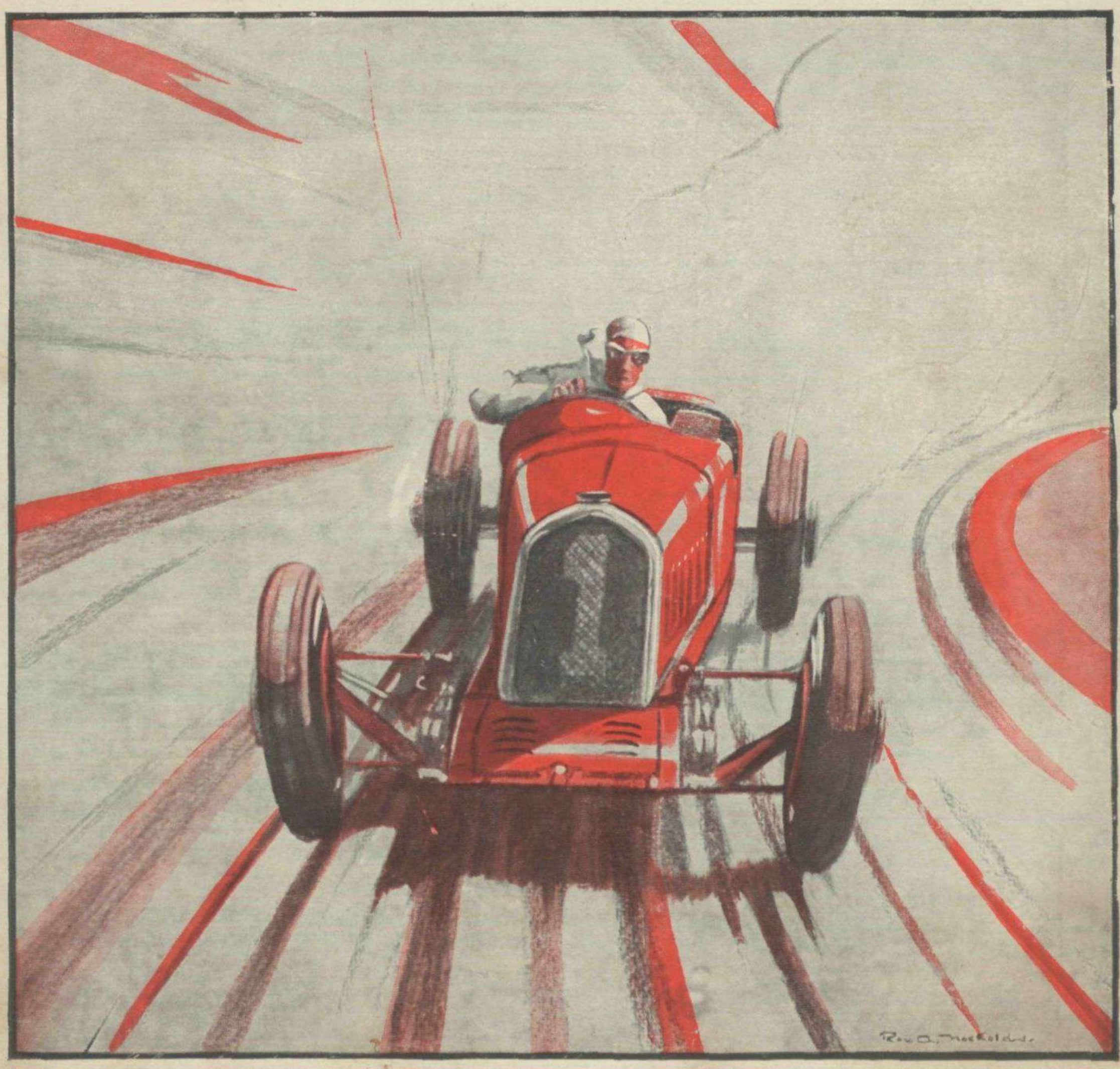
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MOTOR SPORT

INCORPORATING

Speed

ONE SHILLING
MONTHLY



A SELECTION OF MOTOR SPORT ROAD TESTS

THAT HAVE APPEARED IN PAST ISSUES

If you do not see the road test that you require write us a letter. We may have it in stock, but not published below.

Make of Car	Issue
A.B.C. 11 h.p. 2-cyl., 2-seater	Feb. 1926
A.C. 2-litre, short-chassis, 15.7 h.p. 2-seater	July 1936
A.C. 2-litre, 16.40 h.p., 3-seater	Oct. 1927
A.C. 2-litre, 16.66 h.p., 2-seater	March 1926
A.C. 2-litre, 16.66 h.p., 4-seater	June 1934
A.C. "Ace" 16/80 h.p.	July 1937
Alfa-Romeo, 1½-litre supercharged 6-cyl. Charles 2-seater (1929)	March 1934
Alfa-Romeo 1¾-litre supercharged 8-cyl. "Zagato" 2-seater (1932)	July 1934
Alfa-Romeo 2.3-litre supercharged 8-cyl. "Zagato" 2-seater (1933)	Aug. 1936
Alfa-Romeo 2.3-litre supercharged 8-cyl. 4-seater (1931)	Aug. 1932
Alvis 11.9 h.p., 4-cyl., "Firefly" saloon	Feb. 1933
Alvis 4-cyl., 12.60 h.p., 2-seater	July 1931
Alvis 6-cyl., "Silver Eagle" 4-seater coupe (1929)	Aug. 1931
Alvis 6-cyl., "Silver Eagle" 4-seater	June 1930
Alvis 3½-litre saloon	Feb. 1936
Alvis Speed Twenty Vanden Plas saloon	Feb. 1935
Alvis Speed Twenty Charlesworth saloon	Feb. 1934
Alvis Speed Twenty 4-seater	June 1932
Alvis 12/70 4-door saloon	July 1938
Ansaldo 2-litre, 4-cyl., o.h.c., 4-str.	Sept. 1924
Armstrong-Siddeley 20 h.p., 6-cyl. 4-seater	July 1933
Aston-Martin Mark II, 11.9 h.p., 2-4-seater	Jan. 1935
Aston-Martin Ulster 11.9 h.p., T.T. 2-seater	Oct. 1935
Aston-Martin Le Mans 11.9 h.p., 2-4-seater	June 1933
Aston-Martin International 11.9 h.p., 4-seater	Aug. 1932
Aston-Martin T.T., 11.9 h.p., racing 2-seater	Dec. 1931
Aston-Martin 11.9 h.p., 2-seater	Jan. 1930
Aston-Martin 2-litre Speed model	May 1938
Aston-Martin 1935 Ulster	Aug. 1937
Auburn 30 h.p., 8-cyl., supercharged 2-seater	June 1935
Austin Seven Boyd Carpenter 2-str.	Sept. 1930
Austin Seven "65" 2-seater	Jan. 1934
BENTLEY 3½-litre, 6-cyl., Vanden Plas, 4-seater	Nov. 1933
Bentley 4¼-litre, 6-cyl., Park Ward saloon	June 1936
Bentley 6½-litre, 6-cyl., long-chassis saloon (1928)	Dec. 1936
Bentley 4½-litre Vanden Plas coupe	Aug. 1938
Bentley 8-litre sports 2-seater	April 1938
Bugatti 3.3-litre 8-cyl., Type 57 saloon	May 1934
Bugatti 2.3-litre 8-cyl., Type 55, supercharged, 2-seater	July 1932
Bugatti 2.3-litre, 8-cyl., Type 43, supercharged 4-seater (1930)	Dec. 1932
Bugatti 2 3-litre 8-cyl., Type 43, supercharged 4-seater	May 1930
Bugatti 3-litre, 8-cyl., Type 44, saloon	July 1928
CITROEN, Twelve f.w.d. saloon	July 1938
Crossley 20/70 h.p., 4-cyl., s.v. 4-str.	Nov. 1925
Crossley Ten. 1½-litre "Regis" saloon	Jan. 1936
Crossley Ten, 1,122 c.c. 4-seater	April 1932
Crouch Anzani 12.30 h.p., 2-seater	Aug. 1924
DARRACQ 12.32 h.p., Weymann saloon	Sept. 1924
Delage 14 h.p., 2-litre, 2-3-seater	June 1927
Delage 8-cyl., sports saloon	April 1930
Delage D.8 120, drophead coupe	May 1938
Delahaye 3.5-litre "Coupe des Alps" drophead coupe	Aug. 1936
Delahaye 3½-litre drophead coupe	Dec. 1937
D.K.W. "Special" saloon	Feb. 1938
ESSEX Terraplane 8-cyl. 4-seater	Sept. 1935
Excelsior 5¼-litre, 6-cyl., super-sports test chassis	Sept. 1927
FIAT 20.70 h.p., 6-cyl., 2-4-seater	April 1933
Fiat "Balilla" saloon	May 1934
Fiat "Ardita" 17 h.p., 4-cyl., saloon	Feb. 1934
Fiat "Balilla" 10 h.p., 2-seater	Jan. 1935
Fiat 6 h.p., Type 500, coupe	March 1937
Frazer-Nash 6-cyl., 1½-litre (Blackburn) 2-seater	July 1933
Frazer-Nash 4-cyl., 1½-litre T.T. Replica push-rod o.h.v. 2-3-str.	Nov. 1931
INVICTA 4½-litre low chassis, 4-str.	March 1931
Invicta 4½-litre Weymann saloon	June 1929
Invicta 4½-litre saloon	Dec. 1929
Isotta-Fraschini 45 h.p., 4-seater	Oct. 1926
LAGONDA 2-litre, 4-cyl., twin o.h.c. 4-seater	Jan.-Feb. 1928
Lagonda 2-litre, 4-cyl., twin o.h.c. supercharged 4-seater	Oct. 1930
Lagonda 4½-litre, 4-seater	May 1936
Lagonda 4½-litre Rapide 4-seater	May 1935
Lagonda 4½-litre, 4-seater	Jan. 1934
Lagonda Rapier 10 h.p., 4-seater	Sept. 1934
Lagonda 16.80 h.p., 6-cyl., 4-seater	Jan. 1933
Lagonda 3-litre, 6-cyl., 4-seater	March 1932
Lagonda 2-litre, 4-cyl., twin o.h.c., 4-seater (1928)	March 1931
Lancia Aprilia, Type 238, saloon	June 1938
Lea-Francis 1½-litre supercharged T.T. 2-seater (1929)	June 1934
Lea-Francis 1½-litre supercharged special T.T. 2-seater	Sept. 1933
Lea-Francis 1½-litre supercharged "Hyper" 4-seater	Aug. 1930
Lea-Francis, 14 h.p., 6-light saloon	Dec. 1938
Leyland Eight (1929), 2-seater	Feb. 1938
MERCEDES-BENZ Type 540K, 5.4-litre, 8-cyl., supercharged, 2-str.	April 1937
Mercedes-Benz Type 500, 5-litre, 8-cyl., supercharged, 2-seater	Nov. 1934
Mercedes-Benz 12.40 h.p., supercharged 2-seater	June 1925
Mercedes-Benz 36.220 h.p. supercharged, 2-4-seater	April 1928
Mercedes-Benz 33.180 h.p., supercharged, 4-seater	Aug. 1927
Mercedes-Benz 2.3-litre, saloon	April 1938
M.G., 6-cyl., Mark I, 4-seater	May 1931
M.G. Magna, "L" 2-seater	Nov. 1933
M.G. Midget "P" 2-seater	Aug. 1934
M.G. Midget "J3" supercharged, 2-seater	May 1933
M.G. Six Mark I, saloon	Aug. 1930
M.G. Midget Double-Twelve racing 2-seater	June 1930 & Aug. 1930
M.G. Midget "J1" 850 c.c. 2-str.	Sept. 1932
M.G. Magnette "N" 4-seater	Feb. 1935
M.G. Midget "PB" 2-seater	April 1936
M.G. 14/40 4-cyl., 3-speed, 4-seater	Oct. 1925
M.G. Midget "T" 2-seater	Jan. 1937
M.G. 14/40 h.p., 4-cyl., super-sports, 2-seater	May 1927
O.M. 6-cyl., 2-litre, 4-seater	Oct.-Nov. 1928
PACKARD V12-cyl., 57 h.p. coupe	Feb. 1934
Peugeot "201" 4-cyl., 1,122 c.c. saloon	Sept. 1931
RAILTON Terraplane 4-seater	Oct. 1934
Railton Light Sports tourer	Dec. 1935
Railton Cobham 28.8 h.p. saloon	Sept. 1938
Riley Nine "Monaco-Special," two-carb. saloon	March 1931
Riley Nine, 4-seater	June 1931
Riley 16 h.p., Big-four Kestrel saloon	June 1938
SINGER 1½-litre, 6-cyl., Le Mans 2-seater	March 1935
Singer Nine, 4-seater	March 1933
Squire 1½-litre, 4-cyl., 2-seater	Aug. 1935
S.S. I special-bodied 2-seater (1933)	Feb. 1934
S.S. I coupe	June 1933
Steyr Type XII, 14.35 h.p., Weymann saloon	Aug.-Sept. 1928
Stutz "Black Hawk" supercharged 4-seater	Jan. 1930
Stutz 5-litre, 8-cyl., 4-seater	Dec. 1927
Sunbeam 3-litre 6-cyl., (twin o.h.c.) fabric saloon	Nov. 1927
Sunbeam 6-cyl., 21 h.p., (push-rod) Speed Six saloon	Dec. 1933
TALBOT "90" Brooklands-bodied 2-4-seater	April 1931
Talbot "105" sports saloon	April 1934
Talbot 3½-litre saloon	March 1936
Talbot Ten "Rally" 4-str.	Oct.-Nov. 1936
Talbot "105" Vanden Plas 4-str.	Nov. 1932
Talbot "90" 4-seater	Nov. 1930
Talbot Ten sports coupe	June 1938
Tatra 4-cyl., 1,154 c.c., coupe	Dec. 1932
Terraplane, 8-cyl. 29 h.p., 4-str.	July 1935
Triumph 2-litre "Vitesse Six" saloon	April 1935
Triumph 10 h.p. "Gloria Southern Cross" 2-seater	June 1935
Triumph 10 h.p. "Gloria" saloon	Jan. 1934
Triumph Nine "Southern Cross" 4-seater	June 1932
Triumph Eight "Gnat" 2-seater	Aug. 1931
Triumph Eight, supercharged 2-str.	Dec. 1929
Triumph Dolomite 14/60 saloon	June 1937
VALE-SPECIAL 832 c.c. 2-seater	Aug. 1933
Vauxhall 30/98 O.E. 4-seater (1925)	Jan. 1936
Vauxhall 30,98 O.E. 4-seater (1924)	Dec. 1930
Vauxhall 20/60 h.p. "Hurlingham" 2-seater	Feb. 1930
Vauxhall 17 h.p., 6-cyl., "Cadet" saloon	Sept. 1931
Vauxhall 14 h.p. "Stratford" 4-str.	Sept. 1933
WINDSOR 4-cyl., 11 h.p., "Special" 2-3-seater	Nov. 1926
Wolseley Hornet Swallow 2-seater (1933)	April 1934
Wolseley Hornet (12.08 h.p.) saloon	Sept. 1930

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THE BROOKLANDS GAZETTE

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Telephone: NATional 3045

THIS MOTORING

AS we write, the war-news is grave; may it have improved by the time these words are read. The fact remains that it is mechanised forces which have swept through Belgium and Holland, and are penetrating into France. During the next few weeks, British motor vehicles and motoring personnel will be engaged in the most vital fighting of the war.

After we have won the war, the lessons learned cannot fail to emphasise the importance of motor vehicles in modern warfare. We shall strive to maintain mechanised forces and to train skilled men to operate them. This military aspect of motoring must surely reflect favourably on post-war motor-racing and on motoring sport in general.

In any case, we are confident that motoring will regain lost ground, and become a primary factor in the life of the British people after the next Armistice. The motor-car is, to-day, a possession of social pride and vital interest in the eyes of educated peoples. That is true equally of the advanced type of fast car, the modern refined luxury carriage, and those cars which, by reason of outstanding engineering qualities, contrive to give excellent performance notwithstanding small engine size and compact form.

In other spheres, the motor-car is indispensable. The all-round sportsman gets a ton of pleasure from the use of a handy, open car of "sports" type, no matter how far removed we may consider his choice from the genuine thoroughbred. In the construction of special cars, and the tuning of production jobs is found a fascination akin to that enjoyed by the model maker, with the additional attraction of personal transport and personal participation in the operation of the completed vehicle, apart from the knowledge of full-scale engineering gained while working on it, which must constitute valuable experience capable of being turned to good effect in numerous civilian and war-time occupations.

Finally, the unlimited advantages of personal transport ensure the success of cars of all types, from the baby cars which are the hobby of the small family, to our individual quality cars which are both faithful servants and objects of pride to the great majority of our car-owning populace.

It may be that pessimists will foresee motoring seriously curtailed by rising taxation and prohibitive fuel costs after the war. In view of the motoring which is still going on, under a 25/- per h.p. tax, coupled with a rationed annual mileage of much under 2,500, we are confident that when war-time restrictions are removed, motoring in all its forms cannot fail to flourish, even if increased costs make it necessary for lots of us to cut our former annual mileage of 10,000 or 20,000 down very appreciably to balance up.

With this widespread interest in motoring must come a greater appreciation of motoring sport throughout the land. Military requirements will encourage research; military training will develop a pride in good driving. Motor-racing must take on a new importance as a field of research and serve as it always has done as an unapproachable medium for advertisement and propaganda. Even while at war, Germany successfully raced B.M.W.s at Brescia. We have seen the output of this engine increased from about 55 b.h.p. to 80 b.h.p. by using inclined o.h. valves—a valve formation we have long advocated in this paper—and now pushed up to 130 b.h.p. Let such lessons come to the fore when we commence to race again, which we hope will be in the near future.

CONTENTS

Editorial 93
Thirty-Five Years with Good Cars 94
Club News 95
A Speed Hill Climb at Ceylon 96
After the Last One 97
An American View of the Used Car Question 98
Cars I Have Owned 99
2½-Litre Daimler Saloon, The 102
Letters from Readers 105
Brescia Grand Prix, The 108
Rumblings 109
Sound and Speed in Motor Racing 111
Reminiscences of H. L. Biggs, The 112

THIRTY-FIVE YEARS WITH GOOD CARS

L. G. McKENZIE, THE FRIEND OF SO MANY BENTLEY AND ROLLS-ROYCE OWNERS, RECALLS SOME INTERESTING EXPERIENCES

IT has been suggested that after thirty-five years of experience in the motor car industry, a short article on some of the unusual cars I have had to do with might interest readers of MOTOR SPORT. Frankly, I am more at home fiddling with internal combustion engines than writing about them.

My first attempt at improving performance was on my father's steam threshing engine, in the year 1904 at his farm in Oxfordshire. The safety valve blew off merrily at 95 lbs. per square inch, and the r.p.m. were 80 at full throttle. The pressure gauge read up to 130 lbs., and I failed to understand why the hand should never be allowed to go beyond 95, as I had been informed that the boiler had been tested for 300 lbs. hydraulic pressure recently. Examination of the release valve adjustment showed that it was not meant to be tampered with. However, I found that three old horse shoes hung on the end of the bar had a wonderful effect. The pressure gauge hand nearly reached 130 lbs., r.p.m. went up to 95. Unfortunately this gross case of over revving showed up unbalanced forces in an expensive threshing machine with disastrous results.

Further meddling with father's engine was strictly taboo, so I proceeded with great difficulty to build a steam engine of my own. Unfortunately, though I did not know it at the time, much of the material I used was unsuited for this purpose, resulting on test in a shattering explosion, convincing me that something was wrong. It also convinced father, who happened to be passing at the time, and whose temper and dignity were not improved by the force of the blast. In addition to shattered windows and dislodged slates, it was alleged that I had been the cause of entirely deranging the egg-laying mechanism of some sixty fowls, and a dozen ducks, and that a pen of calves in the process of being fatted went on strike for many weeks. For this and many other misdeeds, father decided to get me apprenticed to motor engineering as the best way of getting rid of an intolerable nuisance.

So I came to London, starting my career in one of the largest works at that time, under a wonderful engineer from the Clyde, named Duncan, who was one of the late S. F. Edge's principal mechanics when he won the Gordon Bennett Race. This man's technical knowledge was really amazing at that time, and I am indebted to him for most of the knowledge I acquired of early motor cars.

The first car I drove was a 10/12 h.p. Daimler, much like the first car King Edward VII had. It had just been converted from tube ignition to trembler coil, and went well except that the friction driven water pump slipped when oil got on the flywheel, and caused overheating. As there was a large water tank at the rear, one just got out and pushed the water pump harder against the flywheel for two or three minutes, and all was well for a time.

The first car of real interest that I worked on was a 15 h.p. two-cylinder Gobron Brillie, with two pistons per cylinder, an explosion taking place between them, sending one down and the other up. The carburetter was unorthodox and incorporated an attempt at metering fuel injection into the induction pipe. This was a very good car at that time, but was very hard to wind in the morning.

In 1906, a Frenchman brought to the works a magnificent 24 h.p. Lorraine Deitrich, which was fitted with an excellent air bottle, plus compression self-starter—the first self-starter I had seen, and it would have put to shame many of the much later starters of this type.

My work embraced many makes of Continental cars, most of which are now entirely forgotten.

Later, having advanced in knowledge, my superiors considered me fit to send to the North of England, to investigate a terrible noise in the engine of a customer's 12/14 h.p. horizontal engined Wolseley car. Having traced the noise to a camshaft timing wheel of the laminated type, the laminations of which had been separated, it was necessary to remove the engine from the chassis to dismantle the timing case of this engine, and while waiting for a new wheel to arrive, I was approached by a local motorist who said he had a Wolseley car which would not go, and that I must know a lot about Wolseleys (which I did not, or I should not have been sent from London to repair the one I was working on). Would I come round to his place and see what was the matter? So I went and to my amazement found his car to be one of the famous Gordon Bennett Wolseley "Beetles," beautifully kept with original body. It was only suffering from ignition troubles, which I was able to rectify, and the prospect of a test run on a real racing car was most exciting.

The engine had four enormous cylinders, horizontally opposed, the crankshaft being across the chassis just under the dashboard, with a flywheel and cone clutch, about the size of a 4½-litre Bentley, at each end. Two silent chains transmitted the drive to the combined gearbox and diff. housing situated amidship. The bonnet was very low, with a grilled tube radiator running right round. The dashboard was fully occupied by a long row of drip feed lubricators which one had to unscrew several turns each in the morning to let the cold oil through, and later screw them up again when the oil got warm, and too much passed through.

I had probably the most thrilling run in my life on this car, with the very small section tyres pumped to about 100 lbs., and no shock-absorbers. The roads were bad, and the acceleration and speed were to me terrific. I have never been troubled with nerves, but during the course of a good run I just did not have the courage to engage fourth speed. The car at times was probably touching 65 m.p.h. on third. Of course there was no rev. indicator or speedometer in those days, and after we returned the owner admitted that although he had had this car for some time, he had never used top gear; I could well understand why!

Some years later, to gain experience, I did a round of the car manufacturers. Wolseleys for a short time (who were now making vertical engines), then on to Daimlers just as the "Silent Knight" engine was adopted, and from there to the Rolls-Royce Works, recently moved to Derby. There we had as a repair shop hack No. 1 Rolls-Royce, a two-cylinder, 10/12 h.p. car with a flat topped radiator and bonnet almost exactly like the very early Swift cars. It was surprisingly silent and free from vibration for a two-cylinder. It was unfortunately broken up about 1914.

By far the most interesting cars I worked on were the "White Knave" and the "Silver Rogue"; both had been specially built for the famous Scottish Trials of 1908, and won the Class easily, making fastest times in all but one of the timed hill climbs. The engine had very large overhead inlet valves which made a lot of clatter, and both cars were capable of about 83 m.p.h. with the large five-seater regulation bodies, and it was many years afterwards before this performance was exceeded. These were real sports-cars and it is a great pity they have disappeared.

It was about 1912 before Messrs. Rolls-Royce produced anything in the sporting line again. These new cars were known as the London to Edinburgh type, on which for the first time tapered bonnets appeared. The compression was higher, and the carburetter was larger, with slighter higher valve lift than the standard "Ghost," but they were just as silent. The third one of these I drove into second place in the class in the 1913 Scottish hill climb, although handicapped by having only three speeds. This was corrected in the famous Austrian Alpine cars of 1914, which had four speeds, but were otherwise the same.

Then came the war of 1914, and it was not until 1922 that I had anything further to do with sports cars. From then until 1925 I had quite a lot to do with the early Salmsons, which had wonderful engines, particularly the "Grand Sports" model with twin overhead camshafts, which was very fast. Unfortunately the engine rapidly tore to pieces everything behind the flywheel, which was of insufficient strength for the power developed.

In 1925 I was taken by the then managing director of Bentley Motors on No. 1 3-litre Bentley (it occurs to me that probably very few of your readers have had the privilege of driving both No. 1 Rolls-Royce and No. 1 Bentley, as I have!) This led to me becoming an enthusiast for the Bentley car, and ever since I have had much to do with tuning all models of this make from the 3-litre to the 8-litre, and I still do such work on these fine cars and on a number of the new Rolls-Bentleys.

Club News

750 CLUB

The 750 Club deserves warm praise for going ahead with social gatherings. On Sunday, May 5th, there was a meet at Coulsdon and the club room at the Sunderland Hotel, in Sackville Street, was again the scene of a gathering of enthusiasts on May 25th. Nineteen members with nine cars attended the former, and a great deal of photography took place. There seems no curtailment of specials' construction, and parts were eagerly bought and exchanged. After tea a brief circular-route tour in convoy was indulged in. The next fixture is a picnic lunch on June 9th, starting from Clearway's Café, Kingsdown, at 12 noon. Members are asked to send 2/6 now to the secretary to maintain Club funds, instead of the full subscription as this becomes due. The Club badge is being disposed of at a reduced price of 3/6. The scheme of finding accommodation wherever possible in members' cars for non-car-running members anxious to attend club meetings, continues. The 750 Club was founded on April 16th, 1939, following a suggestion by W. Boddy, primarily for Austin Seven owners. The secretary is :—P. H. Hunter, 39, Warland Road, Woolwich, S.E.18.

J.C.C.

The "Gazette" continues to be published. That for January-February-March contained the Annual Report and Accounts, and some interesting news items. The Club is in a most healthy position, and no loss resulted from the organisation of the 1939 International Trophy race. For the war period, subscription rates are 20/- per annum for cars up to 10 h.p. and 25/- per annum for cars over 10 h.p. Car badges are reduced to 8/-, ties to 3/6, and beret badges to 2/6 while they last.

News of members includes mention of Capt. B. H. Austin, M.A., now holding an important position with the Ministry of Supply; John Pares, who is looking after armaments; Miss Yeo, ambulance dicer; Austin Sowray, siren minder; A. Pearce and H. W. Greenwood, Observers' Corps; R. M. Hardaker, A.F.S.; Mrs. Hardaker, ambulance dicer; J. Barker, C. Horner, C. D. Wilson and G. Wood, Special Constabulary; C. S. Watkinson, P.O. R.A.F.; C. E. A. Dickens, A.R.P. Casualty Service; J. Dugdale, R.A.S.C.; G. Denton, Second-Lieut. Royal Corps of Signals; H. B. Everard, Lieut.-Col. 2/5 Bn. The Sherwood Foresters; G. E. Peachey, Chief Inspector Hove Special Constabulary; L. M. Maynard, A.R.P. Warden; L. Sandford, Balloon Barrage; Jean Pringle, A.T.S. dicer; G. W. R. Coles, G. P. Tilburn, M. S. Soames, and C. L. Nicholson, R.A.F.; Miss K. E. Robeson, ambulance dicer; A. I. Logette, C. A. H. Mason and A. G. Bochaton, Motor Transport Section, City of London Constabulary. Articles by Percy Bradley and Capt. Frazer-Nash are promised in the next "Gazette," which is about due, and a social event is under consideration. Secretary :—H. J. Morgan, 14, Lime Grove, Ruislip, Middlesex (Pinner 3693).

V.M.C.C. OF AMERICA

In the March issue of MOTOR SPORT, we revealed that very considerable keenness for Edwardian and older cars exists in America. We have since had an opportunity of seeing a copy of "The Bulb Horn," the well-produced magazine of the Veteran Motor Car Club of America, published in pica type once a month. The president of the V.M.C.C. is Vassar Pierce. The vice-president is George Crittenden; secretary-treasurer, Cameron-Bradley; New York regional director, Alec Ulmann; membership expansion governor, Raymond Stanley; bulletin editor, W. H. Leathers; ex-officio as retiring president, Dean Fales; and associate members' representative, George C. Rand. The Club caters for all really early cars, and has a vintage section for cars made between 1910-1920—the experience of our Veteran C.C. and Vintage S.C.C. was taken into consideration in fixing these limits. Pierce is an officer of the S. S. Pierce Co., of Boston. He started motoring in 1900, on a Stanley steam car, and owns a 1904 Panhard demi-tonneau, a 1929 Stutz and an M.G. Magnette. Stanley was a passenger in a Stanley steamer in the first Commonwealth Avenue hill climb, and he now directs the advertising department of the First National Bank of Boston. Crittenden is a veteran car distributor, who owns a model 10 Buick roadster, a 1906 two-cylinder Buick tourer and a 1911 Pope-Hartford. Rand is president of the Automobile Racing Club of America and is renovating a rare Mercédès. Ulmann belongs to our own V.C.C., Vintage S.C.C. and Royal Aero Club, and is president of the Aviation Equipment and Export Company. He has a beautifully conditioned little Lion-Peugeot runabout which "truly reflects the thorough renovating of veterans practised within the British Club" [blush, Capt. Wylie, blush!—Ed.] The magazine contains reports of meetings and socials. A 1918 Franklin tourer and a 5-litre Bugatti saloon are being renovated, likewise Chitty-Chitty-Bang-Bang. We imagine this may be Chitty II, as John Morris more or less broke up Chitty I getting out the gearbox as a possible spare for the 200 h.p. Benz, after buying her from the Conan-Doyles. The magazine contains an interesting history of the Oldsmobile, two historic advertisements of Oldsmobile and Columbia Electric cars, and some most intriguing swap columns. The last-named might be of considerable service to British enthusiasts. MOTOR SPORT for January is quoted, in reference to our own run in Heal's 1919 Ballot, and the club claims that, barring the speed, they could stage a similar outing at any time, with 1912 Mercer, 1904 Renault, 1906 Locomobile, 1904 Panhard, 1908 Mercédès and "30/98" Vauxhall. Apparently these cars are not yet registered, but our account has given their owners an idea, and a run may be arranged very soon. Two early Mercédès were used as transport in connection with the Club's inaugural New York dinner. A 1908 Mark XLVIII Columbia and a 1906 Columbia have come to light in a Massachusett's junk yard. We are very pleased to be able to expose this American appreciation for veteran cars and we hope that the Veteran Motor Car Club of America will continue to work in co-operation with our own Veteran and Vintage clubs. The club's address is :—510, Sears Bldg., Boston, Mass.

M.C.C.

The informal supper held at the end of April was definitely a success, some 150 members and friends getting together at Pagani's. And some sixty applicants had to be refused tickets. A similar social is to be put over in the near future.

SOUTHAMPTON C.C.

A Club hike was recently put over, and went off very well. A pleasant tea party followed at Lyndhurst, where the courageous walkers were joined by a handful of sports-car owners. Hon. secretary :—H. S. Pearson, 49, Raymond Road, Southampton.

I.M.R.C.

The Irish Motor Racing Club's trial of April 20th saw C. N. S. Pringle win the Experts' Class with his Ford Ten, and R. B. S. Le Fanu head the General Class, driving his L.E.R.A. Twenty-two cars started, and the trial was run on convoy lines. Runners-up were A. H. L. Archer (Ford), P. M. Cahill (M.G.), and Dr. O'B. Gill (M.G.) in the Experts' class, and J. Stokes (Morgan), D. O'Clery (M.G.), and P. Gill (M.G.)

CLUB NEWS—continued

in the General category. H. Doran (Morgan) won the Novices' Award. Leinster "A" team now leads for the Irish championship from Dublin University Club, I.M.R.C. "A" team and I.M.R.C. "B" team.

HARROW C.C.

The Harrow Car Club continues to send out circulars, and to organise socials. A supper dance occupied the evening of April 26th.

GENERAL NOTES

Well, it was great to have one good week-end since the war began, at any rate. In all the luxury imparted by the modern Daimler we took the Eastbourne road on a sunny Sunday morning at elevenish, and had it very much to ourselves. Making some deviations for testing and photographic purposes, we yet came upon Pevensey in time for a quick one before lunch at a house right on the sea front. Overhead, a long line of "Lysanders" flew, just to remind us that all this sun and sparkle could not stop the folly of mankind away across the Channel. The road up to Beachy Head was taken in an exhilarating run, and sun and ozone enjoyed to the full in the quiet bay at Birling Gap, where quite a lot of cars were parked, and a few of the braver girls were bathing. At the request of the parking attendant our Daimler caused some amusement by motoring itself into the required position, while the driver walked beside it and controlled it on its hand throttle—you can perform some pretty tricks with a fluid drive which fulfils more important functions equally well when it comes to serious driving. Thereafter the big Daimler proved quite able to tackle some rough stuff in the way of grass banks, and did not unduly perturb three charming holiday-makers to whom we offered a lift, although it was cornered very fast indeed downhill into Eastbourne. In the town, army vehicles motored at rousing velocities, and an excellent array of ordinary cars was out and about, including another Daimler, and several Standard Eights, etc. That night, cares were easily forgotten in the beauty of moonlight over the sea, but later content was changed to excitement as heavy gunfire shook the very houses. Next day, a return to London was engineered to take in some very pleasant Sussex and Kent scenery, and at Oakley's Garage at Burwash we were able to inspect a beautifully kept 1903 single-cylinder Cadillac, now resting beneath a dust-sheet, with canvas covers over its big brass lamps. We were directed to it by a policeman who had come out in response to a telephone call to see just what we were aiming our Leicas at—we were able to reassure him that an old Ner-a-Car was the nearest to lethal machinery that we had taken.

The previous evening, a tattered hood espied in a field led to the discovery of an almost complete Horstmann four-seater, the Davies tyres of which were blown up, and, truly astonishing, in the tank of which still swam some two gallons of petrol—in this rationed age! The side-valve Anzani engine seemed in good order and could be turned over on either the handle, or by the ingenious foot starter, which we now recalled to be a Horstmann feature. The scuttle was reminiscent of that of the 200 Mile racing jobs, so probably this was a sports version. The long cantilever rear springs, rear-axle gearbox and right hand brake and gear levers were interesting points and doubtless we would have sought the owner and talked change of ownership had Hitler never been born.

Lunch at the pleasant "April Cottage" at Mayfield, and tea before the bathing pool at the Longford Café at Dunton Green, and the Daimler was back in London with a most depressing reading on the fuel gauge and a burning desire on all our parts to see this war concluded so that motoring such as this may be resumed, in any kind of car . . .

A SPEED HILL CLIMB AT CEYLON

The Mahagastotte Hill Climb of the Ceylon Motor Sports Club, held last March, seems to have had much in common with our own sprint events. Specials were in evidence, and the admission programme contained many reproductions of S. C. H. Davis's drawings of sprint machinery. "Sammy" Davis is the club's president. Some 3,000 spectators attended and the event was reported by "The Times of Ceylon." P. B. Fowke established a new car record in 59.05 secs. with his blown M.G. Midget. In the small touring car class, Fernando's Fiat Ten ran very well, and Rajaratnam cornered his Citroen Twelve very effectively. Wanigasekera's Ford Ten was to the fore in the bigger sports class, and Loos (Ford V8) won this class.

Trophies were given by the J.C.C. and M.G.C.C.

Results :

Touring cars under 1,100 c.c.: 1, W. M. Ferdinando (Fiat Ten), 64.41s.; 2, R. M. Hendry (Standard Eight), 67.81s.

Touring cars, 1,100-2,000 c.c. : 1, D. C. Rajaratnam (Citroen Twelve), 63.04s.; 2, E. Wanigasekera (Ford Ten), 64.22s.

Touring cars over 2,000 c.c. : 1, F. R. Loos (Ford V8), 64.11s.

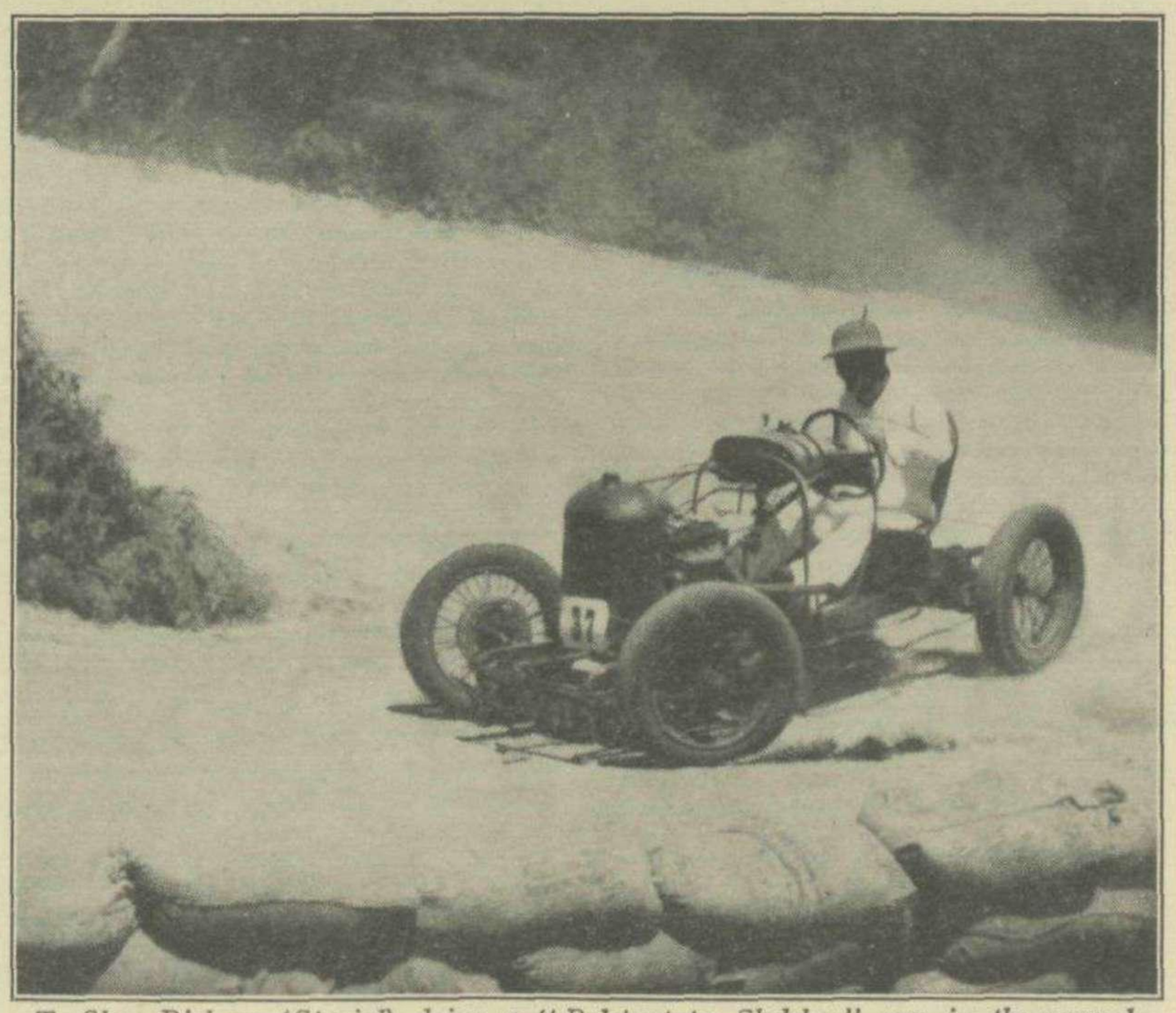
Sports-Cars under 1,100 c.c. : 1, P. B. Fowke (S/c M.G.), 59.09s.; 2, A. C. L. Bayne (Riley Imp), 66.12s.

Sports-Cars 1,100-2,000 c.c. : 1, E. Wanigasekera (Ford Ten), 63.25s.; 2, D. C. Rajaratnam (Citroen Twelve), 63.40s.

Sports-Cars over 2,000 c.c. : 1, F. R. Loos (Ford V8), 63.94s.

Racing-Cars, unlimited : 1, V. Cox (Riley), 56.44s.; 2, T. S. Jinasena (Magpie), 57.75s.

Amongst the entries were Ulster Austin Seven, 3-litre Bentley, B.M.W., special Fords, 4/4 Morgan, etc. The Magpie has a blown Lea-Francis engine in an M.G. frame, and Glen Dickson ran a car having an ex-Freddie Dixon engine in an Amilcar chassis converted to chain-drive. The Riley which made fastest time is an ex-Dobbs "Brooklands" job in beautiful condition. The official programme was very well got up.



T. Glen Dickson (Special) doing a "Bolster-type Shelsley" run in the annual Mahagastotte Hill Climb (ex-Freddie Dixon Riley engine in Amilcar chassis with chain drive)

AFTER THE LAST ONE

[In this article, the well-known motoring writer, F. L. M. Harris, describes motoring as it was after the 1914-18 battle. So long as history repeats itself, we need not be too pessimistic about the chances of getting some sort of fun soon after the next Armistice. F. L. M. Harris is Editor of "The Sports Car," which has suspended publication for the duration, and is also the genial General Secretary of the M.G. Car Club. For many years he was Editor of "The Light Car" and "Motor Cycling," and we are indebted to him for again putting paper in his typewriter on our behalf, in these busy times—he now looks after balloon barrages for the R.A.F.—Ed.]

THIS has nothing to do with the kinds of car in which I hope to drive to the dole queue when the current period of upset is over. The Editor has asked me for some reminiscences of post-the-last-war cars. Twenty-five years ago we used to sing:

When this (blue pencil) war is over,
Oh! How happy we shall be.
When this (blue pencil) war is over,
We'll all have sausages for tea.

It was going to be Utopia. A land fit for heroes was coming into being. All our dreams were coming true. They were mostly dreams of "Prince Henry" Vauxhalls, and "Shelsley" Crossleys, snorting triumphantly along magnificent rebuilt highways.

In the last war all the country's roads became terribly pot-holed and stayed in that condition for years. They were macadam roads with no concrete foundations, and in those days there were no such things as lorries with pneumatics. For nearly five years huge vehicles on solids battered away at the high roads, until many of them offered an agonising ride on a motor-cycle or a small car.

In 1917-18 I had a 1912 Model T Ford for long runs (never mind where the petrol came from!) and a two-cylinder Darracq-Peugeot-Belsize Special for snooting around. The Ford tyres were 30" × 3½" on the back and 30" × 3" on the front. The "Bitsy" had 650 × 65 tyres all round.

For a while, in 1919, I had a Coventry Premier light car, but I never really liked it after I dismantled the back axle and put it up with the pinion the wrong side of the crown wheel. It then had, of course, three speeds astern, and one ahead. That axle was a pest—and it was not by any means unique. Axle troubles were widespread on the dreadful roads, whilst one was constantly stopping on long runs to refix lamps, wings and so on, which shook loose.

The year 1920 brought in its early stages an acute realisation of the fact that after a war comes a mess. Everyone was very broke, petrol was just over 4/- a gallon, and anything on wheels was fetching fantastic prices.

After collecting a "common danger" endorsement while riding a 1913 single-geared 2¼ h.p. Levis two-stroke, I bought a Girling three-wheeler. It was made by a Mr. Girling who later held a big job with Ferodo, and whose name is now very well known.

This machine had a single-cylinder engine, and friction drive, with a shaft and bevel to the rear wheel. The front tyres were pneumatics, and the back tyre was made of wood, covered with rubber rings like the old-fashioned rubber heels. Steering was by tiller, on the lines of the A.C. Sociable, which the machine generally resembled.

The naughtiest thing it did was to break a steering arm, which Barimar very cleverly repaired. Steering breakages were common at that time on account of the state of the roads, and I recall two other steering failures in 1920, both clean fractures of very fatigued steering arms.

In those days there was a weekly journal styled "The Car Illustrated," which had been founded pre-war by that great pioneer, Lord Montagu of Beaulieu. Later it came into the hands of Ed. J. Burrow, of the Cheltenham printing and publishing firm, and then was acquired by W. H. Berry, at that time motoring editor of many journals including *The Times*, *The Evening Standard*, and *The Daily Dispatch*. Berry wanted an editor to run his newly acquired motoring journal and I leapt at the job.

"The Car Illustrated" (it later became "Car and Golf" and was merged with "The Motor Owner" before finally passing out) was the R.A.C.'s official journal, and set out to be a comprehensive weekly motoring magazine. We had such distinguished contributors as Owen John (Llewellyn) who wrote "On the Road" for many years for "The Autocar," and Bill Whittall, Malcolm Campbell's father-in-law, and at that time connected with "The Illustrated London News."

From the editorial chair of "The Car Illustrated" I went up north to attend the birth of the Angus Sanderson (remember its wobbly disc wheels?), and of the Ruston Hornsby (with a great bulge at the back to accommodate the hood).

I tested countless cars, many of which must now be forgotten. I cannot turn up their names from an R.A.F. job remote from old records, but who can recall the Carrow, the Surrey, the Sequeville-Hoyeau [the remains of one of which lie to this day on a dump near Sheffield—Ed.], and the Albert? Memories which stick are of a back wheel becoming detached from a Cubitt and of a huge Cadillac which cost 6d. a mile for petrol alone!

About 1922, the last word in steam cars arrived from America. It was a Stanley, and was notable for its two axles being connected by wooden bars rather like the horizontal bars in a gym. The idea was to improve suspension and steering, which it seemed to accomplish. The car was very fast, and it flashed up hills if you conserved steam pressure while approaching them.

On several occasions in traffic the pilot light of the burner went out, and this led to dense clouds of paraffin vapour suffocating everyone around when the steam pressure fell and the main burners were automatically turned on.

With highly interesting machines of this kind I used to go to Brooklands meetings and to hill climbs and speed trials, which were very plentiful. But I won't reminisce about the events of those days—the job has been done too often.

To one remote event I set out in the first 7.5 h.p. Citroen to be landed in England; the job with a two-seater body, before the clover-leaf came out. It failed me very badly in a most outlandish place, making a noise as if it had run out of petrol. Alas! Investigation showed that the camshaft was not going round.

About the same time, a G.N. served me a dirty trick by shying one of its push-rods into the ditch. There were plenty of spring U-bolts and things of that kind in the toolbox, but no push-rods. Some steel knitting needles were used, bound together with thread. The G.N. was fascinating, and it had good looks, but it was more of a hobby than a car. Something was always dropping off or falling to pieces.

A.C. at that time made a very fine-looking sports-car of 1,500 c.c., the Riley "Redwinger" was coming along, and the "12/50" Alvis was on the drawing board.

The outstanding machine of the period was the Brescia Bugatti, and between 1923 and 1925 one recalls nothing that could compare with it. Amilcars and Salmsons were well in the racing picture, but the Bugatti was the job for fast road motoring.

They were odd machines in some respects. Feed them on costly plugs and they would devour them greedily, but something unheard of at about four bob would last for thousands of miles. The clutch was addicted to seizing, but could be freed by injections of oil and paraffin. I made many runs "clutchless," there being no suitable syringe available.

The technique was, of course, to push-start in second or third and thereafter to judge the gears. A traffic stop naturally meant switching off. One memory is of assaulting Bwlch-y-Groes, and successfully scaling it, in a Bugatti with a bottom gear of 10 to 1.

Horstman, Hampton, Deemster and Crouch were well-known light cars of the time. The Gwynne Eight (the Albert's young brother) was a topper,

AFTER THE LAST ONE—continued

but was born a bit too late for various reasons.

Salmsons, Senechals and Amilcars as sold to the public were, for the most part, considerably slower than their appearance suggested. The absence of weather protection greatly restricted their sales, and they are remembered as fussy machines geared all wrong for trials, but rather fun on a nice day. Their spindley controls and flimsy construction were out of keeping with contemporary thought, which ran to bulky bronze castings as fit items for adoration.

The 3-litre Bentley had many worshippers, but I took a pretty poor view of a very early thermostat fitted to one, which stuck shut in the 1922 (or 1923) "Exeter," and declined to open, thereby costing me a "gold."

Overhead valve conversion equipments for side-valve engines were being developed in 1923-4, and were obtainable for several popular cars. But sporting motorists went in for hundred-per-cent. discomfort, and it was not until a year or two later that speed, comfort, silence and safety began to get hand in hand.

The "12/50" Alvis was an outstanding car. A bit heavy, and expensive, but right on top. I picked up an early model in Coventry, and drove it to Birmingham for the night, garaging it there. After dinner I took it out for a run for the sheer joy of handling such a delicious machine. It deserves an honoured place in motoring history.

In 1924, the R.A.C. held their last Six-days Trial. It was for standard light cars, and among makes entered (and not mentioned above) were the Galloway, the Rhode, and the Lea-Francis. The former made no great impression, but the Rhode came close to being a very notable car. Its big fault was a lubrication system which was inadequate for the high revs. of the engine.

The Lea-Francis gained great prominence from the R.A.C. trial and I hastily sold my 11.4 h.p. Lagonda to have one specially built for me. I wanted the 10 h.p. chummy-bodied R.A.C.-trial model, with the two-port 1,496 c.c. Meadows engine. What a machine! It looked like a sober barouche, but could crack at about 80. It climbed Porlock in second gear with a bellowing exhaust, and was one of the best cars for Alpine work that I ever owned.

At this period I was editing "The Light Car" and its companion journal "Motor Cycling," and often on such occasions as the Scottish six-days trials, I used to drive a Morgan, to be in both camps, so to speak. H. F. S. Morgan, with the co-operation of J.A.P. and Anzani, offered the man of modest means the comfort of contemporary sports-cars, coupled with magnificent performance at a very modest price.

A recollection of 1926 is leaving London on Sunday morning, and driving a Morgan to Edinburgh in the day. Monday to Saturday was spent on the 1,000-mile trial, and on Sunday I drove back to London. About 2,000 miles in eight days, including all the toughest stuff the Highlands have to offer. On a two-cylinder three-wheeler, with a two-speed gear.

Morgan certainly made a most wonderful machine, and you still wonder whether he would have prospered more or less if, in those days, he had listened to critics who asked him for detachable wheels, four cylinders, three speeds and so on. These things came many years later when everything had changed.

Some readers of MOTOR SPORT may be interested to learn how my attachment to the M.G. marque came about. It was, of course, later than the times about which I have been writing, because the M.G. Midget was not born until the end of the 1920s, and the 14/40s and 18/80s were, at that time, out of my reach.

In the long ago I was at school at Abingdon, where my uncle, George Morland, carried on a large and successful brewery that flourishes to the present day. When a car factory was opened there, making just the kind of machine which had always been my passion, what more natural than that I should take rather a special interest in it.

I had known Cecil Kimber for some years as a clever designer, and a prominent figure in motoring sport, whilst H. M. Charles, who was his first lieutenant in the design of the racing cars, had served for several exciting months with me in the early stages of the 1914-18 war. Whenever opportunity offered in the late 1920s and early 1930s I used to go down to Abingdon to get the low-down on the latest racing machines and to enjoy the good comradeship of the delightful folk that Kim has always had around him. Mine was the decision that caused a letter to be published in "The Light Car" suggesting the formation of an M.G. Car Club, and its inaugural meeting at the "Roebuck," Broadwater, was held within a couple of miles of my home.

When, at a later stage, the club wanted a secretary and a magazine, I found myself possessed of the leisure and the opportunity for both activities, and I am looking forward to taking them up again as actively as ever when *this* blue pencil war is over.

AN AMERICAN VIEW OF THE USED CAR QUESTION

WE have just come across an article by E. Hoffman Price, entitled "Jaded Jaloppies," which apparently appeared in "For Men Only," and which has for some time lain concealed in an Editorial drawer. It gives a decidedly American view of the used-car question, the author expressing the opinion that internal combustion virgins are not worth the price of admission—this opinion is backed by the statement that he has never bought a new car. A two-year-old Hudson Eight which had done only 8,000 miles was driven over twice as far again at a depreciation cost of "two cents per 5,280 feet." Reliability was ensured by a tune-up test on a testing-set operated by a reliable man, at a cost of $2.50 per inspection. And that, this article explains, is the whole secret of satisfactory used-car ownership—what a pity our L.C.C. doesn't heed this when buying the used Yanks they are converting into A.R.P. ambulances: though our vintage enthusiasts seem to get along very nicely without scientific car-vetting.

A Terraplane did 19,000 miles in nine months, including 850 miles of the Arizona desert at a 50 m.p.h. average. It was bought cheap because, it is alleged, the valve timing was originally out just enough to burn out the exhaust valves. A used late-model Packard cost the same as a new smaller car and the bigger fuel bill was balanced by the lower depreciation write-off. A tale follows of how the author was nearly swindled by a dealer when helping a friend to buy a car, inclusive of the discovery of red stains on the carburetter which showed that it was on Ethyl and not cheap spirit, and that the performance was down on normal "Ethyl-showing." A good "tune-up-man" indicated just how bad that motor was. Follows a tale of a second-hand eight-cylinder bought from a reliable firm, which three times ran No. 6 big-end at 75 m.p.h., in 1,800 miles running. The price of the car, we are told, was refunded, and a new deal done over a V12 Packard [a rare car; MOTOR SPORT tested one in February, 1934]. This Packard did 18,000 fast, trouble-free miles, within a year and later the author bought a hack Pierce-Arrow from the same dealer for $50. On another occasion he bought a slightly damaged sixteen-year-old Hispano-Suiza for $40; it drew the Highway Cops too often and the engine was sold for a boat. Foreign cars, we are told, are not heavy on gas as is rumoured, but spares are expensive; a Mercédès-Benz front axle costs $450 in America, against $40 for that for the biggest Packard, Cadillac or Lincoln. The author definitely believes in used cars and it seems with good reason—though we doubt if Vintage enthusiasts will agree that you buy a used car "to save dough for the little woman to squander," which, in America, is apparently considered the most sensible reason of all for not buying a new car.

CARS I HAVE OWNED

The first article on this subject, by Donald Munro in the April issue, proved so popular that we hope to include others by well-known personalities from time to time. The second of what we hope will be a series is presented herewith, the author being W. G. S. Wike, a very well-known member of the Northern Section of the Vintage S.C.C. "The owner knows most" is a very true saying, so these articles touch on some very interesting detail information and, dealing with ownership over an appreciable period, strike a good balance between vintage and modern reminiscences.—Ed.

MOST of the cars I have owned have been bought with an eye to low depreciation—in other words, they have been cheap! But altogether they number thirty-five, and even if some of them have been quickly sold again, they have taken me over a quarter of a million miles, mostly pleasant ones.

The first car I ever drove was a pre-war (which war?) Bedelia, which had belt drive, and was the pride of the preparatory school at which I am afraid I drove it; the driver sat behind the passenger, and the wheels were such that when the owner bought a G.N., the tyres on the latter looked positively doughnut (they were about 700×80)

But I digress. When I was *really* old enough to drive, I went to a motor school: I had two lessons in the busiest street of Manchester, and then bought an "11.9" Morris-Oxford, of which not many were made. My mechanical knowledge was more enthusiastic than accurate, as will be realised when I admit I did not notice that there was no nut at the top end of the steering column, and the wheel came off in my hands. As the car had few or no brakes, and could only do 38 m.p.h., there was no mishap.

Then a generous parent provided a successor: the name of Chrysler was great in the land, and a Model 70 turned up. This car had some good points, none of which were evident in wet weather, especially if stopping was needed. The car had a Bosch magneto, probably the last American production car to be so fitted. I knocked down about a hundred feet of iron fencing, and sold it. (No, not the fencing.)

At last I had acquired some sense, and the first of six "30/98s" thundered into my garage. This was O.E.57, with Whitehead f.w.b., and after the other cars, these seemed miracles of anchorage. The weather being cold and wet, I learnt the gentle art of starting by hand, being thrown appreciable distances until I learnt to retard the spark. I did about 20,000 miles on this machine, and for the first time exceeded 90 m.p.h.—there were two men leading a horse about a mile down the road. They left the horse.

When I thought the Vauxhall cost too much to run, I got a very early Anzani Frazer-Nash. This had 710×90 tyres. I also got a rivet extractor and some spare links, having heard awful tales about the transmission, but I had three Frazer-Nashes in all, and only twice broke a chain. On one occasion, I was starting the engine by method C (there was no starter, and I had mislaid the handle)—method C being to run alongside and then shove it in second. The throttle was unfortunately about half open, and I was on the step at about 35 m.p.h. until I could persuade the switch to direct the electric fluid into the chassis rather than the engine. Naturally, I never thought of shutting the throttle, or even pulling the dogs apart, such is the reaction of the youthful intelligence in moments of stress. The Anzani used a lot of oil, and if driven fast for an hour or two would empty the sump, but I never had any trouble with bearings, and eventually fell for a Lancia "Lambda." This was a Third Series, and was so good that I have forgotten all about it, except that I drove it from Torquay to Southport without stopping (well, nearly . . .) in pouring rain, with no front wings, as these had been made by me, and therefore fell off.

I then tried a side-valve "30/98" Vauxhall. This was a special car made for a local rich man, and weighed just under a ton; the body was of such thin aluminium that I think one could have pushed a nail through it! On one occasion it shed a rear tyre, and I did not notice it for at least a mile. On another, the felt oil-retaining ring came out of the back main bearings, and naturally entered the oil-pump; with very occasional gauge-readings of about 5 lb. I coaxed it on tiny throttle openings for over 50 miles, and no bearings had gone.

Next came one of the few closed cars I have had, a 24 h.p. Minerva coupé. Not a very exciting carriage, you say, but the controls were so beautiful, and the engine so utterly silent and willing, that its maximum of 55 and not too sudden acceleration, suited me for over a year. It climbed well, and had good brakes compared with the "30/98." The water pump was fitted with spring-loaded grease-cups, a good idea, as they kept a steady pressure of grease on the string inside the pump.

To keep it company I had an "Alfonso" Hispano, the car now owned by Mr. Lycett. I noticed something wrong with one of the rear hubs, and on dismantling it, found that all the splines had gone long ago, and the taper was packed with old razor blades, a useful hint and/or tip. It had a lovely gear change, and absolutely no brakes whatsoever.

I sold these two, and bought a car I had long admired, a "22/90" Alfa-Romeo, painted gold, covered with millions of tiny red, blue and green spots. In case readers imagine that this was about the time I started drinking, this colour scheme had some popularity about 1925, the body and painting being by Mulliner of Northampton. It was a lovely car, too; perfect steering, perfect road-holding (by "30/98" standards) and very fair brakes. A curious fault was the failure of the case hardening of the tappet feet, and I always carried a spare. The o.h.v. rockers were lubricated by wicks, and the tappet adjustment was at the bottom of the push-rods, where there were auxiliary imitation valve springs, presumably in the interests of silence. The hand brake worked on the transmission, which was as well; instead of bell-cranks, the front brake operating levers had tiny chains and sprockets, and the failure of a chain left the fully-compensated brakes helpless. We never hit anything.

A disadvantage of the colour-scheme became apparent when we had a slight attack of gatepost disease, as nobody could possibly touch-up the paint to match.

About this time I met Sharratt, then owner of the famous Fiat "Mephistopheles." I bought this from him, and collected the car in a very mossy condition from Knutsford, where it had lain for about a year previously. It seems that Sharratt and Le Champion were driving this work of art from Leamington (where they used it for shopping) to Preston, but as it has no dynamo, and uses about 20 amps with all four ignitions igniting, the battery had appeared to have run down. However, this proved not to be the case, as one of the exhaust valves was in the sump, the resultant noise being mistaken for late ignition. I got a piston, some valves, and a full set of rings from Coley, of Kingston, the piston weighing 9 lb. and costing 9/-. We then worked for a year getting the whole car in spot-on condition, with the intention of taking the flying mile at Southport, but after doing about 120 before the event, we unwisely filled up with benzol bought from a fellow-aspirant, which possibly accounted for the water in the float chambers. No race. The Fiat was magnificent to drive; there was a huge ignition lever, about as big as a Bugatti gear lever, and one could not advance under about 800 r.p.m., as the whole show caught fire, but when one *did* shove it forward (at about 75 in top), the acceleration was pleasing. Yet I drove it round the streets of Birkdale, even using TOP gear; about 50 r.p.m. I should think. The car is now in Preston, and the present owner would not sell it for worlds, *nor* drive it.

Now the Alfa was not provided with transmission up to towing the Fiat, so I cast round for another car, and bought the side-valve "30/98" Vauxhall which had appeared at Olympia in 1921. This had been owned since new by a local eccentric, who kept it in faultless condition. It had a bulbous one-door, three-seater body, with an absolutely perfect concealed hood, which went up and down instantly and neatly; surely rare? It had never had a silencer, but had instead a most resplendent copper exhaust pipe which made a NICE noise. It had wheel-discs, a blessing. In some ways, this was the best car I have had yet. as it did 20 m.p.g. and about 85 m.p.h., and gave not the slightest trouble in 22,000 miles. It towed the Fiat at a

CARS I HAVE OWNED—continued

rousing sixty, but after we had done several runs on the Fiat at over 100, it was most difficult to proceed down Lord Street, Southport, at much less than the aforesaid sixty.

I had an egg-shaped Swallow Austin Seven for a short time, and this provided much geographical interest, as the radiator came loose, and taught me where all the streams and horse troughs in the vicinity were situated. It did about 50, but did it often, and although the waterless engine seized up quite a dozen times, no harm appeared to come to it. Possibly the absence of an oil gauge was a good thing, too . . .

One evening I was in the local, and got into conversation with the village taxi-proprietor, who ran a fleet of "23/60" Vauxhalls. He said he had bought a "23/60" tourer for spares, so we went and had a look, and it was a "30/98"! It had a broken piston, so *I* decided to buy it for spares, as no "30/98" parts will fit a "23/60" (it is strange how two such outwardly similar engines can differ so—and *why* the different bore, anyway?) After a *lot* of beer, I got it for 30/-.

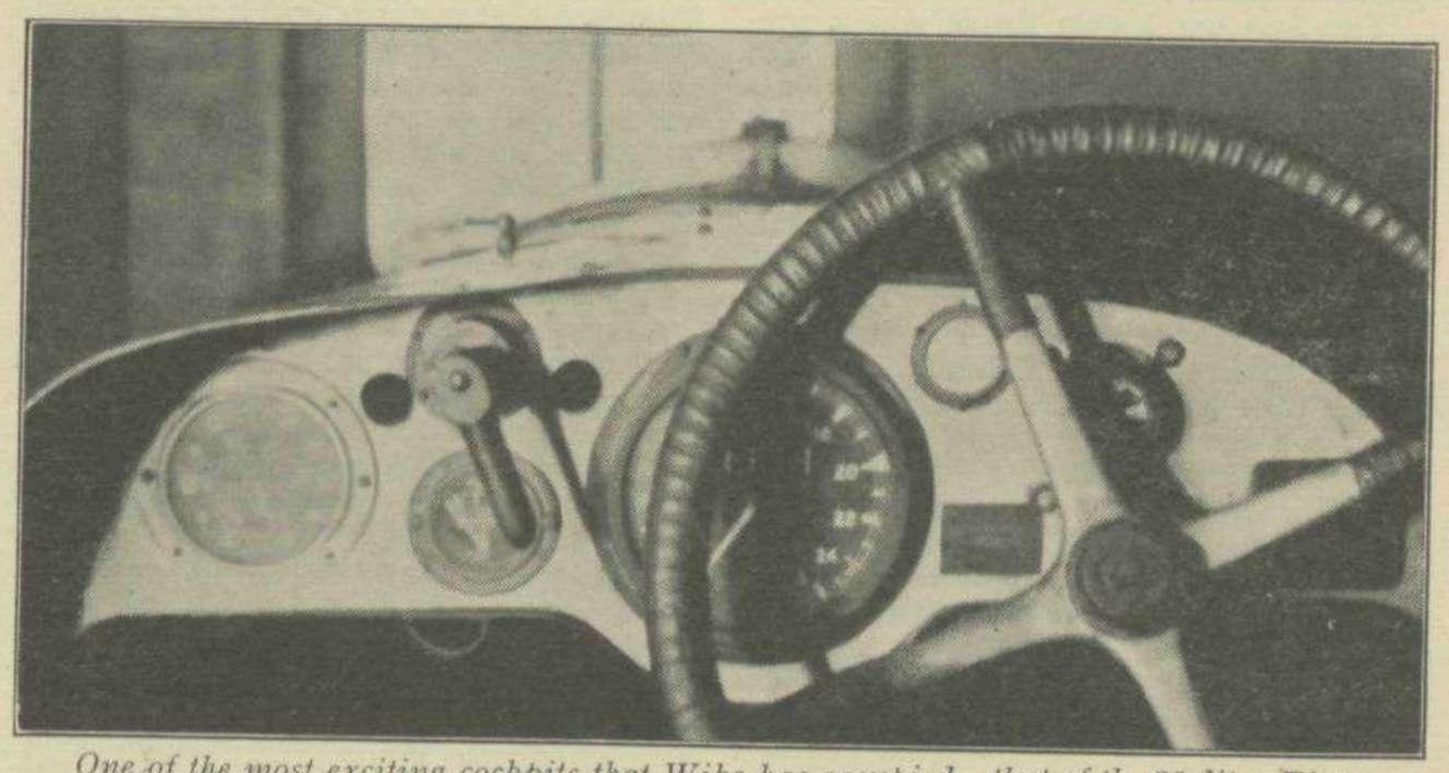
A few weeks later, I was in the other car, travelling hurriedly to avoid being overtaken by a blown 3-litre Sunbeam, when the ball joint at the bottom of the steering drop-arm broke off: we ran into an iron telegraph pole, turned over, and slid 206 feet upside down, ending up in a cottage garden. I never heard the noise, and did not feel hurt, but the petrol dripping out of the top of the Autovac on to the warm exhaust manifold made a most interesting sound. The Sunbeam owner and some yokels lifted the 30/98 off me, and apart from a dislocated elbow, and collar-bone and shoulder-blade bent a bit, all was well. The car was, of course, a complete wreck.

The taxi-man's car was then made into a 100 per cent. good motor, and is the one now run by Shorrock, of Centric fame; the engine is the one out of my crashed car, and he is toying with a blower and a gas-producer.

When I was in better form, I bought a Twenty Daimler saloon, but apart from the aristocratic noise made by the gear-wheels, it was pretty awful, so I got a 3-litre Sunbeam fabric saloon, with suede upholstery, and this was a very useful and completely reliable car. The day after I sold it, two connecting rods came through the side of the engine.

At the same time I wanted an open car, and having tried several 3-litre Bentleys, decided for their superior braking and road-holding. I went to London with Shorrock on a "24/100" Mercédès saloon with no windscreen: as it rained most of the way, our application for a room at the Park Lane surprised the reception clerk no little, as our faces were well manured, and I am sure, almost sprouting! We went to look at the 3-litre of my choice, at Manor Motors, off Knightsbridge . . . and there, lurking in a lock-up, was a really magnificent 6½-litre. In spite of Shorrock's gloomy prophecies about impending bankruptcy, it was just too grand to resist; it was a huge seven-seater tourer, with a deck over the rear seats, and a nobleman's crest on the door with the motto "Carpe diem," which I did.

I did nearly 40,000 miles on this car. It would do 15 m.p.g. at a pinch, and had the high axle ratio, so was ever so nice on long straights, where the presence of six or seven Donington-bound enthusiasts did not prevent it swooping down the long hills of the Buxton-Ashbourne road at nearly 90 miles an hour. It had one carburetter, and a terrible induction pipe. It once developed a mysterious faint rattle, hardly a rattle, more of a *tremor*, and this was due to all six big-ends having shed their wafer-thin white-metal. *And* No. 6 piston cannot be withdrawn from below . . . I sold it eventually to a friend, who still runs and loves it. It has probably done 120,000 miles, and seems as good as new.



One of the most exciting cockpits that Wike has occupied—that of the 21-litre Fiat "Mephistopheles"

Having sold the Sunbeam, I was tempted by a "19/70" Austro-Daimler. I have never had a car with such perfect brakes and steering. but the engine . . . The first day I had it, the pinion fell off the end of the starter, and was at once ground into bronze dust between the flywheel teeth and the clutch housing—a *strange* noise. The engine used so much oil that I arrived at the works one day, found the man draining the lorry sump, and at once emptied the drainings into the Austro—that's despair for you! The body had no doors, and no hood, and was brilliant red: the design of the front brake operating gear was very neat, with the brake cross shaft inside the axle, *a la* Mercédès. I paid £25 for this object, and sold it for £4. It had a horn button on the floor, by the clutch pedal, a good place.

The lure of the "30/98" was again too strong for me, so having sold the 6½-litre and the above horror, I got an O.E. from Jack Cunliffe, of Brough fame, the brother of May Cunliffe. It was painted a bilious blue, and bore the name "Xerxes." I think I paid £20 for it, in 1933; after running it for about 15,000 miles, during which time it cost very little in repairs, I sold it to Sharratt of Fiat renown, and he still owns it, and keeps it in better condition than any other "30/98" I know of. It had "kidney-box" brakes, which I redesigned, scrapping the shaft brake at the same time. A 30-gallon fuel tank kept the tail on the road.

At the same time, I was offered a 1926 3-litre Bentley for very little. It had a suspiciously low chassis number, short wheelbase, one Smith carburetter, and 6.00″×20″ tyres. I found that it was a 1922 car, which had spent the first four years at Poona (gad, sir!), and some enthusiast had fitted a 3 to 1 axle ratio; it did 30, 50, 60, and 65 on the gears, and a consistent 25 m.p.g., but the slightest hill, or even dirt on the road, brought it off top! It had no starter motor, and I never bought one, as it always started first or second turn, and had a low compression. The brakes (f.w.b. had been fitted) were admirable, as were the Bosch headlamps.

Another Lancia "Lambda" then came into the fold, and again it was so reliable that I remember little about it, except that an attempt to redesign the brake gear resulted in a voyage through the streets of Macclesfield with about a mile of wire trailing behind, and a curious failure to stop! Also, the fabric universals failed, and were repaired with fence-wire, which held until a garage was reached.

I sold the "30/98," and bought another Anzani Frazer-Nash. This had been fitted with Michelin R.L.P. tyres, 140/40, then all the rage. It did 60 in second, and about the same in top, and used a lot of oil, but I liked it so much that, having sold it to a friend, I bought it back a year later. I felt a real affection for this little machine, but it was not too reliable; the excessive tyre-adhesion broke the back axle on one occasion (and the tow-waggon which came for it, at midnight, blew up on arrival, so we left them both), and it was some time before I could get front spring U-bolts to stick it. I believe it is still running.

I also bought Sharratt's 1922 3-litre Bentley for £13: this was said to have been Douglas Hawkes's T.T. car, with a shorter wheelbase than usual, and had been fitted with a very nice four-seater body. It was the nicest looking car I

CARS I HAVE OWNED—continued

had seen up to then, and had absolutely MINUS brakes, as the previous owner did not consider them necessary. I sold it to an enthusiast who spent about £100 on modernizing it; it may still be running—I hope so.

For a short time I had a "20/60" push-rod Sunbeam, with cantilever rear springs, Dunlop wheels (like a Rolls), and a Centric supercharger. It was much too fast for its chassis, and only did about 14 m.p.g. I also had another 6½-litre Bentley, with a sports-touring body, but it had an electrical mishap, which destroyed much of the body fabric, and the dealer from whom I bought it gave me my money back—incredible! I then had a 14/40 Delage for exactly one hour, selling it at a large profit at the end of this period!

I happened to be buying some travelling greenhouses for a friend, and in the same showroom was a 38 h.p. Hispano-Suiza. In the end, I got this for £25, with six brand new 7.00"×21" tyres, it being the property of Yates, the Wine Lodge King. I still have the tiny spanners for tappet-adjustment and the tiny nuts round the valve cover. The oil-filler was a box holding about a quart, a sensible idea. There were several levers on the steering wheel, two of them, which opened and shut holes in the bowels of the carburetter, having no apparent effect whatsoever. Eventually it was sold in Cornwall for £8. It had the usual nice Hispano gear-change, and mechanical servo brakes; though built in 1921 it was far nicer than the Phantom II which a rich friend had just bought—to his annoyance! I used the Hispano as a spare lorry at the works, and loads made no difference to the performance, which was about 35 in second, and 75 in top—*not* a sporting gearbox!

By some coincidence I became car-less, and bought another 3-litre Bentley, with a very narrow one-door four-seater body. Two things I noticed; it did 85 m.p.h. almost anywhere, and there were cover-plates round the nuts at the bottom of the block. I must have covered a thousand miles before I realised that it had a 4½-litre engine. The funny thing is that after I sold it the police bought it as an instruction car, and *they* didn't know it was a 4½! Perhaps you would like to know what tax I paid on it. Well, I dare say you would! The radiator had a nasty dent in the top tank, so I had a cowl made, and crowds would collect to find out what the funny motor was, especially as I picked up a set of hub caps with no name on them. It was really fast, being low geared and light; V8 Fords were just appearing, but they were nowhere.

I got a good price for it, and after much hesitation got a blown 1,500 c.c. Alfa-Romeo, the car driven by Ramponi in, *I think*, the Double Twelve, but I am open to correction. It gave me 18,000 miles at a cost in repairs of 1/4d. The next owner broke the crank at about 5,000 r.p.m., which the engine would do, but *not* safely . . . It had the peculiar steering which other Alfa owners have mentioned, in that if one *tried* to corner fast, it was a *bad thing*, but if one just rested one's hands on the wheel and looked round the corner, round she went, at an incredible velocity. It did 18 m.p.g., used little oil, and I fitted a big S.U. instead of the double Italian Zenith (a fearful gasworks), which made the car tractable in traffic. It was definitely a two-plug motor, the best soft plugs I found were Lodge C3 (tut!) and Champion R11 for dicing. The soft plugs would simply pass out if imposed upon, as the blower pressure was about 8 lbs. per square inch. It did not often oil up the R11s, but would soot them up in traffic. It was a marvellous starter in cold weather.

For more sensible motoring I had a large ugly touring 4½-litre Bentley, which was good, but undistinguished.

Eventually the Alfa found a buyer, and was replaced by a very fast Speed Twenty Alvis two-seater, which did about 14 m.p.g., and devoured a piston and exhaust valve, damaging the head in the process. This trouble was caused by an inserted valve seating coming loose, a most unusual trouble, I hope. I lost confidence in it, and sold it after about 1,500 miles. It was a match for the 3½-litre S.S. 100, then just out, and was certainly safer!

Having driven a 1903 60 h.p. Mercédès in the Brighton Veterans' Run the previous year, I bought the 1902 Regal De Dion from Karslake. It was in only moderate condition, but after doing all I could, I ran it in the 1938 Run, which was very wet, and the wind so strong that second gear was needed on the level. I afterwards used it as a runabout at home, and it is really quite a nice little car! Changing gear is a feat, as there is no throttle, so when changing up, the only way to slow down the clutch shaft is to switch off the engine, then change up, engage the clutch, and switch on again: you get used to it. It does 25 in top, and about 30 m.p.g.

I next got a "Nurburg" Frazer-Nash with Meadows engine, and at last had a really fast Nash. Unfortunately, I injured my knee, resulting in a stiff leg, and was unable to get into the car, which had no doors, so I disposed of it, and took in part exchange a late O.E. "30/98" Vauxhall, with a hydraulic braking *system*, but of course, no brakes. I fitted the front axle off the 4½-litre Bentley, and sold the car to a friend; it had an outside exhaust system off a "36/220" Mercédès, and a side-valve back axle, which resulted in a sort of cock-eyed crab-track. I then got one of the latest 3-litre Bentleys made, and fitted the engine out of the 4½, scrapping the rest of the latter, and this was the best of my Bentleys. In June, 1939, I drove from Ellon, north of Aberdeen, to Shap, leaving Ellon after a late breakfast, and arriving at Shap in time for a late lunch, doing the first 120 miles in two hours, which I have never done before or since, or hope to repeat. It cruised at 75-80, steered to perfection (with a huge bus steering-wheel) and had *brakes*, and on this run did 16 m.p.g.

A silly little man with a silly little moustache then appeared about to do something typically silly, so I had a good look round for a small good car for the Duration. By a fluke I got a good buyer for the Bentley (which has since towed a caravan at 72 m.p.h., I am told), and after a very careful inspection, got an 1,100 c.c. H.R.G. It is rather like a little "30/98," and very much like a Nash, and does 40 m.p.g., so perhaps I have bought wisely.

We get the cars we deserve.

ENTHUSIASTS IN THE SERVICES

We are receiving quite a lot of letters from enthusiasts who are in H.M. Forces, stationed away from home, and who enquire whether we can put them in touch with clubs or individual enthusiasts near to where they are stationed. It is easy to realise how these persons feel, away from their friends and, as likely as not, divorced from their cars. There must be many hundreds scattered around the country, at military training camps, R.A.F. aerodromes, searchlight stations, balloon barrage camps, etc., who are a long way from home and unlikely to move to other locations, or to go overseas, for a considerable time. If enthusiasts not in the Services would get in touch, with a view to corresponding, meeting and perhaps offering an occasional drive, to these fellows, much good would result. Naturally, we have no means of knowing which of our subscribers are in a position to do this, nor is it always possible to publish the addresses of Service readers. However, if those readers with the time and inclination to meet fellow enthusiasts in the Services will let us have their names and addresses, we will gladly publish them, so that lonely Service men can communicate direct.

CORRECTIONS

We regret, and apologise for, some recent errors. In the last issue the worst was that which described Stuart-Wilton as a pupil in the R.A.O.C., whereas he is actually an Instructor to the R.A.O.C. down at Frazer-Nash's. Incidentally, he occupies his spare time working on the M.G. which he used to race before the war, and remains 100 per cent. enthusiastic. His present car is a Fiat 500. Mr. Jones, not Mr. Bourne of "The Motor Cycle," is another instructor.

Another error gave the address of Bochaton Motors as 111, Notting Hill Gate, whereas the correct No. is 146. In the heading to John Bolster's article in the January issue, we carelessly suggested that the original two-engined "Mary" was converted into the four-engined, 4-litre car, and that the article described this conversion. Actually, as Bolster told us clearly at the time, he merely borrowed the two engines from his first car to install in the new chassis, and they could have been replaced in the older frame at any time had he wished to compete in the 2-litre class. Consequently, the article describes the development of the second, four-engined car, and not conversion of the original Bolster-Special. John is now toying with the idea of a 500 c.c. single-cylinder engine in the older chassis, for use in sprint events after the war, presumably in the unblown up to 750 c.c. category, reserving the 4-litre job for sterner racing.

THE 2½-LITRE DAIMLER SALOON

A ROAD TEST OF A VERY REFINED, HIGH PERFORMANCE CAR OF MODERATE PRICE, EXTREME SILENCE AND EFFORTLESS SPEED

A DAIMLER has not previously been tested by MOTOR SPORT since 1925, when we tried the sporting version of the then current 16 h.p. sleeve-valve model. For a considerable time after that the Daimler Company Limited was mainly associated with large and luxurious closed cars, amongst which the V12 "Double Six Thirty" and "Double Six Fifty" were notable cars. Then came the quite sensational news that the Knight double-sleeve valve engine which this historic British concern had adopted in 1909 and used consistently ever since was to be dropped in favour of modern, Pomeroy-designed, push-rod o.h.v. units in all models of the Daimler range. Even then, these fine cars did not appeal directly to the sportsman, except as typically British cars of medium size appealing as auxiliary to the sports job, or for general family use. The Daimler Rally Debut altered all that, introducing as it did the new sports Daimlers of advanced design and excellent performance. We have not yet been able to try these cars, but, in view of the interest which they have aroused, a test of the standard 2½-litre six-cylinder saloon, from which the sports 2½-litre is developed, over 350 miles under war-time conditions, is a valuable and very acceptable experience.

Here is a big and imposing car, with sober, yet beautifully balanced lines, very spacious and nicely appointed as to interior, and an effortless car on long, hurried journeys. Right from the start, as we slid into the driving seat after a twelve hour spell of A.R.P. duty, the quiet dignity of this modern Daimler was apparent. The big, thin-rimmed wheel, with 3 inches of column adjustment, is nicely placed, the leather-upholstered bucket front seat easily adjustable and very well-shaped, the preselector gear lever comfortably reached through the wheel by the right forefinger, and the near side sidelamp just visible below the long bonnet, ahead of which the traditional Daimler radiator flutings and "real" large-sized filler cap seem entirely reassuring. Even a momentary glance at the external lines of the car serves to explain the appreciative glances to which one becomes accustomed from passers-by, while although the interior arrangements of the four-door six-light saloon follow conventional practice, they are very effectively carried out. Even as you commence driving, other attributes of the Daimler become apparent. The preselector lever of the Wilson box is moved to second gear position (bottom being used only on a gradient), and the clutch pedal let up. There is a slight re-action, but the car remains stationary, until the hand-brake is released, when it steams off as the fluid flywheel takes up the drive. A perfectly smooth start is thus obtainable in any gear, as it is practical, indeed normal tactics, to hold the car on the brakes, with the engine idling, even in top. Later we demonstrated to an amused audience in a seaside car park that the Daimler could be held by getting out and leaning on the radiator, although still in bottom gear. This combination of fluid flywheel and preselector gearbox (Vulcan-Sinclair and Daimler patents) renders driving practically fool-proof, and must be a god-send to women who now have to get on with the daily driving, not only from behind the wheel, but entirely alone. On the other hand, of course, an enthusiast can use the clutch-pedal in the ordinary way, avoiding holding it out too long, while still benefiting by the cushioning action of the fluid drive and epicyclic bands. It is worth mentioning that the writer had had very little previous experience of the Wilson box, but he found gear changing simplicity from the commencement, given a little practice in avoiding altering the throttle setting while changing down. In any case, moving the Daimler off is rendered even more absurdly simple because she will take top gear after a very few yards—we soon found ourselves going straight from second into top and very early at that, not so much with our minds on "Pool," as because the engine is so very willing. To be strictly honest, this 2½-litre engine pulling 1½ tons of motor-car is a bit more noisy towards maximum on the gears than some engines in silent luxury cars costing upwards of three times what you pay for the Daimler. But you only realise this from very recent experience of such super-cars, and ordinarily the Daimler 2½-litre would be considered 100 per cent. silent. It is inaudible when idling and barely more evident at cruising speeds of 60-70 m.p.h. For a car the chassis of which is valued at only £400, even in these hard times, such under-bonnet silence is certainly something to write to the Front about. It is a characteristic that adds very greatly to the pleasure of handling what is in any case an impressive car. Moreover, it is a silky, responsive engine which can be forgotten. Slight tappet noise could be heard at the end of the test, but only with a window down, or when standing by the radiator, and no flat-spot was experienced anywhere, acceleration being quite consistent all through the range, save for a slight hardness on occasion, possibly as the fluid drive adjusted its torque. After only a brief experience of it, you come to warmly respect this neat unit, with close-set distributor, coil, enclosed h.t. leads, dip-stick and starter in the near side, and S.U. carburetter feeding through a polished, buffer-ended, four-branch manifold on the off side. The finish smacks of good marine practice, being in grey paint. There is a big oil filler in the valve cover, and a large air-cleaner for the carburetter.

At first we set this Daimler down as a nice, but rather stately carriage, trying it solely in built-up areas. Later we found that it has a very brisk performance, the power coming in usefully once the speed rises, so that at over about 30 m.p.h. in third or 40-45 m.p.h. in top, there is ample reserve for instant increases of speed. On the open road 60 becomes the normal gait, or 70, with no more effort, if time presses. The absolute maximum (speedometer readings) was 74 m.p.h., or 80 m.p.h. assisted by slightly favourable gradients. So this big saloon is a really fast car on 2,522 c.c., although the ease with which it reaches, and holds, these speeds, running with no noise save that of the air-rush over the body, is even more worthy of comment. On the gears, as we have said, it becomes usual to do a few yards and then change up, getting top at about 40 m.p.h. if you wish to hurry; the maxima, for record purposes, were: 1st: 17 m.p.h.; 2nd: 35 m.p.h.; 3rd: 47-54 m.p.h. The gears are quiet, but the sun and planet wheels purr happily in neutral. When accelerating, in the gears or at over 20 in top, audible pinking occurred, which could be cured by going on half-retard at the expense of power—the test was made on Pool petrol, of course. Taking the Eastbourne road, delightfully deserted even on a warm Sunday morning, the Daimler was extended with no regard for fuel-preservation, in order to assess its qualities as a means of rapid transport. The suspension gives an extremely fine ride over the worst surfaces and there is no particular fore and aft pitching tendency, any shocks which *are* transmitted being more in the nature of short, sharp bumps. Further experimentation off the beaten tracks confirms the exceptional nature of this springing, yet there is no suggestion either of undue suppleness, or of the presence of independent wheel movement at the front end. Fast cornering was freely indulged in, and the Daimler showed up very well indeed, the coil-spring i.f.s. undoubtedly contributing much to the general stability, while there is no tendency to undue roll. On one bend the car got into a double slide on a dry surface, and in trying to analyse what occurred we decided that the very manner of the car's running resulted in over-fast cornering—so effortlessly does this car perform that you are apt to go into a bend of the 45 m.p.h. kind at a cool sixty. When this happens, the tail comes round, and there is some tendency to over-steer when correcting. On all other occasions, the car goes round clean, with a slight suggestion of floating outwards as a whole, on long, acute bends. At first we put this down to tail float, but more pressure in the rear tyres, while lessening the music, did not effect a complete cure, and it seems possible that the supple independent springing does allow the car to float at times. In any case, this only becomes evident when going really fast down narrow lanes, where it is essential to keep close to one's own side of the road, and in general, the road-holding and all round stability is above reproach. The steering is rather low-geared, needing 3¼ turns lock to lock, against which the lock is very

THE 2½-LITRE DAIMLER SALOON—continued

generous, giving a turning circle of 40 feet, which is appreciated times without number. It is light steering, with full and fast castor action. Only occasionally, as bad undulations are met, does any column-movement develop, while only very slight reaction is felt at the wheel, probably more in the nature of regular vibration along the spokes than return road-wheel movement, as the steering action is quite divorced from the placing of the front wheels. The wheel might be set a trifle lower and slightly higher gearing used, with advantage to fast drivers. Remembering that this Daimler is primarily a luxury car, controllability is of a high standard, and over 19 miles of winding and varied going we averaged over 38 m.p.h. while definitely driving with a view to conserving fuel, which speaks for itself. The 6.00″×16″ Dunlop E.L.P. tyres are rather susceptible to changes of surface so far as noise is concerned.

There are André-Girling brakes, and they act as is expected; a test stop on a tarred road from 30 m.p.h. showed a stopping distance of 26-27 ft. in a commendably straight line, in spite of evidence of locked wheels. No real pressure was used, and in ordinary applications, a mere touch on the pedal is called for, while the action is silent and delightfully progressive. The right hand, "umbrella handle" hand-brake is easily reached by stooping forward slightly, slows the car without being especially powerful, which is all a parking brake need do, and releases quite well.

Owing to the clear floor space, easy entry and exit is effected on either side, and three persons can be accommodated on the front seat, with the two seats level. The radiator remains steady at all times, and the bonnet, which has well-acting single catches, does not ripple, while only over really bad going is any scuttle movement evident. As we have said, the car pulls away at once, if not very rapidly, in top gear and it follows this out by hanging on to top very manfully up steep gradients. It never dropped below 30 m.p.h. up River Hill, near Sevenoaks, three up, after entering the hill at 55 m.p.h. or so, and it took Tilburstow at about 45 m.p.h., all but holding a 20/25 Rolls-Royce coupé, of greater capacity. At anything above 40, there is ample response on top gear and, coupled with the excellent brakes and stable cornering, very decent averages can be realised with an entire absence of effort. The unusual silence of the engine disguises any sense of hurrying, but the beautifully made body shares in this claim. Only one almost insignificant rattle was present, and the deep, leather-upholstered seats are most accommodating, that at the rear having a wide, fold-up arm-rest and individual foot-rests. The thick doors shut very nicely, and the six windows and deep screen provide full visibility. In the Daimler one senses an impression of luxury, both actual and implied, under all conditions of motoring, and envy for owners of American tinware changes to pity in the initial miles. The big luggage locker has a downward opening lid, with a delightfully balanced action, and the spare wheel lives in a locker beneath. The Weathshields sliding roof works freely, and contributes to real ventilation, the windows wind easily and have rain shields, there is ample ash-storage, and the rear blind acts well, though appearing to be of rather thin material. The facia has a large locker on the left, with lockable walnut lid. The rear locker and doors lock; the fuel filler and bonnet do not. The big radiator cap has a screw action; the fuel filler is quick action, but seemed to release some fuel under surge-action. From left to right, the instruments and controls are:—panel with dash lamp switch, cigar lighter, ignition lamp, oil-warning lamp, reserve fuel tap, advance and retard lever, and standard Lucas lighting switch; Jaeger speedometer with trip and clock; water thermometer, ammeter and fuel-gauge dials within one big dial, and, below the facia, ash-tray, hand throttle and mixture controls, the latter with a fairly good pull-out action. There is no oil-gauge. The fuel tank holds 12 gallons, of which 1½ are trapped in reserve, but no contents are shown for reserve, which, with the reserve tap contro pulled out, constitutes an excellent reminder. The gear and brake pedals are well-spaced, perhaps a trifle high from the floor, and the right hand accelerator is of treadle type. All the pedals have a fairly light action. In the wheel centre is the horn button and direction indicator switch on normal Lucas lines. The indicators were not automatically cancelling, but worked positively and audibly; the wind horn beneath the bonnet was rather loud. The central rear-view mirror is fairly well positioned, but the shallow rear window somewhat reduces the rearward view. The electrical cut-outs are accessible under the bonnet on the off side and the starting handle lives in clips on the near side. The lamps are 9 in. Lucas Biflex, good in spite of the mask. The sidelamps have visible indicator tops, which were still uncovered. When the ignition key is removed, everything electrical save the horn and interior light goes dead; a good point. The interior light is very adequate and each facia dial has separate lighting which shows up the readings very clearly. The doors are hinged from the rear pillars. The A.C. fuel gauge is affected by camber, but otherwise seems quite accurate. There is Tecalemit chassis lubrication from the engine sump, the action being entirely automatic upon operation of the brake pedal. Fuel consumption is a sore point these days. Over a truly varied 350 miles we used under 23 gallons, and checked over 250 miles, mostly with no attempt to save fuel, we recorded 14-15 m.p.g. No water or oil was added; normal water temperature is 170° F. The engine always started instantly in spite of Cesspool fuel and pulled away at once with a minimum of mixture-control attention and very little protest from the single S.U.

The Daimler should be a very easy car to clean, as the lines are smooth,

BRIEF SPECIFICATION

Engine: Six-cylinders, bore 69.56 mm., stroke 111.5 mm. Capacity 2,522 c.c. R.A.C. Rating 18.02 h.p. Push-rod o.h. valves. S.U. carburetter. Coil ignition.

Gearbox: Preselective. Steering column control. Ratios: 4.86, 7.58, 11.27 and 19.82 to 1.

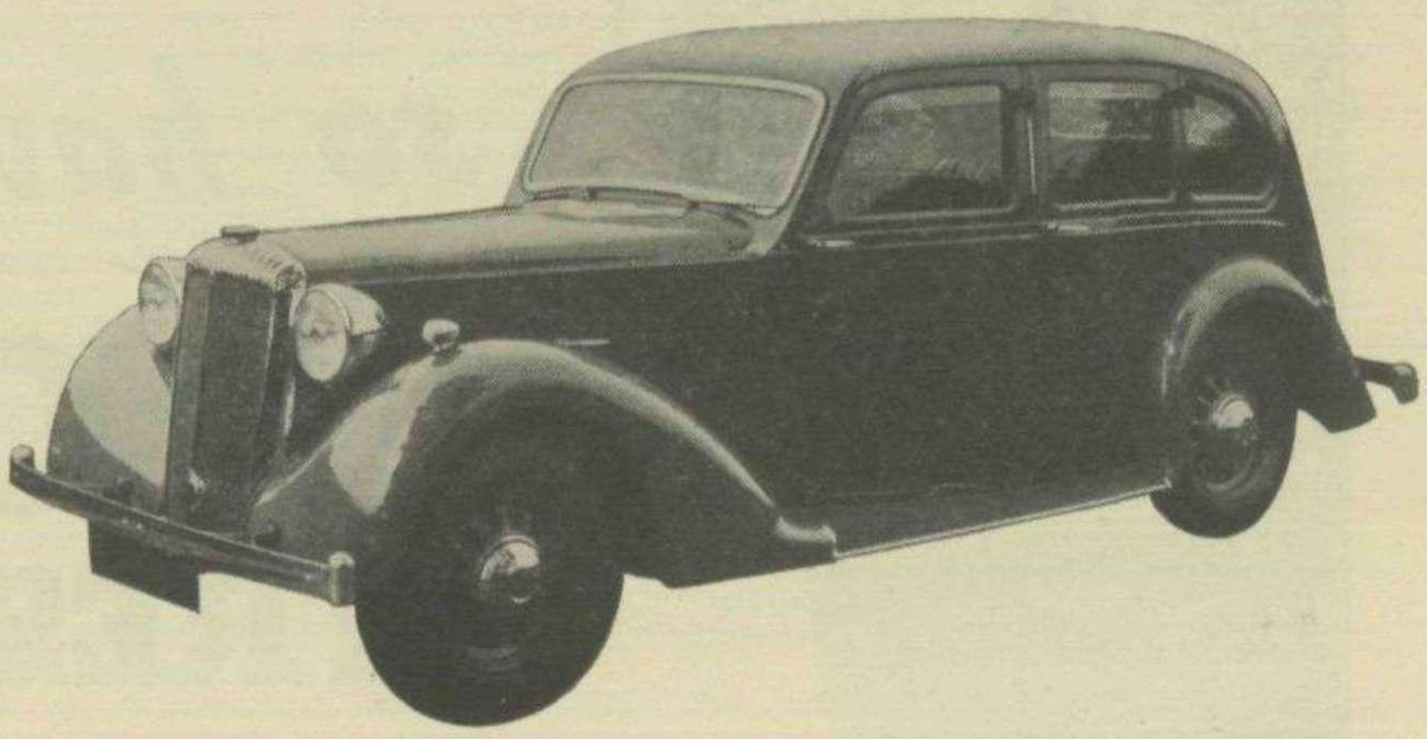
Suspension: Independent by coil springs at front. Half-elliptic with anti-roll bar at rear. Luvax shock-absorbers.

Brakes: Girling system. Dashboard hand-lever.

Dimensions: Wheelbase: 9 ft. 6 ins. Track: 4 ft. 4 ins. Length: 15 ft. 0 in. Width: 5 ft. 4½ ins.

Price: Six-Light saloon: **£525.**

Makers: Daimler Company, Ltd., Coventry (Coventry 4161).



The 2½-litre Daimler Saloon has a dignified outward appearance which is reflected in its manner of going

THE 2½-LITRE DAIMLER SALOON—continued

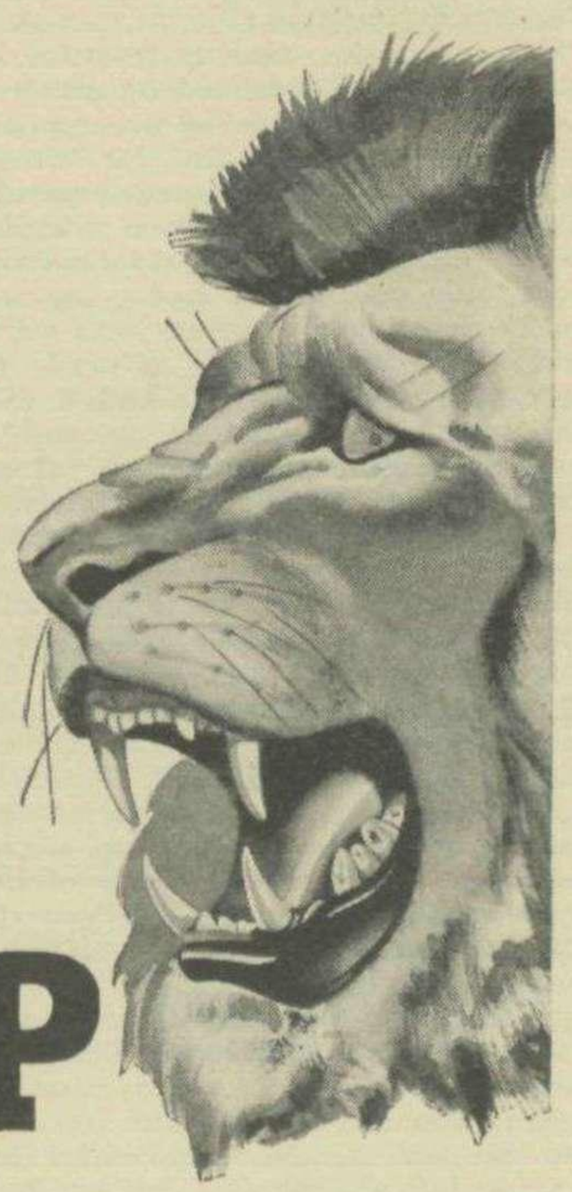
and the wheels are spoked discs. From the front the lines are particularly well-balanced, and the car as a whole is dignified and smart. A slight improvement could possibly be effected by bringing the rear window down a trifle nearer to the waistline, if by so doing luggage locker space would not be seriously curtailed, but that is a very minor point, as is the fact that we rather dislike a forward-radiator setting, even in 1940. There are "pulls" for the rear seat passengers and excellent, taut-lipped pockets in each door.

Turning to the specification, the six-cylinder 69.56×111.5 mm. (2,522 c.c.) engine is rated at 18.02 h.p., and has a 5.5 to 1 compression-ratio. The coil ignition has automatic as well as hand control of advance and retard. Cooling is by fan and pump with temperature control by Smith thermostat. The crankshaft runs in four bearings and the camshaft is driven by roller chain. The Daimler fluid flywheel and self-change gearbox are in unit with the engine, and the drive goes by open propeller shaft to an underslung worm rear axle—one of the few cars now using worm drive. No foot wells are needed in the rear compartment in consequence. The box-section chassis frame has cruciform bracing, and there is a built-in jacking system. Front suspension is independent, with transverse pressed-steel swinging arms, located by radius arms and damped by large, vertical coil springs. Rear suspension is by half-elliptics, with anti-roll bar, damped by Luvax shock-absorbers. The rear axle is three-quarter floating. Fuel feed is by A.C. pump. The steering is Marles cam and double roller. Tyres by Dunlop. The complete car weighs 30½ cwt.; the chassis 21 cwt. The gear-ratios are 19.82, 11.27, 7.58 and 4.86 to 1, with 26 to 1 reverse. The engine revs up to about 5,200 r.p.m., and 1,000 r.p.m. in top=16.5 m.p.h. At 70 m.p.h. in top the crankshaft speed is 4,242 r.p.m. The gearbox capacity is 5 pints, the flywheel 8.5 pints, automatically fed from the engine sump; the rear axle holds 4 pints. The car we tried was in all black finish and very attractive. Maroon, blue, light grey, slate grey and green finishes are listed.

In conclusion, the Daimler provided us with a welcome week-end away from present-day anxieties. Three of us drove her and found complete confidence in the car, whether crawling along a seaside promenade or driving flat out over difficult roads. The silence of engine, and coachwork imparted a sense of luxury in keeping with the house of Daimler, and the top gear performance worthily upheld tradition. Until we lifted the bonnet we were not certain whether the engine was the standard or sports version; certainly we thought the price was £550 before the war and reasonable at that. Now we find that this standard 2½-litre saloon is priced at only £525, even with the recent war-time increase, with a four-light sports saloon available at the same price, The Rally saloon at £615, the Salmons coupé at £580, Salmons cabriolet at £645 and the Abbott coupé at £605. We can well understand why Daimler owners are enthusiastic, and we imagine that those who still motor many miles under war conditions with business worries on their minds must find the 2½-litre Daimler a real god-send when seeking a restful and economical means of fast travel—which probably explains the numbers we saw on the road in a single week-end. At their Kensington depot Daimlers say they are as busy as ever, and a fine array of modern Daimlers you find there. Amongst them was an open sports job with overdrive top and a maximum of 90 m.p.h. Judging by the Daimler saloon we have recently returned, the sports models must be very interesting cars indeed; a belief we hope to be able to prove in the near future.

"The Lion has TEETH!"





...so have

DUNLOP TYRES

40H/115

Letters from Readers

Sir,

I note in my April copy you published my comments on the picture of the alleged 1907 G.P. Fiat, appearing in the March issue of MOTOR SPORT.

I would point out that in the published letter the car is referred to as a probable 1913, and not as 1912 which I suggested it was. As those who remember the race will realise, no Fiats raced in the 1913 French G.P. and therefore the letter loses its point.

I am, Yours etc.,
CAPT. H. W. BUNBURY.

Mildenhall.

[Authoritative circles now seem to agree with Capt. Bunbury that the Fiat in question is 1912 and not 1907.—Ed.]

* * *

Sir,

In the March issue of MOTOR SPORT, Mr. D. R. Hagen requests information regarding the 2-litre Lagondas at Le Mans in 1929. Perhaps the following will be of interest. Actually no Lagonda ran at Le Mans in 1929. It was the previous year that witnessed a works team of three cars, all four-seaters, competing in a field of thirty-three starters—all of them cars such as manufacturers could expect to sell for everyday motoring!

It was not a great day for Lagondas, which, though undoubtedly fast, were unlucky—or was it over-eagerness on the part of some of their drivers? At all events, the start saw one Lagonda badly left at the post. Quite early, a second, attempting Mulsanne at impossible speed, embedded itself for keeps in a sand-bank, only to be rammed by the first Lagonda, which broke a frame and sustained other damage as a result. Strange to relate, this Lagonda was the only one to finish the course, which it did eleventh at an average of approximately 56 m.p.h. The third Lagonda was also eliminated in the early stages with an empty radiator.

The race was won at 69 m.p.h. by a 4½-litre Bentley, a second Bentley putting in a lap at approximately 80 m.p.h. Another, and perhaps the best British achievement, was that of a front-wheel-drive 1,500 c.c. Alvis, which, in addition to winning its class, finished sixth in the general classification at an average of 59 m.p.h.

These speeds may all seem pretty tame to-day, but in 1928 the Le Mans circuit was a very different kettle of fish, and still included the famous Pontliene hairpin.

I am, Yours etc.,
F. LYCETT.

London,
S.W.5.

Sir,

Although somewhat late in the day, I should like to add my praises to your highly commendable effort in "carrying on" and the continued production of your excellent journal. Long may MOTOR SPORT flourish.

It appears that various enthusiastic folk are furnishing evidence that the spirit that broods over fast machinery has not as yet gone into hibernation "for the duration." Here is my contribution. Last Autumn, in southern counties, a very impressive 4½-litre Bentley which was less windscreen and somewhat cut down. Pick of the bag: a genuine "San Sebastian" Salmson which, the owner informed me, was the last of that particular model to leave the works. Blue finish, Cozette blown and twin o.h.c. with a tendency to oil plugs. Early in the new year a T.T. Replica 1½-litre Aston Martin put in a not unnaturally rapid appearance. On leave in the north recently, I had some delightful runs in a real dyed-in-the-wool Ulster-Austin—most exhilarating was the raucous note peculiar to this model, interrupted on occasions by minor explosions from the blower release valve. A veritable paragon among small cars, with superb road-holding. And lastly, on returning to the south, an open four-seater, 14 h.p. Marendaz Special. Not too bad, considering prevailing conditions, although I fear my main connection with automobiles has been confined to the passenger seat of sundry lorries, fruits of some energetic "hitch-hiking" when proceeding on week-end. Glad to see the old Austin Seven tourer putting in an appearance in increased quantities. Fine little cars; I had one for some time, which, albeit thirteen years old, gave no trouble, and had truly astonishing performance.

Here is a suggestion that I should like to put forward. Many may bewail that there are no longer any sporting events in which to compete and that they have had to lay up their sports-cars or considerably curtail their peregrinations in same. But what of the enthusiasts who had only very humble vehicles and were forced to follow the "Sport" from the wrong side of the fence, any way? There were lots of people who could only keep up their motoring associations by means of the Press and radio, one of their main joys being simply to "talk motoring." Now, Mr. Editor, I can assure you that the average barrack-room is by no means 100 per cent. enthusiastic in the motoring sense of the word, so couldn't some means be found (perhaps through the pages of MOTOR SPORT?) whereby small numbers of interested persons up and down the country could arrange to get out of camp for a few hours and repair to some convenient hostelry and discuss those two subjects of never flagging interest, to wit: sporting motoring and vintage cars. Not much, I admit, but definitely something to do until Brooklands, Lewes, Prescott, Donington and the like open up once more.

I am, Yours etc.,
J. O. BALLARD.

Somewhere in England.

[The idea of enthusiasts getting together to "talk cars" is very much to the point; the question is, how best to get the ball rolling. We hope that regular meetings of sports-car owners will soon be a feature of the war, and can think of no better organizing body than the Vintage S.C.C.—Ed.]

* * *

Sir,

In these troubled times with a nuisance of a nation to be put back (?) into a strait jacket, and therefore practically all modern sporting motoring completely curtailed, I must confess to a feeling not far short of bitter anger that there are persons so lacking in imagination as to chide you for frequent mention of Edwardian and vintage motors. What better time than this to dwell on glorious cars of the past?

It is a very immature enthusiast indeed who cares only for modern fast and distinctive cars. Any pre-war (I) car that could equal or better a goodly number of to-day's smaller sports-cars in the matter of top speed is surely worthy of more than passing respect.

I've always thought it a pity that MOTOR SPORT had never published pictures, or brief descriptions of the larger, really rare super sports-cars of pre-war vintage. To my mind, the two that stand out are the "Prince Henry" Austro-Daimler, and the "Prince Henry," Mettalurgique (sp. ?). Of the former, I have been told by the service depot (fifteen years ago) in New York City, that no more than eleven found their way to this country. Probably the rarest of all was the Mettalurgique. This car *really* deserves an article, if only a brief one. From "The Autocar" of 1912 or so, I seem to remember that the engine was almost the same capacity as the Austro-Daimler, but carried four gigantic overhead intake valves (the 70 mm. diameter valves of the Austro-Daimler are sufficiently gargantuan!), one to a cylinder, nearly as big as the bore, while there were no fewer than four lateral exhaust valves (horizontal) to a cylinder. I cannot remember the b.h.p. but the speeds on the gears would be impressive to-day, 35 m.p.h. on bottom, 60 on second, 80 on third, and 95 on top. This car was actually illustrated in an issue of "The Autocar" for 1912. I, for one, would certainly like to know how many were ever built.

LETTERS FROM READERS—continued

Going back to the "Prince Henry" Austro-Daimler, mine is a 1912, engine number 1329. Speeds in the two lowest gears are not outstanding, being about 18 and 30 m.p.h. respectively. Over 50 can be obtained on third, and this gear possesses very satisfactory accelerative powers. Top is 2.5 to 1, and therefore needs no comments as to its "free-running" properties, and other attendant joys. The engine carries a R.A.C. (as well as S.A.E.) rating of 27 h.p., while 80 was delivered on the brake, at just what r.p.m. I can't say, though I do know that 1,900 represented its safe maximum.

I know of a 1913 Austro-Daimler that attained 55 easily in third, and a 1914 model that could reach 70 in the same gear, though it had been admittedly doctored a bit. From 1912 through 1914 the "P.H." model had practically no mechanical changes. I believe it came out in 1911, with chain drive, though all three subsequent years were shaft driven. The bore and stroke was 105 mm. × 165 mm. Main oil tank was on the dash in which was a multitude of plunger pumps, each with its own pipe to main bearings and cylinder walls. Base chamber was very shallow, the big ends dipping—I always trusted (!)—into whatever oil happened to collect there. On the left of the oil tank was a hand operated plunger oil pump that, I was told in all seriousness, was for strenuous bits of running! When I dismantled the engine I found that this pump *really* did squirt a jet of oil at each down stroke, on all four big ends simultaneously. The little pumps in the dash tank were driven by skew gears from the rear of the single overhead camshaft. The valves, both intake and exhaust, were inclined and opened, not by contact on their stems, but by forked rockers that engaged collars on the stems very close to the valve guides. Ignition was by two Bosch magnetos driven from the vertical shaft (to the camshaft). One was a dual, giving coil ignition for starting. Dynamo was chain driven from the clutch to gear-box shaft in the manner of the Rolls "Silver Ghost." Lights and starting were six volt, the components obviously being added on arrival in this country. Petrol feed was by pressure in the rear tank (which holds about 16 U.S. gallons). Preliminary pressure was pumped by hand on the dash; when the engine started, a weird exhaust pump attached to the fourth exhaust stack, or lead to the muffler, more or less kept up pressure. This pump, too corroded to dismantle, appears to work at each explosion, compressing a small amount of air as it reacts from each "impact."

Steering is the quickest I have ever experienced; slight pressure on the wheel rim suffices for all but the sharpest bends, while those met on the average highway are simply not dealt with.

The picture before one, that imperceptible inclination, is more than sufficient. The castor action is excellent. Suspension is of a very robust sort, but after 60 m.p.h. it takes on a more "flowing" quality. These cars were, with original tyre equipment, supposed to do around 85 m.p.h. I've been told. Being such a rare creation I have refrained from exceeding much beyond 65 m.p.h. Northern New England roads are not like those of South Georgia.

Incidentally three pedals are used; as in the contemporary Isotta and Benz cars, there were two separate foot brakes working on a large drum behind the gearbox. The hand lever controlled expanding shoes on the rear hubs.

Totally aside from the above, there are two items in the March issue that I would like to touch upon.

Now that article that appeared in "Esquire" by that supercilious Sagendorph (needless to say, none of us enthusiasts ever heard of him before, and the well-known Gallico should damned well stick to his golf, boxing, etc., before wading out into what is for him the unknown).

Keech *was* killed in a multifold crash at Altoona, but after Indianapolis, 1929, of course; that fall or late summer I'm sure. Yes, Jimmy Murphy *was* killed at Syracuse, but *on* a dirt track. That mile triangle at Syracuse has always been dirt or macadam, never boards as Sagendorph infers.

Item No. 2 is that "1907" Vanderbilt Cup Fiat photo that Professor Fales sent you. I feel I should argue with him personally before writing to you, but so far we have lacked the chance to see each other for some months.

Now this Fiat, when first shown to view about two years ago, was stated to have won the 1911 Vanderbilt Cup Race at Savannah. I have before me a *New York Times*, dated November 11th, 1911, showing a map of the course (how that makes a real Yankee sportsman cringe!—the glorious days that used to be!—Santa Monica, Elgin, and others!) and pictures of many of the contestants. Except for wheel sizes the Fiats shown bear a very marked resemblance to the one shown on page 48. Somehow I feel sure that that high, massive radiator was not used by Fiat as early as 1907. Nazzaro's Targa Florio winner (for that year) was much more on the order of Anthony Heal's. This will bear further investigating.

I am, Yours etc.,
DILLWYN PARRISH.

Vermont,
U.S.A.

[Further proof of American enthusiasm, and a most interesting letter. The date of the Fiat has already been queried, and it is now generally agreed to be later than 1907.—Ed.]

* * *

Sir,

In the current issue I like H. L. Biggs's "Chain Gang Days," and am looking forward to his Alfa-Romeo article. Could you possibly dig up a similar Lancia effort? As a sometime owner of a "Lambda" fourth series, I should be very interested, especially as so far I have not come across a history of this marque—except for paragraphs which crop up occasionally in your magazine.

I am, Yours etc.,
WILLIAM A. CRABB.

139 Sqdn.,
R.A.F.

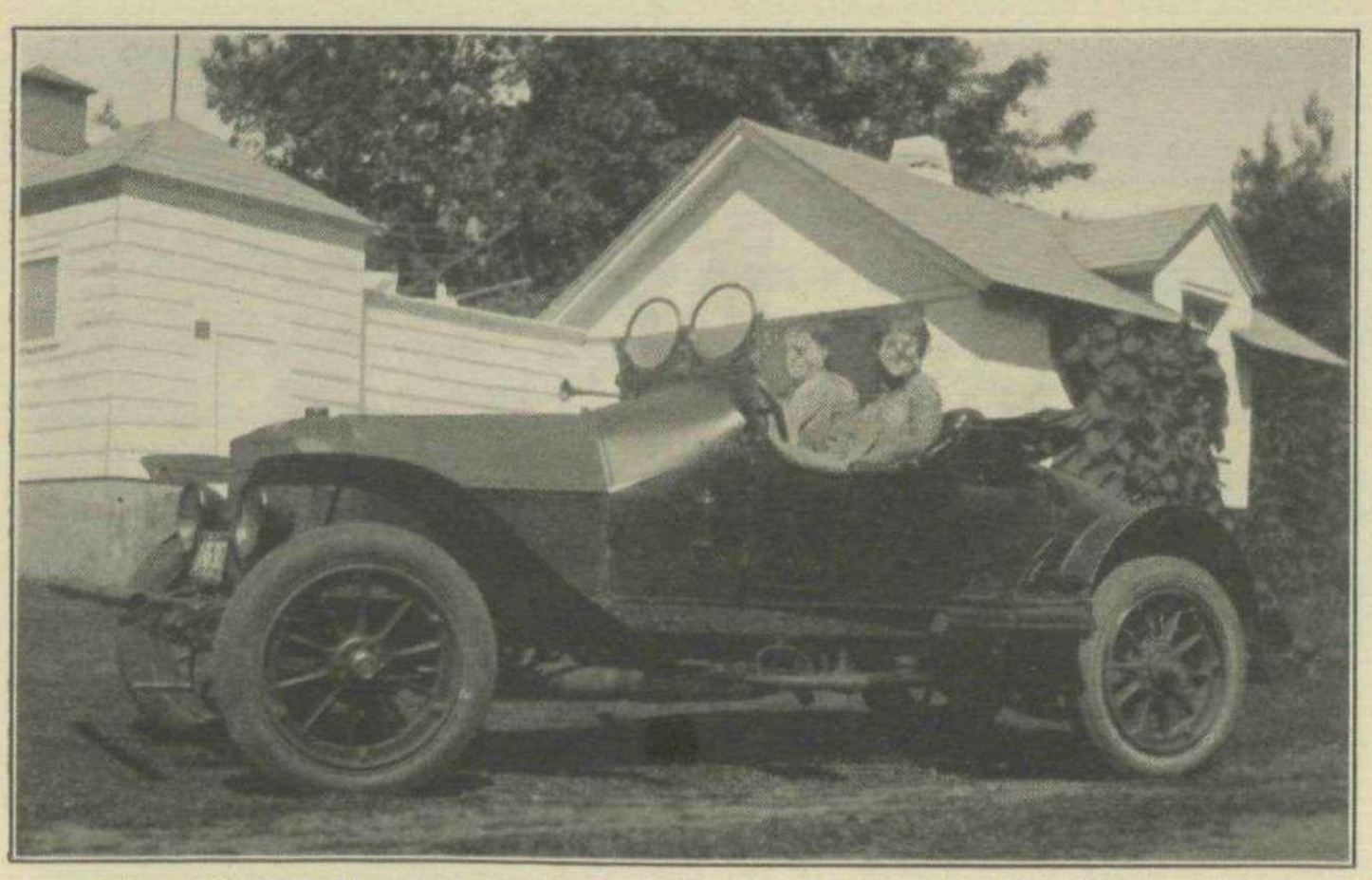
[Letters about Lancias, please.—Ed.]

* * *

Sir,

I have noted with interest the observations of Mr. Clutton and Mr. John V. Bolster, relative to the performances of the "30/98" Vauxhall and the 3-litre Bentley.

Doubtless Mr. Bolster is correct in stating that the "30/98s" were superior to the 3-litre Bentleys in initial acceleration, in acceleration in top, and wear of bearings, etc., but in my somewhat biased opinion (being a Bentley fan since my school days) I would say that a doctored 4½-litre Bentley is the superior



The "Prince Henry" Austro-Daimler of **1912**, *now in America, owned by Dillwyn Parrish*

LETTERS FROM READERS—continued

of a hotted up "30/98" in many ways—also I would point out that the 3-litre Bentley has a h.p. of 15.9 and therefore it is rather unfair to compare it with the higher powered Vauxhall.

Mr. F. E. Elgood lapped Brooklands last year at 127 on a 4½, which started life as an ordinary production model. The 4½s of Mr. Forrest Lycett and Mr. L. C. McKenzie—which have had outstanding performances at Brighton, Crystal Palace, etc.—would, I believe, be a match for any "30/98" Moreover, I think it would be a fairer comparison to take the performances of these "lightened" 4½s as the production model was definitely too heavy in many directions, and of course, half the secret of the "30/98" performance is the power/weight ratio.

However, far be it from me to dash into this controversy too quickly, as I must admit that I have never driven one of the famous "30/98s" and am, therefore, ignorant of first hand knowledge—nevertheless, my own "4½" Bentleys give me every satisfaction, and a speed in third of nearly 80 m.p.h., coupled with a maximum of 93 m.p.h. on a good open road for a car used every day for business purposes, needs some beating. Also in five years of Bentley motoring (3 and 4½-litres) I have never had to stop on the road except for punctures—that is to say, until last Saturday week when I used a 4½ which had been standing for many years—the trouble in this case was merely dirt in the petrol system, and this would, of course, happen to any make.

I would add how much I look forward to MOTOR SPORT each month, although it now costs 1/-. I am made to pay for it myself; previously my wife just included it with the newsagent's bill, but the increase was noted, and if I had not produced the necessary oof I was threatened that the standing order would be cancelled.

I am, Yours etc.,
C. J. L. MERTENS.

London,
N.W.2.

[What did we always say about women!—Ed.]

* * *

Sir,

I have noticed several letters *re* vintage cars, but none after my own heart. I am a "Brooklands" Riley enthusiast.

My model—W.K. 7162—is at present undergoing a thorough overhaul, and is being extensively modified. At some time, a previous owner fitted large Itala brakes—I take my hat off to him—they're "super."

Besides polishing con-rods, flywheel, crankshaft, etc., I have faired in the con-rods, fitted a pair of "super-super" camshafts, and am fitting four Amal carbs., and the exhaust system has been redesigned.

The car has been lightened, and several alloy fairings "bashed" out and fitted, also the under carriage faired in by a 26g "tray-thing." With all this and the special "Hep." pistons and copperizing I have had done to head and valves, I expect a real honest-to-goodness 90 when I put her on the road again for the third quarter.

I should like to hear from previous owners of this car.

My present transport is a Riley Nine "Monaco," which although fairly recent, has had a huge rebore and has been known to dust up a "Gamecock" which lives locally.

May I, in conclusion, wish you every success in your campaign for "Motor Sport" *during* the war and if you do succeed—my Riley will be there. [Our correspondent refers to the now cancelled race.—Ed.]

I am, Yours etc.,
NORMAN D. ROUTLEDGE.

Chatham.

* * *

Sir,

The coals of fire so profusely heaped upon my head by Mr. John Bolster, writing in defence of the 30/98 Vauxhall, are not altogether unexpected; but as I have received almost equally passionate complaints from incensed 4½-litre Bentley partisans, my conclusion is that I have treated the whole matter with a truly noble impartiality.

So far as Mr. Bolster's letter is concerned, it is surely unreasonable to compare the performance of a 4½-litre and 3-litre machine of almost identical weight? I never denied that the 30/98 was faster, but speed is not the only requisite of a fast hack-tourer, and if the owner of a standard 30/98 is going to make full use of his undoubted performance, under modern traffic conditions, he will be obliged to take risks with his funny brakes.

It is undoubtedly true that a 30/98 can be *made* into a better car than any 3-litre Bentley, but I was careful to refer to each machine in standard form. The Bentley, as supplied in 1925, was as immediately practicable for daily, trouble-free use as it is to-day, but the purchaser of a 30/98 had to fit different brakes, find means of preventing the torque arm, speedometer drive, and dynamo drive from throwing themselves away at inappropriate moments, and remove a large proportion of the flywheel; to name the most urgent modifications only.

Undoubtedly, the gearbox on a Bentley has to be mightily exercised if the car is to be got along worth mentioning, but this is only to be expected with a small engine; and, wonderfully as the 30/98 accelerates on its top gear, it would go much better with less ludicrous ratios, especially with a raised compression. Something like 3.3, 4.4, 6.4 and 10 to 1 would make a phenomenal difference.

There is, surely, a lot more to be said on the subject of non-detachable cylinder heads than the added cost of decarbonization. Personally, for example, I prefer to have something between my coolant and lubricant that is a trifle less perishable than a slice of household asbestos.

The Bentley engine is certainly no smoother than it has need to be, and I deplore the fault no less than Mr. Bolster; nor am I unaware of the other respects in which the Bentley fell short of perfection. But I still hold that, in standard form, the 3-litre Bentley and 12/50 Alvis were perhaps the most serviceable and generally practicable sports-cars ever put on the market. I think this is borne out by the remarkably large number still in daily use, even since we have been going in for this war business.

Even on grounds of performance I doubt whether a standard 30/98 was a lot quicker than a standard 3-litre of the same date, and certainly not enough to justify the difference between 16 and 24 h.p.

I am, Yours etc.,
CECIL CLUTTON.

London, W.11.

* * *

Sir,

Will you please ask whether any of your readers have a handbook for a "P" type M.G. Midget, 1934/5 model?

I am, Yours etc.,
J. ROE.

1, Liverpool Lawn,
Ramsgate.

* * *

Sir,

I am driven to write to you by a sentence appearing on page 77 of this month's MOTOR SPORT, in the invaluable "General Notes." If the special does come into being, and by some miracle it will be possible for you to baptise it at Nailsworth, I implore you to let me know the date, that I may turn up to watch. I am in the happy position of being pretty well in the midst of the Gloucestershire Trials Country, and Nailsworth is a mere six miles away. I inspected the Ladder on a motor-cycle in April, and I plan to visit as many hills as a basic petrol ration will allow. May I suggest that if you are in this part of the country you attempt to inspect Breakheart, near Dursley (two miles from here)? This struck me as the most awe-inspiring acclivity I have yet seen, and I know of only one *car* trial that has used it. So if you manage to turn the nose of your special in this direction, I shall be eternally grateful if you would send me details.

Next, something for the MOTOR SPORT census. I have changed the motor-cycle for an Austin Seven, actually the "Speedy" model that A. E. Moulton drove in the C.U.A.C. June meeting of last year. I plan to run it for this year, until called up, on basic rations.

I found the Georges-Irat road test particularly interesting, as it included a few remarks on the Tracta. A friend has just purchased from a dump a 1929 model, for which he paid £10. It appears to be in excellent order, and certainly, in my hands at any rate, possesses the "marked directional uncertainty" you mention. Further information would be very welcome.

I am, Yours etc.,
A. H. WILSON.

Uley,
Gloucestershire.

THE BRESCIA GRAND PRIX

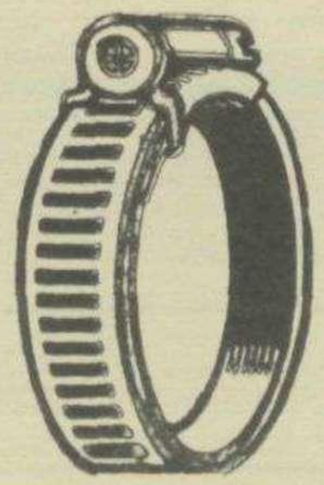
SENSATIONAL SPEEDS IN ITALIAN SPORTS-CAR RACE. SWEEPING SUCCESS FOR B.M.W. ALFA-ROMEO OUTCLASSED

THE Brescia G.P. this year replaced the famous 1,000 Mile Miglia Race, and was nearly as strenuous for the unblown sports-cars up to 3-litres, for which it was organised. It will go down in history from many aspects. It was won by a German B.M.W. at a time when Germany is engaged in fighting a major war. It resulted in some truly astounding average speeds over what is a road circuit, despite its long straight-aways, one of which runs for as much as 18 miles. And it was a triumph of the open and closed sports-car. Incidentally, it proved that sports-racing cars can be very definitely impressive in action. The race was won by Hanstein and Baumer in an all-enclosed B.M.W. of 2-litres capacity. They set up a record lap at 108.18 m.p.h., and averaged 103.59 m.p.h. for the entire race. No tyre-change was needed, and Hanstein managed to drive for nine-tenths of the race. The B.M.W.s were controlled with typical German care of detail, and the standing lap was turned at over 101 m.p.h. The winning car had enclosed wheels and coupé top, and gave 130 b.h.p., or 65 b.h.p. per litre, at about 5,500 r.p.m. Lurani and Cortese had an even faster Elektron B.M.W. coupé, capable of 134 m.p.h., but it ran badly and retired after fuel feed and lubrication troubles on the eighth lap. This car weighed a mere 14.8 cwt. The winning B.M.W. was the last year's Le Mans car. The open B.M.W. weighed 11.8 cwt. It quite outclassed the new 2.5-litre six-cylinder Alfa-Romeos, Farina and Mambelli finishing second at 100.68 m.p.h. These cars developed 124 b.h.p., or 49 b.h.p. per litre, and suffered the additional disadvantage of 19.6 cwt., or some 5 cwt. more than the coupé B.M.W.s. Even so, road-holding was very good, and some schools of thought believe that Alfa would have won on a wet or windy day. Nevertheless, the best Alfa lap, by Trossi and Lucchi's saloon, at 102.43 m.p.h., does not equal the winning B.M.W.'s average for the entire race. The Alfas were put up from 4,600 to 5,000 r.p.m. in an effort to beat the German cars.

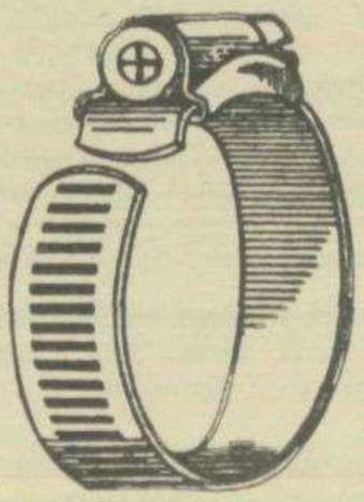
The other three 2-litre B.M.W.s were open cars with the modified engines and newly-faired bodies. All were lapping faster than any Alfa at the end of the race, until slowed, and all finished to get the Team Prize, Brudes and Roese being third at 100.0 m.p.h. Of the others in the big car category, the Lancia Astura and 2.8-litre Fiat were non-starters, and the Delage entries from the English Watney stable were greatly hampered by difficulties arising from the international situation, Taruffi going out in the first lap with engine trouble. The other Delage held second place for a time, until it caught fire and retired. The weight per h.p. of these cars is about 16.6 lbs. per b.h.p. (135 b.h.p. at 5,000 r.p.m.) against 10.7 for the B.M.W. and 19.4 for the Alfa. Biondetti and Stefani (Alfa-Romeo) were fourth; Briem and Richter (B.M.W.) fifth; Wencher and Scholtz (B.M.W.) sixth; Pintacuda and Sanesi (Alfa-Romeo) seventh; and Trossi and Lucchi (Alfa-Romeo) eighth. Nine Alfas started. The race was over 922.7 miles. In the smaller classes some most interesting speeds were shown. Nineteen started in the 750 c.c. class, and Venturelli and Ceroni won on an o.h.v. streamlined Fiat "500" at 70.88 m.p.h. Cortese and Parravicini did the record lap at 74.64 m.p.h. Twenty-four Fiats started in the 1,100 c.c. class, and Fioruzzi and Sola's streamline saloon won at 82.47 m.p.h. from Bertani and Lasagni, lapping at 86.49 m.p.h. The new Ferrari "815s" were the fastest cars in the 1,500 c.c. class, Rangoni and Nardi setting the lap record at 90.77 m.p.h. before a roller bearing failed, while Ascari and Minozzi led from the start until a broken valve early retired them. The new Lancia Aprilias generally suffered tyre and minor engine trouble, but D. Ambrosio and Guerrini won with one of these cars against a lone Fiat, at 78.47 m.p.h. Even if we add only 10 m.p.h. to the lap average as maximum speed, we have unblown sports-cars tuned to last 1,000 miles, achieving 85 m.p.h. in 570 c.c. form on 30 b.h.p.; 97 m.p.h. in 1,100 c.c. saloon form on 50 b.h.p., and 101 m.p.h. on 1,500 c.c. form on 65 b.h.p.—a real triumph of streamlining. It is easy to visualise marketable sports-cars of these capacities with maxima of 75, 87 and 91 m.p.h. respectively in unblown closed form, available to lucky enthusiasts who survive the war.

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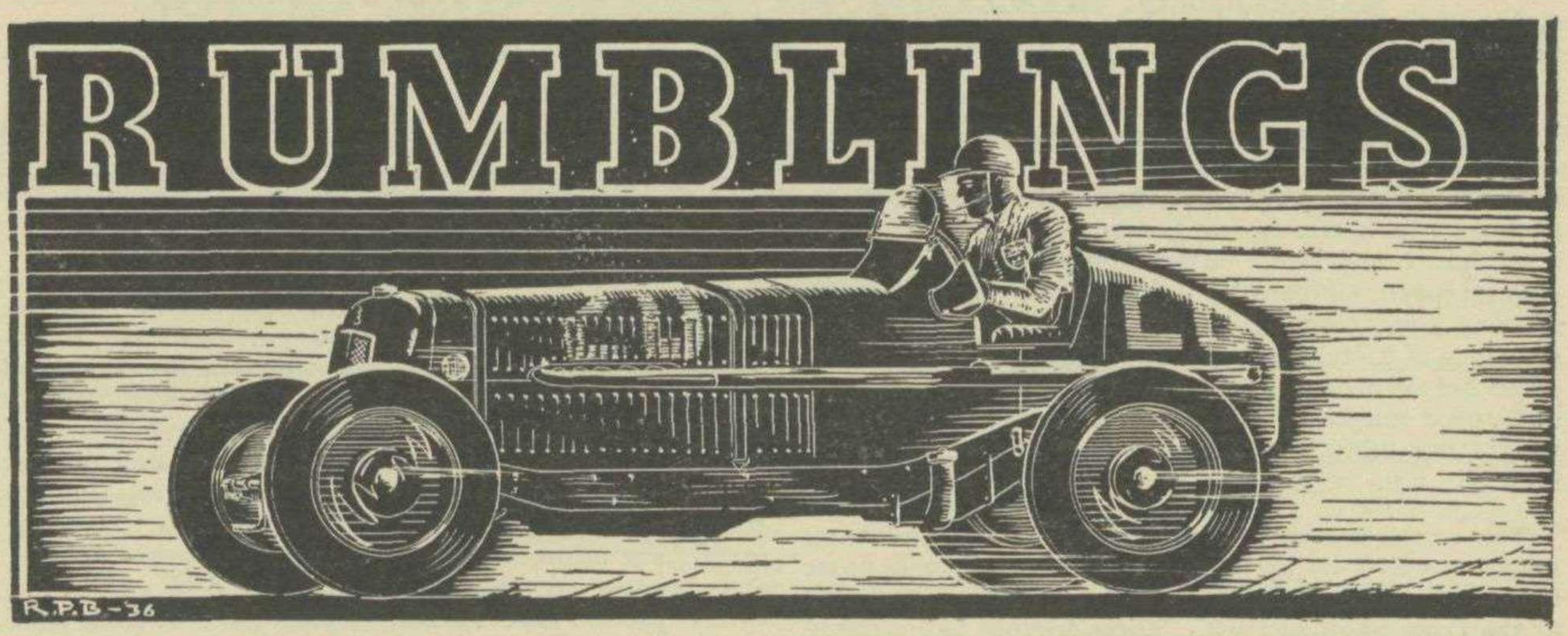
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A Triumph of Design—and Material

LOTS of exceptionally interesting aero-engines are undergoing tests in this country at the present time, for war is an immense stimulus to design, and our technicians are not lost for ideas and enthusiasm. However, we must not let pass even a hint as to what these new motors are. So, in complete contrast, let us consider that most remarkable aero motor of the last war—the rotary. While quite a few enthusiasts know that W. O. Bentley designed the last of this type of motor—the B.R.1 and B.R.2—and that the French Gnome was the most famous of them all, not many people seem able to visualise just how these engines functioned. They were really remarkable examples of specialised engineering and a very worthwhile subject for study.

The rotary scored over in-line and vee engines just prior to the 1914-18 war by reason of smoother running and lower weight, but it was certainly a complex piece of mechanism and its rotating cylinders absorbed fully 10 per cent. of the maximum output. Carburation and lubrication were fraught with difficulties, and even-cooling of the cylinder barrels was next to impossible. Nevertheless, these engines were produced in considerable quantities and figured in some of our most potent fighter aircraft, notably the immortal Sopwith "Camel." The crankshaft of a rotary engine, of course, is stationary, and the cylinders revolve round it. The Gnome, designed by M. Laurent Seguin, was first popularised as a five cylinder, with a bore of 3.94". The famous seven cylinder of 50 h.p. followed, and then came 60 and 80 h.p. seven-cylinder, 100 h.p. nine-cylinder, 100, 120 and 160 h.p. fourteen-cylinder versions, and, finally, an eighteen-cylinder job of 200 h.p. Very high class construction was essential, and in 1913 the 50 h.p. Gnome cost £520 and the biggest model—giving but one-tenth the poke of our newest motors—was listed at £1,760. So far as constructional details are concerned, we had seven H-section steel connecting rods, one a master rod to which the others were attached by pins and bronze-bushed big-ends; very thick cast iron pistons with two rings, of which the upper was of thin L-section in bronze, backed by a cast-iron padding ring; and nickel-chrome steel cylinder barrels machined out of solid ingots with the fins left on in the process of machining. It is interesting that the six subsidiary con-rods were shorter than the master rod, yet the resultant variation in piston position, velocity and acceleration had no adverse effect on the engine's inherent smoothness; that the cylinder walls had a thickness of only 1½ mm. (under $\frac{1}{16}$"), and that the piston ring gap was at least 1 mm. The firing order was 1, 3, 5, 7, 2, 4, 6, for the seven cylinder, and the fuel consumption was 0.63 lb. per b.h.p./hour and oil consumption nearly 1½ gallons an hour.

The intriguing thing about the Gnome is its method of functioning. The cylinders rotated on ball bearings, the crankshaft being anchored to the air-frame. Mixture was drawn from a floatless carburetter, of which the fuel supply was controlled from the cockpit, up the hollow crankshaft. It entered the crankcase and finally achieved the combustion spaces via poppet-valves in the piston crowns! In the 50 h.p. engine, these were controlled by a 4 lb. return spring. Naturally, valves so located took an immense caning, so they had to be heavy, and the use of pure castor oil became traditional. In cold weather the oil would be diluted with about 8 per cent. methylated spirit to increase fluidity. If these valves did break, apart from severe internal damage, it was usual for the entire charge in the crankcase to light up! The pistons passed so much oil that the o.h. exhaust valves, together with their stems and rocker-gear, etc., were lubricated quite adequately as a matter of course. Timing was by a most ingenious epicyclic

RUMBLINGS—continued

train, and the exhaust valves opened 65° before B.D.C., and closed 13° after T.D.C. The springs were of leaf type.

Ignition was by h.t. magneto, with an external distributor, consisting of an ebonite ring revolving within the crankcase and having seven contact studs, each of which was connected to a sparking plug by a straight brass wire. The magneto ran at 1¾ times engine speed, of course. To ensure really smooth running each complete cylinder weighed within half an ounce of its fellows. These remarkable engines had a life between overhauls of sixteen hours at full load, at a speed range of 600-1,100 r.p.m., and the effective weight per b.h.p. was 2.7 lbs. in the case of the 120 and 160 h.p. versions.

The worst trouble was the danger of fire following an inlet valve failure and to overcome it the great Gnome "Monosoupape" was evolved, and shown at the Paris Show of 1913. These engines had a single valve in the head. Burnt gases left via this valve on the exhaust stroke and it remained open for about one-third of the inlet stroke, enabling air to enter, incidentally cooling the valve. During the remainder of the suction stroke an over-rich, non-inflammable mixture compressed in the crankcase was admitted to the cylinders via ports in the barrel bases, and was suitably diluted by the air. Engine speed was regulated by varying the lift and dwell of the exhaust valves, which were naturally prone to burning. No silencer could be fitted, and the reversals past the single valve gave the engine a very distinctive note. The speed would come down as low as 200 r.p.m., and the seven-cylinder 90 h.p. and fourteen-cylinder 100 h.p. models both normally ran at 1,200 r.p.m. The latter cost about £880 in 1914. Various other rotary motors were built, but only the Bentley and Le Rhone became well known. These had the carburetter in the crankcase, feeding via radiating pipes to the cylinders. The Le Rhone was made almost entirely of steel, with cast-iron cylinder liners. These old engines are a most absorbing engineering study, and they undoubtedly helped us to win the last battle. Probably R. G. J. Nash is the only present-day authority on them, as he has rebuilt and run up a Gnome quite recently. It is interesting that one of our very latest aero motors has its cylinders rather oddly disposed about its crankcase—but it isn't a rotary! Incidentally, several motor-racing personalities are engaged on aero-motor research at various places about this green and pleasant land. We met W. E. Wilkinson at Bellevue Garage recently, but he is really hard at work and very happy testing Rotol constant-speed airscrews in conjunction with the latest, very secret British aero-motors. With him are Robin Jackson and the motor-cycle expert, H. L. Beart. The racing shops where Wilky used to preside are now an Auxiliary Ambulance Station, and quite devoid of any reminders of racing, although a high degree of efficiency prevails and some big Armstrong-Siddeleys feature amongst the Staff cars. Wilky says he has a quite good job, but itches to come back to the racing game all the while, and will do so if all ends well.

Letters

The MOTOR SPORT postbag continues to bear witness to the enthusiasm for the Sport which prevails in war-time Britain. Requests for photographs, back issues, details of little-known cars, addresses of accessory makers, tuning hints, spare parts and so on, come in with every post. After this blue-pencil war is over, answering such letters will, we hope, become a very important service indeed. As it is, much delay and some curtailment in reply is unavoidable, and we have to encourage readers to communicate direct where practical, whereas once we liked to digest all information before passing it on. Moreover, it is no longer possible to acknowledge all these personal letters to the Editor and those letters which do not contain queries, but which bring such interesting information to us. We would assure readers that these letters are appreciated just as much as ever—indeed, it is because so many enthusiasts write to us from so many places that MOTOR SPORT gets such a good cross-section on current views and happenings. This being the case, we are sorry to have to add insult to injury by requesting all writers of query-letters to enclose the 2½d. fee which postage now entails. But there is it. Advertising revenue is sadly down, and paper prices are very much up and we must cut expenses in every possible way if MOTOR SPORT is to go on.

Incidentally, all praise to those advertisers who continue to support us, and it is a pleasing thought that, without exception, they are concerns contributing immensely to the country's war effort—Lucas with all manner of electrical equipment, the great Dunlop Rubber Co. Ltd., L. Robinson & Co., whose Jubilee Worm-Drive Clips seal effectively all sorts of joints in all kinds of war machines; Sydney Lewis's, supplying just the very clothing needed by Service personnel, McKenzie's Garages Ltd., now doing Air Ministry work and still maintaining Bentleys, and T. P. Breen, still bravely selling entertainment in the shape of sports-cars and doing very nicely, thank you. Yes. Enthusiasm is unquenched—we always knew it to be unquenchable—and when the war finishes a bigger and better MOTOR SPORT will be possible, allied to a really effective information service. When the war finishes . . . ? Well, optimistic folk believe that trials will start again by Christmas, 1941.

Odd Spots

Frazer-Nash-B.M.W. Type 328s are selling well, at some £40 above former list prices, in spite of the war.

* * *

Edwardian cars continue to turn up, in spite of the store now set on scrap metal. Douglas Tubbs, who wrote on the Turin museum in the last issue, knows of a big Talbot and may buy a Turicar for himself. At Walford Cross, Taunton, a Mass, a 1911 Napier tourer, a Radiator and a really old Century, occupy a breaker's yard.

* * *

In a recent article in "The Motor," Laurence Pomeroy suggests that German peace-time trials paved the way to success in the Norwegian campaign.

SOUND AND SPEED IN MOTOR RACING

SOME OBSERVATIONS ON A LITTLE-DISCUSSED ASPECT OF THE SPORT

NOW that motor racing is suspended it is only natural that enthusiasts should turn occasionally to some of the vivid memories of the Sport which has been temporarily relinquished. In looking over any collection of souvenirs, such as photographs, films, press-cuttings, programmes, or the row of volumes of MOTOR SPORT, one is soon struck by the memories of stirring sound which are awakened. Here are a few of them, remembered at random from the store of impressions gained in a dozen years of active spectating.

Car Sounds

It is only natural that these should come first since they are the true tongue of the game. Much of the thrill of driving racing cars lies in the loud exultant song of the machine. To the spectator the sound impression is equally full of interest. It soon becomes possible to differentiate between cars from their exhaust notes and to identify them afar off by that means. Thus, no true enthusiast is likely to forget the characteristic notes of the high-revving 750 c.c. Austins, the full-throated song of the E.R.A., the old S.S.K. Mercédès with its screaming blower, the hearty two-lung Shelsley Special and the high-pitched note of the German Grand Prix cars at Donington. Most glorious of all is the torrent of sound at the massed start of a race. The writer has memories of many tingling minutes as the pack strained at the leash before the flag fell. The contrast is all the greater, coming as it does after the quiet period before the engines are started, when, particularly at Donington, the great crowd waits silent and expectant while the seconds tick by.

Then comes the thrill of hearing the confused roar of the pack as they rush round the circuit on the first lap. This is particularly fascinating on short courses like Monaco, Donington, Brooklands "Campbell," Crystal Palace, or the lamented Douglas. Here the roar can be heard from the start all round the back-stretches in the woods, behind the "mountain," or through the towns, until the leaders come roaring round.

Phenomena

As the cars go by, the celebrated phenomenon of Herr Doppler is audible, the sudden drop in exhaust note as a car passes the observer. Instances have been widely reported of radio listeners deriving quite accurate lap times from careful observation of the times of machines passing the microphone, using the Doppler frequency drop as the mark to time on.

Somewhat similar is the phenomenon of the sound following some distance behind the car, due to the low speed of sound compared with that of light or vision. This is familiar to all students of high-speed flying, who learnt long ago, in Schneider Trophy days, that it is useless to look for the plane in the direction from which the sound comes.

This effect is not generally visible, particularly if a number of cars are running at once, and are watched at close quarters. It is most striking when a fast car is watched at Brooklands from the paddock or clubhouse. When the motor disappears behind the Members' Hill, there is a pause, then it is seen suddenly emerging, followed a second or so later by the burst of sound. The converse effect is equally striking; thus if the spectator in the paddock suddenly looks up attracted by the sound of the car emerging from behind the mountain, it is quite surprising to see the car already many yards out along the Home Banking.

Paddock Sounds

More intimate and personal are the noises of the Paddock. Roars of canvas-tearing sound crash out from time to time as cars are started, but the general effect is more subtle. Tick-overs are interesting. Most famous of all is the one which gave its name to the cars which produced it, "Chitty-chitty-bang-bang," motor racing's greatest piece of onomatopoeia. Even to-day the sound of a really big fellow idling is, to the uninitiated, a particularly unmechanical manifestation. The wheezy slack-sounding clatter of such motors as the Napier-Railton, Hassan Special or other big-engined cars contrasts vividly with their taut full-throated roar when in full flight.

Another fascinating sound is that of a car warming up by means of a cam-operated accelerator flipper, producing automatic bursts of revs to avoid oiling-up. Other sounds which remain as memories include the ring of hammers on Rudge hub-caps, with that harp-like background of vibrating spokes, the rattle of the little castors of the quick-lift jacks over the track-surface, the gurgle of fuel, the hissing of compressed air, and the jangle of tools, cans, funnels and other equipment on the pit-counter.

Cornering

Cornering has a whole gamut of sounds of its own. Beginning with the squeal of hard braking, accompanied quite often by the mutter of front-axle tramp and the banging of explosions through the blower relief-valve, and the gusty flutter of flames from the exhaust, we then hear the change-down and follow through the corner, to the scream of tyres scraping sideways. Then comes acceleration, perhaps with the scream of wheelspin, and finally the falling note of the exhaust as the upward gear-changes are made.

Public Address

The fairly recent art of running commentary, through public address units, has brought with it fresh types of dramatic sound to remember. While the work of the commentator is chiefly the dissemination to the crowd of accurate information on what is happening, times, lap-speeds and so on, the more practised exponents of the art do contrive to sustain dramatic interest, by vivid description of the scene before them, for the benefit of the crowds at other points on the course.

One of the most dramatic incidents heard by the writer over the speakers was at Bristol Speed Trials in 1937. Here the announcer at the start handed over quickly to his colleague further on, who was extremely excited and who was putting vivid descriptions of the runs over on the speakers. "Waddy is just coming into sight now," he screamed. "His little car is travelling at a terrific pace, easily the fastest yet, he is all over the road. He is just approaching this bend, his car is snaking, he has ———" There was a complete cutting break in the commentary and we knew, many of us, that something had happened. After a few moments the announcer's voice returned, asking in chastened tones for the ambulance. Fortunately Waddy was not seriously injured, and the photograph which we took a few seconds before his crash reminds us only of that sudden dramatic silence in the high speed commentary.

Montlhery

Two sound memories of Montlhèry stand out clearly. One is that of a big car running round the banking, as heard from the garages underneath. The general effect is that of a fairground switchback, the car making the light concrete structure of the track rumble, excited by the passage of the wheels over each of the joints in the track surface.

The other memory is of the whole of Montlhèry track groaning in the sunshine on an April day. As the sun shone, the light structure of the track warmed up and expanded, sighing gently as it stretched itself in the sunshine. When a cloud came over the face of the sun, the process was reversed, and the track groaned as it contracted.

Crowd Noises

The noise of crowds lingers as a memory, too. The silence of Donington just before engines are started has been mentioned. The self-satisfied clapping after a good ascent at Shelsley is just as unforgettable. Little else remains in British motor sport, for we are in the main taciturn even at our most excited. The circus applause of the skid-thirsty at Quarry Corner leaves a strange impression, but it is quite definitely part of the local colour, and will be something to listen for if the race returns to Ulster.

Memories of the sound of Continental crowds come easily to those who have been fortunate enough to have heard them. The heavy, but, when necessary, full-throated enthusiasm of the Germans, the non-stop chattering excitement of the French, and the indescribable high-pitched fervour of Italian and Spanish racing enthusiasts.

These sound impressions are part of the motor racing picture. They are vital and very memorable to such enthusiasts as have learned to know them. May the day soon come when we shall hear them all once more!

THE REMINISCENCES OF H. L. BIGGS

No. 3—ALFA ASSOCIATIONS

SEVEN-FORTY-FIVE on the morning of the 11th August, 1928, saw me standing outside the closed doors of the Lorne Gardens Service Station of Alfa-Romeo British Sales to which, inspired by the success of Ramponi in the Essex Six Hours' Race, a desire to work on the 1½-litre Alfa-Romeo had brought me.

At first my efforts were confined to the earlier 3-litre cars, the "22/90" short-chassis R.L.S.S., and the "21/70" long-chassis job. These two cars differed in many respects. The "22/90" was the genuine sports machine, with a wheelbase of 10 ft. 3½ ins., axle ratio of 3.75 to 1, dry-sump lubrication (4 gallons), twin vertical Zeniths, and a V-fronted radiator. The "21/70" had a wheelbase 1 ft. longer, 4 to 1 axle ratio, wet sump, single carburetter and a flat-fronted radiator. Identical features were four-speed box, multiple disc clutch, o.h.v. push-rod engine, four-wheel brakes by pedal, and hand operated transmission brake. The "22/90" used a 76 mm. bore block, the "21/70" a 75 mm. block, whilst both engines had a stroke of 110 mm.

The only tuning personally attempted on these cars was the fitting of an 80.5 mm. bore block, carefully balancing the reciprocating parts, and changing the constant mesh gears for a pair of higher ratio.

A very special 3-litre which appeared for service and aroused my keen interest was the blue Targa Florio car, owned at that time by a Mr. Lindsay. Considerably lower and shorter than the standard R.L.S.S. with a smaller radiator with the base mounted below chassis level, it definitely looked imposing. The differences from standard were many. So far as the chassis was concerned, double-opposed Hartfords damped the rear axle movement, single Hartfords the front. The gear change was right-handed, and a stiffening strap ran under the gearbox from the chassis side members. The hand brake operated on all four wheels, the foot on the transmission, and many other detail alterations were embodied. The engine was originally 80 mm. bore by 120 mm. stroke, but when I knew the car, a standard 76 mm. block was being used, with twin 47 H.K. Zeniths, the pistons and valve gear were considerably lighter than standard, and the connecting rod webs were drilled. Special large capacity oil pump and tanks completed the dry sump system, and an exhaust manifold composed of three separate branches, one from each port, gave a free passage to the gases. I believe this car was of 1923 vintage and that it is still in existence.

Things began to look brighter when Marinoni, then chief mechanic at Alfas, and his assistant, Perfetti, arrived to prepare two of the 1½-litre blown cars for the "Coupe Boillot," to be run at Boulogne.

At last, I felt, I should be working on the real thing. They were intriguing little cars, always referred to by their racing numbers "43" and "45." The Boillot Cup, as all will remember, was a handicap race for sports-cars, and to that end we set about the modifications to the more or less standard Spyder bodies, removing the long sweeping wings, and substituting regulation short aluminium guards (a flaired-up extension attached to the scuttle on the driving side with heavy gauge celluloid riveted thereto, deflected the wind over the head of the driver). Wire cables, spring loaded, secured the hood, and the smallest lamps allowed by the regulations, turned sideways to reduce resistance and prevent glass breakage, were fitted. An additional oil tank with large bore pipes and tap, and a needle contents indicator, mounted inside the body to the near side within reach of the driver, enabled him to let down additional oil to the sump when required.

Rapid action tank caps were made up, with a special tommy bar pattern for the radiator. Marinoni and Perfetti stripped down and rebuilt the engines with extreme care, giving the necessary extra clearances where needed. Large diameter sheet metal exhaust manifolds, using a 2¼ in. tailpipe, were welded up, and the Italian aversion to spring spoked steering wheels was made manifest by the replacement of the standard rigid type (I noticed this again later, when Campari lashed steel strip across the spring spokes of the wheel of his Maserati in 1932). Jaegar 8 in. rev. counters replaced the standard small head, the red sector being at 5,000-6,500 r.p.m. Straight toothed bevels with a 12/51 ratio replaced the standard helical 11/54. Tyres used for the race itself were 27″ × 4.75″ front, and 28″ × 4.75″ rear, and the completed cars, in Italian national red, looked extremely fierce and businesslike. The third team car was not seen over here.

Ivanowski won at 69.78 in No. 43, Marinoni was third, and Cyril Paul driving No. 45, entered by F. W. Stiles, the British concessionaire, fourth; not a bad performance! One of the six-cylinder Amilcars run in this event, and driven by Miss Maconachie, I was to meet again five years later, in different form, as the 1,100 c.c. Hour record holder. On the Monday following the event I accompanied Dunkley, the works foreman (since killed in an M.G. Midget during practice in Ulster), to Folkestone to pick up No. 45, and in a glorious run back to town held 104 on a level stretch of road. Back at Lorne Gardens, a standard axle ratio was fitted, and this car sold to a private owner. No. 43 had similar attention, but in addition the engine was replaced by a standard unblown 1½-litre twin o.h.c. engine which had been fitted with a compressor by Guilio Ramponi, who had come over immediately after Boulogne. Incidentally, I had some very interesting demonstration runs in No. 45

The actual racing engine from No. 43 was put into a beautiful little two-seater, finished in old ivory and blue-black, by Youngs of Bromley, and sold to that eminent bacteriologist and motor sportsman, Dr. J. D. Benjafield.

Shortly after, the 25th October to be exact, Count Lurani arrived in England to compete in his first event in this country, the M.C.C. One Hour High Speed Trial. He brought with him his pale blue Spyder-bodied unblown twin o.h.c. 1½-litre car, special features of which included an extra oil tank as on supercharged cars, extended steering column, the Count being extremely long in the leg, small headlamps, radiator shutters, and a flaired scuttle with English pattern fold-flat screen. The only work we had to do was the fitting of the regulation Brooklands silencing system, and I accompanied him to the Track on the Friday for practice, and carburetter tuning. On our way to Champions for the necessary plugs, we had a slight argument with a tradesman's cycle, due partly to Lurani instinctively taking the right hand side of the road. Distribution of largesse, however, smoothed over the incident, and we were soon doing a steady 3,600 down the Kingston By-Pass in a veritable cloudburst. As the use of an 85 main jet gave a useful 83 over the kilo, the car was tucked away in Malcolm Campbell's shed, and we returned to town in a friend's bull-nosed Morris Cowley coupé, the Count, with his inimitable Italian courtesy, forcing me to travel inside, whilst he occupied the dickey, the lid of which he proceeded to shut down:—it must have been most uncomfortable!

On the morrow, in appalling weather, and misfiring badly with water in the fuel, the Alfa lapped at 77, and covered 66.5 miles in the hour. Nowadays, being used to seeing 100 miles covered in this event, this may seem slow, but actually the best performance that day was that of Brian Lewis, whose 1,998 c.c. Bugatti covered 85.5 miles. The then unknown driver, Henken Widengren, driving a Sports Austin Seven only covered the amazing distance of 35.9 miles!

I maintain that these 1½-litre twin o.h.c. Alfa-Romeos, blown or unblown, would still show their fishtails to most modern sports-cars, and I remember vividly a run I made in an unblown version to Portsmouth, from town in the pouring rain, absolutely non-stop, taking nourishment in the car, and putting up an extraordinarily high average speed in comfort!

These cars started the run of Alfa-Romeo successes, first in sports-cars, and then in Grand Prix racing, which will remain for ever a landmark in Italian motor racing history.

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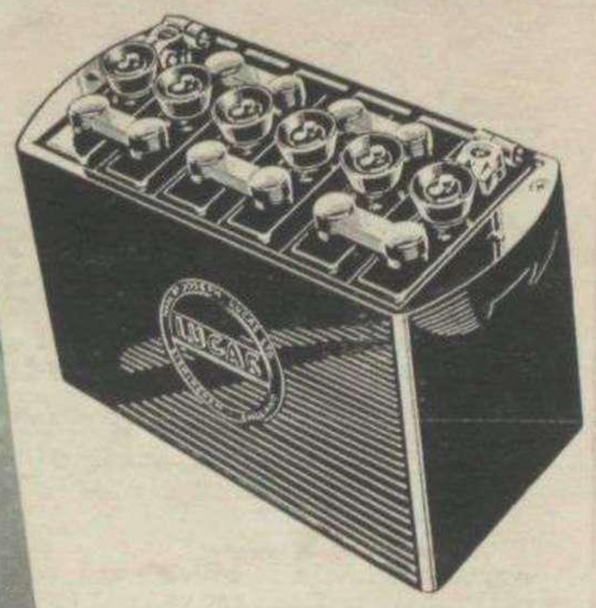
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