the new Altas, M.G., Invicta and Morgan "4/4." British manufacturers should obviously encourage this market. Three new members were elected up to February, with Type 35A Bugatti, 4th series 1924 Lancia "Lambda" and Multiplex-Special cars. T. A. S. O. Mathieson has been done the great honour of being elected an honorary member and is fitting a S.C.C.A. badge to his Type 57S Bugatti. Secretary-treasurer: G. F. Boardman, 48, Thornton Road, West Hartford, 7, Conn., U.S.A.

★

## VINTAGE S.C.C. OF AUSTRALIA

This live organisation goes from strength to strength, and the monthly journal, the *Vintage Car*, remains most interesting and contains an excellent drawing each issue by R. Shepherd, who made such a grand job of the painting of a Type 55 Bugatti which the club members presented to the undeserving Editor of MOTOR SPORT via Inman-Hunter, before he again sailed for Australia. New members continue to join—rather surprisingly in a country in which the supply of suitable cars must be limited. February saw five new full members, six new associates and two transfers from associates to driving members. The cars involved include two "30/98" Vauxhalls, a D.I. Delage, Ulster Austin Seven, two veteran De Dions and a 1929 Auburn.

The South Australian Division speed trial, over ⅜-mile of 1 in 8 macadam, saw Godfrey's "30/98" Vauxhall make f.t.d. in 46.6 sec., Wollaston's sister car being runner-up, in 47.2 sec., and a Hispano-Suiza clocking 49.8 sec. Hon. secretary: R. Beal Pritchett, 1, Phillip Street, Neutral Bay, N.S.W.

## WAVING THE FLAG

Mr. Richard Watney's V12 Lagonda "Rapide" coupé tied in the recent *Cote d'Azur Concours d'Elégance* with Sir Duncan Orr Lewis's Bugatti, for the Grand Prix de Mer.

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## HEARD AT THE ELSTREE SPEED TRIALS

"An Allard is as fast as the best '30/98'—but watch them on longer courses this year."

★

## THE LIBRARY

The Editor is well aware that many readers are awaiting the loan of instruction books from the MOTOR SPORT Library, but if readers fail to return borrowed volumes within the three weeks' limit of loan, other readers obviously have to be kept waiting, or, if books are lost, disappointed altogether. Will anyone having books to return please address them to: W. B., "Carmel," Wood Lane, Fleet, Hampshire (Fleet 831). This is the Editor's permanent address and all news letters, correspondence, etc., may be thus directed. Subscriptions, back issue orders and all business matters to 15, City Road, E.C.1, please.

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## B.R.D.C.

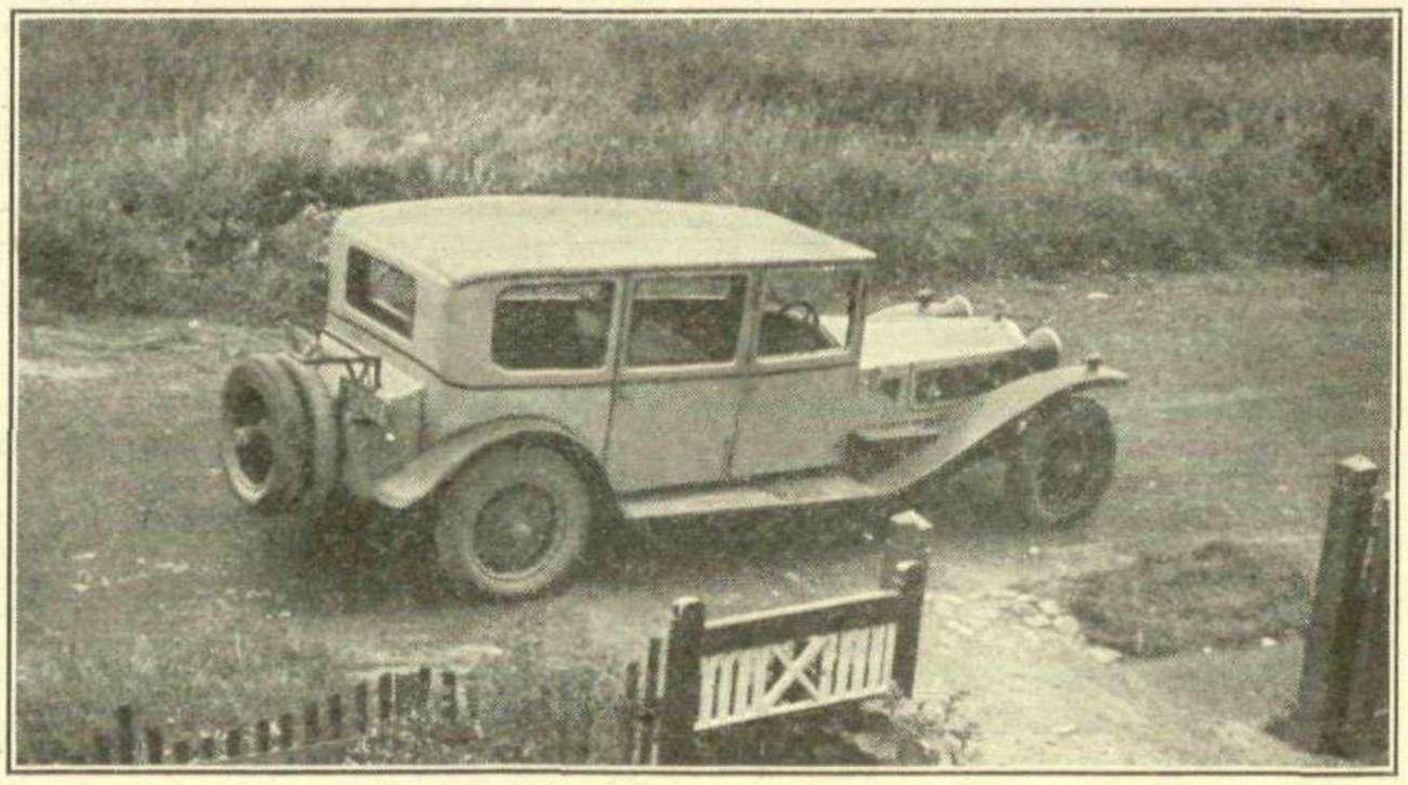
D. J. Scannell is now back in office as secretary of the British Racing Drivers' Club.

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## THE VINTAGE M.C.C.

On April 28th, at a meeting on the Hog's Back, Surrey, the Vintage Motor-cycle Club came into being. Membership is confined to actual owners of motor-cycles made up to December 31st, 1930, and the club will be affiliated to the A.C.U. as soon as possible. Three-wheelers and four-wheelers of the forecar type were ruled out by a very small majority—presumably because the Veteran C.C. caters for these vehicles, but a pity, nevertheless. Honorary membership may be conferred by the committee. J. J. Hall, who has done so much for vintage motor-cycling interests, was elected president, and C. E. Allen, B.E.M., W. C. Beaumont, J.P., Brig. C. V. Bennett, W. Boddy, of MOTOR SPORT, A. B. Bourne, of *The Motor Cycle*, Wing-Cmdr. A. M. Maclachlan, R.A.C., F. A. McNab, A.P.M.C., and Graham Walker, of *Motor Cycling*, were suggested as vice-presidents. The services of C. S. Burney, A.M.I.A.E., A.P.M.C., as hon. secretary and treasurer, and A. J. Bonnett as hon. legal adviser, were accepted, and the committee elected were Messrs. J. Cohen, T. G. Griffiths, D. S. Jenkinson, W. J. Lawrence, C. Anantrill, M. F. Walker and J. B. Wicksteed. It was decided that the club year would be from June 1st to May 31st, and the entry fee 10s., with 10s. annual subscription. Some 76 prospective members were listed, and the Sunbeam M.C.C., which will continue to run *veteran* motor-cycle events, offered its veteran register to the Vintage M.C.C. A bulletin will be issued, workshop facilities are possible, and a rally-cum-sporting trial, sprint or hill-climb and a winter social are under discussion. All of which suggests a really successful club. It was a nice idea to offer prizes for attendance at this inaugural meeting. The prize for the oldest machine went to R. C. Ashton's 1921 Model-H Matchless combination, in which he brought his family.

The vintage prize was a close thing, and in the end went to J. A. Whaley's 1927 long-stroke Sunbeam, the runners-up being S. A. Johnson (Norton early head and barrel on 1928 ES2 crankcase), C. Quantrill (2-speed Scott "Squirrel"), and C. S. Burney (680-c.c. Burney-Special, the only one!). The judges laid especial emphasis on the everyday practicability of the machines, and this will be a feature of the club's policy. Whaley proved the Sunbeam's qualifications by riding down from Nottingham. Other interesting machines included Graham Walker's 1925 Sunbeam (rider R. Holliday) and Wicksteed's solo 1927 990-c.c. Royal-Enfield, amongst 20 old machines attending. We hope to see this ambitious organisation



*"Lambda"—To keep last month's open Lancia company we present this 7th series saloon, of which the owner, Alfred Arnold, said: "Not lovely to look at, but what a joy to drive."*

expand rapidly. Details from C. S. Burney, Cedar Cottage, Marlow, Bucks.

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## GENERAL NOTES.

A long spell of fine weather, so unusual for March in England, tempted us to volunteer to accompany the driver of a 1924 Lanchester "21" tourer from the unliked Metropolis to Whitstable. Alas, this particular day dawned wet and although the beautiful leather hood was sound enough, the discoloration on the windscreen, coupled with the raindrops, made it politic to keep the top panel open, which procedure necessitated removal of the wiper box in a downpour on Blackheath. Proceeding, we were beginning to enthuse over the silence under way of the Lanchester o.h.c. engine, the comfortable riding and the general air of exceptional dignity pervading our mode of progression when, up a long gradient, the fuel feed failed. Gum was the trouble and most of the day was spent dispelling it from the long-suffering Autovac. But such was the appeal of this large, lusty old Lanchester that one all but forgave it, even after the *n*th pause in the wet to search for minute traces of glue deposits. It has a bearing quite distinct from, and in some persons' opinion far and away preferable to, that of even "high-quality" structures of pressings and sheet-tin. It certainly wasn't the car's fault that we ate, wet through and shivering, at a wayside cafe—for "Pool" was not invented in 1924.

Whitstable was reached with ourselves at the wheel, but so sodden that impressions of the car are confused. It has more than mediocre acceleration, especially for its weight, cruises at 50, and the steering was accurate and very smooth, with a trace of Lancia-like kick-back; the gearbox none too easy to control, the clutch heavy. Whitstable produced more rain in torrents, and a breaker's, one of whose breakdown cars was an imposing "Big Six" Bentley. We were depressed by the rain but more so by another "21" Lanchester which we sought—it was much later vintage than the one we had come down on, and gone was the special Autovac mottled to match the finish of the engine, gone the dignified "real" radiator and the characteristic brake lever you pull sideways to free from its ratchet. Even the "21" Lanchester was "modernised" by degrees, to its disadvantage.

The run home was a nightmare of stops to disperse the fuel stoppages. But, as we have said, the old Lanchesters exert their own indefinable fascination and instead of leaving the car in wrath, we bore with it; indeed, the owner has recently acquired another, of suitably early vintage.

Odd runs in the hack Austin Seven followed, memorable only on the occasion when, stopping for a traffic block on Staines Bridge, a misguided gentleman in a Ford used us as an anvil, the "drift" being a brand new Austin Eight saloon which had stopped behind us. The hazards of the road . . . !

Then there was an amusing day in a s.v. Anzani-engined Frazer-Nash, a harshly-sprung, you might say "rough and ready" little car, but "right" in every respect, very stable, even four up, showing excellent acceleration, a certainly-not-dull cruising speed, and being more than adequately braked. In it we went through Hyde Park and Putney Hill, out of town to the B.O.C. Rally, and then back, penetrating Sunday afternoon London to tow home a rather unusual 4½-litre Bentley from the outskirts of the Metropolis. The 'Nash proved particularly and surprisingly game at removing the all-too-heavy Bentley backwards, and uphill, from its garage, although how near was the clutch to catching fire we cannot say. The Bentley started up very easily and helped itself up hills, even helping the 'Nash when its plugs grew tired.

Very different motoring came when, on the spur of the moment, a friend said, "Would you care about a flip in the experimental Allard?" We said we would, and were taken out to Kenley aerodrome along the Croydon By-Pass road. A most imposing business it was, Allard's idea of "experimental" embracing an uncowled radiator, canvas bonnet-top, the scantiest of light-alloy strip wings, two bucket seats setting you above the low screen, and a huge wooden box of sand ballast on the back. The acceleration was, of course, immense, making the step-off of ordinary cars look positively silly, and I suppose we did 75 or so along the arterial. The top-gear pick-up was also most noticeably good, and the roadholding and steering excellent, if not giving quite the same sense of security as you experience in, shall we say, a Type 51 Bugatti. Remember, however, that most of the weight was concentrated in one place and that the seats were 7½ in. higher than in the production post-war Allards. The brakes were especially well up to the car's great performance abilities, although they were standard Ford. We pobbled along so easily at 50, got effortlessly past suburban-road obstructions with a trifle of throttle without coming off top gear, and we rode easily and not particularly slowly up the appreciable gradient leading to Kenley aerodrome on the same ratio. Altogether it was a run both pleasing and imposing. When we climbed out and stretched our chilly limbs we felt some off-setting remark to be called for. "Of course," we babbled, "she only weighs about 21 cwt. . . ." "No," retorted the demonstrator firmly, "she is ballasted to equal the avoirdupois of the production coupé with two passengers—27½ cwt." "Moreover," he continued, "she has a completely standard Ford V8 engine in at present, taken out of stock and put straight in." Well, well, we thought, as we pushed off for home at an unsteady 35 m.p.h. in the Austin.

One fine evening produced another run in the Anzani-'Nash to introduce a Lanchester enthusiast to his newly-purchased 21-h.p. model. The 'Nash grew on one more and more every time one rode in it—so very much the enthusiast's car, sometimes giving odd spots of bother, rather noisy and asking real skill in handling, but so willing, such a ready performer, and really quite reasonable as a town car. The modest engine speed at 50 m.p.h. cruising, by reason of a 3.8-to-1 "high," is always a joy. Our route lay down the Fulham Road, up Putney Hill, and along the Kingston By-Pass on to the Portsmouth Road, all the way to that picturesque, old-world Surrey town of Guildford.

On another occasion the 'Nash did quite a Surrey tour, in the course of which we watched Marcus Chambers stripping his blown, single-seater Austin at L.M.B.'s, spotted a really early "25" Talbot breakdown lorry near Horsham, visited a horde of old-school Bentleys (one about to don a fearful name-plate and chromium badge-bar!) at an emporium in Surrey, took tea with two rabid Bugatti enthusiasts after wandering round another dealer's where Bentley, Alfa-Romeo, Mercédès and Frazer-Nash stood awaiting new owners (we didn't dare enquire prices!) and, finally, found a very well-preserved 1925 A.C. 2-seater with its Anzani engine less magneto (this valued at £130!). Which reminds us that on another meander, again in Surrey, a certain garage yielded up some half-a-dozen "7.5" Citroens, a coupé A.C. Anzani (price £70), an excellent 1910 Gobron-Brille landaulette (for veteran car seekers to consider) and hosts of unused, pre-1914 tyres, for sale at original list prices. There was also the joy of watching Peter Monkhouse trying out the "Monaco" M.G. single-seater, the Darracq and (quite perfect) his own Type 51 Bugatti, on the Denham By-Pass road before the Elstree speed trials.

## PRACTICE AT PRESCOTT

Surprisingly few people took the opportunity of using Prescott Hill over the week-end of May 4th and 5th for practising purposes. The hill had just been re-surfaced and was in a very slippery state, and those who attended had their work cut out to find much adhesion, especially with partly-worn racing covers. K. W. Bear, with his 3-litre special 4.9 Le Mans car and Type 51, and C. Lambton with a sports Type 37 were the only Bugattisti present who actually diced. Others who ran were Cowell, Abecassis, Heath and Mortimer with Altas, and Ansell, Whitehead and Gerard with E.R.A.s.

On Saturday Louis Giron very unfortunately ran off the road at Orchard hairpin and struck a tree with the ex-T. A. S. O. Mathieson 3-litre Maserati, now owned by F/Lt. Yates. Luckily he wasn't badly hurt and should be about again before long. Thanks to the Cowell *equipe's* travelling workshop the Maserati was towed home.

Whitehead, whose E.R.A. it is rumoured has a Z.F. self-locking differential, made some very good climbs, and Ansell's get-aways were truly inspiring.

Due to the slippery nature of the surface Heath's 2-litre Sports Alta and Lambton's Type 37 Bugatti suffered less from wheel-spin than anyone, and were among the fastest through the bends. Cowell, with the latest thing in 2-litre Altas, suffered from too much power and too little tread on the back covers, but improved greatly when he borrowed twin rear wheels from Abecassis. K. W. Bear, on his 4-carburetter, 3-litre Bugatti Special drove very smoothly and gave the impression of knowing his way up the hill better than anyone.

# Letters from Readers

Sir,

To anybody carefully following the discussions reported in the motoring Press concerning the de-requisitioning of Donington, the statement made recently by the Government spokesman in the House of Commons that the owners were not demanding the return of their property for its pre-war use must have occasioned little surprise.

One can only assume the present arrangement is more attractive than the early rehabilitation of the course and facilities for racing.

We are therefore faced with the fact that unless some alternative venue is found, countless enthusiasts will be unable to watch or participate in motor racing for some years, at least, in this country.

In view of this position, might I suggest a meeting be held at which all the clubs who were organisers of road or track races in the pre-war years be represented, and a committee formed which would consider (*a*) the examination and subsequent recommendation for approval of a suitable venue, and (*b*) the opening of a fund to cover hire and expenses connected with such venue. The enquiry to cover war-time aerodromes and existing privately-owned sites.

Several aerodromes exist near London or the Midlands which, if approved, could become the headquarters of such clubs as the B.A.R.C. and the B.M.C.R.C. (Naturally the review would cover motor-cycling as well as car interests), and in which case certain of the assets from these clubs would presumably be available, subject, of course, to the members' consent; also hangars might be available for tuning sheds and a clubhouse.

This suggestion may be ambitious, but it is felt that unless some such action be taken and a co-ordinated effort made by *all* the bodies concerned, a track will not be usable for several years, by which time much enthusiasm will necessarily have been diverted into other channels.

It is realised that it might take several years to bring a site into a state of perfection, but some facilities would be to hand almost at once.

A joint effort would be needed, and the lack of such effort has been the motoring fraternity's weakness in the past. What an anomaly will occur if a British team of "Grand Prix" is built that can only race abroad!

I am, Yours, etc.,

L. E. Good.

Sevenoaks, Kent.

* * *

Sir,

Mr. Graham C. Dix is quite correct in his designation of the initials D.K.W. Local enquiry states Deutsche Kraft Wagen, but the vehicle is known too as Das Kleine Wunder.—a form of publicity, no doubt.

In recent weeks I have ridden, for short distances only, in a variety of German cars. Outstandingly popular is the little D.K.W. and it certainly has something in the matter of springing. This item is particularly well tried over these cratered roads. The "Wanderer" seems to be sprung on the hard side but is quite comfortable. The smaller Mercédès is not so hot. Rolls somewhat on corners and does not deliver as one would expect from such a name on the bonnet. The B.M.W. always calls forth praise. There are a couple running round here which appear to be powered by small two-stroke engines. I haven't been able so far to get close to one of these, and I never remember seeing any such B.M.W. model in England. An Adler recently proved safe under bad conditions, and had a fair show of power. I don't like the steering on these f.w.d. cars. There is no play whatever in the wheel and the slightest touch sends the job across the road in double quick fashion. Rather unsettling at first.

In your report on the Filton Speed Trials you make passing mention of the competing 'bikes, but give no comparative times. I am sure that many of your readers will be, like myself, ex-bike enthusiasts, and just the bare times would be greatly appreciated. I am thinking mainly of the day when bikes are competing at Shelsley Walsh; for those of us who won't be able to see it the two-wheeled times would be most interesting. Though I prophesy they won't touch fastest time of day.

Perhaps the most fascinating moment of this European campaign occurred in December of last year when a young Guard's officer brought a "2/3" Bugatti along a restricted(!) ammunition road in Belgium at a splendid rate of knots. The staff officer occupying the other half gave bags and bags of straight on arm-waving jargon to the Military Police pointsman, who was completely shattered by the close passage. As the superb exhaust note faded down the tree-lined straight the pointsman shook his head and said softly, more in sorrow than in anger, "And I'm supposed to book every so-and-so doing over fifteen down this road!" A few moments later a furiously driven car of normal design, presumably housing the staff officer's aides, came careering down the same stretch. As the box-like body got closer the pointsman eased in to the shelter of the roadside where he watched its gyrations with an awed expression. There is a moral somewhere I think.

Finally, may I add my congratulations to the many. Motor Sport stands out as the journal of this day. The very best of luck for the future.

I am, Yours, etc.,

K. Dixon.

B.A.O.R.

Sir,

Congratulations to you and "Baladeur" on your reconjugation.

Anent M. Mathis and Henry Ford—"Weight is the evil."

When M. Mathis saw the Ford V8 on its first appearance in the Grand Salon for the French Motor Show, he said: "Never, in the history of the automobile, has a car been produced for so little money and capable of consuming so much fuel."

In those days M. Mathis prided himself on the fact that he produced a car for every taste and pocket. The variety of models he produced must constitute a record for one manufacturer. Indeed it led to the opposite extreme. His factory later produced Ford cars in France. Hence "Matford."

I am, Yours, etc.,

A. J. P. Deacon (Lt.).

B.A.O.R.

* * *

Sir,

The introduction of a new Rolls-Royce "Silver Wraith" is inevitably, understandably and perhaps even justifiably heralded by fanfares and general ballyhoo. The latest product is certainly noteworthy. For the first time in 40 years the Rolls-Royce company offers a really wieldy short-wheelbase chassis that should handle like a sports car and yet can carry a roomy body. The gear ratios are particularly pleasing. The old square "face" is still there; one is especially grateful that it hasn't been birdcaged; and though it does look a trifle odd mounted so far forward, the foot-and-a-half less wheelbase is worth while on a large car of high performance. I also commend the reasonably eyeworthy dashboard, which avoids the modern craze for functionless ornate pressings and plastics almost devoid of dials.

But having contributed my quota of homage to a motor-car that I only wish I could afford, horrid, unworthy, questioning thoughts assail me. Was it, for instance, really necessary to go to America for a carburetter? Granted that Messrs. Stromberg make a very elegant gasworks, it still comes as a shock to find that the Rolls-Royce people apparently consider it better than their own. A three-spoked steering wheel is definitely retrograde, though maybe we should be glad it isn't the modern two-spoke horror. No one questions the mechanical adequacy of the new rear axle, but why was the beautiful fully-floating axle—itself the subject of much ballyhoo in its time—abandoned? Surely it hasn't taken 40 years to decide that semi-floating shafts are *better*? Or—but what am I saying?—can it be that cost is being rated above engineering aesthetics, just as in any mass-produced car? And if synchromesh is really a good thing on top, third and second gears, why not also on the pleasantly high and usable bottom gear?

To anyone who has experienced the comfort and ready adjustability for height of simple torsion-bar-cum-wishbone front springing, the Rolls-Royce system seems needlessly complex and even quaintly archaic. What are its special virtues? I speak feelingly, for the worst car I ever owned had what looks on paper like a near relative of this system. I am not impressed by the quoted power output, even when unsilenced, though doubtless it is more than adequate. The 4-litre Bentley "Town Carriage" of sixteen years ago, for the assembly of which Rolls-Royce Ltd. were largely responsible, had the same valve arrangement (indeed it was a flatteringly similar engine) and developed some 15 per cent. greater b.m.e.p. on a 14 per cent. lower compression ratio. Progress? And what is the reason for not chromium-plating the whole cylinder bore? Not cost, surely? Then what? But enough of this cavilling and carping. No doubt Rolls-Royce Ltd. have all the answers. May we share them, please?

I am, Yours, etc.,
J. R. EDISBURY.

Hooton Farm,
Cheshire.

[Well, well! We invite Rolls-Royce Ltd. to explain matters to Mr. Edisbury.—ED.]

* * *

Sir,

I could not quite see the mathematics of Mr. Clutton's letter *re* the road test of the Gregoire. If this engine has had its power deliberately restricted by throttling, a volumetric efficiency of 65 per cent. and a manifold pressure of 9-10 lb. at 4,000 r.p.m. would seem all that one might expect. With a 7-lb. supercharge the manifold pressure rises to 21-22 lb., and as this is at least double it would appear that one would not be too optimistic in expecting the horsepower to increase from 15 to 25.

The only way I can see Mr. Clutton obtained his 22-h.p. with a completely efficient supercharge, is to say 7 lb. is 50 per cent. approximately of atmospheric pressure and hence the horsepower increase will be 50 per cent., *i.e.*, 15 to 22.

If I am omitting some hidden mysteries, I should be pleased to have them cleared up for my own edification.

I am, Yours, etc.,
P. A. WARD.

Esher.

* * *

Sir,

In your report of the Elstree Sprint, in the May issue, under "All the Times," no mention is made of my time on my unblown 747-c.c. Austin Seven, which was 23.2 secs. I was runner-up in the 750-c.c. Super-Sports class, which was also not recorded.

I think this a pity, as the time proves that the unblown Austin Seven, even in near-standard form, far from being a self-propelled roller-skate, as S/Ldr. Boothby and others would have us believe, is, on measured performance, quite capable of more than holding its own with the more leisurely type of larger sports car.

Our time actually bettered five assorted Bentleys up to 6½ litres, the 7½-litre twin-cam Duesenberg, the 4-litre Graham-Paige, two Alvises, a Frazer-Nash, and A. Heal's 3-litre Sunbeam.

As a trials car, the Austin Seven is, of course, unsurpassed, as proved by the "Grasshopper" team in the 1938-39 trials season.

I am, Yours, etc.,
A. M. R. MALLOCK
(Capt., R. Signals).

Catterick.

[The list of times was a "Stop Press" effort and we are sorry some were inadvertently omitted. We have heard praiseworthy reports of Mallock's get-away on his 23.2 sec. run. He was not given as being second in the super-sports class, as we understood there were only two runners.—ED.]

* * *

Sir,

We would like to correct a misstatement in your May issue concerning the Elstree Speed Trials.

You said that our Mr. R. J. Canham was running an "over-bored" Allard. This is not so. The car used was that run by Mr. S. H. Allard at the Filton event, at the Southampton Club hill climb, and in many trials. It is fitted with the genuine "Mercury" engine which, in addition to the larger bore, also has a more robust crank than the 30-h.p. V8.

As you no doubt know, there are certain Allards running which have had their 30-h.p. blocks bored out to "Mercury" dimensions, but in this case, the car mentioned is the only Allard made with the actual "Mercury" engine as fitted.

I am, Yours, etc.,
H. L. BIGGS.
pp. The Allard Motor Co., Ltd.

London, S.W.2.

[We were wrongly informed by a member of the Allard staff.—ED.]

*Continued on page* 119

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*PARIS—BORDEAUX*

*—continued from page* 124

a pleasant companion, full of wit and back-chat. And, finally, as passengers, there is young Arthur Wincke, the son of the maker, and me, just a tourist."

Five people, in other words, on board the wretched little Wincke and Delmer!

From Limours the road climbs up the hill to the crossroads by Le Cormier, where, if you are going to Etampes, you turn left on to the hilly road to Dourdan. The mildest of these gradients reduced the petrol cars to a crawl, but the big steamers could take them in their stride. The Bollée, particularly, was going famously. Authorities seem to differ as to whether the omnibus was "l'Obéissante," built in 1873, which celebrated her fiftieth birthday by a trip round the road-racing circuit at Le Mans, or "la Nouvelle," of 1880 vintage. Personally, I favour the latter; but in any case, pride on the hilly road from Limours went before a most unfortunate fall.

"Up to a certain point," writes Léon Bollée, second son of the "captain," who was a member of the crew, "we could well hope for success, but, noticing that our left-hand connecting-rod was overheating, the washer having been taken up too much, we had to stop for ten minutes to let it cool off enough for us to go on to our water relay at Angervilliers.

"While we were taking on water, my father, with the idea of cooling down the connecting-rod more thoroughly, put a pad of damp rags on it, and, unfortunately, when we had finished our replenishment stop, this pad was forgotten. As soon as the engine started the rag got caught in the gears operating the slide-valve and broke the cast-iron support of the bearing of the intermediate shaft between the crankshaft and the slide-valve, which set up such a strain that one of our connecting-rods was bent."

This, one might have thought, was enough to put even an omnibus out of a race. But not a bit of it. The Bollée family got down to effecting repairs—the first of many required on that memorable voyage—but repairs which were so well carried out that, in spite of all its stops, the speedy steamer duly finished the race within the stipulated time, at an average speed of 6 m.p.h.!

Up and down the hills to Dourdan and on to Etampes, the luckier De Dion Bouton steamers were easily making the running. But once at Etampes, the competitors were on the fine road to Orléans and across the flat plain of La Beauce the petrol cars began to make up lost ground.

Panhard et Levassor had established their first depot at Orléans, Peugeot 31 kilometres further on along the valley of the Loire at Blois. Here each driver was to be relieved by a man who had accompanied him from Paris, and here there appeared M. Peugeot, who had come by train to see how they were getting on. The steamers were still in the lead, but replenishing a steamer with fuel and water is no light task, and M. Peugeot, on his arrival, was not a little amused to find that M. le Comte de Chasseloup-Laubat had called in to his assistance as boiler-fillers six of the local firemen, in full uniform, and only too glad to perform this little service for the nobility!

Alas! however, even the services of the fire brigade were in vain. From Blois Route Nationale 152, one of the most delightful in France, runs along by the very banks of the Loire, past Amboise towards Tours. But the Comte de Chasseloup-Laubat's steam "dog-cart" (as it is usually called in the French accounts) was fated never to reach that day what thinks itself the most French of French cities. Just outside Vouvray something went seriously wrong with the cardan shaft, and in spite of all that M. Bouton could do to repair it, No. 3 was out of the race. Nevertheless, there may have been compensations; the day was drawing to a close, and the Michelin Guide says, laconically, of Vouvray: "Speciality—Wines."

Jeanteaud, on the only electric vehicle taking part in the race, had had trouble with an axle near Orléans, and with the De Dion steamer out of it, Levassor, driving with the utmost regularity on No. 5, was in the lead when he passed through Tours at a quarter to nine that evening. But he was now on the direct road to Bordeaux, and it behoves us to retrace our steps to Versailles.

[*To be continued.*]

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MARSHALL supercharged P.B. M.G., June, 1936, outside exhaust, twin spares, aero screens, excellent condition. Offers over £340. 69, Wrexham Road, Whitchurch, Salop.

CIRCA 1930 Riley Nine engine and gearbox, complete with carburetter, overhauled magneto (B.T.H.), starter and dynamo. J. Scott, P.O. Box 9, Barnoldswick, via Colne, Lancs.

MAGNETTE backend, excluding half-shafts, crown wheel, pinion and ballraces, new and unused. Marsh, Pine Cottage, Batherston, Bath.

## WANTED

**SPORTS CARS. T. & T. interested in purchase of good sports cars. Thomson & Taylor (Brooklands) Ltd., Portsmouth Road, Cobham, Surrey.**

URGENTLY wanted, a rough sports car, a crashed saloon, and a "20/25" Rolls-Royce. Full details, please, including price, to BCM/SWBS, London, W.C.1.

SPORTS car wanted. Ancient or modern, complete or requiring attention. Please write fully to BM/NEEM, London, W.C.1.

WANTED urgently by enthusiast to complete collection. Any copies or bound volumes of the following:—*Autocar* up to July, 1927, copies of Nov. 22nd, 1935, and July 11th, 1941. *Automobile Engineer*, 1921-33 incl., and 1913; copies of March, 1915, and Sept., 1920. *Automotor Journal* after June, 1928. *Brooklands Track and Air*, all copies. *Bugantics* up to Dec., 1934. *Irish Motor News* up to Jan., 1934; copy of Nov. 4th, 1937. *J.C.C. Gazette* up to June, 1940. *Light Car* up to Jan. 1936; copy of July 22nd, 1938. MOTOR SPORT up to Feb., 1931. *Motor* up to Oct., 1927. *Motor Cycle* up to Feb., 1932. *Practical Motorist* after May, 1939; copy of Feb. 9th, 1935. *Proceedings of I.A.E.*, Vols. up to XV (1920–21) and after XXXIII (1938-9). *I.A.E. Journal* up to Vol. V and after Vol. X. Also any show guides, motoring books, catalogues, instruction books, pamphlets, etc., of any date. Please state price wanted. 7931077, Cpl. Rickley, D Squadron, 43rd R.T.R. BM/AUTO, London.

SIDE screens for 1936 Singer sports 2-seater Le Mans. State price. Goodall, 148, Glasgow Road, Edinburgh.

LANCIA Lambda, complete, or body for same. Vintage 1,000-c.c. o.h.v. Jap-engined motorcycle, and flat-tanked o.h.v. Norton. Information leading to purchase of above. Tomkinson, 8, Bath Road, Warminster.

## WANTED—*continued*

**R.A.F.** officer returning from Overseas requires body for 2-litre Lagonda. State price and type. S/Ldr. W. House, c/o Nuffield Club, 9, Halkin Street, London.

WATER pump, complete or parts, and bonnet cover for Triumph Gloria, 1935-7, 6-cylinder. Same pump as on 6-cylinder Crossley Regis. G. Williams, 37, Rainsford Road, Chelmsford.

WANTED, following copies of MOTOR SPORT: all numbers to Dec., 1936; also Aug., 1940; Oct., 1940; Sept., 1941. Marfleet Brown, The Vicarage, Bayford, Herts.

RILEY enthusiast seeks old-type Nine. Any model, reasonable price. B. Spring, 24, Bristol Road, Morden, Surrey.






**F.W.D.** Tracta 2-seater car or spares. R. Truscott, White Gates, Horne, Horley, Surrey.

LANCIA Lambda urgently wanted by enthusiast. Distance no object. Carpenter, 1223, Christchurch Road, Bournemouth.

AUSTIN Seven "Ulster" front axle, "Ulster" head. Other special components. Edwards, 149, Coombe Lane, W. Wimbledon, S.W.20.

CHEAP sports car. Any type in small h.p.-class considered. Minor repairs not objected to. D. Coates, 232, Radford Boulevard, Nottingham.

PARTS of, or complete, Frazer-Nash front suspension, 6-in. revolution indicator (half-engine speed). Remotely controlled four-speed gearbox and clutch, suitable for "Hornet." Akerman, 51, Kynance Gardens, Stanmore, Middlesex.

## WANTED—*continued*

**9/12**-h.p. good Riley, Alvis or similar sports saloon, tourer. Required by disabled enthusiast offering about £100. Anyone oblige? 10, Northdale Road, Liverpool 15.

URGENTLY required and good price paid for 4-speed gearbox out of old-type chain-drive car such as "90" Mercédes. Rodney Clarke, Wilcot House, Bisley, Surrey.

AUSTIN Seven engine wanted. Three-bearing crankshaft type, and preferably with pressure feed to big-ends. Thomas, 48, The Lindens, Friern Park, Finchley, N.12. Hillside 4284. Distance no object.

ENTHUSIAST requires sports car in running order. 1927–1934 model up to 1½ litre. Please state price. Macdonald, 34, Castellain Mansions, London, W.9.

LANCIA Lambda, Fiat 500, or similar, sound only. Loning, 40, Fountain Road, Birmingham 17.

WILL pay £1 per year for 1938 to 1945 MOTOR SPORT, complete. Roy Parr, 9, Evans Street, Lacey Park, Hatboro, Pennsylvania, U.S.A.

ENTHUSIAST building Grand Prix car, previous racing exp. (tech. and prac.), with well-known marque. Financial ass. required in exchange co-driving, etc. Write Box No. 242, MOTOR SPORT, 15, City Road, London, E.C.1.

SERVICEABLE 5.50/25 by 18 tyres and tubes. 6-cylinder magneto. Twin manifold for S.S. Purdie, 26, High Street, W.1.

WARNER dual overdrive gearbox. Must be 100 per cent. sound. W. L. James, Berwick Lodge, Ludlow Road, Maidenhead.

**24**-h.p. Model B Ford engine, wear immaterial if cheap; also various Model B or B.F. parts. B. Heber-Percy, Loning, Cholderton, Salisbury.

CYLINDER head (S.V.) for 1930/31 6-cyl. O.M., two aero screens, fold-flat windscreen, and two small bucket seats. C. Danks, Askew Villa, Bedale, Yorks.

**A.C.** engine, excluding gearbox. Marsh, Pine Cottage, Batherston, Bath.

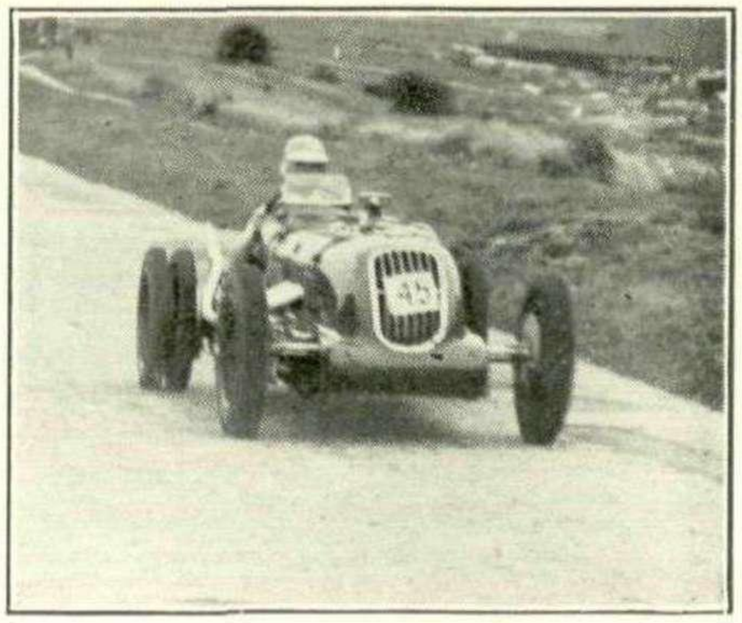
HANDBOOK for 1935 Singer Le Mans required urgently. Fuller, "Belcombe," Chard, Somerset.

VEE-type windscreen for Super-Sports Morgan. J. A. Bray, 12, Walker's Croft, Wallasey, Cheshire.

GOOD condition copy of "Motoraces," by Monkhouse. State price required. S. L. Wallace, Longwood, William Road, Hitchin, Herts.

SALMSON Grand Prix long tail 2-seater metal body wanted, or consider complete car if reasonable price. W. Jennings, 212, Victoria Road, Thorpe Bay, Essex.

BUGATTI, 1½, 2 or 2.3 litre Grand Prix, complete, or parts for same. F. O. Cleveland Harmer, 83, Old Oak Road, Acton, W.3.

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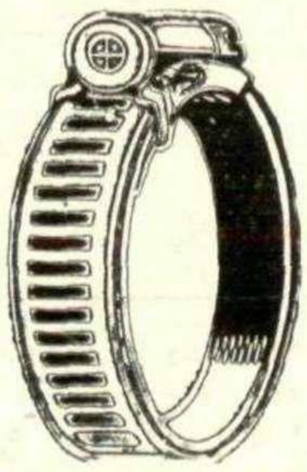
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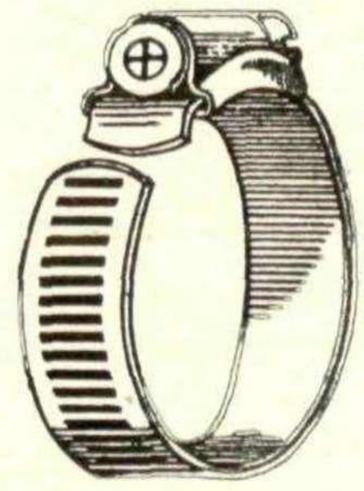
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