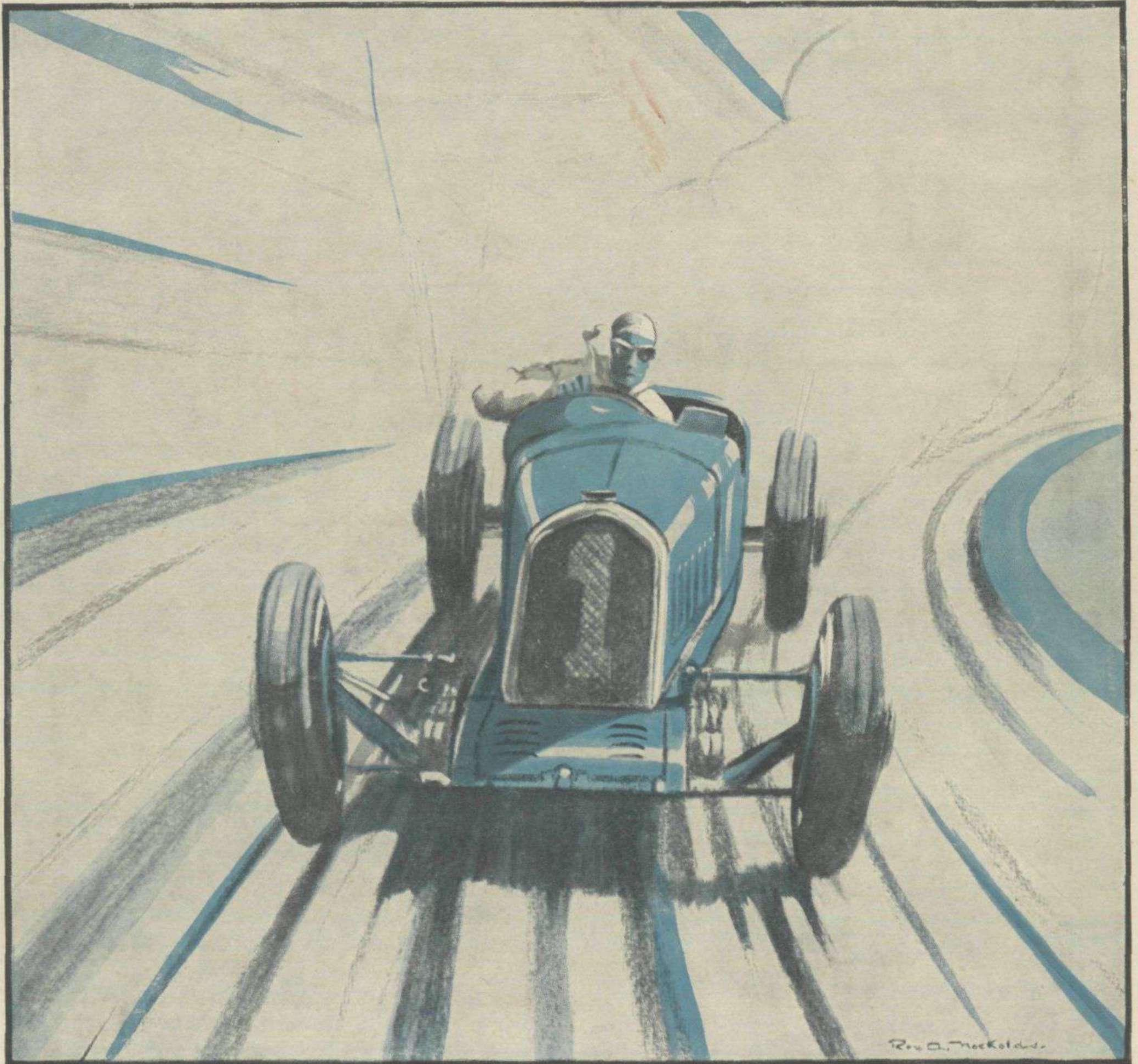


MOTOR SPORT

INCORPORATING
Speed

SIXPENCE MONTHLY



Rev. A. MacKeldin

*Have you Ordered
your*

MOTOR SPORT

AS ALREADY STATED
OWING TO PAPER
RESTRICTIONS COPIES CAN
NOW ONLY BE OBTAINED
BY PLACING A FIRM ORDER
WITH YOUR NEWSAGENT

DON'T BE DISAPPOINTED
PLACE A REGULAR ORDER
WITH YOUR NEWSAGENT

MOTOR SPORT



OFFICIAL JOURNAL OF THE BRITISH RACING DRIVERS' CLUB

INCORPORATING **SPEED** AND
THE BROOKLANDS GAZETTE

ADVERTISING AND EDITORIAL OFFICES

21, CITY ROAD, LONDON, E.C.1

Telephone: NATIONAL 3045



CARRYING ON

This Nation is at war, and it is nobly carrying on. Judging by the traffic on our roads some seven weeks after the commencement of hostilities, the private motorist, too, is doing his and her best to carry on. It says a very great deal for the hold, pleasure motoring has on the British public that this should be the case, when blacking-out renders after-dark driving a trying occupation, when each car is only allowed a petrol ration equivalent to 200 miles operation per month, and when so many cars, taxed quarterly, could conveniently have been laid up on September 30th.

We, as particularly enthusiastic motorists, are proud to witness this evident reluctance on the part of ordinary folk to discontinue with their motoring, in spite of extremely trying conditions imposed by war-time regulations.

We sincerely hope that they will not lose heart, and that 1940 will find them just as keen. For, casting aside selfish appreciation of deserted highways, the wholesale curtailment of private motoring would strike a very serious blow to the business and economic life of this country. This applies less to the motor manufacturers than to garages, repair shops, accessory and component makers, and the countless associate trades which exist out of the public's desire to motor. The hotel and catering trades, the clothing industry, and so many auxiliary businesses would likewise suffer, because they rely on unrestricted use of the motor-car either wholly or in part for continued prosperity. At least the bigger manufacturers are mostly coping with reasonable Government war material contracts, and many of the small car makers are doing likewise.

It is logical to assume that a small quantity of new cars will still be sold, for export, to rich buyers at home well isolated from the horrors of war, and, so far as sports-cars

are concerned, to hyper-enthusiastic drivers who are quite calm about buying £2,000 racing-cars for limited use and who may now be expected to regard purchase of a new sports job in the same light.

It is the associate businesses which will swell the unemployment roll in a startling manner if private motoring comes to rest.

Certainly, the outlook is not too bright. The mileage limitation of 200 a month approximately will put up running costs to an absurd figure. Motoring that formerly cost 3d. a mile will now absorb something like 1/3 a mile. A friend of ours, Aston-Martin owner and 100 per cent. enthusiastic, confesses he will lay up the car at the end of the year, because he considers a £15 tax out of proportion to his rationed annual mileage of 1,800. Business motorists are apparently being rationed at 6,000 miles a year—MOTOR SPORT has been given nine supplementary coupons a month for an 8 h.p. car. We hope these rations may soon be adjusted more favourably.

Then the black-out has resulted in a big increase in road accidents. We hope further lighting regulations will ease this additional penalty. Some quarters

are of the opinion that the Government does not wish to encourage private motoring. Their existing war-restrictions have been estimated to represent a taxation loss of £54 millions. Nevertheless, the facts that the War Budget contained no increase in car taxation and that work commenced on new roads and highway repairs is to continue, are in our favour. So, remembering that ordinary motoring is almost non-existent in Germany, let us all attempt to carry on. After all, if five enthusiasts pool their resources, they can realise over 200 communal miles each week-end. If we can assist in forming inter-car parties we shall be glad to do so.

CONTENTS

<i>Carrying On</i>	297
<i>On A Peaceful Period</i>	298
<i>Club News</i>	300
<i>Home Front, The</i>	301
<i>New Racing Alta</i>	301
<i>An Irish Hill Climb</i>	301
<i>Rumblings</i>	302
<i>Looking Back</i>	304
<i>Continental Notes and News</i>	307
<i>Letters From Readers</i>	308
<i>Driving the Edwardians</i>	311

ON A PEACEFUL PERIOD

NOW that this country is again at war, one may cast back over the intervening peaceful period and take stock of what has happened between November of 1918 and September of 1939, in our world.

As one could quite comfortably fill almost any desired "space" in "wielding the pen or tapping the keys on this subject. There is a strong temptation to set down various headings and to deal with progress and development in technical matters, and the history of motor-ing sport in its several aspects, as a series of separate articles. This is a scheme which we shall quite possibly adopt in future issues, but just for the moment the writer, being isolated from all sources of reference, has every excuse for surveying, along no very definite lines, in one article, various happenings during the time period under review.

Perhaps the most significant happening just after the armistice was the introduction of W.O. Bentley's now immortal 3-litre. Not that other cars of very advanced design were not introduced at about the same time; they were. There was the famous Leyland Eight of Parry Thomas's creation and weaning, and a most remarkable Seabrook, which was quite unlike later cars of this make, having, if I remember rightly, a 1½-litre o.h. camshaft all-alloy engine and divers other sensational items of specification. But it was the 3-litre 15.9 h.p. Bentley which, a direct outcome of W.O.'s experience with war-time aero-motor design (he was responsible for the last of the "rotaries" in the BR1 and BR2, etc.) showed that it was possible to make a commercial success of a car of such advanced technical layout, a market existing for such cars providing they were reliable, not too temperamental, and possessed of performance which justified their higher first cost and need of greater care in servicing over ordinary, mundane automobiles.

Other cars of this kind followed. Lea-Francis, Vulcan, Beverley-Barnes, Maudsley and others produced twin o.h. camshaft engines, and Lagonda did very well with the 2-litre, twin "under-head" camshaft car, which incidentally, owing to its curious inlet manifold formation, was particularly adaptable to supercharging. In 1925 Sunbeam found a reasonable market for the twin o.h. camshaft, dry-sump 3-litre based directly on their Grand Prix racing cars, one of which, in 1923, won the only French G.P. ever to go to a British car. The houses of Bugatti and Alfa-Romeo have long sponsored racing-type designs, and produce models to-day which can be traced back to the influence of W.O.'s venture of twenty years ago.

A parallel, but rather different, line of attack was employed at the same time as W.O. was busy arranging production of his 3-litre. I refer to the development by Laurence Pomeroy of the "30/98" Vauxhall. Here was a car which astounded by its performance, yet which had a completely reliable, side-valve engine of perfectly straightforward design. The answer was, of course, high power-weight ratio. In 1923 the O.E. edition of the

30/98 Vauxhall replaced the side-valve model E, a push-rod o.h.v. engine of slightly smaller capacity being employed. But, once again, the general design was quite straightforward, apart from a special camshaft allowing abnormally small tappet clearances to obviate excessive valve-gear noises, and the "30/98" achieved its great potency from the use of a big 4½-litre engine in a relatively light chassis. Its gear-ratios were also very carefully chosen.

It is certainly difficult to associate the essentially old-school "30/98" with later high performance Americans and Anglo-American developments of such cars, which the first black Railton tourer, driven by S. C. H. Davis in a Monte Carlo Rally, brought thoroughly into prominence, and which the present Allard, amongst others, so admirably portrays. But the principal—good power weight ratio—is essentially the same.

Reverting to more highly developed designs, we see the same thing in the small-car field. The little sixteen valve Bugatti started it and the Amilcar Six and later Salmsons carried the trend on, the Salmson being notable as a very low-priced example of a design based on racing practice. Recently cars like Alta, Rapier, British Salmson, Frazer-Nash and Aston-Martin have represented modern developments and only lately, have more sober designs, like the TB M.G. Midget from Abingdon, caught up to standards of performance realised from more complicated designs around 1925.

Then (still dealing with high-performance, as distinct from utility-cars) we have seen semi-sporting types, of which the 14/40 Morris Garage (or, if you will, M.G.) was a good early example, produced in numbers, some successful, others not so successful, but leading, nevertheless, to such useful modern high-performance stuff as cars in the Triumph Dolomite, 12/70 Alvis, and Rover category. Ordinary utility cars have improved in speed, acceleration and general usefulness. Quite appreciably, for 45 m.p.h. was going some in 1920, but was slow cruising in 1930. Yet another type development has been witnessed; that of what is best termed the luxury-car field. High, cumbersome "town carriages," satisfactorily fast if they could achieve 60 m.p.h. underwent a change somewhere about the time the "Big Six" Bentley was welcomed as a worthy offspring of the Bentley family—all the Bentley models had much in common with that original 3-litre, of course, until the short lived, Ricardo-head 4-litre which came out just before the old company closed down. Later, Armstrong-Siddeley, never really associated, or wishing to be, with fast stuff, introduced the Siddeley Special, which could do 90 m.p.h. To-day, the 4½-litre Bentley and V12 Lagonda, combine the qualities of luxury and speed vehicle, and, if you want to split hairs and follow my meaning, the former rather goes back along the 30/98 path, with its sober, but very efficient, push-rod engine, whereas, by my reasoning, the Lagonda comes

more into the "3-litre Bentley family" on account of a twin-camshaft, high speed engine, which is of comparatively specialised design. Carry the argument a little further and you see that since about 1930 there has been an increasing tendency for design to converge and for specifications of all types to be, in general, neither all twin o.h.v. and generally complicated, nor yet very dull s.v. with flat, iron heads. There is a whole wealth of technical history in this gradual settling down of engine design. The question now arises as to what was the greatest contribution to progress in the period of automobile development under consideration. That is a very difficult one indeed! Perhaps the answer lies in tyres. Tyres of 1939 are vastly superior in divers ways to the tyres of 1914. They improved gradually, helped by racing and record breaking, and after the balloon episode (no reference to sausage barrages!) of around 1924, progressed notably in respect of immunity from punctures, long life and size standardization. Next, perhaps, would come brakes. While it is true that, like multi-cylinder engines, superchargers, downdraught carburettors, independent suspension, and other "modern" features, front wheel brakes were known long before the 1914-18 war, they only became universal around 1923, generally reasonable about 1930 and practically foolproof from 1935 or so, onwards. In the early days of their general adoption various systems were exploited and adopted almost without number. Quite small makers of obscure light cars hastened to employ this latest contribution to safety at least by 1926. Even G.W.K., whose hollow hubs gave the impression of brake drums, had put real shoes into his front hubs by this date. Technicians had two golden years of argument as to what percentage of braking should be employed between front wheel and rear, of whether one should actuate by cable, rod or a combination of both, as to whether the inner brake should release, as H.E. did it, on a corner, and of how cables should be led, rods made to follow spring reactions and steering changes of angle; and then the arguments could be begun all over again on the subject of adjustment, both at wheel and pedal extremities, drum and shoe materials, and so on. Daimler even tried magnetic braking, Whitehead introduced a proprietary cable system and demonstrated it on an Essex, and Chenard Walker had front drums only, coupled with Hallot servo application. The Perrot rod and cable system remained extremely popular and lots of designers sang the praises of the Dewandre auxiliary, vacuum servo. We were all profoundly impressed when Rolls-Royce introduced their now famous mechanical servo and applied more braking to the back than to the front wheels. Gradually, the excitement died down, manufacturers began to employ systems of their own, or their engineers' conception, and now we stop safely, mostly in not more than 40 feet at 30 m.p.h. by the grace of Lockheed hydraulic, Girling direct action or Bendix self-wrapping shoe brakes.

ON A PEACEFUL PERIOD—continued

Wasn't it just the same with gear-boxes? The E.N.V. self-change box came along on the Armstrong-Siddeley and everyone wanted a car with a stumpy gear-lever, as every girl wanted a stumpy umbrella. Then Riley came out with constant mesh third on the four-speed box of their "Nine," which was easier to shift than a sliding third. Synchromesh followed, at first on third, then on third and second gear in all sorts and prices of cars, until it is now universal, and Alvis and Sunbeam-Talbot use it for all four ratios. But decent synchromesh did not push the "Panhard-box" out before all manner of intervening ideas had flitted through the limelight, such as free wheels, electric control, free-wheeling, overdrives, etc., of which the Rover free wheel and Cotal electric shift remain with us still. Constantinesco, even brought out a converter which entirely eliminated the gearbox and tried to market it housed between the two-water-cooled cylinders of his 5 h.p. car. But everyone voted it too complicated, although you could reproduce the action in Meccano at the time. So to-day we universally have our ratios changed by synchro-cones, albeit it is a far cry from beautiful boxes such as that on the modern Bentley, to certain early systems which worked slowly and stiffly and, as often as not, scorned any encouragement in the way of double-declutching.

The six-cylinder engine needed a lot of introducing to a public endeared to large capacity "fours," although Wolseley and Austin ultimately got away with quite tiny six-potters. Once again, technicians were in their element. When

it wasn't a discussion on crankshaft vibration and firing-order it was argument over mixture distribution. The six-cylinder passenger car engine was a pre-the-last-war development as witness S. F. Edge's Napiers, but it was in the subsequent period of place that it was generally developed and accepted for widespread use. On this question of mixture distribution, R. W. A. Brewer spent much of Peacetime asking the World to realise that petroleum supplies might one day cease, and trying to conserve the world's supplies by experimentation in hot-spotting of induction manifolds.

Over enthusiasm for his doctrine led to loss of power; later, complicated thermostats and hot air supplies were used; and the fun began all over again during the six-cylinder era. But at last we got it comparatively all correct and shipshape and nowadays downdraught carburation of ordinary engines causes no trouble and your most humble touring car has its cast-iron hot section let into an alloy manifold as a matter of course. Incidentally, Brewer is probably the only person who accepts the present fuel rationing without a murmur!

This recalls all those beautifully and technically upstage discussions on where the flame should be persuaded to go in combustion spaces. It was all very much in the 1918-39 period, even if before the day of alloy heads and copperisation. Ricardo had turbulence as his doctrine, Whatmough went all out for streamline flow and other people either took sides or preached theories falling between both these lines of approach. These

battles fought at the Society of Arts and in the pages of "The Automobile Engineer" led to sports cars able to behave like little gentlemen on pump fuel, even No. 1, and to quite usefully high compression ratios passing unnoticed for side valve, utility car engines.

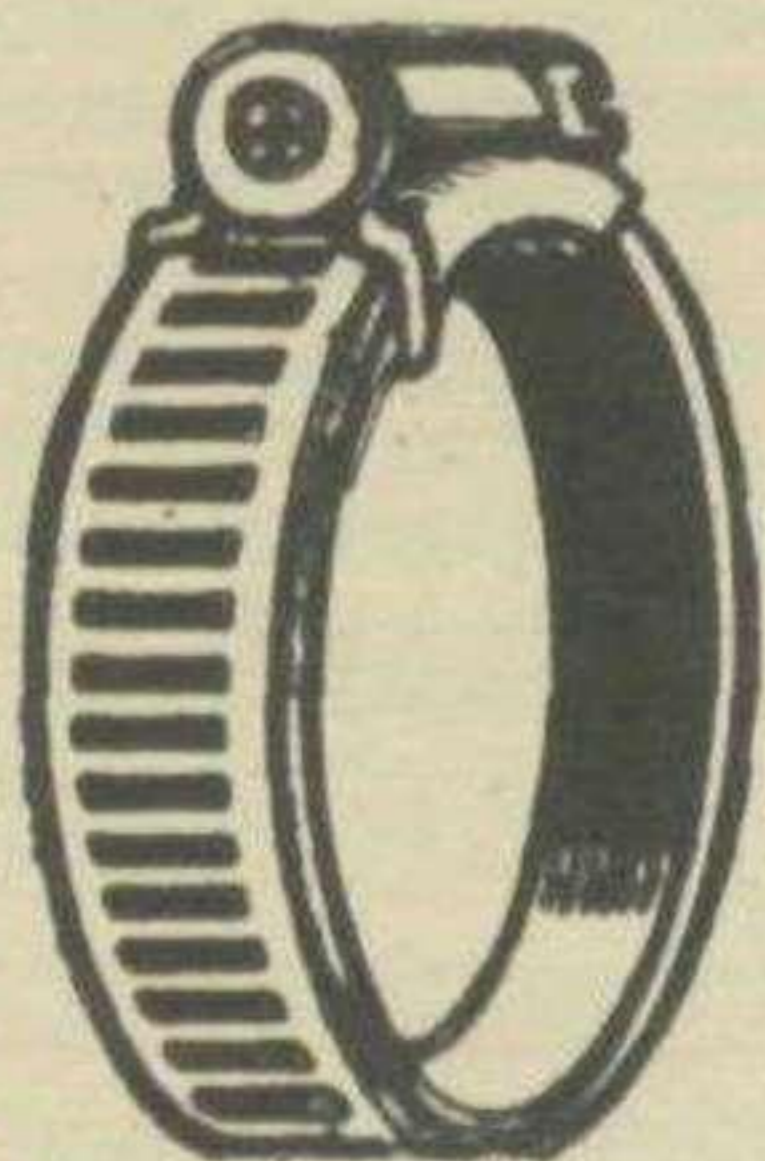
Supercharging was known before Germany went to war with Britain the time before this, but it was after the Armistice that Mercédès showed how to apply it to production cars, Fiat exploited it for modern G.P. racing and Austin, Alvis, Lea-Francis, Triumph, Bentley, H.E., and other British makers came along with forced induction for the sports car owner. Then the McEvoy-Pomeroy combination brought to this country the Zoller vane-type compressor, and thereafter makers of proprietary blowers started a many cornered struggle for success in a new field. Perhaps the time and money spent on supercharging has been of less value than that employed in other directions, at all events, there are fewer supercharged cars marketed to-day than was the case at the midway point of the period under discussion.

Car prices have fallen almost as satisfactorily as car efficiency and value have increased. The £100 car was a Morris achievement, after countless cyclecars and the four-cylinder Gillett and two-cylinder, rear-engined Waverley had striven for success in this field.

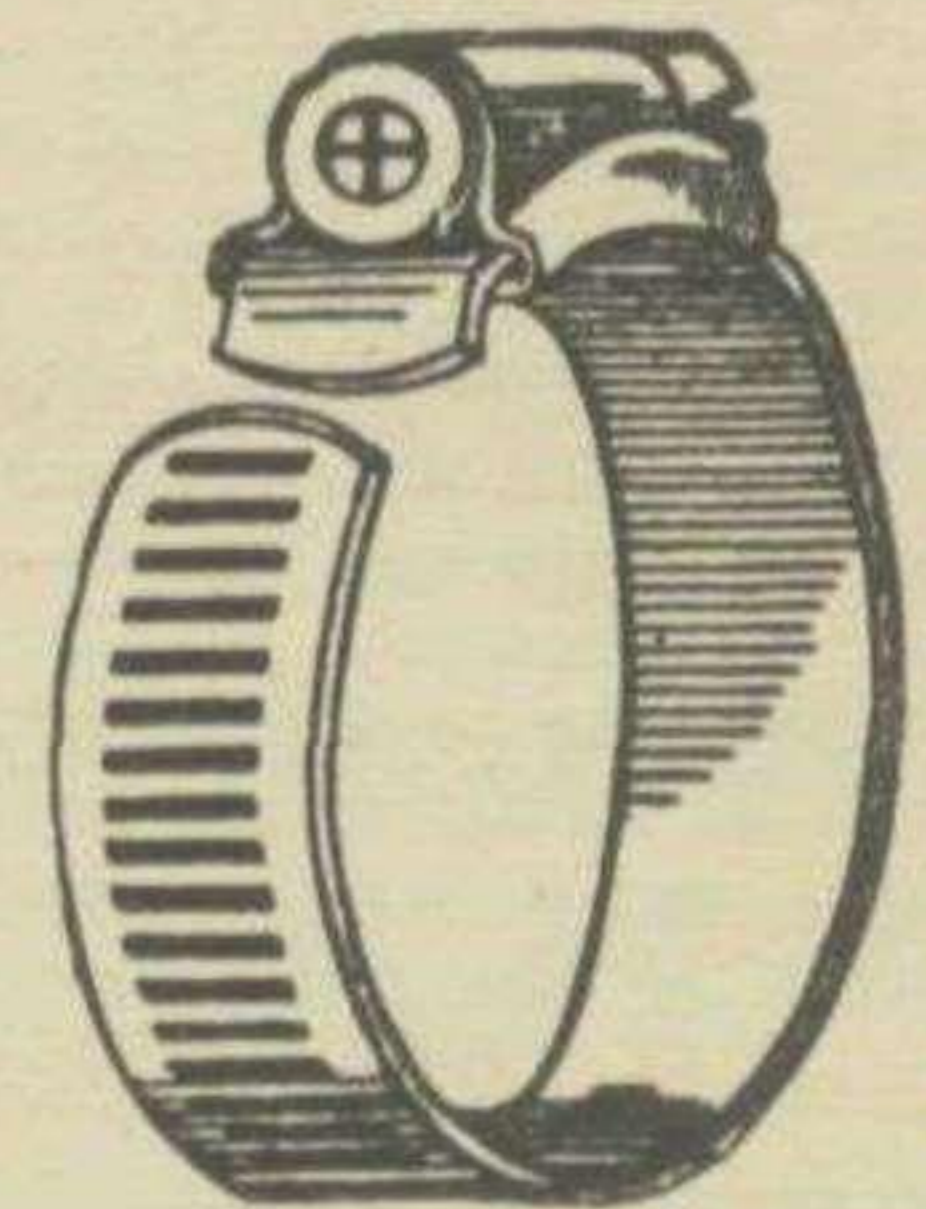
Verily, much water has flowed since we last were at war. Now that the wheels of industry are clogged once again we must derive pride and pleasure from a consideration of the progress which we achieved during twenty years of peace.

JUBILEE WORM-DRIVE CLIPS

THE BEST POSSIBLE TO GET



MAKE SURE YOU HAVE THEM
FITTED ON YOUR RADIATOR
JOINTS, LEATHER COVERS,
ON UNIVERSAL JOINTS, AIR,
OIL & WATER HOSE JOINTS.



ALL IN ONE PIECE.
EASY TO FIT.

NO PARTS TO LOSE.
GUARANTEED NEVER TO LEAK.

A KEEN MOTORIST WRITES: "I cannot understand anyone using any other pattern, as yours are the last word in satisfaction and efficiency."

STOCKED BY ALL GARAGES
& ACCESSORY DEALERS

MANUFACTURERS:

L. ROBINSON & Co.,

2, London Chambers,
GILLINGHAM, KENT.

PLEASE MENTION "MOTOR SPORT" WHEN CORRESPONDING WITH ADVERTISERS

Club News

A little more news of Club intentions has come to hand, but, even now, there seems to be a general apathy so far as arranging social programmes is concerned. This is a matter for regret, especially as a very considerable number of motor-cycling clubs are carrying on, not only with social evenings, impromptu suppers and film shows, but with short club runs. It may well be argued that motor-cycles use less fuel than cars and that this is a most vital consideration in these hard times, but nevertheless enthusiasts should exist who would rather use half the monthly "pool" in communal motoring than employ the whole allowance in short-distance pottering. The Government obviously has no objection to the ration of 200 miles per month being used for purely pleasure motoring, although any supplementary grant is intended for utility transportation. In this connection an ambitious event organized by the Rugby M.C. & L.C.C. stands right out. On September 24th they staged a fuel consumption test round two laps of a triangular 2.6 mile course. L. H. F. Warth won the car class with a figure of 60.7 m.p.g. with an open Ford Ten. A Rover Ten managed 51.7 m.p.g., a Morgan tri-car 60.3 m.p.g. and a 350 c.c. Levis 172 m.p.g. Such contests were quite frequent after the last war, G.N. cyclecars contriving to do something around 90 m.p.g.

The Vintage S.C.C., astounding institution, actually continues to enrol a few new members, including one from Holland. To conserve finance for setting up the Club when hostilities cease, the "Bulletin" has been suspended, at all events in its old form. Shakespeare's Mors and Enfield tourers, the 7-litre Renault "Agatha," Clutton's Itala, the 57 h.p. Daimler, Forrest Lycett's Alphonso Hispano, Shakespeare's Type 55 Bugatti and Clutton's 1923 type E 30/98 Vauxhall have all been put for safety's sake in Lavender's garage at ———, "somewhere in Surrey." Incidentally, the Vauxhall was quite wrongly described as an O.E. model in our September issue; actually it is a beautifully preserved specimen of the earlier side-valve "E" type. Col. Clutton's Fafnir and Sam's Bentley will both be stored in the country; the Fafnir has just completed another summer season's work without a moment's trouble, save for a few "shorts" in the twenty-seven year old electric wiring. In the last war she covered over 100,000 miles on active service.

Peter Clark and his wife have acquired the 1914 G.P. Mercédès—a car of topical interest just now and believed to have been the reserve car of the famous 1914 team. It still did 85 m.p.h. in top and about 78 m.p.h. in third at 3,000 r.p.m. with the heavy touring body it had when in the hands of its late owner, Major R. M. S. Veal. On arrival in town, Heal and Clutton fell upon it and in two hours

had restored it very much nearer to G.P. trim, removing about half a ton of equipment. This Merc. pulls a top gear of about 2.5 to 1 and has a four-cylinder sixteen-valve engine of 4½-litres, rated at 21 h.p.

Heal had bad luck when towing the 1910 Fiat down from Worcester before petrol rationing came in. The big car overturned and Peter Robertson Roger, in the driving seat, broke his leg on the steering wheel and cut an ear. We are very glad to be able to report that he is progressing favourably and remains exceedingly cheerful. Moreover, Heal says the Fiat is not broken beyond repair and should appear as good as new when war is finished with. Incidentally, we wonder whether John Morris has applied for a petrol ration for the Benz—presumably to allow him his 200 miles recreation per month he would have to be allotted about 40 units!

The Bugatti Owners' Club has closed down on activities, but hopes to issue a news-sheet at intervals, and is believed to have let Prescott "for the duration," which should assist the club financially.

The Veteran C.C. has likewise suspended activities, issuing a final note requesting the safe storage of members' pre-1904 cars. Jackie Masters has promised to notify members of the M.C.C. at once, should it be possible to resume activities. His address is 22, Norland Square, W.11.

The Liverpool M.C. has a new address: Pacific Building, 33, St. James Street, Liverpool, 2. The Leamington & D. M.C. and A.M.C.A. held socials every week throughout September. The C.S.M.A. has suspended its Gazette until further notice, but the Sunbeam M.C.C. hopes to get out a small bulletin and to hold Saturday luncheons. The B.R.D.C. seems to have vanished since war began. The Harrow C.C. held an almost forgotten gymkhana in August, at which Lawson, Adams, Biggs, and Murkett were very much in the public eye. There seems to have been a universal change of cars, for Lawson and Adams used Vauxhalls, and Biggs a Lancia, though Murkett had his M.G.

GOOD NEWS INDEED

It is announced that if Brooklands is not entirely taken over by the Military, it may be possible for the B.A.R.C. to hold a few socials at the Track. There is a plan afoot to institute a new £1 1s. 0d. subscription rate, the club house remaining open. Brooklands Aero Club is closed. In the last war the Track was eventually closed to the public, and did not reopen until about eighteen months after the Armistice.

THE A.C.U.'s ATTITUDE

The A.U.C. has issued an official announcement to the effect that the organization so carefully and successfully built up for the encouragement and control

of the Sport should not now be allowed to crumble. No open events will be held and notice should be given of any proposed event that is not a purely local affair. Government sanctioned speedway racing, if any, will be encouraged and approved by the A.C.U. This statement was signed by Col. Loughborough. Everyone will wish the R.A.C. to make a similar, and at least as lenient, announcement. We can see no reason why a few trials should not be held, for entry by hyper-enthusiasts. We believe some cinder tracks (motor-cycle) will reopen, so at least open exhausts of a kind will be heard again.

WHAT OF THE A.R.P. SERVICES?

Now that so many civilians are engaged on driving of an adventurous and rapid nature in association with A.F.S., First Aid Party and Ambulance, etc., A.R.P. jobs of work, is it too much to hope that borough councils and local civic authorities may, if only once during the War, hold contests of a motoring nature open to such personnel? Preferably speed trials, for owners' own vehicles. While association with A.R.P. drivers has emphasised to us in no uncertain fashion the vast difference between your true enthusiast and your merely competent, but disinterested, driver, it is feasible that quite a few depots could produce at least a solitary, candidate, to compete for inter-depot or inter-town honours. This should be of some little interest to remaining drivers and personnel, and so might consolidate their keenness for their jobs. It should serve to show just how keen, in the genuine motor-sporting sense, are these attractive and invariably be-trousered young ladies who have joined up as drivers. Personally, the writer has yet to discover one such who will enthuse over motoring, of the old, ordinary kind, immediately following a night shift on her ambulance . . . Reverting to the practicability and possibilities of such a scheme, inter army motoring events were not altogether unheard of, last time. So is this a good idea, or merely something else in the "what a hope" category?

GENERAL NOTES

Well, of course, there's not been anything like so much motoring of late. The experimental Austin took a violent dislike to its first ration of "Pool" petrol, another Austin just flatly refused to motor at all, although the head was removed and the timing thoroughly checked by an expert, and so only the hack Austin saloon, with its lamps suitably shrouded and obligingly giving its 45 m.p.g., could be used. Black-out driving has really proved very little trouble, except in heavy rain, and now we are hoping soon to experience another war-time set of conditions, namely, dicing something rapid over empty roads in the winter sunshine. Quite obviously, enthusiasts remain

CLUB NEWS—continued

enthusiasts, even with the world at war. Several M.G.s and that sort of thing have scurried through the gloom and we have noted quite a few old-school Bentleys, some striking modern Bentleys, including one driven by an R.A.F. officer, two Amilcars and another Frazer-Nash. There was a Rover of something like 1915 vintage happily in action and a second-hand dealer had actually turned a motor-cycle combination of the wicker-chair sidecar sort, alas, minus the engine.

The idea occurs that enthusiasts might now get quite a lot of fun by buying old light cars of the 8/18 Talbot class and using them up to the end of the year. Dilligent search should reveal fascinating old-timers already taxed for not very much more than the next quarter's tax on the existing car, judging by the modern small cars at small dealers which, marked up at £50-£65 before the war, are now going for £20-£30. Whereas in former times old cars gave you the added worry of "tyres, spares, slowness and excess insurance," with motoring curtailed to 200 miles a month such things matter little and doubtless insurance companies will no longer quibble over old vehicles. Some of the older coupés are very snug for shopping and theatre parties and you have no need to trouble about dented wings in the black-out. So I shall be interested to hear of such cars saved thus from being melted down as scrap, or of any that are

in need of a new War-time home. Incidentally, the older cars had an excellent reputation for fuel economy . . .

A spot of A.R.P. work, at a stretcher-party depot equipped with Austin Twelve and Eighteen saloons and Morris Ten and Twelve saloons has not been without lighter moments. From the discovery that it is possible to drive in a gas-mask, even wearing glasses, to hectic practice dashes in mass-formation along the local main roads . . . The writer is no end bucked at having been mildly remonstrated with for driving too fast, and along a private road at that, on what was patently a timed test, and it gives food for thought to compare the incomes of men like Nuvolari with the rate of pay offered to local, full-time drivers—about 8½d. an hour! There are the minor excitements such as the driver who cannot commence his engine on a test-call because he has forgotten to switch on the ignition, the car which goes off fully choked, to crawl in with sooted plugs, and the crew which gets hopelessly lost on a practice spin in full gas-kit, having to not only alight, but partially disrobe, before any member of the public can be called upon for directions. Although no well known racing men are amongst us, there is he who always goes over to the I.O.M. for the motor-cycle T.T. races and whose motoring experience extends back as far as the days of the

Tamplin cyclecar and there is a gentleman who used to be a tester for General Motors, though he is now a singer by profession. Of the rest, clerks, commercial travellers, taxi-drivers, sweep, cattle-slaughterer, musician, waiter, lorry driver, barber, journalist, builder and the rest, happily occupy the cars and depot together, some on twenty-four hours' continuous duty. Nor is it all play, for you are expected to pass a First Aid examination and I would far rather study torsional vibration in crankshafts, any day . . .

FURTHER CLUB NEWS

Although the N.W. L.M.C. is suspending activities, they deserve congratulations for producing a last, and rather dramatised issue of the "Gazette." It contains an account of Paul Hardy's Continental holiday with a Hillman Minx, in company with V. S. A. Biggs and his new Allard, and reports of two events by "The Umbrella Man"—we have just guessed his identity. Have you?

Ilford M.C. & L.C.C. is staging socials at the "Golden Pleece," Wanstead Flats on Thursdays and at the "White Heart," Abridge at 11 a.m. every Sunday.

The West Middlesex Amateur M.C.C. proposes Sunday morning meetings at the "Myllet Arms," Western Avenue, Perivale, and announces a new secretary: E. J. Thurston, 22, Evelyn Drive, Pinner.

THE HOME FRONT

Activity continues on the home front in spite of fuel rationing, black-out depression and dangers,—and the 20/- increase per h.p. in next year's tax.

Although our bigger manufacturers are largely engaged on armament work, car production has not entirely ceased. Sunbeam Talbot report some sales, and introduced a new 2-litre just before the War. Hillman sales also continue and S.S. have delivered a satisfactory number of Jaguar cars since the outbreak of hostilities, although they announce that production will probably cease by November.

The Bentley Service Station at Hendon

still operates, but production of Rolls-Royce cars has been temporarily suspended in favour of "Merlins." Wolseley and M.G. continue to cope with orders, although the new Wolseley Eight will not be put on the market now.

Riley report a big number of orders and will go on with production on a limited scale, concentrating especially on Export.

Bellevue Garage is heavily protected by a wall of sandbags, bearing "Business as Usual" announcements. The racing shop is now an A.R.P. ambulance station, and, all the racing cars having gone home to their owner's, houses a variety of vans and cars for first-aid work,

including D. G. Evans's Siddley Special saloon. Benn's Motors, of Mold, North Wales, is making every effort to carry on, and Lemon Burton is specialising in A.R.P. requisities as well as Bugattis.

Adlards Motors carry on as usual at Putney and Brixton and offer excellent commercial vehicle facilities.

Work proceeds on the new Thompson and Taylor building at Brooklands. Boon and Porter and University Motors have been conducting fuel-economy experiments.

[We shall be glad to receive news of business activities of interest to sports-car owners.—Ed.]

A NEW RACING ALTA

War has interfered with the introduction of a new racing job from the Lada workshops at Tolworth.

Lady Mary Grosvenor's new *monoposto* 1½-litre Alta was completed at the end of August. The new, tubular chassis has a wheelbase of 8 ft. 5 in. and a track of 4 ft. 3 in. It has entirely new independent suspension, comprising torsion bars running within the tubular cross-members. The wheels are carried on ball-bearing, box-section swinging links, coupled by T-pieces to the torsion members. There is an internal reservoir to lubricate the steering pivots and the king-pin location remains constant at all angles of wheel deflection. Luvax piston shock-absorbers are fitted and there is a 28 ft. turning circle. Alta formerly used coil springs. Girling brakes are a new feature. The 15 in. alloy drums have cast-iron liners.

The supercharge is now 20 lbs. per square in. and over 200 b.h.p. is claimed at 5,000 r.p.m., or over 275 b.h.p. as a 2-litre. R.R.A.C. 9 alloy is now used for the big-ends. There is E.N.V. transmission, a 2½ gallon oil tank and a 33 gallon fuel tank. The cost is about £1,250. Our sympathies, Lady Mary! Taylor still toys with a V8 300 b.h.p. 1½-litre engine for this chassis.

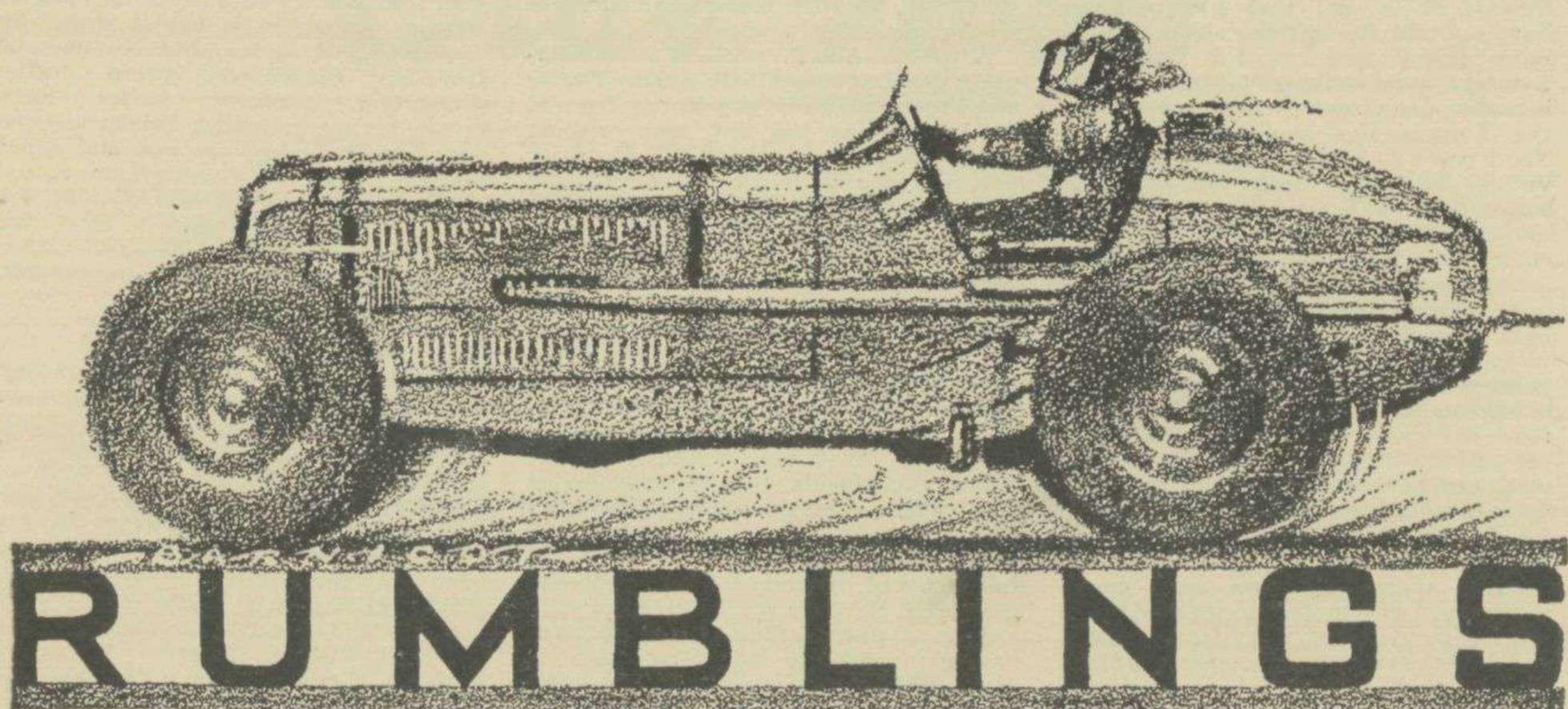
I.A.E.

The Research Centre will concentrate on work of National Importance "for the duration," but no papers will be read. It is hoped to continue the Journal, containing papers already prepared—which we hope will include Raymond Mays's contribution on the technical aspects of motor-racing. The last issue contains a paper on sound-problems, by General Motor's engineers.

AN IRISH HILL-CLIMB

As it happened, Phoenix Park was not the last British motor-racing event until the war is over.

As Eire postponed its fuel rationing until October 2nd, it was found practicable to run on open, speed hill-climb at Ballinascorney Gap, near Dublin, on September 23rd last. The three-quarter mile course involved many corners. A new record was set up by A. P. Macarthur, handling his well known M.G. Magnette which clocked 48.79 secs., or 55.34 m.p.h. As a handicap system was in operation, D. M. McCracken's Morgan won the 1,100 c.c. class in 52.26 secs., or 58.26 secs. actual time. Macarthur's M.G. was second and third was Stanley Wood's 4/4 Morgan, in 53.9 secs., or 59.9 secs. actual time. Macarthur was on scratch.



Echoes from the Last One

THE news that Mrs. Peter Clark has bought one of the 1914 G.P. Mercedes recalls the dramatic adventure that befell one of the team on the outbreak of War in 1914. In April of that year the famous German firm had given a luncheon to the Trade at our Trocadero. At this gathering a director arose and naively stated that his firm thought it advisable to win, for publicity reasons, the forthcoming French Grand Prix! Long beforehand Mercedes had been conducting experiments at the Lyons circuit. The result? As we all know, six of the four-cylinder 4½-litre, sixteen valve, rear-braked Mercedes started and the finishing order was Lautenschlager (65.35 m.p.h.), Wagner and Salzer—all driving Mercedes. Came the War. One of the team was seized by the military authorities while still in France and was sent to Rolls-Royce, Ltd. at Derby, where the engine was carefully examined and, they say, finally bench-tested to destruction. From this research evolved our 75 h.p. Rolls-Royce "Hawk" aero-motor, which was built at Straker-Squire's works. This may be said to have been the least successful of the long line of Rolls-Royce aero motors. Yet, when a German Phalz aeroplane was shot down in France it was found to have an engine to all intents and purposes identical with those which won the French Grand Prix so convincingly for Mercedes at Lyons, except that the cars were four-cylinder and the aero-motor was a "six."

One can hardly visualise aero-motor designers copying racing-car engines to-day; indeed, when Peace is declared it may well be that the aero-engine of war-time will point the way to getting even greater performance from racing "bolides" than we did in 1939, and to making racing under the 1½-litre Formula—which we shall presumably then commence using—even more sensational than anyone expected.

To-day, our Supermarine "Spitfire" single-place fighter goes 367 m.p.h. on a Rolls-Royce "Merlin II" motor of 1,030 h.p. and Germany's Messerschmitt Me 110 two-place fighter does 385 m.p.h. on two Daimler-Benz DB 601 motors of 2,200 total h.p.

This time, although Brooklands staged a picket-gate complete with policemen towards the Aerodrome end of the aerodrome road within a week of war, and showed dazzle-painted splodges here and there on its grey surface, it seems likely that we shall be able to go on using the Paddock club-house and perhaps bits of the Weybridge estate for social events. It was different last time, when you couldn't get into the place and, anyway, the solid-tyred R.A.F. lorries played havoc with the surface (excuse for present roughness which "A.P.B." is too much of a gentleman to resort to). Even so, Brooklands had its war-time race-meeting. It happened on August 7th, 1915, and was termed the "All-Khaki" meeting. Mostly it was motor-cycles and only the Railway Straight was in decent enough order to be used. Entry fees were just 2/6 and admission was 1/- per head. We find Maurice Newnham astride a Douglas, O. M. Baldwin on a Matchless and a P. V., R. A. Woody with an Indian, Frank B. Halford driving a Calthorpe Minor car, H. F. Edwards fighting a 90-bore Zenith, and W. G. McMinnies with his Morgan. Other cars included G.N., Singer, Richmond cyclecar and Baby Peugeot. Officials included the still well known names of Loughborough, Low, Ebbelwhite, and Reynolds. If in 1915, why not in 1940?

Peaceful Motoring

Even in these days of considerably curtailed mileage one has opportunity to notice shortcomings in modern cars. For example-pistol-type handbrakes which jamb one's knuckle against the roughly-finished back-edge of the fascia, and window winders that refuse to

RUMBLINGS—continued

operate fully when a sliding front seat goes back far enough to contact the winder. Seat backs and squabs, too, that sometimes possess unpalatable angles.

He would be a brave man who could forecast what improvements popular cars will incorporate after the war that are not evident now, but at least cars did become better in certain respects, in general, by 1918 as distinct from 1914. When lasting Peace arrives we shall probably want to motor peacefully, so at all events designers might get down to a study of these, and similar, minor problems, right now. As for the trend of design of racing-cars; well, we will merely content ourselves with presenting a survey of design as it was up to this year, under the 3-litre Formula, in a future issue.



Another peace-time memory. H. L. Benn and his modified 1924 Austin 7 climbing Prescott in 62.8 secs. Economy sports cars are now right in the news.

Where are they Now

News continues to come in of well known personalities who are nobly doing their bit in time of need. Morris-Goodall runs a canteen for troops, Gwenda Hawkes is trying to be allowed to help the Polish army, or was; Chiron deals in French Army Transport of the four-legged kind, Ripley is in the A.S.C., Murton-Neale is a Pilot Officer, R.A.F., Peter Clark is a policeman, and contrives to use his Le Mans H.R.G. on active service, Scannell is a fireman, Ansell and Shaw-Taylor are gunners, Duke Woolley is R.A.F., Hugh Hunter an A.R.P. Warden.

Capt. G. E. T. Eyston deals with war supplies, H. L. Brooke is in a demolition squad, Mathieson is an A.D.C. to Authority; Major Gardner is again in the Gunners, Wakefield is a pilot in the R.N.V.R. and Yarburgh Bateson is waiting to put out fires. Sommer, Wimille, Benoist, Senechal and Veyron are in the army. In Wales, Benn does A.R.P. work including ambulance driving instruction to Bright Young Things. Any more, please?

Odd Spots

Capt. Alister Miller has associated himself with an ambulance scheme said to embrace "reconditioned

chassis that once belonged to millionaires, and which are to be manned by racing drivers."

* * *

Newport, Monmouthshire, has in its Mayor a far-sighted motorist. He has formed the Newport Motor Volunteer Corps, for car drivers of both sexes and all ages, and driving ability is specially considered. In consideration of our views expressed in the October issue under the heading of "Fast Drivers Not Wanted" this is of particular interest. You enroll at Newport Town Hall. Now, then, London and other big cities!

* * *

Three thousand one hundred and fifty six more new cars were registered in July 1939 than in July 1938. Confound Hitler . . . The biggest increase was in the 8 h.p. class.

* * *

Jack Barclay has dug out a 1903 Stanley Steamer to eke out his petrol rations.

* * *

The open, straight-eight Jensen is shown off very well in the film "Q-planes," wherein an Airspeed Envoy pretends to be a 330 m.p.h. secret bomber, or suchlike, and Brooklands Flying School "Moths" figure as fast chasers. Other cars include a sports Singer Nine and an old-school Bentley.

* * *

Correction.—In the article "Multum in Parvo" in the skeleton October issue we said that one-third of a pint of oil lubricated the blower interior. This should read: one-third of a pint *per gallon*, oil being mixed with the Discol. Prospective owners of blown "Ulster" Austins kindly note!

NEXT MONTH'S ISSUE

Will contain a report from the Secretary of the British Racing Drivers Club, which has ceased activities for the duration of war.

LOOKING BACK

BEING AN ACCOUNT OF SOME VARIED ROAD TESTS CONDUCTED FOR "MOTOR SPORT"

IN the beginning this article was inspired by the annual habit of a very popular motor-cycling, journalist, who thus summarizes his experiences of all the machines road-tested in the course of a year's riding for his paper. Why, then, shouldn't we do something of the same absorbing sort in MOTOR SPORT? Now war is upon us, and, further road-testing being most unlikely for a while, at all events on the generous scale of former times, it seems a reasonable scheme to touch briefly on each of the cars road-tested, so far as the present writer is concerned, since his association with this paper. Some cars stand out for their sheer performance, others on account of interesting experiences and undertakings accomplished with them, but each one has definite character of its own. It is interesting that, although each has been handled very much as an ordinary owner, as distinct from a professional motor scribe, would use the car, indeed, driven hard in every instance as your true enthusiast likes to drive, usually over extensive continuous mileages, only once has a car left us stranded, and only in one other instance has a major repair needed to be effected on the road. The experience gained in trying all these divers makes and types has been enthralling beyond words. One cannot attempt to name one car in any particular group as being the "best," or offering the best value for money, for each, in its own way, appeals for a particular job of work or given set of conditions. Let us see how this observation applies to each individual car taken out for test, rather than try to tabulate performance data in attempting to pick out invidious "ideals."

First, then, the Talbot Ten open "Alpine" tourer, tested towards the end of 1936. A very handsome little car, especially as it had aluminium wheel discs, and one to remember for its smooth, willing flow of power and general convenience of handling. It did not pretend to be a super-sports sort of vehicle, the maximum speed being about 66 m.p.h. But it could put up very decent averages by reason of good brakes, balanced cornering and excellent steering. This last-named characteristic was most pronounced, the smooth, light action being quite rare at that time and, indeed, previously experienced, albeit to an even finer degree, only on the remarkable B.M.W. I recall that we used the Talbot for a day's run to Shelsley and back, amongst other trips, in company with a blown M.G. Midget and a Brescia Bugatti, and, in torrential rain, found the weather protection extremely snug. Seven hundred and fifty miles were covered altogether and they left a highly favourable impression; this car was the only one in which the writer has ever been apprehended for exceeding 30 m.p.h. in a built-up area, which perhaps is a tribute to its easy ability to run fast. Incidentally, Talbots keep a fleet of Press cars, each one beautifully turned out and handed over with a comprehensive log book containing detailed information about the car and

a note to Authority that the car insurance is all in order. Barbly Road is truly the road tester's idea of heaven!

Next, a six-cylinder, closed Brough-Superior, which took us some long runs in very wintery conditions. Five hundred and eighty fast miles were completed in it altogether and we became accustomed to using its abundance of power to cruise comfortably at 70 m.p.h. and to accelerate up to 50 m.p.h. in under 14 secs. A high degree of stability allied to completely silent cruising made the Brough very pleasing to handle on long, rather trying runs, particularly as the Lockheed brakes were amply able to deal with emergencies. Here was the typical American automobile re-bodied and re-designed to conform to British ideals and a very pleasant machine had resulted.

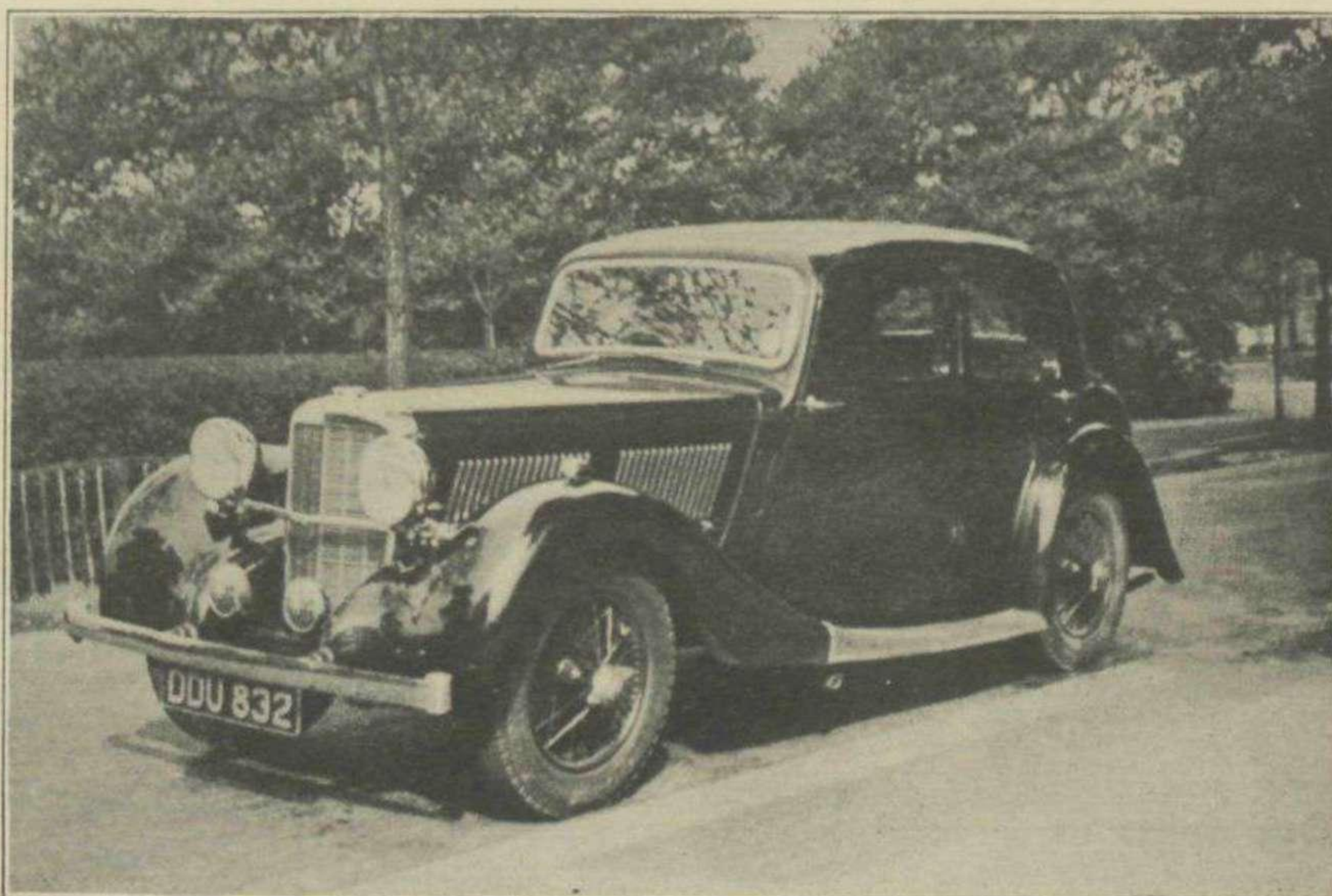
Not long afterwards we had extensive experience (672 miles) of one of the first of the T-type M.G. Midgets. Here was a thoroughly lively small sports-car, yet one without a trace of embarrassing temperament. Its 1,292 c.c. engine gave its power willingly and the gear-change was good synchro-mesh in the modern style. In its manner of handling this latest M.G. was grand fun to drive, and after lunch with George Tuck at the Abingdon Works we found it, even so, surprisingly quick over not too familiar roads. It did a genuine 80 m.p.h. (4,900 r.p.m.) round Brooklands and 0-50 m.p.h. in 16 secs. and the push-rod power unit revved to 6,000 r.p.m. on bottom gear. So it is hardly surprising that, bound for Peterborough one Sunday morning, we accomplished what was then a new personal record for mileage covered in one hour, since bettered only in a car many times the engine capacity and price of the M.G. Moreover, this very real and reliable little sports-car was doing a cool 27 m.p.g.

The next 300 miles or so of professional

dicing were done in one day in a Type 45, 2-litre Frazer-Nash-B.M.W. saloon. It was not the first B.M.W. we had driven, or been driven in, for Aldington's own Type 55 had previously been loaned for a trial. Nevertheless, we found it difficult to restrain our enthusiasm for that marvellous steering, high-g geared, yet so exceedingly light and smooth, and for the remarkable suspension, combining comfort and absolute stability to an extreme degree. Add to that a maximum speed of 75 m.p.h., perfect brakes, an engine able to rev. without complaint to 5,500 r.p.m., and a power-weight ratio resulting in 0-50 m.p.h. in under 14 secs. and it is easy to understand how we left London near to mid-day, drove to Clacton, lunched, walked, had tea, and got home again at mid-evening, enjoying every second of the drive. You could sum up this B.M.W. by saying that however casually you drove you seemed to average 40 m.p.h. in complaisant security.

Another Continental, the little Italian Fiat "500," proved highly entertaining on a 250 mile day's jaunt to the Cotswolds and back. The road holding qualities made up for any lack of speed, as speed, over give and take roads, and there was lots to be said for a fuel consumption of 45 m.p.g. from a baby capable of doing real big-car work for its living. Since then further experience of what is one of the most outstanding youngsters of our time, shows that an average of over 35 m.p.h. is possible on a long, main-road run, given certain concentration in cornering and ready manipulation of that rigid lever controlling an excellent four-speed gearbox.

An Austin Ten "Cambridge" saloon, used as utility transport over an Easter holiday, served very materially to emphasise how excellent is the low priced British family car. For that Austin could do its 60 m.p.h. without much effort,



The 12/70 h.p. Alvis Saloon

LOOKING BACK—continued

gave 28 m.p.g., and would corner without disaster with the tyres howling, if you wished. And it was the sort of car which gave heaps of enjoyment with complete freedom from worry, being easy to handle, with excellent driver-visibility, and seemingly capable of going on for ever without any sort of attention. It is on such productions as these that much of the British Motor Industry's reputation rests.

Covering 400 miles in a day, mostly hill-storming in the Salisbury district, with a 1½-litre Meadows-H.R.G. was most satisfying. This 100 per cent. sports job proved able to do 71 m.p.h. in third (5,000 r.p.m.) and to cover the Brookland's half-mile at 88 m.p.h. Hills like Ibberton troubled it not at all, and on the open road it cruised indefinitely at 70, the thermometers indicating no signs of distress. Moreover, with all this, it did a full 30 m.p.g. Its road-holding and steering were definitely thoroughbred in rather the old-school style and it was delightful to handle a quick plain gearbox with a visible gate. H.R.G.s keep no special Press car but their attitude to would-be road-testers is most pleasantly tolerant and informal.

About this time the four-cylinder, 2-litre "14/60" Triumph "Dolomite" saloon provided a chance to sample the better type of British utility car. The road-holding, steering and general layout, including the remote control gear change, endeared the car to the sportsman, even if the particular example tested was a trifle disappointing as to fuel economy and sheer maximum speed. Four hundred and fifty miles in the Triumph's company resulted in a full appreciation of the comfortable and effortless motoring which £338, wisely spent, will procure. A friend put up a truly astounding average speed with this "Dolomite" into the bargain and so handsome was it externally that we actually went to a local dance in it one evening, in lieu of motoring.

The A.C. has always been subject to the attention of enthusiasts and has had the light-alloy, single o.h. camshaft six-cylinder engine ever since the days when S. F. Edge looked so competently after this unique firm's business interests. Something over 500 miles' driving in the

1937 "16/80" Competition two-seater revealed the strong charm of the A.C. Six in modern guise. Although it is beautifully equipped and appointed and its engine very sweet, as a good six should be, and scarcely sensitive to variations of ignition timing, the car is nevertheless a real performer. Returning from Shelsley Walsh we cruised indefinitely and very pleasantly at 60 m.p.h. (3,000 r.p.m.) and later investigation on Brooklands showed the absolute maximum to be 86 m.p.h. and 0-50 m.p.h. acceleration to occupy just over 11 sec. This A.C., too, gave the writer claim to a clean climb of Knatt's Valley, in spite of a deflating rear tyre. Like every other present-day sports-car (the exceptions, alas, are too few to worry about) the gearbox had synchro-mesh, the lever, with an outsize knob, working quickly with excellent action. The steering, too, was of modern, light, smooth conception and interesting variations in suspension and road-clinging characteristics could be made via the facia-operated Telecontrols. This individualistic engine motored very nicely, be it at 400 or 4,800 r.p.m.

About this period brief re-acquaintance with an Allard-Special reminded us how well Sydney Allard has attended to V8 Ford steering and suspension and, incidentally, gave the writer his best Brooklands-driver lap to date, at nearly 86 m.p.h., the car slightly restive at around 95 over the Fork.

The General Motors Corporation is known to have done intensive research work for many years and a reflection of this was provided by a Vauxhall "25" saloon, outwardly a very ordinary machine, which, nevertheless, was quite amusing to drive, the independent front suspension and solid feel of the frontworks engendering confidence, so that something like 81 m.p.h. was reached in teeming rain and, cruising mostly at 70 on the clock, this roomy and sensibly-appointed automobile covered the 116 miles out of Finchley, to Donington, in three hours dead.

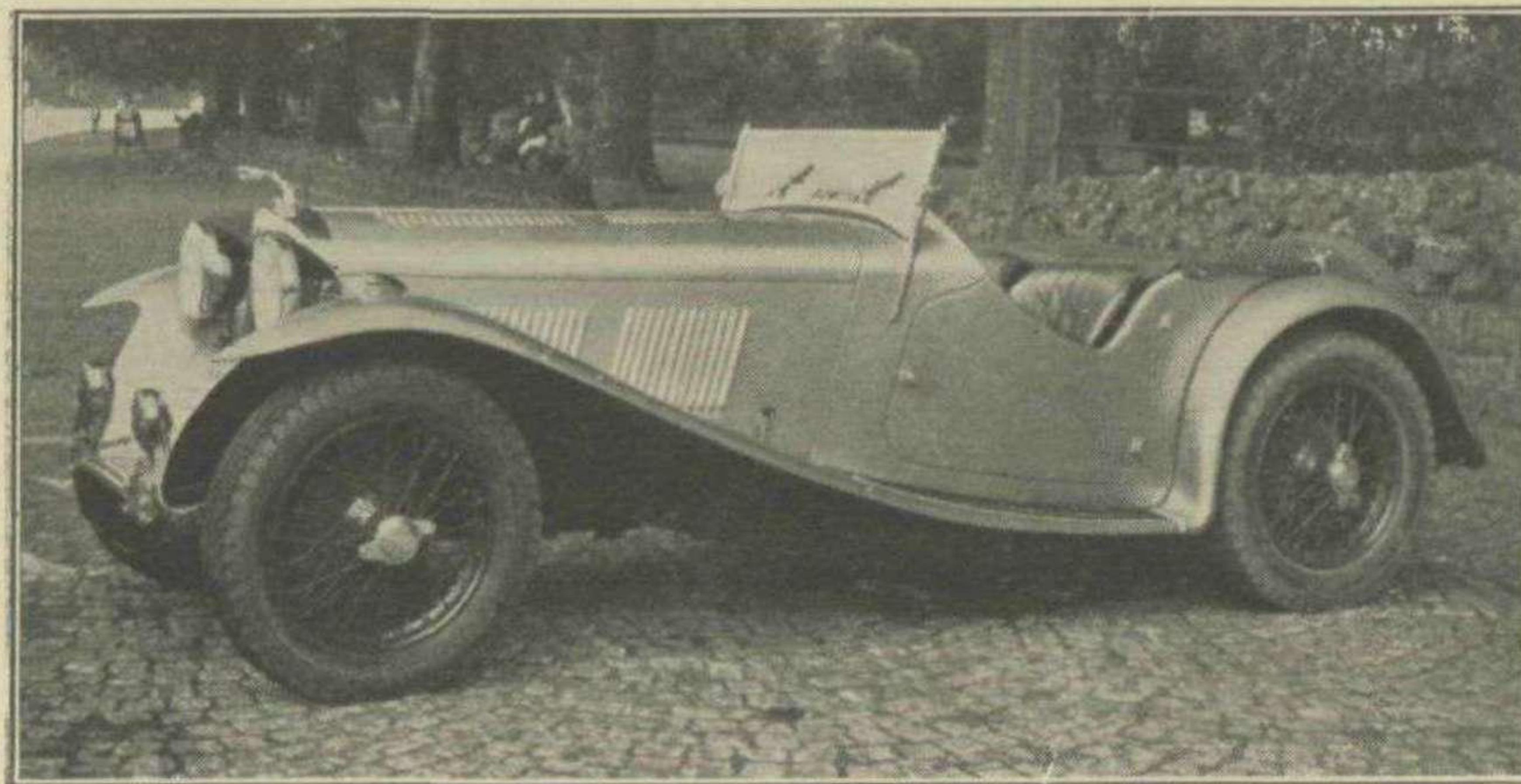
The 2½-litre Opel Cabriolet, obtained for test after rather a tussle with the man who was then Publicity Manager to this German-American firm, possessed road-holding qualities of the high order which one had come to expect of Continental

productions, albeit the independent front suspension was really quite supple, as it has been found to be on the smaller Opel "Cadet" and not quite in the B.M.W. category as regards sheer perfection of control. Even so, these Continental productions all show-up the British technician and his eternal half-elliptics. The Opel had a very effortless and willing 2½-litre push-engine and a three-speed gearbox, and very powerful brakes. Like its smaller brother its castor action in the steering was conspicuous by its absence. Rather "Yank" in some aspects, the convertible bodywork was very acceptable, and the Opel was quite a mile-eater, and good for 70 m.p.h. on the Track.

On the subject of extremely fine road-holding qualities of Continental cars, the unique little two-stroke D.K.W. stands right out in this respect. The back-bone frame and independent suspension not only results in a car which steers and rides beautifully, but which feels absolutely right and in entire agreement with its driver. Consequently, in spite of the 684 c.c. two-stroke two-cylinder engine giving no more than 50 m.p.h., we averaged quite a reasonable speed to the coast and back, although quite unused to the car. There is a strong fascination about the purr of the motor, and its gentle bleating as it over-runs on the free-wheel, and it had quite a deal of pick-up urge, while the dash-board gear-lever could be operated quite rapidly with practice. The whole car rode absolutely solidly and the driving position could not be bettered. An ambition lingers, to instal an engine of some 30 b.h.p. in this very clever little car, on the grounds that it would handle remarkably well at any speed you could get out of it.

We seem to have tried a lot of Continentals about this time—the opening months of 1938—for next on the list is the eleven hundred Fiat "Balilla" saloon—all very modern, with its sloping radiator grille and flush, pull-up door handles. And that Fiat had unexpected urge and handled as we had expected, so that we contrived to cover the 90 miles from the works to Prescott in exactly 2 hours; very fine going for a cheap car of this h.p. A high degree of controllability, of course, was responsible for this performance (one half-hour check gave an average of 48 m.p.h.) as the actual maximum was about 64 m.p.h. Subsequent experimentation up Prescott itself revealed that the Fiat was remarkably stable, even at racing speeds, and in spite of the rolling which photographs subsequently proved to be fairly excessive. If the "interior decoration" was plain, visibility was excellent, rear-seat comfort good and altogether this under £200 saloon impressed us very favourably indeed. But the fuel consumption was heavy and the firm's Press service on the lackadaisical side.

Now, for a complete change, we borrowed a Dodge 25.3 h.p. "Custom Six" saloon—the sort of automobile a friend lovingly calls a "big, vulgar yank." Really, there was lots to be said for this class of car. It was the sort of vehicle in which you could invite five friends



All that the Sportsman expects to find is evident in the 16/80 h.p. A.C.

LOOKING BACK—continued

away for a week-end trip with no preceding or subsequent worries about their comfort. The driver does hardly any real work and gets high averages just the same. Cruising at 60-70 m.p.h. was rendered effortless by reason of the over-drive and liberal acceleration there on tap. Brooklands was lapped at 72½ m.p.h. and at the other extreme we coaxed that Dodge very successfully up Lythe Right, when that hill was nice and sticky, though unfortunately removing a wing on "Allard's tree" in the process. Nor was the fuel consumption too unreasonable, for 3½ litres of motor—16-17 m.p.g. A day's experience of this Dodge enabled us to understand better the considerable proportion of such palatial "airships" which you find on British roads.

A Lancia "Aprilia" saloon added 750 very pleasant miles to the log, and here was a car approaching the personal ideal. Handling as safely and securely at speed as any modern we have tried, with excellent brakes and steering, and finger light controls, this outstanding Italian saloon of very modernistic outline, does over 80 m.p.h., achieves its 0-50 m.p.h. in 11½ secs., laps the Weybridge Track at over 75 m.p.h. and yet goes some 32 miles to every gallon of No. 1 fuel. Its oft-criticised plainness of interior never bothered us and we liked the layout of fascia and secondary controls. A very wonderful production indeed is this "Aprilia" and we included competing at Prescott, where you really throw a car about, in our experience of it. The only major criticism is that it handles so well you never feel that you are dicing.

At the opposite extreme so far as effort of control was concerned, but also handling very notably, was a f.w.d. Citroen Twelve saloon. Impressing one as a really big car, rock-steady, comfortable and riding very well, this Citroen, if it could not better 65 m.p.h., nevertheless possessed "life" that came as a pleasant surprise. The front wheel drive, too, was most interesting, and, while being discernible through the steering, was never disconcertingly so; moreover it certainly contributed to controlability on nasty surfaces, especially when power could be put on while executing an acute swerve. Lots of slime and gradient tested the front drive thoroughly and favourably and we grew to like the fascia gear-control, even if it did seem to jeopardise the passenger's fingers. In another sphere of activity, this solidly constructed "Twelve" put over 50 miles into an hour's running, admittedly over deserted, but teeming wet, roads. And at Citroen's, as at Lancia's, they were courtesy itself.

The "12 70" Alvis saloon—latest of a so famous line—stood out for its high degree of refinement, reflected in its interior appointments, delightful gear change, well laid out right hand brake lever, and the unobtrusive functioning of the 1.8-litre, four-cylinder engine. Strange to the car, we averaged over 45 m.p.h. on a difficult journey and this Alvis was capable of 59 m.p.h. in third and 77 m.p.h. in top gear. Again, at

St. James's Street, the motor scribe receives every attention.

Last, but by no means least, the 4½-litre Bentley; in our case a Vanden Plas drophead coupé. Here is an example of British automobile engineering in its finest form. We were lucky enough to be able to take this fine car right up to John o'Groats, from London, establishing what is probably an unofficial record for this run—at all events we got up in 15¼ hours, averaging 46 m.p.h. for the 702 miles, stopping only for breakfast, or an average of 50.5 m.p.h., running time. The Bentley road-holding, brakes and general controlability allow such averages in complete safety and with a minimum of fatigue—mentally as well as as physically, on which score the known dependability of Derby-bred cars count for much. Coming home, we averaged 51.2 m.p.h. down from Glasgow, the writer setting personal records of 62 m.p.h. for one period of half an hour and 56 miles in the best hour's running. That was single-man driving, nothing overtook the Bentley and the biggest difficulty was keeping the cruising gait to 80 m.p.h. instead of the maximum of 95 m.p.h., at which speed the engine was as unobtrusive and the whole car as silent as at a crawl. The fuel consumption of nearly 17½ m.p.g. impressed us equally with the performance. It is hardly necessary to refer to the beautiful action of the gear change controlled by that slender, right hand lever, to the smooth, progressive retardation of the mechanical brake-servo, to the delightful movements of the secondary controls, indeed, to all those qualities which combine to make the 4½-litre Bentley a car esteemed the world over. One recalls these elusive qualities as soon as this make is mentioned, if one has driven it any distance at all.

That, then, is the record of quite an extensive period of testing of a quite wide variety of cars for a paper which had sufficient space, and sufficiently intelligent readers (it is the fashion just now, be you a political weekly or a hip-pocket "digest," to throw out an appreciation of your subscribers' mental-

worth . . .) to discuss the resultant impressions and data in considerable detail. It has been a collective opportunity which no enthusiast would have refused.

Of course, over and above these definite tests, has been further experience with one's own and friends' cars, of second-hand cars tested and of runs in particularly interesting cars loaned by friendly readers. That has been equally interesting.

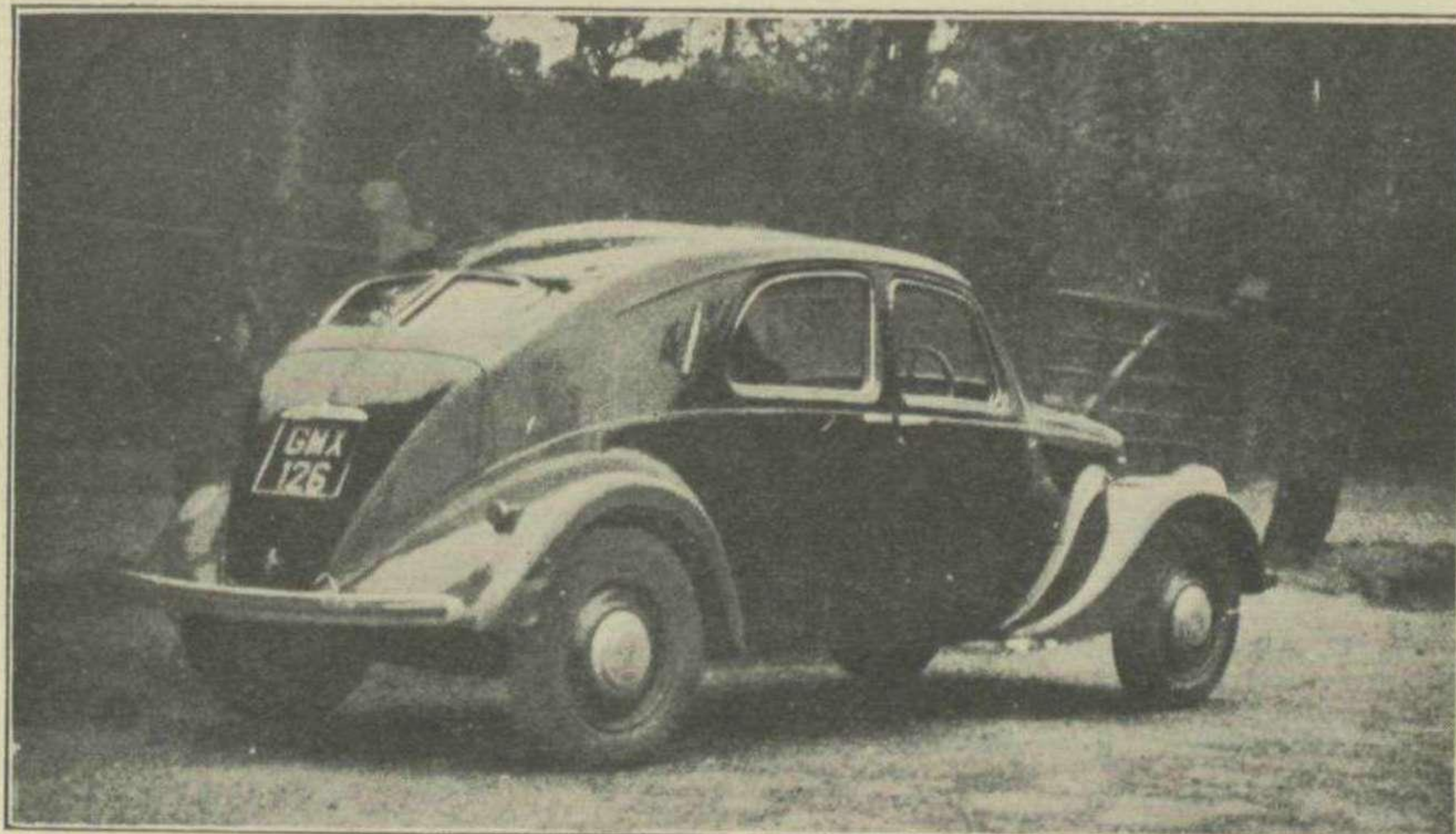
The question of average speed seems to crop up quite often, because, broadly, it represents a reasonable means of judging and emphasising a car's good performance-qualities taken as a whole. As a basis of comparison one might remark that a 7 h.p. saloon, known absolutely intimately, gives about 30 m.p.h. driven very hard, which average drops to 25 or so on more difficult, even long, runs. So some of the cars tried have done very well, regarded only from the angle of an ability to provide rapid transportation.

Quite apart from one's increased knowledge of modern cars, there has been the joy of driving, of exploring new country, of the company of friends, old and new, of new places visited and fellow enthusiasts met. Only on two occasions has trouble intervened; both times, curiously, it concerned the clutch mechanism. Looking back, on this job of work, brings extremely happy memories. To anyone to whom motoring and motor-cars means anything at all, that will be understandable.

DUNLOP SENDS £1,000 TO RED CROSS

The Red Cross and St. John Ambulance Funds have received a contribution of £1,000 from the Dunlop Rubber Co. Ltd.

The sum has been divided among the boroughs in which the Company has factories—Birmingham, Coventry, Dudley, Edmonton, Leicester, Liverpool, Manchester and Rochdale.



Lancia Aprilia Type 238 Saloon

Continental Notes and News

Curtain!

Well, the curtain has rung down on the motor-racing stage, and it would take a man with second sight to say when it will be lifted again. For the time being most of our thoughts and activities are concentrated on encompassing the downfall of Public Enemy No. 1 and his mob of gangsters, but it won't do any of us any harm to talk now and again about the things that interested us most in peace time. In that way we shall perhaps retain a sense of perspective and thus make a better job of building up a normal way of life on what is left of our civilisation when peace returns once more.

That little homily over, let us practice what we preach and talk about motor-racing. The Munich crisis of September last year showed us how the German racing teams were determined to carry on till the very last moment, for they only departed from Donington when war was really imminent. The same sort of thing happened this time, and both the Mercedes-Benz and Auto-Union teams actually took part in a Grand Prix at Bucharest on Sunday, September 3rd, the day Britain declared war on Germany. The race was won by Nuvolari, with Muller second and von Brauchitsch third, and I understand that Hermann Lang crashed when leading. Whether he was badly hurt or not I do not know, as news is rather hard to come by these days, especially from foreign sources.

By the same token, it is extremely difficult to find out what is happening to the various drivers and team officials. Caracciola is believed to be in Switzerland, apparently having decided—quite rightly—that the war is no concern of his. For some years, of course, he has had a very charming villa at Lugano. It would not surprise me to hear that Hans Stuck is in Switzerland too. He has had a place on the shores of the Lake of Zurich for a long time, and he was never really happy in Nazi Germany after the incident at Kesselberg, where posters were stuck on trees lining the hill denouncing him

By

AUSLANDER

for having a wife with Jewish antecedents. Von Brauchitsch, as nephew of the German Commander-in-Chief, no doubt has an important rank in the Army. Lang one would expect to find in charge of a mechanised unit, while Muller, who is an expert pilot, is doubtless in the *Luftwaffe*.

And what of the cars? It is a peculiar thing that one of the few—the very few—good feats of the murderous career of Hitler should have been the development and production of the finest racing cars the world has ever seen. It can be taken as absolutely certain that even if the war does not last long (which in itself is far from certain), the German motor factories will not be able to afford to continue motor racing for many a long day. Of course, no one knows what form of government will take the place of National Socialism, but it would seem that under a purely competitive capitalistic system, at any rate, motor manufacturers cannot justify the expense of building and maintaining a team of Grand Prix cars. I hasten to add, however, that this does not imply that I am in favour of National Socialism! In any event, it is probable that the whole of Europe, as well as Germany, will be so impoverished after this war that such sport as motor racing will have to start all over again, as it were, and to begin with will be supported entirely by independent sportsmen.

All this, however, does not alter the fact that there are in existence to-day, and there will be after the war, a number of 3-litre and 5½-litre Auto-Union and Mercedes-Benz racing cars, at least a couple of 1½-litre Mercedes-Benz and a couple of Auto-Unions or so of similar size. What will become of them? It is an intriguing thought. Will they be for sale—assuming that the factories will not be able to race them?

French drivers are all very much engaged on warlike activities, as

one would expect in a country where military service is compulsory in peace time. Louis Chiron, for example, has a responsible position in the Army as a Transport Officer, and I can imagine the drivers under him quickly becoming infected with the desire to skid corners on their heavy lorries. I fully expect to hear of him organising races for transport vehicles!

Raymond Sommer is in the army, Jean-Pierre Wimille is a sergeant therein, and no doubt taking his job as seriously as he does motor-racing. The place one would expect to find racing drivers is in the *Armee de l'Air*, but so far the only people I have heard of flying are Louis Villeneuve and Giraud-Cabantous.

Although Italy has managed to keep out of the war, Italian motorists have been harder hit by in the matter of petrol supplies than most people. In fact, at the present time no one is allowed to drive a private car at all. The result has been an enormous increase in the number of bicycles on the streets. A friend of mine who was in Milan recently tells me that the Italians are applying to this method of transport all the competitive instinct which distinguished their motoring manners. Everybody pedals flat-out the whole time, being utterly determined to pass the cyclist in front and in turn stave off the challenge of those behind. No quarter is asked or given, and age does not count. Old men and women are just as anxious to keep in front as young people, and a thoroughly satisfying race is had by all.

Dr. Giuseppe Farina and Luigi Villorosi have been declared motor-racing champions of Italy in the Grand Prix and 1½-litre categories respectively, and it can be presumably taken as an indication that Italy has not lost interest in motor-racing that this announcement was made after the war had been in progress nearly two months. The winter is generally a close season in Italy, as elsewhere, for motor racing, but no doubt the usual programme of events will be carried out next year.

Letters from Readers

Sir,

Having just received your October issue, I should first like to say thank you for "carrying on." I see that you would like to hear from readers, so having been a regular reader for five years, here you are. It probably will not interest anyone but it will fill up an odd corner.

Whilst at school during 1934 at the age of fourteen, a classmate of mine told me a number of interesting insights about a sport, of which I had heard but knew little, namely motor racing, or as I now know it, "The Sport." My enthusiasm soon grew and I began to buy motoring papers. The following year I had given to me Barre Lyndon's book "Grand Prix," this really fired my enthusiasm, and I was soon reading every book and paper on motor-racing that I could lay my hands on. At that time the nearest venue was Brooklands, but unfortunately the cost to attend a meeting was more than I ever possessed and I had no friends with cars, who were interested enough to transport me there, so my motor-racing had to come from the reports in the journals.

In 1936 I saw a racing car "in the flesh" or should I say "in the metal," for the first time, that was an E.R.A. at the schoolboys' Exhibition. Later in the year, whilst staying at Brighton, I found that the Lewes Speed Trials were quite near, so off I went to find the venue. It was there that I first saw racing-cars in action, what a thrill! There was a "works" s.v. Austin, Hadley up, M.G.'s, Alta's, Bugatti's, the Vauxhall Villiers and that marvellous piece of machinery, Fuzzi. After that meeting I thought something must be done.

Nineteen hundred and thirty-seven, what luck! The Crystal Palace circuit was opening almost on my doorstep, no need to worry about transport. At that opening meeting I think I must have been one of the first to go through the turnstiles and I am sure the last to come out. Since then I haven't missed a R.R.C. fixture. During that year and 1938 I found a means of attending some other meetings, that was the bicycle, for as I had now gone to a Technical College, my funds would not allow a powered means of transport. Nineteen hundred and thirty-seven saw me attending at Lewes, Brighton, and one or two practices at Brooklands. Race day still being a little beyond my pocket. At last! August Bank Holiday 1938 I was able to attend a Brooklands meeting, and since then the track has been like home to me. The next question was Donington, 130 odd miles away! The Donington G.P. was my objective and fortunately, due to the Germans coming over, I was able to persuade some friends with a car, that it was really worth

while going, on which point we all heartily agreed afterwards, even though Hitler nearly messed things up.

At the beginning of this year opportunity knocked loudly at my door and I wasted no time in opening it. The opportunity was given to me by MOTOR SPORT in the February issue, when they published a letter from a reader, asking for someone to help with his racing car at meetings and such like. I offered my assistance and was accepted, and I can honestly say I have had a thoroughly interesting and enjoyable time, consisting of doing a spot of work at a racing car works, working on a pukka racing car, and attending a meeting in one of the fastest road cars in Great Britain, plus an hundred and one other interesting and enjoyable jobs, here I should like to thank both MOTOR SPORT and the reader in question. Through the same source I have been able to attend Shelsley and Prescott and numerous other speed trials such as Poole and Wetherby, all of which had previously been out of my reach, and of course Brooklands meetings, not behind the fence, but right out in front, all things of which I had dreamed of way back in 1934, and if this ——— war had'nt started I could have looked forward to another Prescott, Shelsley and Donington, and especially the runs to and from, which are always certain to be enjoyable, so the sooner we get back to normal, I for one will shout for joy.

I should just like to add another "thank you" for carrying on and if your staff can find enough interest in 200 miles a month to write "General Notes," everything in the garden will be lovely.

Hoping I haven't bored you too much.
I am, Yours etc.,

DENIS S. JENKINSON.

London, S.E.23.

[As we have so often preached, it pays to cultivate youthful enthusiasm.—Ed.]

* * *

Sir,

In common with all enthusiasts of my acquaintance, I rejoice exceedingly that you have decided to carry on.

You ask for topics of interest to readers, and I beg to tell you of a machine which usually finds little space in your paper. I write out of no desire to see myself in print, but solely to bring to the notice of enthusiasts a car after their own hearts. I refer to the three-wheeler Morgan. After a long apprenticeship on motor-cycles, force of circumstances forced me, a little while ago, to look for a motor car with the following characteristics:—

- (a) First-class road-holding;
- (b) High-gear and accurate steering;
- (c) Low tax and petrol consumption;
- (d) A high cruising speed;

(e) Moderate first cost;

(f) Complete enjoyment of motoring

After much head scratching, I made enquiries about the Morgan. At once a maelstrom of protest came from kind friends. "They turn over as soon as look at you," "A hand throttle is useless," "Hopeless—a blacksmith's job," were but a few of the comments poured forth. For a while I waited, then finally, decided to plunge. For £70 I got a 1935 car, water-cooled, and have never regretted the step. It has the good old "big-twin" characteristics, will do an honest 70-75, and cruise at 65 all day long without coming near its peak revs. Once you have mastered the knack, the road-holding and steering are extraordinary. I can imagine nothing less likely to capsize on corners.

Once, caught by the falling dusk, I had to make Bournemouth by "black-out" time. Starting from Southampton, I shall never forget that run across the New Forest. It was an "eye-opener" on the subject of speed in safety. At 60 m.p.h. and upwards an uncanny change seems to come over the car, all the low-speed harshness of suspension disappears, and the car seems literally glued to the road, and, believe me, tucked away in that tiny cockpit, with the "big-twin" barking beautifully, and with the wind tugging at your hair and "outside" sleeve, there is little to touch it for unadulterated joy. Of course, the proximity to the ground assists the impression, but even so, it is very real. Quite frankly, there are snags. The braking could be better, and the hand throttle and high-gear navigation take practice, but it is very easy to convert to foot throttle and coupled brakes, a job which I am at present undertaking. Perhaps the greatest joy of all, however, is the enthusiasm amongst the band of Morgan owners. Never do you pass one on the road without a colossal display of "thumbs up" and waving, the usual procedure, apparently, being to nearly fall out of your seat in delight at another enthusiast passing.

You will of course appreciate that I write as a genuine admirer of Morgan products, and am not in any way connected with them. I do feel however, that your readers, who may require a similar motor to myself, might like to know how delighted I am with my own. Tax (next year) £5, petrol consumption 50 m.p.g., dropping to 40 m.p.g. if you cruise fast, is surely an attractive proposition these days.

With best wishes to your paper.

I am, Yours etc.,

C. L. DENSHAM.

Southbourne,
Hants.

LETTERS FROM READERS—continued

Sir,

Congratulations on your resolution to continue the publication of MOTOR SPORT, it will be the duty of all regular readers to see that this one light in the present darkness is not extinguished.

As an Austin enthusiast I was very interested in the article describing the ex-Chaplin Seven, now owned by Mr. Lush, but surely your thoughts must have been on the Continent when you state that the three-branch exhaust is on the off side! Possibly some readers might be interested in a brief description of my own somewhat special Austin, which, with its recent modifications, should have been appearing in competitions shortly.

Starting life as a 1930 coupé, its body had been converted to a short open Chummy before it came into my possession in January, 1937. I commenced by completely stripping the whole job, every worn part was replaced, and every stressed bolt replaced by high tensile, nuts split-pinned and bolts drilled and wired. The engine work consisted of the usual overhaul, in addition to which ports were opened out and polished, trumpet exhaust valves of KE965 with double valve springs fitted, flywheel lightened and heavy clutch springs used. The dynamo was replaced by 1937 type with the centrifugal advance control distributor head. A double fan pulley was machined, in order to drive, by spring-belt, a revolution counter drive-wheel having its bearings in a casting mounted on the dynamo body itself. The cylinder head was an aluminium "Alta" and a special 1 gallon sump of sheet metal was used. Twin S.U.'s, from a P type Midget were adapted, using short aluminium castings bolted to the standard exhaust manifold and incorporating a $\frac{3}{8}$ inch diameter balance pipe.

All alterations to body and chassis were made with an eye to competition requirements, the more marked of these being the use of LMB front suspension with a very strong leaf spring, additional transverse Hartfords at rear, attached to reinforced chassis ends and to lugs mounted on the axle casing itself. A light enclosed remote gear control with short stubby gear lever was constructed for the three-speed box and a malleable steering-box substituted for the aluminium one already fitted.

The brakes were coupled by massive drop lever made from the solid, clamped to the brake operating cross tube and this, in conjunction with long brake cam levers and a 12 inch extension to the hand brake lever, provided fairly efficient stoppers.

A rear double spare wheel carrier of sufficient strength to withstand trials surfaces was not easy to accommodate, but this difficulty was surmounted, thereby providing more weight over the back axle where required. Off side door was cut down and Sorbo padded, a fold-flat screen of brass section and twin aero screens were mounted, large ventilating doors in bonnet sides and top controlled the under under-bonnet temperature, wings of the fixed cycle type, very rigidly braced, have given no trouble, in fact the whole car may be lifted by them.

The Brooklands silencer was mounted flat underneath the body on the near side, a suitable asbestos sheet fitted to the underside of the body prevented any undue rise in temperature of the passenger's seat; in order to avoid various components, the tail pipe presenting an appearance not unlike Sir Harry Lauder's famous walking stick. The radiator is standard 1930 except for a Monza snap filler.

The whole car was cellulosed Brunswick green trimmed to match and with a green fabric all-over zipp tonneau-cover, umbrella pattern hood and passenger's side screen. Additional equipment includes double screen wipers, clock, oil pressure gauge, Nivex petrol gauge, radiator thermometer, Jaeger rev. counter and Zeiss headlamps.

In April '38 the car was completed and taken down to the Track for test; on 130x40 Michelin tyres and without passenger it held 4,200 r.p.m. round the Byfleet, approximately 70 m.p.h., the addition of a passenger reduced this speed by 5 m.p.h. In the J.C.C. High Speed Trial in August '38 it failed to attain the rather high standard speed set for the class, but averaged 52 m.p.h. with a maximum on the Railway Straight of 64 and was very definitely controllable through the bends, due, no doubt, to the LMB suspension.

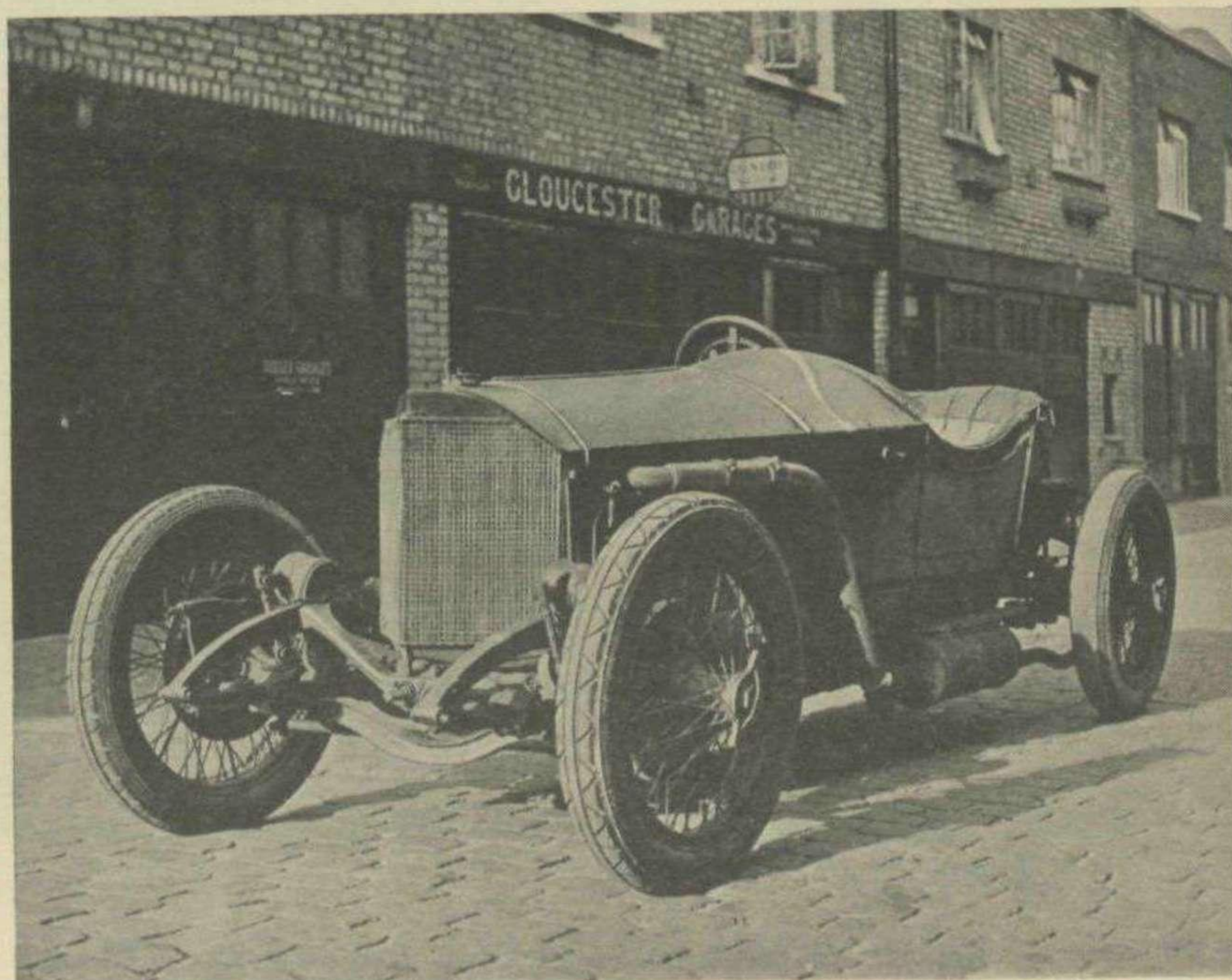
At Beechwood Park in September, using 4.00x17 rear wheels and tyres and a light duralumin bonnet, which saved 11½ lbs., it reached 4,500 r.p.m. in second and gained second place in the 850 c.c. Sports Car Class.

After the Cottingham Trial in November I replaced the standard 4.9 to 1 axle by a 5.25 Ulster axle and with further

lightening and using special 17 inch car section wheels with 4.75 Freighters ran in the Bossom and C.L.J. Trophy trials gaining only experience in each, the car, though, giving no trouble whatever other than lack of urge, at times however, this lack allowed the car to complete some sections non-stop where other more potent vehicles dug themselves in.

Early this year, realising the fact that all really successful Austins are blown, the construction of another engine was put in hand. A 1929 crankcase was adapted to pressure feed in the usual way, a 1931 Ulster crank fitted, and steel conrods of KE used, another block was prepared, ports opened out, polished, bored and fitted with Aerolite blown Ulster pistons. As the crankcase was of the coil ignition type, it was intended to use the unblown Ulster camshaft, but this was rejected as the distance of the pulley from the camshaft bearing would have caused a great strain to be thrown on this bearing, due to the tension load of the twin-blower drive belts; so, by means of grinding small clearances on the centre pair of cams, centre roller bearing outer ring and the use of special diameter rollers, a high lift Speedy camshaft was conjured into the case. It was then, of course, necessary to use the Speedy pressure feed nose piece and steel timing gears. The standard tappet guides were turned down and solid tappets with hardened buttons made up to suit, the remainder of the valve gear being standard unblown Ulster. An early "Brooklands" head, copper-plated, was lapped dead true and bolted down on a solid copper gasket by high

Continued on page 312

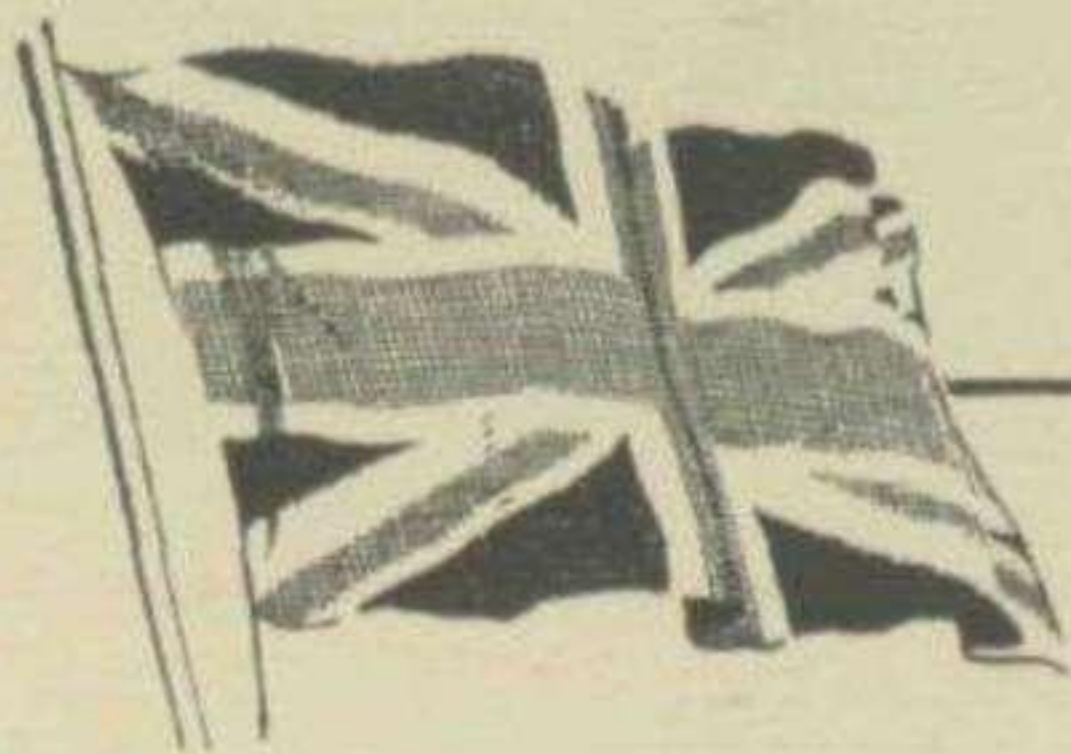
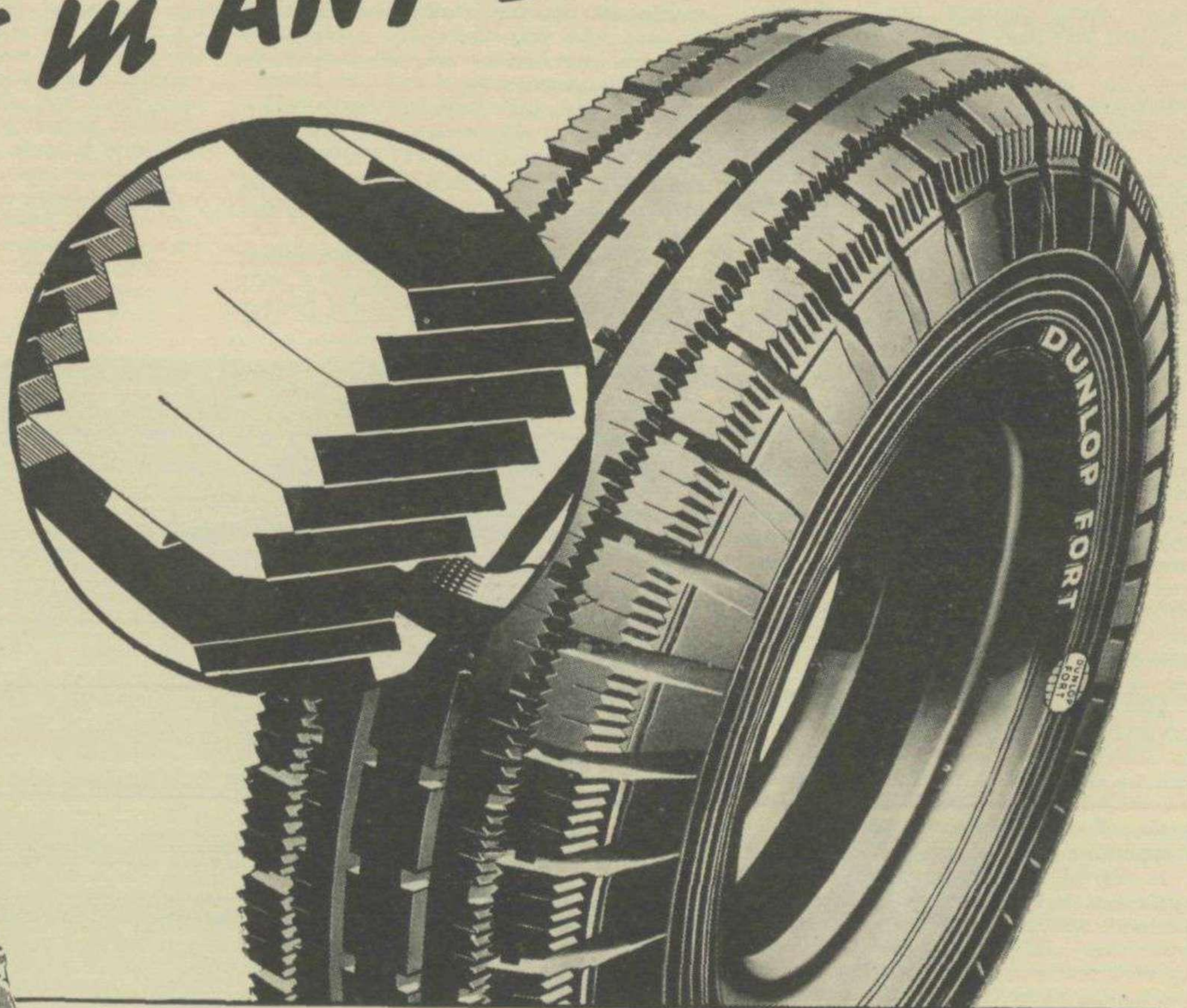


Winner of the Last Race before the 1914-18 War.—The 4½-litre Mercedes. This is one of the team now owned by Mrs. Peter Clark.

DUNLOP Fort TYRE

with **TEETH** to bite the Road

best in ANY EMERGENCY



AS BRITISH AS THE FLAG!

DRIVING THE EDWARDIANS

CECIL CLUTTON, WHO IS AMONGST THE FOREMOST EXPONENTS OF THE EDWARDIAN CULT, HAS WRITTEN THE FOLLOWING ARTICLE. HE APOLOGISES THAT IT WAS VERY HURRIEDLY COMPLETED, BUT WE FEEL THAT THE INFORMATION HE IMPARTS ON A SPECIALIST SUBJECT WILL BE OF VERY CONSIDERABLE INTEREST.—ED.

IF motor racing is dead for the moment, we can at least still amuse ourselves by talking about it.

In the last year or two Edwardian motoring has been coming increasingly to the fore. From arousing mild amusement, the performance of the faster cars has come to earn genuine respect, and there is no doubt that the spectacle of these apparently cumbersome monsters going up Shelsley or round the Crystal Palace at speeds which few modern production cars—even of the super-sports variety—can equal, has undoubtedly caught the fancy of a large majority of the race-going public. For this, one cannot sufficiently praise the foresight of Leslie Wilson, Harry Edwards, and the Bugatti Owners' Club, while the "central body," for this type of machine, and which started the Edwardian Cult as long ago as 1935 is, of course, the Vintage Sports Car Club.

But what is the appeal of these cars to their owners, who are in most cases younger than their prized machines? Undoubtedly those which most catch the fancy, are the big racing cars, with four-cylinder engines of 10-litres or over.

The savage thrill of these vast, crude engines must be felt to be believed. Every explosion can be separately felt when travelling in top gear at 60 m.p.h. and their tremendous acceleration is, of a "brute force" variety which can hardly fail to stir the imagination as much as the rising whine of the small modern racing car. Most marked is this on the biggest of all—John Morris's 1914, 21½-litre Benz. Even on the lower gears one senses that each impulse has perceptibly hastened the rate of travel, and as the engine is giving of its best at 600 r.p.m. there is a separate kick-in-the-back with each explosion. Despite its poor brakes, cone clutch and many weak components this big car is remarkably tractable in traffic, and the first time I drove it was in the suburbs of Birmingham, John Morris having brought it through the thickest of the town centre. Perhaps not the least attraction of the car is that if you make any serious mistake you are more than likely to break something vital, and so fragile is the transmission that gear changing is ordinarily done without the clutch, to save the jerk of re-engaging the clutch if the revs. have not been perfectly judged! The top revs. are put at 1600, but 1750 have been obtained, in second, at Lewes. My own impression was that little advantage is gained by exceeding 1300 in the gears.

The best speed that circumstances permitted me to attain was roughly 85 m.p.h.—about 1100 r.p.m., but the speed was still rising quickly, and I can readily believe John Morris's statement that 100 is quite frequently exceeded on the road. The top speed should be nearly 130, and I think the best lap speed in Brookland days was around 120 m.p.h.

Long open curves find the long chassis in its element and the Benz will hold on without a trace of fore or aft skid, at speeds when many of the modern little flat-irons would be becoming excessively vague in their sense of direction. Sharp corners, however, are not at all to her choice, and at Shelsley she is by no means in her element; though if she was going really well I do not think a time of 48 seconds would be at all out of the question.

Starting on this car is quite easily effected by two people, one to pull over the starting handle on half compression, and the other to wind the impulse magneto on the dash.

Staggering in its performances at Shelsley and Prescott is Heal's 1910, 10-litre Fiat. In performance, it is quite unlike any other big Edwardian I know, and gives none of the "gas-engine" feeling of the Benz. It is, in fact, considerably higher revving than most, and despite the long stroke of 190 it runs up to 2,000 r.p.m. Even then, it seems willing for more, if one had greater trust in the integrity of a cast iron flywheel as wide as the chassis! A very small, multi-plate clutch and wide-spaced ratios add to the difficulties of driving the car, and it "floats" through its corners in a most peculiar way that has taken Anthony two years to master and which led me seriously astray the only time I drove it, at Prescott.

His present performances on the car, have undoubtedly won him a very considerable and just fame as a sprint driver of high skill. The Fiat is now hardly practicable as a road car. It has no means of starting, except by pushing, and there are several other technical difficulties. Probably its only considerable run in recent years was one from High Wycombe to Prescott.

Most familiar to the writer is, naturally, the 1908, 12-litre Itala which he shares with Peter Robertson-Rodger.

Road-holding is certainly the strongest feature of the big Edwardians, and in none is it better than the Itala. This is really remarkable when one considers the unpromising materials:—flimsy, unbraced

chassis, strongly cambered springs, high centre of gravity and narrow tyres. Undoubtedly a strong asset is the light front axle assembly, permitted by the lack of front wheel brakes, and an almost perfect weight distribution. There is not the least tendency to over or under steer, and the car can be put round sharp corners or long bends in a steady four-wheel slide, at speeds which might seem quite unwise to an unaccustomed passenger. The steering ratio on these cars is usually about one turn from lock to lock, and this is, of course, an untold advantage on a twisty course. Furthermore, owing to the narrow tyres, and superior workmanship, the effort required is by no means serious.

Like the Fiat, the Itala has a very fancy multi-plate clutch (seventy-two plates!) but it has never given any trouble, and getaways can be made by dropping the clutch in with a bang at over 1000 r.p.m. As the bottom gear is high, this is a great advantage, the ratios being 5.3, 2.8, 2.3 and 1.8 to 1. Upward or downward changes can be made as fast as the lever can be moved, with a single declutch and without any attempt to adapt the speed of the engine, yet the gear wheels are entirely unmarked. There is no instrument to indicate the engine or road speed, and one can only conclude that the time to change up has arrived when the car ceases to accelerate on the gear which happens to be engaged at the time. Fortunately, the engine will not go faster than it cares about—somewhere around 1600 r.p.m.—and will apparently go on indefinitely at that. Shelsley is just too steep to permit the use of third, while peak revs. in second are reached at the Kennel. The distance from there until the *esse* seems interminable, but nothing has ever shown a disposition to come to pieces.

The Itala is a perfect road car, easily swung on half compression if you have the way of it, running smoothly down to 30 m.p.h. in top, and doing 13 m.p.g. if driven with moderation. She is also exceedingly comfortable. To bring her to concert pitch attention need only be given to the low tension ignition, to make sure that the timing of each cylinder is exactly even.

The later, just pre-war machines, have quite a different appeal, and are basically similar to the post-war 30/98 and 4½-litre Bentley. The 1914, 4½-litre G.P. cars, are, indeed, as advanced in almost every respect as the 4½-litre Bentley and a great deal more so than the 30/98. Single

DRIVING THE EDWARDIANS—continued

overhead camshafts, four inclined valves per cylinder, and dual ignition were the order of the day; the cars weighed 20 cwt. in racing form and the engines peaked at something like 3000 r.p.m., giving a top speed of 120 m.p.h. on the prevalent top gear ratio of 2.5 to 1.

Being designed as racing cars these machines could afford to be far less cumbersome than the Bentley, while the workmanship is naturally of an incredibly high order, such as would be out of the question on a production machine. They are, too, remarkably tractable, and Mavrogordato's famous Opel will pull smoothly at less than 300 r.p.m. in top. The Opel, is in fact, one of the most thrilling cars anyone could hope to go in and the only serious limitation to its performance is the difficulty of braking with so little weight behind. This does not affect the roadholding, however, which is of a truly exceptional order. As is well known, the car is Mavro's normal touring machine.

Very similar in design is the contemporary G.P. Mercedes (Merces. finished in the first three places) of which Ariel, wife of Peter Clark, has just acquired the example lately owned by Major Veal. This is now being brought back to G.P. condition, but I had an opportunity of driving it for several miles just before this work was put in hand. Sadly in need of attention though it then was, one could still sense the thoroughbred in every detail and the steering and gearbox were sheer perfection; the car may in fact, be described as an idealised $4\frac{1}{2}$ -litre Bentley or 30/98 Vauxhall, and quite as practicable for everyday use.

The Edwardian attempts at voiturette racers are more humorous than exciting; not least, the once supreme Sizaire-Naudin. This surprising machine includes in its specification independent suspension of advanced layout; a single cylinder, $1\frac{1}{2}$ -litre engine with dual ignition and dual inlet valves—one automatic

and the other fitted with a variable cam that is the only means of altering the engine speed; three speed gearbox on the back axle, the gears being changed by moving the propeller shaft about so as to engage with different sets of pinions in the back axle housing; and many other strange and unendearing features.

To drive, it would be hard to imagine anything more difficult. The clutch is on the right, the foot-brake on the left, and the only accelerator on a huge quadrant on the steering wheel, that moves round with it. The gear change is of the quadrant variety, far estranged from the driver, and getting away on the slightest slope calls for incredible delicacy of touch if the engine is not to be stalled. Should this occur, as it almost inevitably will, the brakes do not work going backwards.

Still, here was a car which swept the light car class in its day, could exceed 50 m.p.h. and cruise at 40. Probably the only current example to-day is that now belonging to John Seth-Smith, and lately owned by Kent Karslake.

Other people obtain endless pleasure from the ordinary Edwardian touring car. The coachwork, great comfort, fine mechanical finish and a wonderfully effortless performance combine to make a really serviceable touring car that derives its appeal from characteristics that are as real as they are unobtainable from any post-war machine except, perhaps, the Phantom I Rolls-Royce.

The large pre-war Daimlers combine the above mentioned features with a degree of silence which is quite fantastic. Their culminating achievement was the 1910 and onwards, 57 h.p. six-cylinder sleeve-valve car, but from a driving point of view the 1908, four-cylinder, 45 h.p. car belonging to John Bradshaw is far superior.

But it is not only the big, super-luxury touring cars that can appeal to a modern

driver, and among the smaller cars I suppose that none is better known than the 1910, 16 h.p. Fafnir belonging to the writer's father, Col. Clutton. Despite long periods of ill-health he has nevertheless used this car for over twelve years as his regular conveyance and I can only think of two occasions during that period when it has given trouble on the road, this despite a total mileage of over 250,000 miles after which the original engine bearings and the cylinder bores and pistons are still perfect.

Indeed, for anyone not in a hurry it is difficult to think of a pleasanter way of getting about. A restful 1500 r.p.m. gives a cruising speed of 40 m.p.h., and the acceleration is about equal to an old-type Austin 12-4. The beautiful gearbox helps the performance, but equally, the car can do most of its running on top, pulling smoothly at 12 m.p.h. or less. Roadholding is well ahead of the performance, starting is 100 per cent., you can get in and out of the car, and drive it with a top-hat on, petrol consumption is 23 m.p.g. under all conditions and oil consumption 600 m.p.g. Brakes are well up to ordinary requirements.

What more, in fact, could a leisurely minded, mechanically fastidious, but somewhat impoverished motorist require?

Other machines, such as the little two-cylinder Renault or the 16 h.p. type Alfonso Hispano Suiza come between the different types of vehicle mentioned in this article, and given the initial necessity that one must have some taste for the antique it can truly be said that here is a field of motoring in which every kind of taste can be met, and a very great amount of pleasure derived for an extremely small outlay. It can certainly be anticipated that after this tedious war we shall see a further pronounced advance in this already popular cult of Edwardian Motoring.

LETTERS FROM READERS—continued from page 309

tensile cylinder head studs. A steel double pulley keyed to the camshaft end provides the means for driving, by twin belts, a type "75" Marshall blower mounted on a $\frac{1}{4}$ inch plate steel platform supported on a gantry level with the cylinder head and stayed to the studs, on the near side; the blower pipe passes over the cylinder head and down into a "65" downdraught induction pipe, the usual blow-off valve being incorporated. The twin belts are tensioned by a special fan pulley, which jockeys on the back of the belts and carries a mag. ignition type fan. The flywheel is extensively lightened and Ulster cast iron linings with heavy springs are used.

As it was decided to use a four-speed box the fitting of this entailed the use of the old geared pattern starter and the shortening of the propeller shaft, so a 1933 Hardy-Spicer shaft was adapted

and the tail shaft flange of the Ulster axle modified to take the H.S. joint. A well swept three-branch exhaust manifold was made up of sheet metal, beaten and welded, with a $\frac{1}{4}$ inch plate port flange, the radiator header tank was trebled in capacity to cope with the increased heat flow in the blown engine.

There, for the moment, the job stands and such details as carburetter type and size, blower shaft extension, alterations to body, etc., must await the termination of the present unpleasantness, when the car should give a fairly good performance in trials and sporting events.

I am, Yours etc.,

H. L. BIGGS.

Putney,
S.W.15.

[We agree, "off side" should read near side as Mr. Biggs suggests.—Ed.]

?

Have you registered
with your News-
agent or paid your
Annual Subscription
to 21 CITY ROAD,
LONDON, E.C.1

CLASSIFIED
ADVERTISEMENT SECTION

Head Offices:
**21 CITY ROAD,
LONDON, E.C.1**

Telephone: NATIONAL 3045

RATES (prepaid) 1/- per line

Minimum 3 lines
6 Words to line

Copy required by 20th of the month

PUBLISHED 1st OF EACH MONTH

T. P. BREEN

We have the following Vintage Sports Cars in stock, which owing to the war, we are prepared to sell at very low prices to see them go to good homes.

3-litre Bentley. Vanden Plas tourer in excellent condition.

D.M.S. Delage 21hp. Vanden Plas tourer. An unusually fine specimen.

D.I.S. Delage 14hp. Saloon.

D.I.S. Delage 14hp. Two seater.

Lancia-Lambda 14hp. P.G. Special.

1912 MERCEDES TOURER. 36hp. One owner from new. Complete and in original condition. A unique car.

We have several others in stock as well and no reasonable offers will be refused.

Write, 'phone or call.

**HIGH ROAD, WHETSTONE,
LONDON, N.20**

Phone: Hillside 2393.
or after 8 p.m. Hillside 1468.



We specialise in the re-building and super-tuning of the above cars, and are carrying on as usual.

Now is the time to have your 3-litre put in good condition as a War economy car for really hard work before existing stocks of parts are exhausted.

McKENZIE'S GARAGES LTD.

Vic. 4923-4

For Rolls Royce
& Bentley service.

**1, BRIDGE PLACE, BELGRAVE ROAD,
S.W. 1.**

(Back of Victoria Station)

**NOTE THE ADDRESS
D
N
E
Y**
LEWIS'S

THE OLD FIRM

OF

**RACING, FLYING AND
MOTOR CLOTHING FAME**

**27, CARBURTON STREET
London, W. 1.**

**EUSTON
4793**

First turning on left from
Great Portland Street
Met. Station

**NO CONNECTION
with any OTHER FIRM**

**10% Discount to "Motor Sport"
Readers.**

Send Advert. with order, please

KEEP WARM

**Genuine Surplus Air Force
Flying Suits with detachable
linings, size 5' 6" & 7' each
slightly used 5' 8" & 9' 50/-
5' 11" & 6'**

**Genuine Air Force Double
Texture Silk undergloves
Soiled - 2/6 and 3/- pair**

**Genuine Air Force Flying Suits
unlined. Slightly used all
Zips - - - 25/- each**

Flying Boots. Black calf skin below knee length sheeps-wool lined, waterproof leather soles, Standard Air Force - - 67/6 pair

Flying Boots. Zip Front Rubber Soles below knee length all sizes Ladies or Gents - - 50/- pair Lined Sheepswool.

Flying Suits. Our Standard Pattern, zip front oilskin interlined fleece lining 105/- and 95/- per suit.

**Black Double Texture
Waterproof Coats, 3-ply Twill
with Patent leg fittings, guar-
anteed Waterproof: Super
quality, all sizes - 55/- each**

**Sleeping Bags - 17/6 each
Foot Muffs Fur-lined 8/6
to 20/- each**

**Waterproof Raglan sleeves
fitted zip fasteners - 6/-
Standard Pattern without
zip - - - 4/6 each
Leather Coats of every des-
cription.**

**Steel Helmets, Standard Gov-
ernment all sizes 14/6 each**

**Gauntlet Gloves of every des-
cription.**

**Persian Leather Jackets fitted
woollen collars and cuffs, zip
front - - 55/- each
Will wear for years super
quality.**

**Everything in the clothing line
for Motorist.**

**Flying Equipment of every des-
cription.**

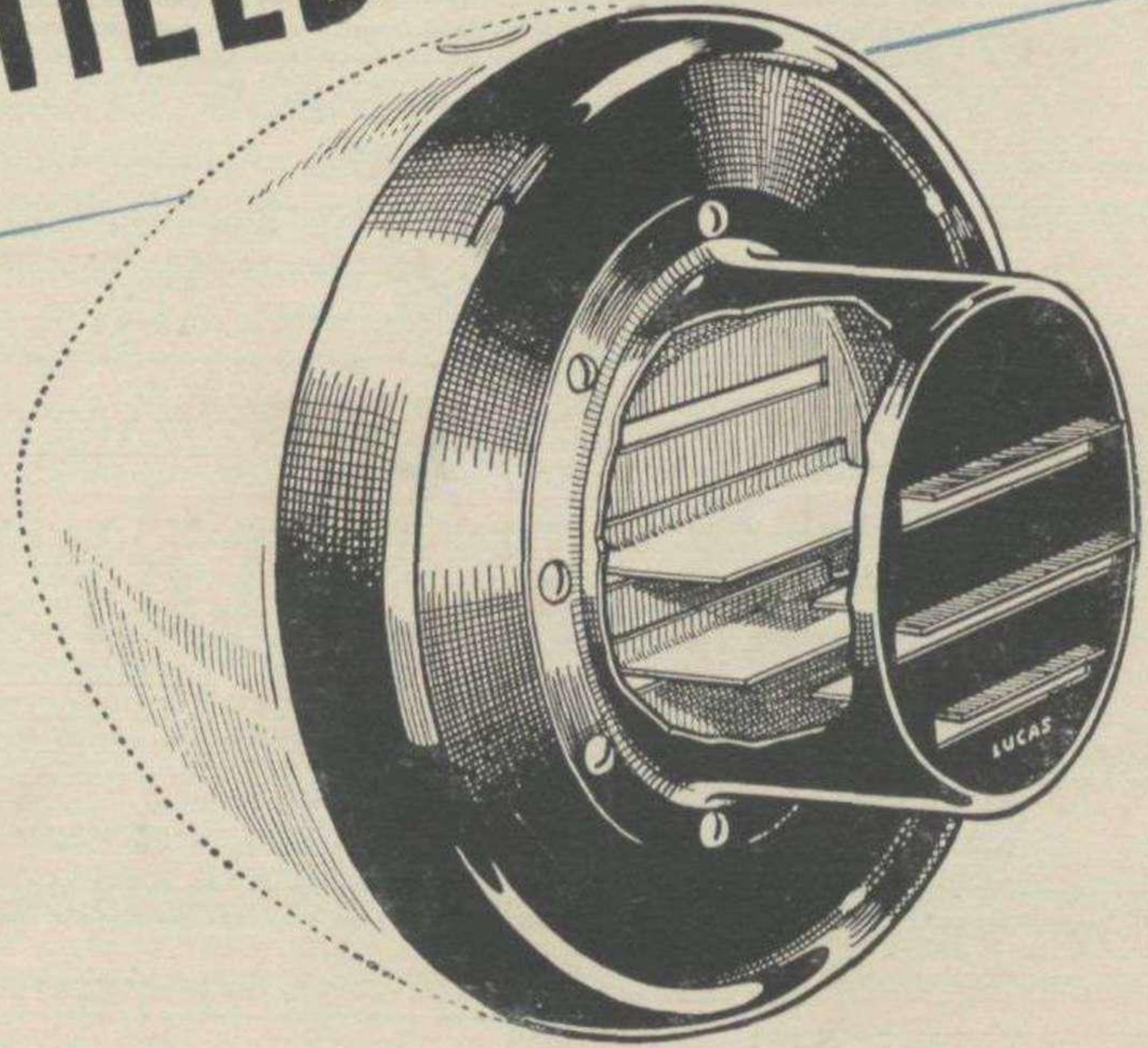
S. LEWIS'S

**27 CARBURTON STREET
LONDON, W.1
EUSTON 4793**

LUCAS

A·R·P

COMBINED LAMP SHIELD & RIM



- SIMPLE, QUICK AND NEAT CONVERSION
- NO ADJUSTMENTS OR MODIFICATIONS
- HIGH - QUALITY DURABLE BLACK FINISH
- PARTICULARLY SUITABLE FOR LAMPS WITH DOMED FRONT GLASSES

All Lucas Models fully comply with the latest Home Office Lighting Regulations.

PRICES

Combined Shield and Lamp Rim:—
7/-, 7/6, 8/6, 9/6
according to size.
Universal Type only 5/-

SPECIAL

FOR MORRIS "8"

SERIES "E"

Specially designed model to replace the glass, using existing rim and fixing, giving an attractive and integral appearance, in the flush fitting headlamp.

Price 5/-

The new Lucas A.R.P. Headlamp Replacement Unit has the outstanding advantage of being supplied as a complete direct replacement of the existing lamp rim and glass, giving the most convenient, easiest and quickest conversion.

The original glass and rim are simply removed complete and stored away. The replacement unit is slipped on and the whole operation takes only a few moments without any adjustments or modifications.

A cheaper form of Regulation Shield is also available. This fits in place of the glass, utilising the existing lamp rim. The Lucas type has the advantage of being supplied as a Universal Model for all popular sizes of Lucas headlamps. Concentric rings are marked on the back plate, requiring only to be trimmed down in the case of smaller sizes, so that there can be no confusion over sizes when ordering.

Combined Head and Side Lamps in 3-Lamp Sets, Motorcycles, etc., are also catered for by special models of approved type, both with and without rim, for these headlamps with pilot bulbs.

Obtainable from Motor Agents, Garages,
or any Lucas Service Depot.

JOSEPH LUCAS LTD., BIRMINGHAM, 19