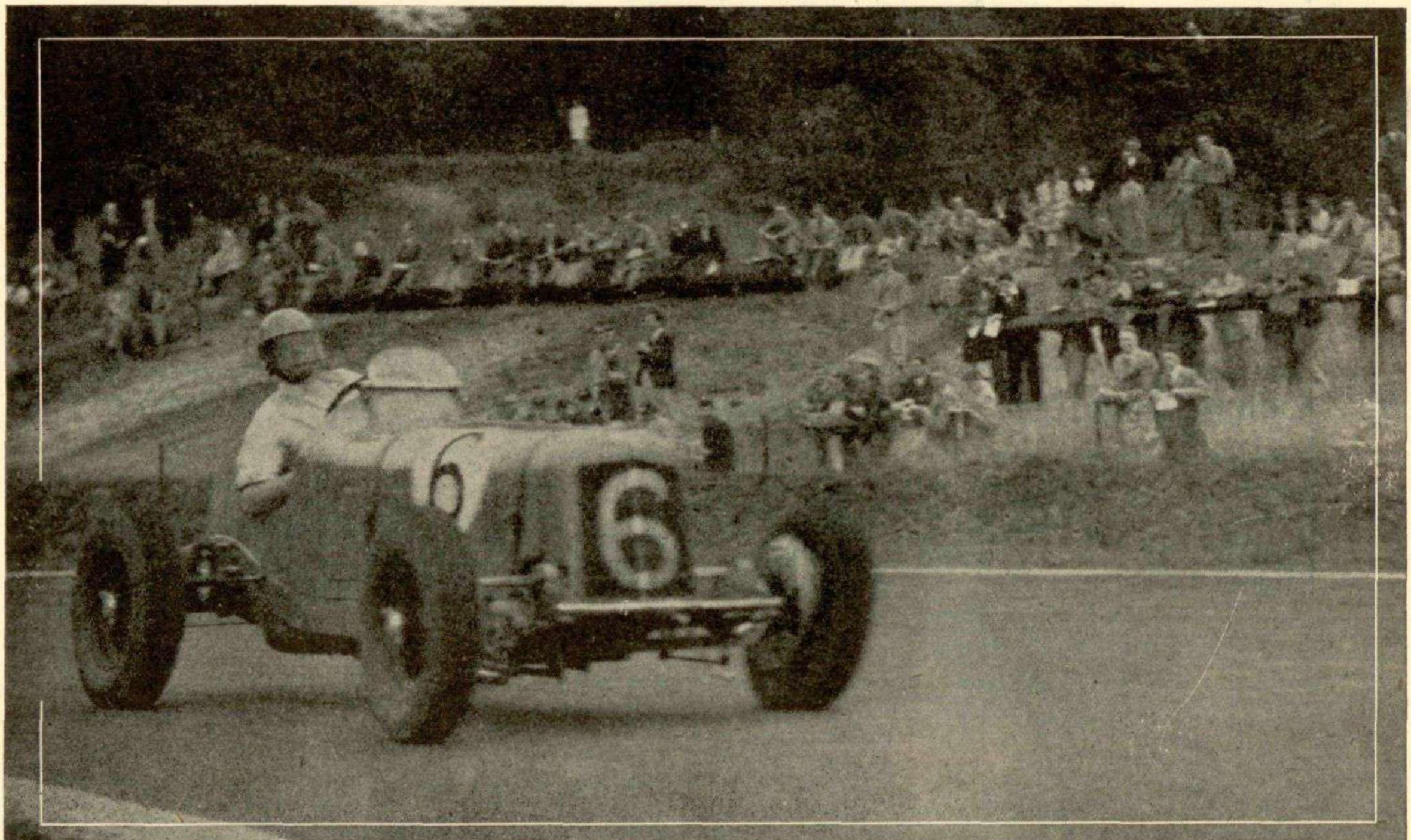
Vol. XXI No. 9 **CAPT. MOON ON THE JEEP AS A SPORTS CAR** *September, 1945*

MOTOR SPORT

INCORPORATING **Speed**

ONE SHILLING MONTHLY



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The **Piston** *that earned a medal*

THERE was a time when the success of our North Africa Campaign hung in the balance. We faced the risk of being beaten—not by the enemy but by the desert, for in that indescribable sand-polluted atmosphere tank engines were being continually immobilised through excessive wear.

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THE TRUTH ABOUT THE JEEP

By Capt. John Moon

Many people are wondering what will happen if conventional trials cars have to meet the Jeep in future competitions. In this informative article Capt. J. S. Moon, of the S.E. Asia Command, gives his candid opinion of the Jeep after long personal experience of this vehicle we all know so well by sight.—Ed.

A CORRESPONDENT to one of the motoring weeklies has asserted that the Jeep provides the complete answer to those who have stated that America could not produce a sports car. This, of course, is not true, as the Jeep is far from being a sports car, unless one defines a sports car as a car that gives one pleasure to drive, a definition that is much too broad to be of any use, since it covers any car driven by an enthusiast during war-time. Nevertheless, I think that a few notes on the Jeep as seen by a motoring enthusiast may be of interest to those readers of MOTOR SPORT who have not had first-hand experience of this fascinating little vehicle.

As the story of the origin of the Jeep has been the subject of litigation in the U.S.A., it must be treated rather cautiously. However, I believe that the original idea for a general purpose four-wheel-drive light car came from the American War Department and the Bantam Motor Co. The latter, it will be remembered, were the successors to American Austin Co., producing the Bantam, an Americanised-version of the Austin Seven. The original Jeep was not a complete success, partly because its weight gave insufficient adhesion for towing. Revised versions, produced by Willys and Ford, as well as Bantam, were more successful and were put into large-scale production. For some reason, the Ford and Bantam versions were dropped after the initial batches, but Willys continued large-scale production, and the Willys version was also produced by Ford in very large quantities as the Ford G.P.W., which is identical in every respect with the Willys M.B.

Another point that I do not intend to enlarge upon is whether the car, 5 cwt., 4 by 4, to give it its British Army nomenclature, should be called a "Jeep" or a "Peep," as quite enough has been written about that already! I can, however, give two more names (polite) that I have heard. The first is "Bantam," which is of obvious origin. The second, "Dingo," is more obscure, but arises from the fact that in the Middle East Jeeps were at one time used in the same role as Daimler Scout cars, which were commonly known as "Dingos," obviously having been christened by the Australians.

All my experience has been with the Willys M.B., or the identical Ford G.P.W. Of the earlier Ford G.P. I only know that it had a rather larger engine and was externally recognisable by a different radiator grille, a normal type hand-brake lever, and a rectangular panel combining all the instruments. A very few of these were produced as four-wheel-steering jobs, with a front axle at both ends.

A few notes on the Jeep's specification will not be out of place, but to avoid masses of figures in the text I have given the principal dimensions and such performance figures as are available in a data panel.

The Jeep engine is very similar to the pre-war Willys Overland private car unit, and is a perfectly orthodox side-valve, downdraught-carburetted 4-cylinder, whose performance is in no way remarkable for these days. It has two points of some interest: the camshaft drive is by silent inverted-tooth chain, a design feature that I thought had been completely relegated to the past, and the oil pump consists of one internal and one external gear. Finally, the quick-release latch on the dynamo mounting enables the belt tension to be slackened for fording.

The engine is mounted, offset slightly to the left in unit with the three-speed-and-reverse synchromesh gearbox, on flexible mountings, the underneath of the whole unit being protected from damage by rocks by a stout steel plate—quite a trials feature. The drive is taken through a single-plate clutch of orthodox design, the spring not being of the diaphragm type that features on most modern American vehicles. Behind the main gearbox, and an integral part of the engine/gearbox unit, is mounted the auxiliary gearbox. Through this the drive is taken downwards and to the right through either a train of single helical gears, giving no reduction in ratio, or through straight spur gears giving a reduction of 1.97 to 1, thus providing the alternative high and low ranges of gear ratios. At the front end of the driven shaft of the auxiliary box is a dog clutch which engages the optional front drive. Two additional short gear levers to the right of the main lever engage, respectively, the front drive and the low range of gears, an interlock being arranged so that the low range can only be engaged when all four wheels are being driven. On the rear end of the final drive shaft is the external contracting parking brake, operated through a heavy Bowden cable from an umbrella-handle lever on the dashboard.

From the auxiliary box the drive passes through needle-roller-jointed shafts to the hypoid bevels and pinions of the front and rear axles, the final drive assemblies being offset to the right in the casings. At first it is rather surprising to find that the rear axle is of the fully-floating variety, but one soon realises that this construction is adopted so that the hubs and bearings are interchangeable front and rear. The front axle, of course, incorporates constant-velocity universal joints to accommodate the steering movement,

these joints being of one of three types, Tracta, Rzeppa or Bendix. The stub axles pivot in the axle casing in tapered roller bearings.

The steering gear, a Ross cam and twin-pin lever variety, is mounted on the left side of the frame, but is the opposite way round to normal, *i.e.*, has the drop arm on the inside of the frame member. Motion is transmitted forward by the push-and-pull rod to a bell crank pivoted approximately in the centre of the axle, and thence by two separate tie rods to forwardly projecting steering arms on each stub axle.

The foot-brake operates expanding shoes in 9-in. diameter drums on all road wheels through a normal Lockheed fluid system.

Suspension at all four corners is by quite flexible semi-elliptic springs mounted on threaded U-type shackles. There is an extra torque spring under the left-hand spring to stabilise the axle under braking. Damping is by adjustable, direct-acting hydraulic shock-absorbers, which are both reliable and effective. The frame has deep channel-section sides and five cross-members with diagonal bracing at the rear. When seen in a stripped condition the frame looks as though it were from a very much larger vehicle.

Petrol is carried in an L-sectioned tank under the driver's seat, and contains about 12½ imperial gallons. On later models it is filled through a very large diameter orifice with a pull-out tube, but the early Jeeps had a very small hole through which it was difficult to refuel.

Electrical equipment is 6-volt, with constant-voltage current regulation. The lighting arrangements are rather complicated, being designed to operate under either blackout or normal conditions. As the blackout is now a thing of the past as regards the majority of readers, I do not propose to describe in detail the nine lights provided, nor how various combinations of them are operated by the push-pull switch on the dash. It is worth mentioning that the main headlamps are of the sealed beam variety and are very effective, and that the small lamps mounted under them, known as blackout headlamps, give a polarised beam which cannot be seen above the horizontal. There are two dashlamps, and, presumably for blackout reasons, no ignition warning lamp. The starter switch is foot-operated.

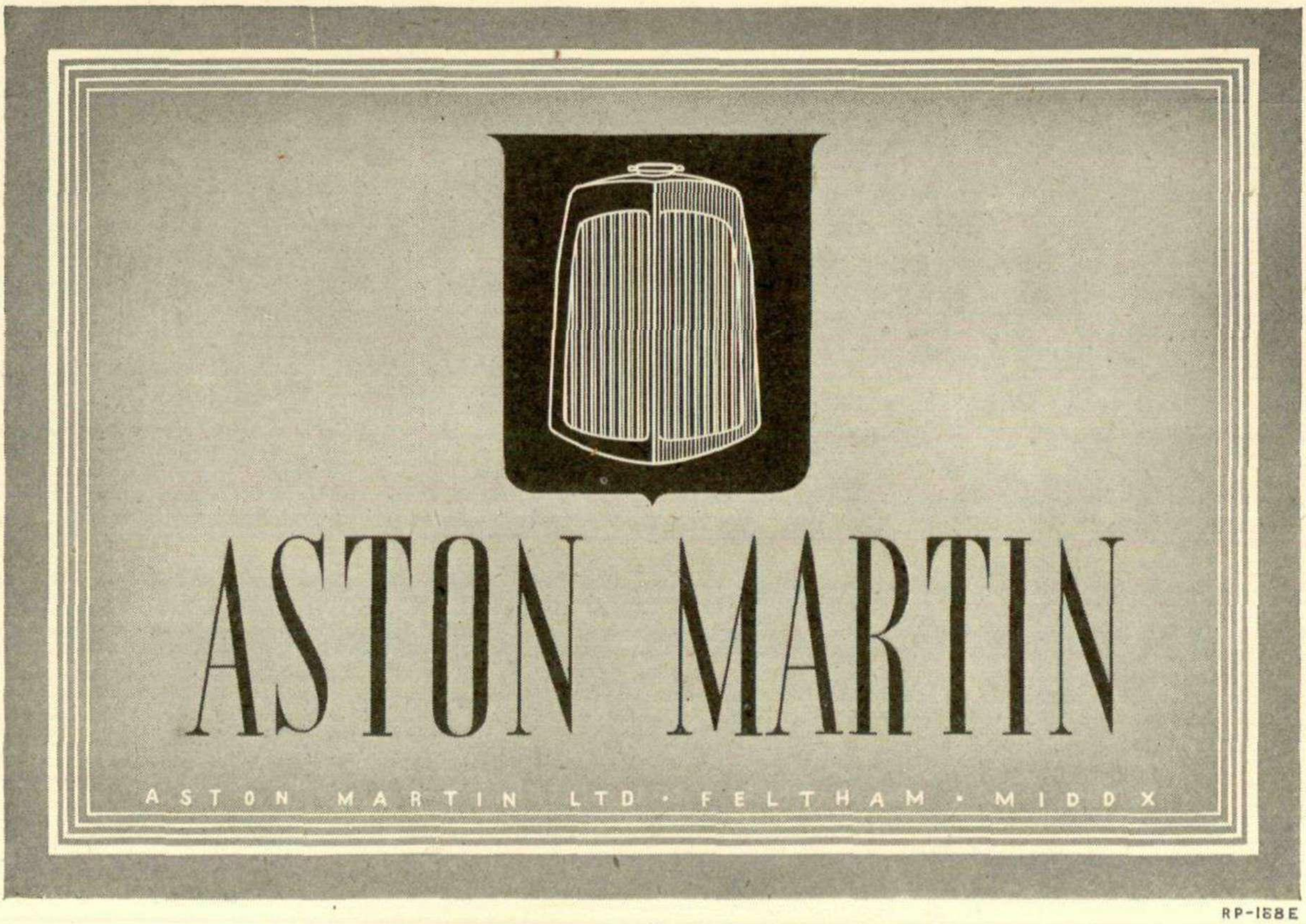
Instruments are of the excellent type common to all American service vehicles, and almost come up to the best European sports-car standards as regards legibility —a complete change from American private-car practice. They are all in separate circular dials with white figuring on a black background, the speedo. needle being luminous. They comprise a 60 m.p.h. speedometer, oil pressure gauge, vapour pressure-operated thermometer, electric fuel gauge and ammeter. Minor controls, apart from the three switches and the hand-brake, are piano wire pull-out controls for the choke and the throttle. The right-hand side of the dash is occupied by a useful locker with a plunger-type catch for the lid.

The engine compartment is covered by a lid hinged at the rear. Lifting this reveals the radiator, with cowled fan, battery, headlamps, voltage control and oil and petrol filters, as well as the engine itself, so that quite a large space is completely filled.

The body is, of course, purely utilitarian, and provides about as much weather protection as most motor-cycles. The hood, which removes and folds up under the front passenger's seat, is apparently designed to keep the sun off, to provide as much draught as possible for the backs of all the occupants' necks, and to remind the driver when he is going too fast by flapping on the top of his head. A better pen than mine is needed to describe the hardness of the cushions after a day's journey. The windscreen arrangement is very practical. The screen will open upwards in the normal manner to a horizontal position, or the complete frame will fold forward to lie flat on the bonnet top. A hand-operated wiper only is provided—a cause of much annoyance in wet weather.

One of the interesting features about a Jeep, and one which governs the body design to some extent, is that by removing the windscreens these vehicles can be stacked one on top of another, the front wheels resting on the flat front wings of the underneath one, and the rear wheels on the wheel arches.

As regards performance, a plate on the dashboard gives the speeds shown in the data panel as maxima which are not to be exceeded, and these do represent



speeds above which the engine begins to feel overstressed. The maximum speed I put at just under, rather than over, 65 m.p.h., but some Jeeps are much better than others. Before leaving England, I had meant to time my Jeep over a standing quarter-mile and from 0 to 50 m.p.h., in order to get some definite indication of the acceleration, but like many good intentions, it was not carried out. Actually, while undoubtedly good, I do not think that figures would prove as outstanding as many people suppose. I think a lot of the apparent snap of the Jeep on the road is due to the high bottom gear, which enables it to get up to 25 m.p.h. while other cars are having their gears changed.

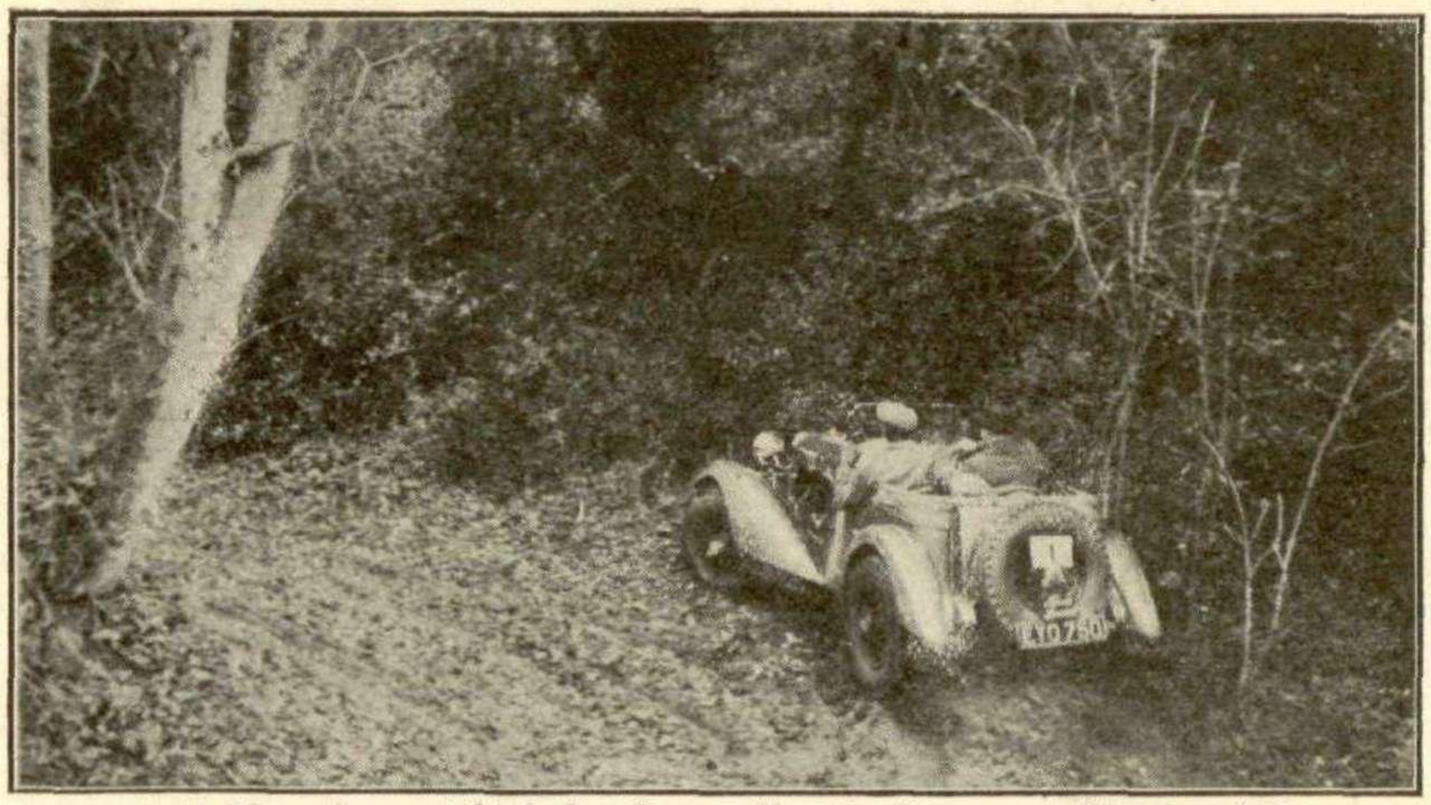
The gear ratios are quite well chosen for a three-speed box, though bottom gear always seems to me to be rather high. Careful clutch engagement is necessary, and with a full load, and most certainly when towing, any upgrade makes " low-low " desirable for restarting. Any abuse of the clutch leads to early failure, as this component is not very large and seems to have a rather low safety factor. Apart from this, the clutch is smooth and well behaved.

The main gearbox synchromesh, as in many cars, tends to get tired rather early in life, so that double declutching downwards is desirable, and upwards results in a slightly quicker change than the alternative. Clutchless changes go through quite nicely in spite of the synchro. The gear lever is not too long and is rather more rigid than those of some American cars. Gear changes in the auxiliary box go through easily by double declutching, but are slow, due to the large change in ratio. Front-wheel drive is engaged and disengaged without stopping, but is sometimes difficult to disengage when one axle gets wound up relative to the other and causes the dogs to bind.

Roadholding I class as fair (by sports-car standards). It is aided by the fairly considerable weight, but is influenced far more in the other direction by the very considerable unsprung weight of the live front axle. The centre of gravity must be quite low because of the absence of a roof and of the fairly low engine mounting, although the ground clearance is very good and the seating position is high. Rolling, therefore, is not too pronounced in spite of the soft springs.

The foot-brake is up to the usual Lockheed standard in power, but braking hard from anything over 45 m.p.h. produces quite a fierce swerve to the left, due to the front axle winding up on the springs and thus pulling on the push-and-pull rod. This twisting takes place in spite of the torque reaction spring on the left-hand side. This swerving, with an oversteering tendency, can make stopping in a hurry an interesting process.

The hand-brake is purely a parking brake, and its use while on the move produces transmission judder. It needs watching rather carefully, as it sometimes sticks on or fails to free properly, while some drivers have been known to drive away with it on—to its rapid detriment. I am rather in favour of its pull-out control, on which the ratchet is released by partial rotation of the handle from the straight-down position. This is quite easily accomplished with one finger, giving a fly-off effect. Apart from this, a transmission brake always makes for easier starting on hills.



Capt. Moon does not think that Jeeps will seriously menace Allards and the like in future Trials.

Steering is fairly accurate, quite light and, by American standards, high geared, requiring about 2½ turns from lock to lock, with an excellent turning circle.

The exhaust note is pleasantly audible, but not loud, unless the rather thin exhaust pipe or silencer have rusted through.

Petrol consumption varies with driving conditions, but to exceed 18 m.p.g. on main roads is rare, which cannot be classed as a brilliant performance from a 2.2-litre car weighing just over a ton.

The cross-country performance of the Jeep with four-wheel drive engaged is, of course, terrific, far exceeding that of any two-wheel-drive vehicle. Short of gluey mud or soft sand over axle level, there is nowhere where it can set its four wheels that a Jeep cannot go.

A question that is looming in some people's minds is what will be the effect on post-war trials of large numbers of Jeep entries (assuming, that is, that Jeeps are available to the general public). Personally, I think that in trials of pre-war severity, where final results are often determined by special tests, the Allard and the " Grasshopper " Austin would wipe up a standard Jeep nine times out of ten, due to the latter's inferior power/weight ratio. Of course, if trials are stiffened up to the standard of pre-war German events, the Jeep will have a great advantage over a two-wheel-driven vehicle.

Can the Jeep power/weight ratio be improved by simple modification? I doubt it. The weight of a Jeep is inherent in the design and is not built in to any particular component that could be discarded or extensively lightened. Moreover, supposing that one could pare off a couple of hundredweight, which brings the weight down to something comparable with the Allard in trials form, one has to consider the deleterious effect upon the already not-too-good roadholding of increasing the unsprung weight ratio, since the axles could not be lightened in proportion to the rest of the vehicle.

What about increasing the power output? Again difficult, I think. While much can be done by increasing the compression ratio and the valve overlap and using re-designed manifolds with twin carburetters, the only way to make 2.2 litres compare with 3.6 is to supercharge, a process of which I think the engine would not approve. In any case, any appreciable increase in power would necessitate a larger clutch, and probably gearbox modifications as well. The solution may be found by someone who can install a Mercury V8 engine and mate it up with the Jeep transmission. Until then, I do not think that the " Tail-waggers " and the " Grasshoppers " need lose overmuch sleep over the prospect of hordes of Jeeps participating in post-war trials.

It may be added, in conclusion, that the apparent impracticability of improving the Jeep by modifying it is a further proof of the excellence of its design, as the essence of design is to achieve the best possible compromise between opposing factors, and it certainly appears that this has been attained in the Jeep.

DATA SHEET

CAR, 5 CWT., 4 BY 4, WILLYS M.B. OR FORD G.P.W

ENGINE

No. of Cylinders	4
Bore	3⅛ in. (79.4 mm.)
Stroke	4⅜ in. (111.1 mm.)
Cubic Capacity	134.2 cu. in. (2,201 c.c.)
R.A.C. Rating	15.6 h.p.
Stroke/Bore Ratio	1.40-1
Compression Ratio	6.48-1
Maximum Power Output	60 b.h.p. at 4,000 r.p.m.
Specific Output	27.3 h.p. per litre
B.M.E.P. at Max. Power	88.4 lb. per sq. in.
Maximum Torque	105 ft.-lb. at 2,000 r.p.m.
Maximum B.M.E.P.	118.0 lb. per sq. in.
Maximum Engine Speed	4,000 r.p.m.
Maximum Piston Speed	2,920 ft. per min.

GEAR RATIOS

	High Range	*Low Range*
Top	4.88	9.60
Second	7.62	*15.0*
Low	12.8	25.2
Reverse	17.3	34.1

MAXIMUM SPEEDS
(corresponding to 4,000 r.p.m.)

	High Range	*Low Range*
Top	65 m.p.h.	33 m.p.h.
Second	41 m.p.h.	21 m.p.h.
Low	24 m.p.h.	12 m.p.h.
Reverse	18 m.p.h.	9 m.p.h.

DIMENSIONS

Wheelbase	80 in.
Track	48¼ in.
Overall Length	132¼ in.
Overall Width	62 in.
Overall Height (to top of windscreen)	63 in.
Weight (ready for road)	2,315 lb.
Weight (fully laden)	3,125 lb.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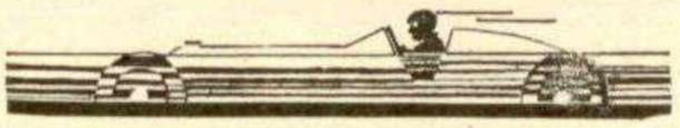
CARS I HAVE OWNED

A. G. Sanderson writes of his motor-cycles and cars and, in particular, of some rather hot M.G.s—Ed.



LIKE dozens of other enthusiasts, my brother and I started off on two wheels, our first mount being a 1922 Coulson Blackburn motor-cycle.

This machine, which cost us the gigantic sum of 10s., had a spring frame, two-speed gearbox and belt drive, but no clutch. To take off, one selected bottom gear, lifted the exhaust lever and, running alongside, released same, whereupon the bicycle promptly took charge, pulling you down the road. If you were fortunate enough to gain the saddle all was well until the next traffic block, when this performance had to be gone through all over again. I remember on one occasion the machine winning the race, to the detriment of someone's front garden! My brother declares to this day that my "racing" change from top to bottom was the cause of the Coulson's downfall, shearing the sprocket from the cam-wheel.

Incidentally, should anyone require an Albion gearbox and belt for this machine, they can be had for the asking.

Our next investment took the form of a 350-c.c. B.S.A., vintage 1926, complete with footboards, acetylene lighting, clutch and sit-up-and-beg handlebars. Being capable of about 55 m.p.h. this machine was a definite step in the right direction.

The acetylene lighting was a bugbear, the slightest bump being sufficient to extinguish the rear light, whilst the headlamp had a shocking habit of suddenly flaring up like mad and promptly going out. One night, the headlamp having just done its "party piece," I was stopped by the arm of the law for being without a light. I explained to the constable that it had only just gone out, whereupon, to test my statement, he removed his glove, placing his hand on top of the lamp. Judging by the rapidity with which his hand was withdrawn it was perfectly obvious he had no reason to doubt the veracity of my story. It says much for his sportsmanship that I escaped with a caution!

My brother now purchased a 1928 350-c.c. New Imperial, whilst I had a series of Austin Sevens. The latter were: a saloon (1931), a tourer (1926), a tourer (1928), and a Gordon England "Cup" model. These little cars had one thing in common, the brakes (or, rather, lack of them). I well remember, when three of us were ambling around North Devon in one of the tourers, making what I strongly believe to be the fastest *descent* of Porlock Hill. My friend, who was driving, managed to find second gear and stood on the foot-brake, while the front passenger held on to the hand-brake like grim death. As for myself, in the back, all I could do was to heave myself over the hood and act as a drag-anchor. At the bottom of the hill, the remains of my shoes were on fire!

It was upon one of these cars that we made our first attempt at tuning. The ports were polished, the compression raised, double valve springs fitted and lastly, we obtained a special exhaust system. The result was hardly worth the labour expended. Whilst the car, before the operation, would not have been able to pull the proverbial skin from a rice pudding, afterwards it might just have managed this task!

By this time my brother had purchased an Austin Seven 2-seater with a very long pointed tail. This car certainly looked fast and had cost him £25. I was running the "Cup" model for which I had paid £7. After a number of arguments as to the merits of our respective vehicles, we decided to settle the matter by a "dice" around the houses. Scouts were placed on every corner of the course, and off we went. I was leading by ten yards when one of the scouts signalled us to stop. I pulled up, but my brother couldn't, his starting handle punching a neat hole dead in the centre of "Cup" model's tail. This proved beyond doubt my car's superiority, whereupon I sold it for £17.

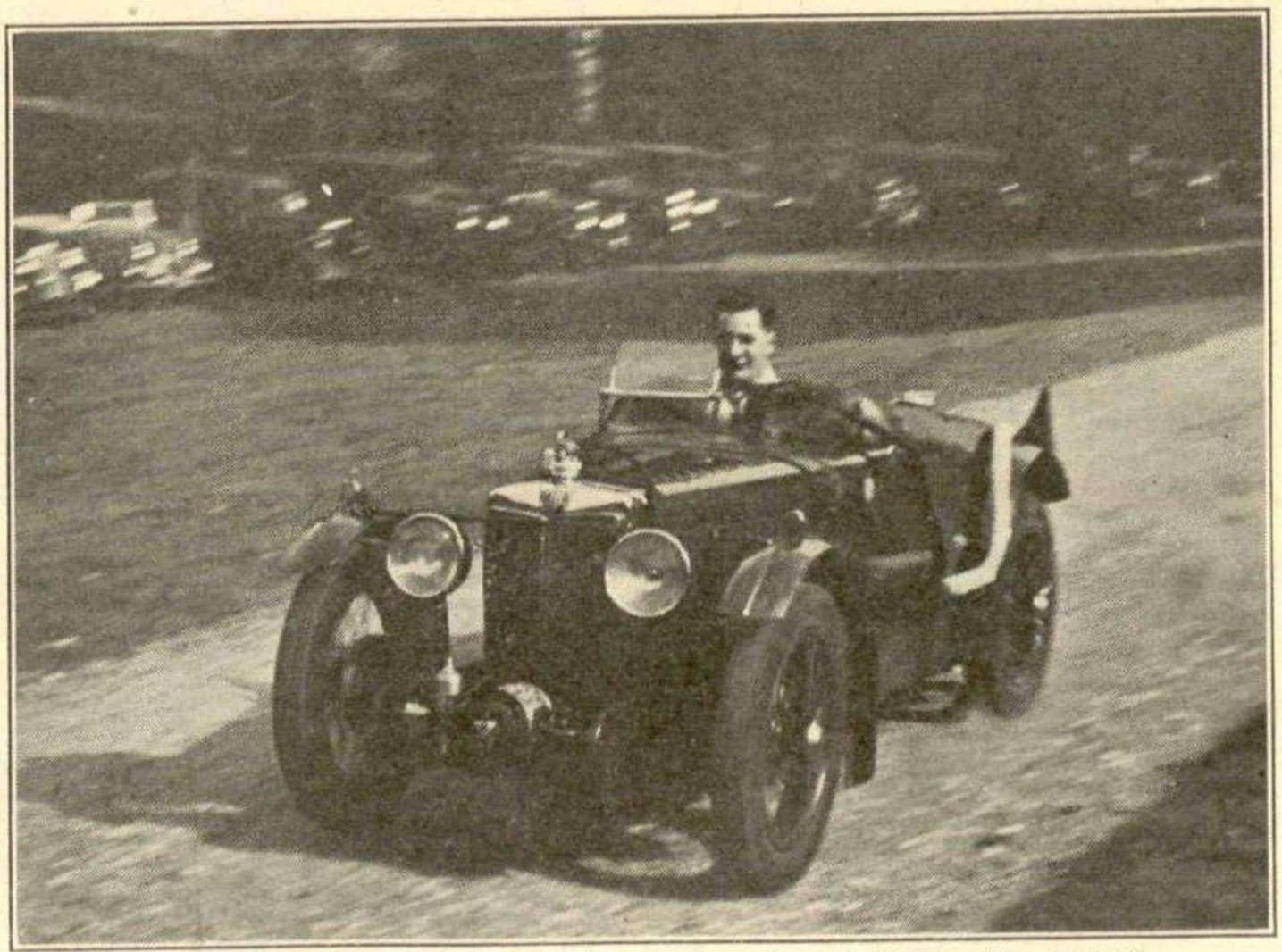
Much to the disgust of the local Austin brigade I now deserted Longbridge for Abingdon, a step which I have never had cause to regret.

My first M.G. Midget, a 1933 J2, was my faithful companion for five years. During this time it was flogged unmercifully in trials, hill-climbs, and sprint events with remarkable success. In all it cost me one clutch (burnt out on "Nailsworth"), one crown-wheel and pinion, a crankshaft, and one connecting rod.

One fact that has always puzzled me is that, whilst (in certain circles) M.G. cars are frowned upon, Austin "Nippys," "Speedys," and the like are regarded with reverence. At this point I must digress for a moment and dwell upon the dreadful experience of a friend of mine, a dyed-in-the-wool motor-cyclist. After a rather serious accident on the bicycle, parental pressure was brought to bear and he purchased a "Nippy" Austin Seven. As if experiencing all the troubles expounded by Capt. Moon in the April issue of MOTOR SPORT were not enough, he was finally passed, when flat out on the Great North Road, by a London taxicab! Two days afterwards he was back on a bicycle.

One day I happened to see a remarkably clean 1928 Alvis "12/50" 4-seater tourer. This car had a new hood and tonneau cover, five new tyres, chrome headlamps, and had just been re-sprayed Ulster green. In fact, at the price of £22, the whole thing was so fishy that it reeked. As I had always wanted one of these cars, and had garage space available, a trial run was arranged, and it became my property. After eight miles a big-end ran, and after another 30 miles another one followed suit. An engineer friend of mine held an inquest on the crankshaft, declaring that it had gone too far to be reground and advised another. We sought everywhere for a secondhand one without success, so the Alvis had to go. I traded it to a dealer for a 1931 unblown "Ulster" Austin Seven. Many times have I regretted parting with the Alvis (UP 633) and hope it found a good home. Being honest with the trader, I lost about £5 on this deal. Upon taking delivery of the "Ulster" I found great difficulty in driving it, owing to lack of leg-room. (I must say here that I am 6 ft. 4 in., and weigh some 15 stone.)

However, by removing the stuffing from the back of the seat, and scrapping the spring wheel in favour of one of the standard "dished" variety, I managed to get along fairly well. (I still possess the spring wheel if anyone wants it.) On the rare occasions when the hood was erected, my head made a large dome where it pressed against the canvas. The performance was fairly satisfactory, the



The author in action at the Beechwood Speed Trials in the "Montlhery" M.G.

speedo. showing 30 m.p.h. in bottom, 60 m.p.h. in second, and about 70 m.p.h. in top gear. Unfortunately, the road-holding and steering were decidedly "Austinish." The car was so light that by placing one hand under the tail I could lift it round in the road.

I now found that running two cars was too much of a drain on the exchequer, so the Austin gave place to a Velocette G.T.P. 250-c.c. two-stroke. This little bicycle ran very well, but was prone to dry up if kept flat out for any length of time. Being rather long in the leg, I could change up by hooking my knee over the gear-lever. In this way quite a happy change could be made.

By this time my brother had had a 250-c.c. B.S.A., a 350-c.c. A.J.S., and a 350-c.c. Triumph "Tiger 80." With both the latter machines he had collected a fair amount of pottery. Of the two, although the Triumph was the faster, I preferred the A.J.S. for roadholding and steering.

After the Velocette I purchased a 1926 Morris-Cowley 2-seater, taxed and insured for £2 10s. This I ran until the tax expired, when it was sold for £4. Of its condition I need only say that my fiancee, by no means fastidious, refused to ride in it. However, it ran well and will, no doubt, be still running when many 1939 models have gone to the breakers.

My next car was a 1933 Wolseley-Hornet saloon for business purposes. Altogether it was a very satisfactory proposition, being smooth, economical, and roomy. On one occasion I actually ran it in a trial (the J2 being off colour), and collected a second class award, tying in the driving test with a certain well-known blown M.G. for fastest time of the day.

In due course this car was swopped for a 10-h.p. Lanchester sportsman's coupé, mainly, I think, because I wanted to try a self-change gearbox. I liked the Lanchester less than any car I have owned. It was far too heavy for the engine, and kept breaking rear springs. The thing boiled like a kettle at the slightest provocation, and I was for ever topping up the fluid-flywheel. A quick change from third to top always resulted in the gear-band slipping and the bucket seats collapsed, in turn, under my weight.

I now had a chance to acquire a real motor car at last and, selling both the J2 and the Lanchester, bought from B. Rogers his 1932 blown M.G. "Montlhèry" Midget and a 1929 Riley Nine tourer. The "Montlhèry" (RX 8628) I believe to be the car in which Capt. Samuelson put up such a fine show in the 1932 Le Mans race. At any rate, his name was in the log book and the filler-caps of the M.G. were all drilled for the Le Mans seals. This race is described in detail in Barré Lyndon's book "Combat," without which no enthusiast's bookshelf can be complete.

I well remember Rogers's remarkable effort at the Howard Park (Aston Clinton) speed trials where he piloted the M.G. down the ¼-mile course in 16.5 sec., beating A. Baron (1,496-c.c. Bugatti, S) by 1/10 sec.

On the road the "Montlhèry" was a delight, the whine of the straight-cut rear-axle unit merging with the drone of the Powerplus No. 7 supercharger between the dumbirons. The exhaust note was of the type that makes strong men blanch and women hide their young, and one had only to change down to clear anything from a flock of sheep to a cycling club, mobs of hikers opening up like the Sea of Galilee.

The solidity of the E.N.V. gearbox had to be felt to be understood. The rest of the specification included a beautiful little crankshaft machined from the solid and connecting rods like those of a battle-cruiser. A hand-controlled "Vertex" magneto looked after the "sparks department," whilst brakes and "shockers" were adjustable from the driving seat.

Although the gears were on the high side for sprint work, I never came home empty-handed from an event in which I ran this car.

Incidentally, I have a few bits and pieces left over from the "Montlhèry" which I should be only too pleased to pass on, free of charge, to anyone with a similar machine. These include a new cylinder for the S.U., fitted with a heavy bronze piston (for snap acceleration), and about eight different needles for same.

The Riley did yeoman service, and having twin Zenith carburetters, had a respectable performance. My brother, very much impressed, also bought a Riley. His, being a 1930 tourer, had better brakes than mine, and was fitted with twin S.U. carburetters. The back axles of both these cars gave the usual trouble, but otherwise they handled like machines of double the h.p.

In 1939, as I was contemplating matrimony, expenses had to be cut down, so I sold both the M.G. and the Riley, purchasing a new Standard Eight drophead coupé. With this little car we covered some 22,000 miles with next to no trouble. The Standard stood up to hard driving without complaint, but on parting, I think the satisfaction was mutual.

Just after the outbreak of war I picked up a 1936 M.G. Midget (Type P.B.). The car has an outside exhaust system similar to the "Montlhèry," Scintilla magneto, and Marshall blower. The long, sweeping front wings had been scrapped in favour of very scanty strips of aluminium. This car has been completely rebuilt during the war and is now ready for the "basic."

After an uninteresting month or so riding an A.J.W. two-stroke having the flat-top piston Villiers engine, I obtained a 500-c.c. Ariel "De Luxe." All was well until a drastic cut in my petrol allowance argued something less thirsty. Consequently a 1940 Rudge auto-cycle took the place of the Ariel. Having the rigidity and narrow tyres of an ordinary bicycle, with a top speed (downhill) of 42 m.p.h., its behaviour on ice and wet wood blocks in the blackout can be imagined. The machine, although being the slowest that I have owned, was, without the slightest doubt, the most dangerous. Many are the occasions when I have arrived at work wet with perspiration with the temperature well below freezing point! It was constantly seizing up, whereupon one sat down in the gutter fanning the wretched engine with a cap or anything that happened to be handy.

The direct lighting worked well enough under 20 m.p.h., but if you should, in a moment of exuberance, "turn up the taps," the infernal bulbs promptly blew, leaving you as blind as a bat. The pocket of my leather coat was always stuffed with spare bulbs, but one night, the demand having exceeded the supply, I had a nightmare ride of five miles harried by policemen, wardens, and anyone who happened to be about.

Lest I appear somewhat hard on the Rudge, let me say that the task I set it was beyond its powers, but it would, no doubt, have been ideal for carrying district nurses to confinements!

After the auto-cycle I unearthed a 1936 350-c.c. Velocette, model M.A.C. This I have used for the last three years, and although not particularly rapid, it steers to a hair and has given excellent service.

★ BOOK REVIEWS

"Model Race Cars," by D. A. Russell and D. B. M. Wright. The Drysdale Press, Ltd., 3s.

This book, which is extremely well illustrated and produced on high-quality paper, is the first published in this country devoted to petrol-driven model racing cars. Notes on tyres, suspension and spring testing, design, starting the engine, building a miniature accumulator and estimating speed are included, and there are descriptions of the first ten cars built in this country, and detailed descriptions of Russell's Auto-Union; Buck's "No. 2"; Galeota's beginner's model; the Curwen-Special; Cruickshank's record-breaking M.G.; Russell's S.S. 100; and the Wright-Special. So many excellent photographs are included that prospective builders of model cars cannot fail to glean useful information about constructional methods. Our only criticism is that, apart from the Auto-Union, S.S., M.G. and one of Buck's free-lance designs, these models do not quite resemble the real thing to motoring enthusiasts' eyes. And why model *race* cars? Plans giving detailed information for building seven of these models are available from the publishers at 82, Highgate West Hill, London, N.6. Of these, those for the Auto-Union and M.G. cost 15s. 6d. each, and that for the S.S., 18s. 6d. All parts are shown full size on these plans, and are post-free. Model car racing should benefit a great deal from the availability of this useful information.

Air Review (bi-monthly). Air Review, Ltd., 3s.

This revived magazine brings forth the immediate comment, "Mr. Russell has done it again!" It is magnificently produced, contains most absorbing aviation articles and photographs, both up-to-the-minute and of intense interest to students of history, while it is liberally besprinkled with cartoons, historic photographs, and g.a. drawings from the famous Aero Modeller Plans Service, Ltd. If you want a high-class aviation magazine, this is *it*.

Anthony Phelps, whose outspoken articles have pleased MOTOR SPORT readers, is shortly publishing his A.T.A. reminiscences, under the title of "I Couldn't Care Less," a book which should be a fitting companion to the divers reminiscences of R.A.F. pilots published since the outbreak of war.

AN ENGLISHMAN IN SYDNEY

By E. M. Inman-Hunter

SINCE my arrival in Australia some three months ago I have been trying to find time to record my impressions from the motorist's angle, but pressure of business has repeatedly compelled me to postpone this pleasant task. To-day, however, an incident occurred which demands no further delay in the matter.

I was riding in a taxi (Yankee " Yellow Cab " variety) out Bondi way, an outer suburb of Sydney, when my rather doubting ear seemed to pick up the crackle of a real honest-to-goodness motor car, and before I had time to realise just what was happening a stripped red 2-seater which could have been (and I am pretty certain *was*) an 1,100-c.c. or 1,500-c.c. racing Maserati, turned from a side road, and with engine screaming at something like maximum as the driver stepped through the gears rapidly became a mere speck in the distance. In true movie style, but with an excited stammer, I instructed my driver to " catch that car in front." It was, of course, hopeless, as any reader who might have chased a Maserati in a taxi will know full well.

That is, perhaps, an outstanding war-time incident even for Sydney but, nevertheless, for the English sporting motorist (rather uneducated regarding the Empire) this is a city full of pleasant surprises and extraordinary interest.

One other recent surprise was the sight of a Nuffield-Riley saloon with a brand new chassis of similar type in tow, thus demonstrating that at least the nucleus of an overseas trade is being maintained by the British industry, a fact which interests me after having read over a period of years of Britain's struggle to secure a colonial market. In view of this I came out here fully expecting to see the Americans holding the monopoly, as indeed they do, but not nearly to such a large extent as one has been led to expect. Not only are there a very large number of the smaller British cars, but also a good seasoning of European products, particularly in the form of D.K.W.s which, with most attractive Australian coachbuilt bodies, would appear to have been well on the way to securing a good market immediately prior to the war, whilst quite a few American Bantams, known as A.B.C.s, are also to be seen.

Due to the enormous duty imposed on complete motor vehicles brought into this country, both European and American chassis are usually fitted with bodies of local manufacture, the latter conforming in most cases to their original design and quantity produced by a subsidiary of General Motors, whereas the English chassis are bodied by more numerous and smaller concerns whose designs provide a pleasing contrast to the much-of-a-much-ness mass-produced saloon to which we have become so accustomed at home. Of these English chassis the 8-h.p. Morris, known here as the " 8/40 " (40 b.h.p. ?) would seem to predominate with Austin Eights and Tens running close behind in company with the smaller Standards and a number of Singers and Hillman Minx. The Ford Eight and Ten are also to be seen, but to a rather less extent. The most popular body style in the small-car class is the 2/4-seater tourer, rather like the British 8-h.p. Austin in general outline, but different enough to be individual.

In the field of larger cars the Americans are certainly on top, for with the exception of a 25-h.p. Daimler, an Armstrong-Siddeley, some rather aged Rolls and a few Vauxhalls, I have seen nothing from Britain. As might be expected, the Yanks are mostly of " sedan " type, and as alike as two peas, recognition of individual makes being almost impossible except at close quarters, although half a dozen or so 1944 Chryslers used by the Commonwealth Government are quite distinctive and possess good lines, aided by the war-time austerity finish which tends to tone down the ironmongery at the front. Of the few open-bodied American cars of more recent manufacture the Willys are the most numerous, and are strangely reminiscent of the Raymond Mays despite a hideous frontal treatment.

A very popular body style out here, and one unique, I think, to this country, is a form of utility vehicle consisting of a pressed steel cab rather like a fixed-head coupé, with a metal panelled open truck behind provided with a kind of tonneau cover. Whilst this body is more usual on the larger chassis, there are one or two smaller versions around, including a little D.K.W. which, because of its front-wheel drive, has a very low loading level.

Despite their good fortune in having a basic petrol ration, the Australians have been much more ready to make use of the gas-producer plant than the British, a good 25 per cent. of all vehicles being thus equipped. There are several types of gas units on the market, and good specialised service is available at most garages. Generally speaking, the gas works are fitted in the rear boot, the lid being discarded, but it is not unusual to see them mounted on long outriggers ahead of the radiator (particularly is this so in the case of taxis, where retention of luggage space is desirable), whilst the Australian utilities already described have the unit immediately behind the cab, where they occupy a good proportion of the carrying space, but at the same time save a great deal of wear on tyres and chassis.

Some few weeks ago I made a 150 miles return journey to the Blue Mountains of N.S.W. on a gas-producer Mercury at a total cost of 14s. for two bags of charcoal, which is not bad going. The car was slow but pulled well, climbing to well over 3,000 feet in 25 miles without difficulty.

With regard to actual motoring conditions in Sydney, war-time restrictions prohibit the creation of a fair impression, but I should imagine the intricate tramway system utilising units of two cars coupled together, is an absolute menace in peace-time traffic, whilst it would be untrue to say, "I think your policemen are wonderful," for they are the most officious examples of small people wielding big power I have ever encountered.

As in Britain, one has to pass a driving test before a licence is granted, and as this test involves knowing a most voluminous highway code, I have been content to renew my learner's licence every 28 days. This is probably a shocking confession to have to make, but having failed my pilot's course in the R.A.F. due to a poor knowledge of maths., I am convinced that during my short stay here it would be impossible to master all the various minimum distances at which a car may be parked from kerbs, inter-sections, fire hydrants, postal boxes, and other vehicles.

And now, having dwelt all too long on motoring as a means of transport, let me turn to motoring as a means of preserving one's sanity in a world gone mad.

Within a fortnight of stepping off the boat I had looked up Bob Pritchett, the hon. secretary of the Vintage Sports Car Club of Australia, and been duly enrolled

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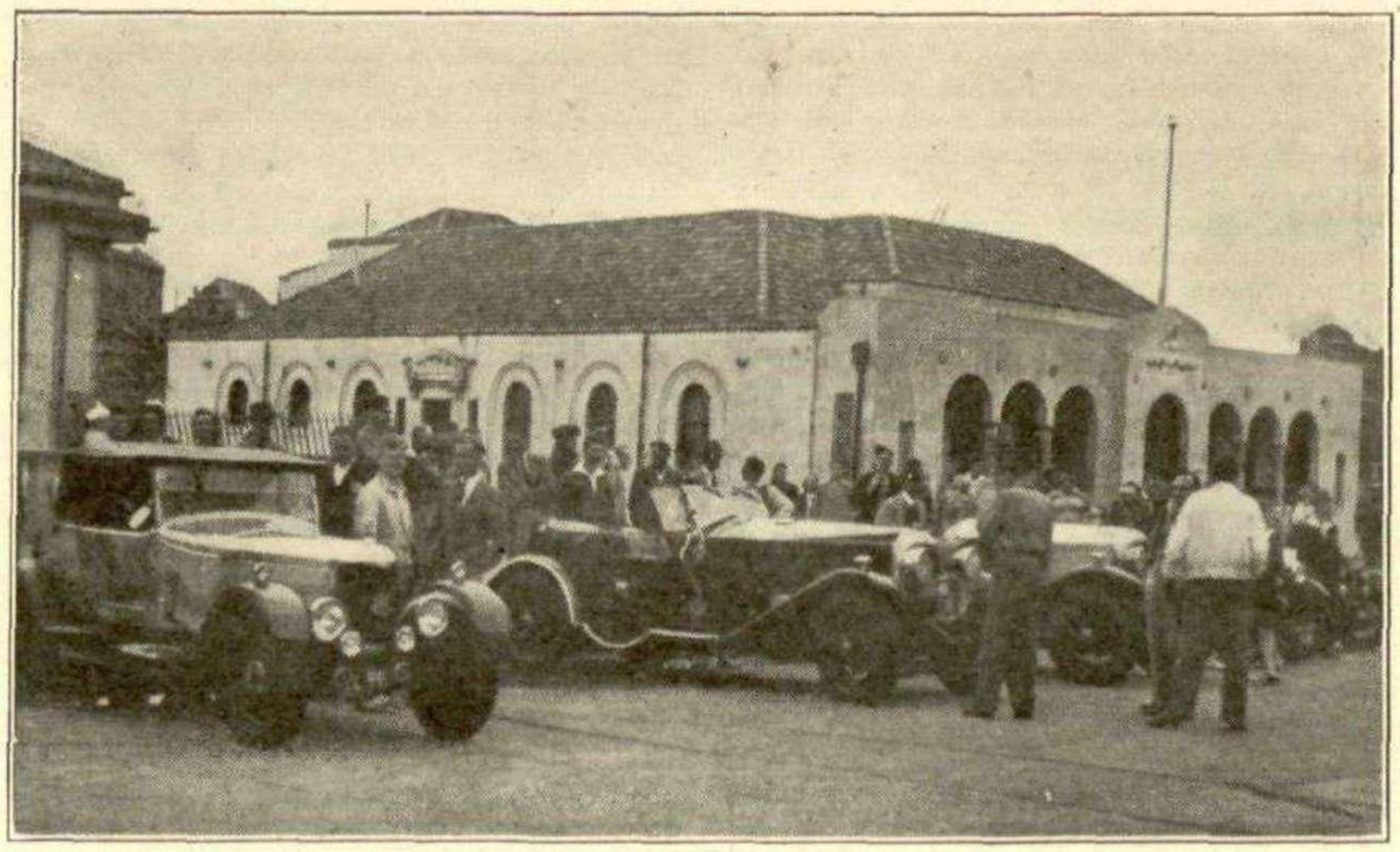
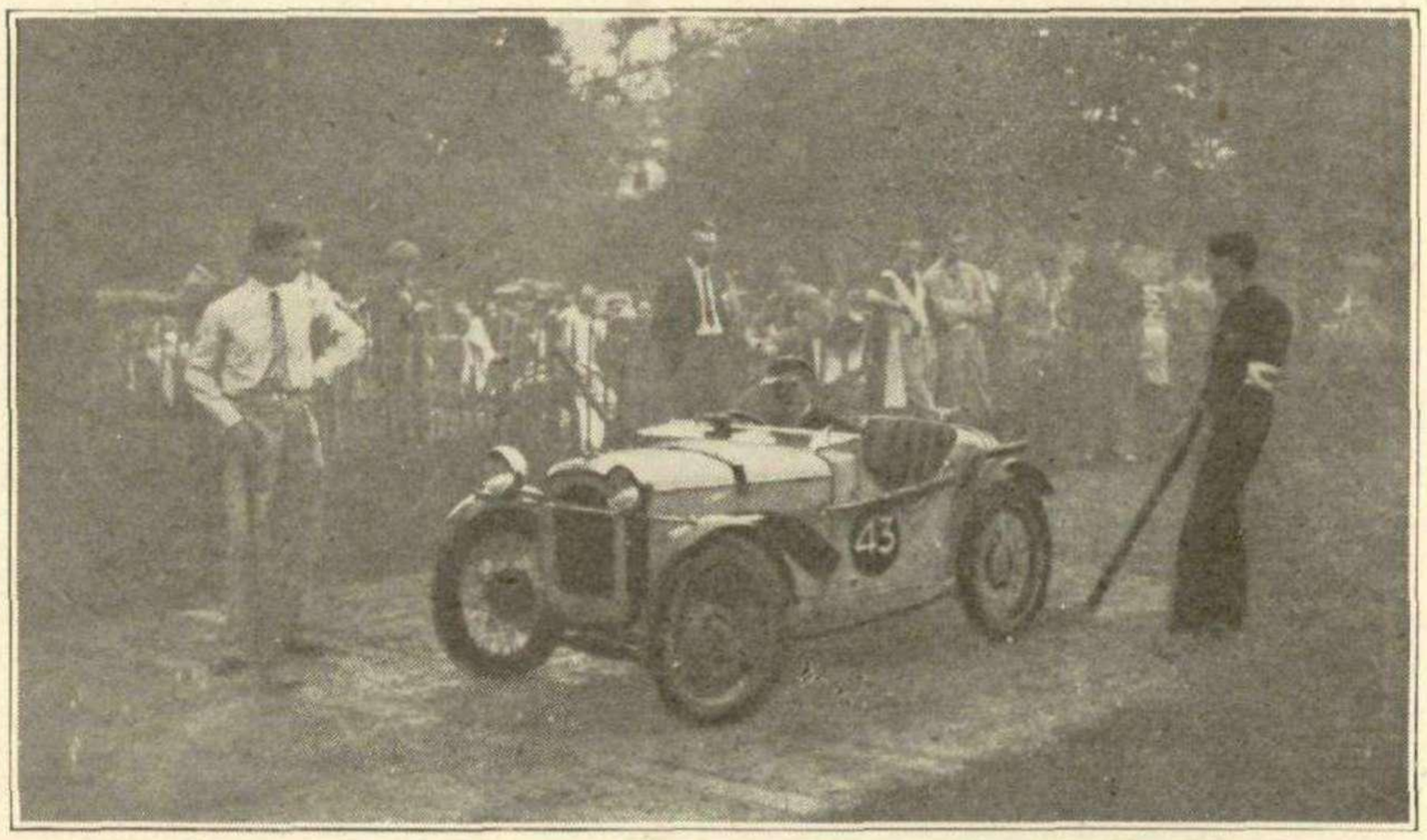


Australia certainly has her enthusiasts, as Inman-Hunter says. Here is a meeting of the Vintage Sports Car Club of Australia.

"It's One of the Team Cars, Old Boy"

THERE appears to exist in Austin Seven circles a fallacy as to what constitutes one of the genuine 2-seater team cars, which the Austin Company raced with considerable success immediately before concentrating on single-seaters. As a result, all sorts of people who own standard, blown " Ulster " sports models are misled into saying, "It's one of the team cars, old boy." Actually, the genuine racing 2-seaters, which ran in orange paintwork, differed in certain rather obvious respects from the production " Ulster " cars. The body was narrower, with higher, more upswept tail. The fuel tank constituted the scuttle and held 11½ gallons, and this necessitated a short bonnet like that on early touring Austin Sevens, whereas the "Ulster," both blown and unblown, had a smaller fuel tank and a long bonnet coming right back to a very short scuttle. The team cars had a huge filler cap for the tank, whereas the bonnet had to be opened to fill the " Ulster " tank. The team cars, apart from the blower oil tank, had an additional 1-gallon scuttle tank from which extra engine oil could be fed to the sump, while the radiator incorporated a stone guard. Fixed cycle-type wings figured on the racing cars, whereas the " Ulster," as it left Longbridge, had touring wings united by short running boards. Apart, therefore, from the orange paintwork and obvious racing equipment, which may subsequently have been removed, the team cars are fairly easy to identify. They also had bronze heads and there were minor differences about the chassis frame, clutch, brakes and rear axle over the production cars, while hydraulic shock-absorbers were used. Lush still preserves one of the orange cars, alas, now with standard engine. We believe that the ex-Bretell car still exists, with modified tail, and Birkett's car, now dismantled, is a border-line case and may have been a T.T. Replica.



Walker's "Ulster" Austin Seven at Prescott. This has non-standard wings and exhaust system and a rear tank ; but observe the long bonnet which distinguishes production "Ulsters."

Amongst the successes gained by the " works " 2-seaters can be numbered first place in the 750-c.c. class in the 1929 B.A.R.C. Six-Hour Sports Car Race, first in this class in the Irish G.P., 3rd and 4th places, at 59.6 and 59.49 m.p.h., respectively, in the 1929 T.T., and 1,141.9 miles covered in the " Double Twelve." In 1930 one of these cars, driven by Waite and March, won its class in the " Double Twelve " at 65 m.p.h., Frazer-Nash drove one into 3rd place at Phoenix Park, at 65.94 m.p.h., and Poppe was 5th in the T.T. Then, in the B.R.D.C. 500-Mile Race, Davis and March won at 83.41 m.p.h., lapping at over 87. Afterwards this same Austin covered the equivalent of two more 500-mile races, when Davis and Goodacre took International Class H records up to 12 hours, at Brooklands, thirteen records falling in all, the 12 hours at 81.71 m.p.h. Then, in the 1931 1,000-Mile Race in Italy, Goodacre finished 2nd in the 1,100-c.c. class at 46.8 m.p.h.

AN ENGLISHMAN IN SYDNEY

—continued from previous page

as a member, attending a meeting held at his home, when Alex. MacKinnon took me for a brief run in his Frazer-Nash, an episode which took me right back to the days before the delightful aroma of Castrol R gave way to the stench of T.N.T. MacKinnon, incidentally, comes from Richmond, Surrey, and some ten years ago I remember trying in vain to raise enough money to buy a T-type Aston which he had for sale at the old Talbot Garage at the bottom of the hill.

What an enthusiastic bunch these Australian vintagents are, and what a good collection of cars they own between them. If Bob Pritchett is as efficient a club secretary as I think he is, a list of these cars will have appeared in MOTOR SPORT by now, as also reports of their initial rally and a one-hour trial held in March, at which latter event your correspondent had the honour of officiating as starter and the pleasure of riding in the last car away, Tattersall's truly magnificent " 30/98 " Vauxhall Wensum, a car that would delight the hearts of Sam Clutton and Anthony Heal.

However, it must not be thought that the three dozen or so real motor cars owned by members exhausts the supply, for I personally have seen in and around Sydney several T and TB Midgets, Hornet Specials, Morgan 4/4s (as many of the latter as I ever saw in London), two large Alvis, a B.S.A. Scout, a very shabby Brough, two Austro-Daimlers, one of tubular chassis type with a beautiful coupé body, a little Skoda saloon, an elderly F.N., an S.S. 100, several Jaguars, an enormous boat-bodied Fiat with C spanner wire wheels and V radiator (someone, please, designate type), an A.J.S. and a " Segrave " Hillman with their fabric bodies beautifully preserved (how, in this climate ?), a Morris-Leon Bollée, and a very impressive black Hansa with cowled radiator not unlike the special 12-cylinder Lagonda.

But there is a tragic side to most things in life, and it is now my sad duty to relate that Australia, too, has its sporty boys of the white helmet variety. These poor, misguided creatures are largely influenced by gadgets imported from America and taking the form of chromium-plated flexible exhaust pipes leading from V8 bonnet sides directly into the wings, the word *supercharged* cast in aluminium, with " speed spray " trailing from each letter, and the most abortional badge bars of square section tube twisted after the fashion of the supporting columns on fair-ground roundabouts.

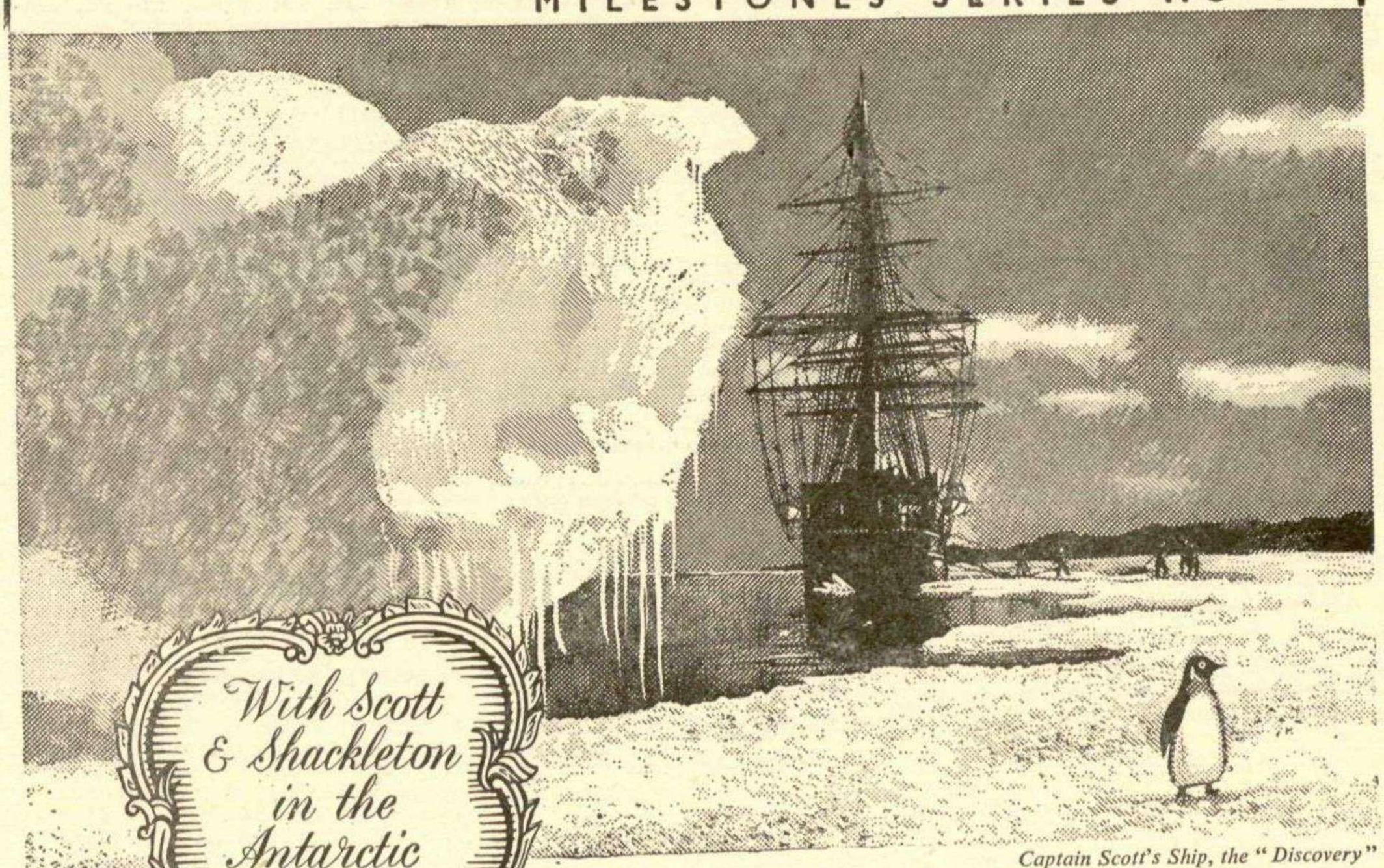
There is certainly plenty of cleaning up to be done by the V.S.C.C. of A.

Outside the city itself one is immediately impressed with the large number of vintage everyday motor cars still giving yeoman service. Model T Fords (some with lovely brass radiators) are a common sight, equalled in numbers only by the bull-nosed Morris, whilst large American tourers appear in a variety of marques long extinct in England, such as Rugby, Flint, Jenett, Oakland, Durant, Erskine, etc.

Yet amongst this vast international assortment of cars I have yet to locate the particular one I am looking for—the s.v. Aston-Martin. Somewhere, somehow it has been lost check of, although through the V.S.C.C. of A. I have been able to secure its chassis number (1934) and a couple of photographs. But to track her down, and beg, borrow or steal her for the period of my visit, would, indeed, be something to write home about !

Smiths of England

MILESTONES SERIES No 4



With Scott & Shackleton in the Antarctic

Captain Scott's Ship, the "Discovery"

Today, mention of the polar expeditions of Scott and Shackleton from 1899 to 1917, recalls first the courage and heroism of these leaders and their men ; but the purpose of their voyages was purely scientific.

The "Discovery" and the "Terra Nova" sailed in quest of news and exact knowledge, to gain which they were equipped with instruments as advanced in design and construction as contemporary skill made available. No wonder the great "Smith" family had a part to play in these historic British enterprises. Captain Scott relied upon "Smith" instruments for all his observations : by means of a "Smith" recorder he would measure the distances travelled by a sledge, and "Smith" watches helped to standardise time for his party.

Both Scott and Shackleton spent many a profitable hour at that mecca of explorers, the famous Fenchurch Street shop of Henry Hughes & Son Ltd., now one of the "Smith" group of enterprises.

S. SMITH & SONS (ENGLAND) LTD

MOTOR : Smiths Motor Accessories Ltd., K.L.G. Sparking Plugs Ltd., British Jaeger Instruments Ltd., Smiths Jacking Systems Ltd. CLOCKS & WATCHES : Smiths English Clocks Ltd., Enfield Clock Co. (London) Ltd., English Clock Systems Ltd., A.B.E.C. Ltd., British Precision Springs Ltd. AIRCRAFT & MARINE : Smiths Aircraft Instruments Ltd., Henry Hughes & Son Ltd., Marine Instruments Ltd., Furzehill Laboratories Ltd. INDUSTRIAL : Smiths Industrial Instruments Ltd., A.T. Instruments Ltd.

Scientific S.E.41

500 MILES IN THE 3-CYLINDER, TWO-STROKE SCOTT-ENGINED MORGAN 4/4

Complete reliability and ability to average very high speed.

THE excellent meeting at Cockfosters last July offered us an excuse to test the Scott-engined Morgan 4/4 over a big mileage, whereas previously the car had only been tried round the Saltaire houses, as it were. That visit to the Scott works and brief trial of the car had endeared us to the idea of three cylinders and the two-stroke cycle, as envisaged by Mr. Cull, Scott's chief engineer, and we had no compunction in asking whether we could take the car down to "Cockfosters." Once again Mr. Cull reminded us that it had been hacking all through the war, but that if we wanted to chance it, we could do so. We did. The first hot day of the year saw us off to Bradford in the Austin to collect our unusual mount. On the journey back to Harrogate we took things steadily and looked around. Oil pressure was noted to remain steady at about 8 lb./sq. in., and the water temperature at about 65° C. Had we but known it, these figures were to remain static throughout a hard and hot 500 miles, save just before we put in a quart of XL, when the oil indication fell away a bit on bends. The first surprise was the way in which the Morgan, as engined by Scott, took Humphrey Bank, outside Harrogate, in top gear, whereas many 4-speed moderns call for 2nd speed to negotiate this notorious hump. The engine seemed disinclined to accept much ignition advance, but, as we noted before, ran beautifully evenly and refused to four-stroke even at idling speed. It commenced commendably on the starter and, indeed, behaved just like any well-mannered Otto-cycle unit.

Starting the long run about mid-day, we got on to A1 after a long hold-up at Spofforth level-crossing and, stopping for lunch, and for tea in congested Stamford, we were in and across London early that evening. The Morgan hadn't been pushed very hard, but had cruised happily at around 50 m.p.h., and we had already noted how its seemingly unburstable engine would run up to the same speed in 3rd gear and how astonishingly well the little car—three up, and luggage—pulled up long hills on the highest ratio. Incidentally, gearbox and axle are, we understand, standard Morgan 4/4, in which case the ratios are 5.0, 6.7, 11.95 and 19.3 to 1.

Next morning the H.215 plugs oiled up in London traffic, so the "softer" C.14s were substituted. These not only stood up to low-speed pottering, but also to subsequent prolonged high-speed cruising, so that the 3SM Scott cannot be considered sensitive about plugs. Incidentally, a record cloudburst proved the practicability of the Morgan hood.

So to Cockfosters. Thereafter the real test commenced. Tea was taken in Barnet, and the Morgan pointed north, still three up, at 6.30 p.m. So fast did it run without effort that the plan of arriving home about midnight seemed unworthy of the car, and the driver decided to improve on this schedule. The engine humming grandly, with that exhaust purr which had led the paddock marshals at Cockfosters to query: "Is it blown?" we devoured A1 with the speedometer on the "70" mark along all the straights. Aided by high-geared steering, a low-hung chassis, Morgan coil-spring i.f.s., and Girling brakes, an unexpectedly good time was made.

In the first half-hour 20 miles were disposed of, and 7.30 p.m. saw us nearly at Eaton Socon, 46 miles out of Barnet. Another half-hour and another 24 miles were gone, while, as the driver's watch showed 8.30 p.m., we were at Grantham, 98 miles from where we had started. Exactly 24 miles went by in the next 30 minutes' spell, after which we had a quick drink and rapidly consumed some sandwiches. So consistently did the Morgan make for the North that 24 miles again went by in the next half-hour, and in 60 minutes' running time after our self-imposed stop we had covered 40 miles, which included negotiation of the straight, but congested and signal-controlled main road through Doncaster. A curious phenomenon had by now been experienced. As the oil pressure became unsteady, indicating a falling sump level, the engine "pinked" less and became able to accept rather more ignition advance. The solution appears to be that oil is metered into the fuel by means of a special engine-driven combined fuel and oil pump and, as the oil supply drops, less oil enters the combustion spaces and the full anti-knock properties of the fuel are temporarily restored. This is borne out by the sudden violent "pinking" which is experienced as the float chamber empties when fuel is exhausted, allowing an excess of oil to be momentarily injected into the engine. This latter happening occurred just beyond Wetherby, after we had left the Great North Road for Harrogate, and so, instead of getting home from Barnet in about four hours, we spent a difficult hour in the dusk, trying to prime a seemingly unprimable pump. However, the fuel tank was found to possess a sensible tap and we were thus able to fill the float chamber, whereupon the engine started easily, and primed its own pump—the C14 plugs were quite happy after the excess-oil trick.

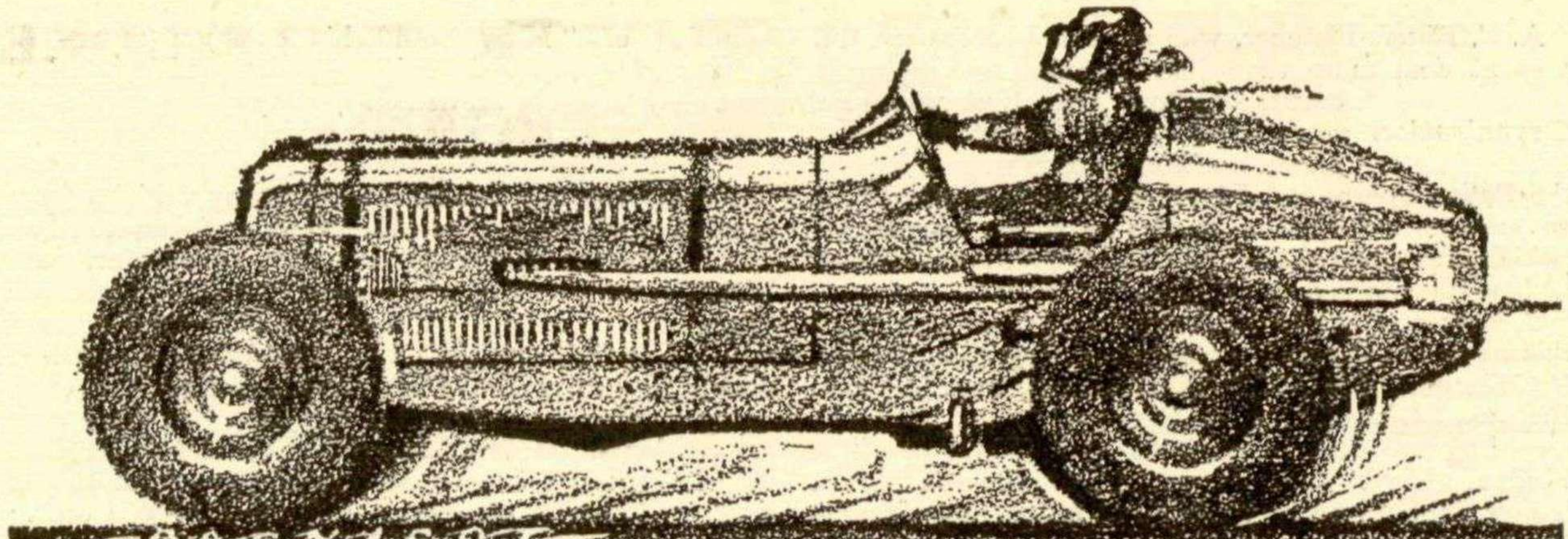
Working things out the next day, we became more and more impressed. Even allowing for the absence of full peace-time traffic, an average of 48½ m.p.h. for three hours' running up the Great North Road calls for a very good car, especially when its capacity is a mere 1,108 c.c. The Scott engine poured out 70 m.p.h. on the "clock"—say, something over 60—for mile after mile, and not only *felt* quite unburstable, but didn't overheat or show any sign of distress at all. After a night in the open in heavy rain, a lot of which came through the bonnet, it started straight away on the starter and was driven rapidly back to Saltaire on those same C14 plugs. If ever it didn't want to start an easily-reached cock in the crankcase was opened, the engine spun on the starter to clear out excess fuel and oil, the cock closed and—off she went. The quart of oil went in after some 450 miles—a consumption of 1,000 m.p.g. from a well-worn two-stroke! Going down, fuel consumption came out at approximately 27 m.p.g., cruising at 40–50 m.p.h. Including London driving, plenty of stopping and starting, and the *very hard* drive home, the overall consumption of "Pool" was 23½ m.p.g., on an S.U. carburetter adjusted for all-round running and not expressly for economy. As an amusing exercise, before returning the car, we tried a 0-50 acceleration test, using very rough timing, and got 17 sec., including a longish dwell between the change from 2nd into 3rd gear at around 45 m.p.h. In all we covered 510 miles and no water was added throughout.

All of which has convinced us that the 3-cylinder, crankcase-compression two-stroke, 3 SM 78 by 78 mm. Scott engine is a very fine little unit. It develops over 40 b.h.p. at 4,000 r.p.m., but the firm's intention is to obtain more power lower down in the speed range, while offering 30+ b.h.p. at peak speed. The engine will probably be supplied in this form after the war, and it should be excellent for competition work. Those interested, especially from the latter viewpoint, should contact Scott Motors, Ltd., Shipley, Yorks.

OUT OF PRINT

To avoid unnecessary correspondence, those subscribers desiring back numbers are informed that the following issues are unobtainable :—

1924 : June, July, Aug., Sept., Oct., Nov., Dec. ; **1925 :** Feb., April, Aug., Oct. ; **1926 :** Feb., Mar., April, Aug., Sept., Oct., Dec. ; **1927 :** Feb., April, June ; **1928 :** Mar., Dec. ; **1929 :** Jan., Feb., Mar., April, May, June, July, Aug., Sept., Oct., Nov. ; **1930 :** Man., June, July, Aug., Sept., Oct., Dec. ; **1931 :** Jan., Mar., April, June, July, Nov. ; **1932 :** Jan., Mar., July, Aug., Oct. ; **1933 :** May, June, Aug., Nov., Dec. ; **1934 :** Jan., Mar., April ; **1935 :** Jan., Mar., May, Aug., Oct., Dec. ; **1936 :** Jan., Feb., April, Aug. ; **1938 :** May, June, July, Nov. ; Dec. ; **1939 :** Jan., Feb., May, June, Sept. ; **1940 :** Aug., Sept., Oct. ; **1941 :** Jan., June, Sept. ; **1943 :** Jan., Mar., Oct., Nov. ; **1945 :** Mar., April.



RUMBLINGS

This is a most interesting period from the viewpoint of new models, although many that are announced cannot yet be bought, even with a permit.

New Models

Lagonda, Ltd., intend to concentrate on a 2½-litre car.

Via the Bugatti Owners' Club we learn that Ettore Bugatti now intends to market four models. The first is to be a supercharged 1½-litre job with 2- and 4-seater coachwork, offering similar performance to that provided by a Type 57 and easily doing 87 m.p.h. (140 k.p.h.). Quite large-scale production is contemplated for this model. Then there is to be a very special blown car of only 300 c.c., offered with open or closed bodywork. Next, a 4½-litre car, developed from a 1937 design, similar in size to a Type 57. This car will be built in small numbers only and, in blown and unblown form, will have performance superior to that of a Type 57 S.C. A speed of over 112 m.p.h. is spoken of. Finally, there is to be a car like the incredible "Royale," built in very small numbers and covered by an unlimited guarantee, with overhaul every two years. Ettore says his reputation has been gained largely on power/weight ratio, and mentions that up to 1939 he obtained 145 b.h.p. from the Type 57 which, with 4-door, 4-seater body, weighed 1,450 kilos. His Type 57C was giving 170 b.h.p. This represented about 10 kilos. per h.p. unblown and 8 kilos. per h.p. blown, and these excellent ratios will be considerably improved in the new models. Vive, Ettore!

H.R.G. hope to be in production again shortly, and Lloyd Cars, Ltd., who have been making precision components for aero engines during the war, propose to offer a 650-c.c. car in 1946. Morgan Motors, Ltd., are already producing two 3-wheeler models, the F Super and the F 4-seater, and also the famous Morgan 4/4 in open 2-seater and drophead coupé forms.

Rolls-Royce, Ltd., have announced that their post-war cars will be based on, and will closely resemble, those designed before the war. But we believe the Mark V 4¼-litre Bentley will be even faster than before. Jaguar Cars, Ltd.—late S.S.—will build the well-known 1½-, 2½- and 3½-litre models, and A.C., Ltd., have something very interesting up their sleeve. The new push-rod-o.h.v. Aston-Martin should not be too long delayed. Fiats are busy with a 4-seater car, curiously enough having a normal bonnet instead of Fiat's usual easy-view frontal aspect, which is said to have a 4-cylinder o.h.v. engine of 650 c.c. It is intended to replace the 4-seater Fiat "500," which was too diminutive to be really useful. Things are looking up in the Motor Industry.

* * *

If you have not already done so, you certainly must purchase a copy of "Drive for Freedom," by Charles Graves. This liberally-illustrated book, running to 136 pages, is published by Hodder & Stoughton, Ltd., for the S.M.M.T., and is remarkably good value at 2s. It tells the complete story of the immense, indispensable part which the British Motor Industry played in beating the Germans. The story unfolds in a most fascinating way, and the account of how Chilwell was founded and of the problems to be faced in the hectic period following the bombing of Coventry, make very interesting reading. What pleases us particularly is that the Sport receives proper recognition from Charles Graves. In Chapter III over two pages are devoted to the value of racing and trials as a training ground for war, and pictures are included of the 4-litre Sunbeam at speed on the Brooklands' banking, of the start of a classic sports car race at Donington, and of a Singer negotiating a trials section. One reads, with justifiable pleasure, "The type of man who was keen about motor racing was the first to rush off to join the R.A.F. or the motor gunboats or motor torpedo boats of the Royal Navy." Let us hope peace-time politicians will remember that fact. This book covers every aspect of the Motor Industry at war—production, research, tank development, the Home Guard, N.F.S., W.V.S., transport, and militarisation. The S.M.M.T. has done a fine job of work in producing it, and you should support them by buying your copy without delay.

"Drive for Freedom"

A. F. Rivers-Fletcher, who gave us Cockfosters, did a great deal more than just organise that pleasant event, big task that that was. He saw that every daily and evening newspaper, and some dozen magazines like the *Tatler*, *Sphere* and *Picture Post*, each received four advance notices relating to the rally, the programme (which was printed free of charge by Temple Press, Ltd., and contained an article on the value of the Sport) and, later, a report of the event. Rivers also extended this service to the B.B.C. and to the news-reel agencies. He discussed the event with Michael Standing and Raymond Glendenning, of the B.B.C., and a sound-recording was duly taken, with commentary by F. J. Findon. Rivers tells us that he thinks the B.B.C. is now liable to be very partial to future motor-racing broadcasts, and he also believes that running events in aid of charity may further the Sport in this country. He has been asked to run further meetings, but has decided—and in this he has the support of Lord Howe—to hold only one more, at the "Rembrandt" on December 2nd, and then to let the normal clubs take over, as it were. We sincerely hope that this will not mean that Rivers-Fletcher will be lost to the organising side of the Sport. And we most certainly echo his sentiment that the final "Rembrandt" may be a good "breaking-up party." Incidentally, Rivers is chairman of the N.L.E.C.C., whose members marshalled very effectively at Cockfosters, while George Symonds, of their committee, was responsible for practically all the fencing of the course, as well as demonstrating his R-type M.G. Bolster, by the way, was not specially warned to be cautious, as our report suggests, as this would have been an insult to his usual safe handling of "Mary" and his common sense—all drivers were warned in writing, and Lord Howe asked that they be again warned on the day of the event. It is to the credit of all that no accidents happened.

Organisation

* * *

Not having taken a census of passing vehicles for a long time, we took one on the evening of August Bank Holiday, on the Leeds–Harrogate road, where some 400 cars passed per hour, without any semblance of congestion. Very few motor-cycles and practically no cyclists were encountered on this cold, rainy evening, and we hasten to assure you there were no accidents. Result: Morris, 23 per cent.; Austin, 18 per cent.; Ford, 12 per cent.; Standard, 10 per cent.; Rover, 6 per cent.; Vauxhall 5½ per cent.; Hillman, 3½ per cent.; Wolseley, 2½ per cent.; S.S., Triumph, 2 per cent. each; Riley, Singer, Jowett, Armstrong-Siddeley, M.G., 1.5 per cent. each; Opel, Lanchester, Buick, 1 per cent. each; Talbot, A.C., Rolls-Royce, B.S.A. 3-wheeler, f.w.d. Citroen, Hudson, Sunbeam-Talbot, Humber, Chrysler and Renault Eight, under 1 per cent.

The Country's Cars

* * *

At the V.C.C. luncheon it was announced that the tyre manufacturers will make new models in sizes suited to veteran cars when rubber is freely available again. A.F.N., Ltd., has linked up with the Bristol Aeroplane Co., Ltd., and a new Frazer-Nash car is to be anticipated. When F/Lt. Crook raffled 3d. tickets for charity for a ride in his rather special Type 328 B.M.W., 200 were sold and the winner, a W.A.A.F. girl, was driven at 100 m.p.h. down the main runway.

Odd Spots

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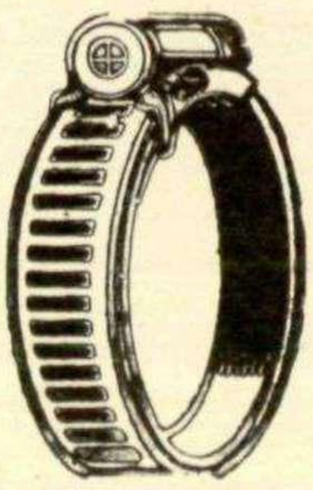

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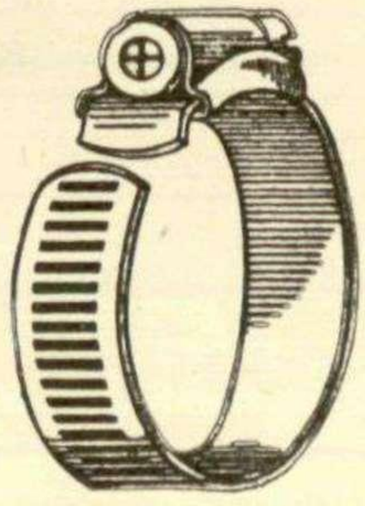

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Club News

WE HEAR

Major Souter has purchased Boddy's "14/75" open sports Alvis, and hopes to race his 2-litre Bugatti as a sports car when sports-car racing is resumed. Chapman is running a "Red Label" 3-litre Bentley and a 1936 Riley "Sprite" saloon. A 1924 "14/40" Delage was sold last month in Sutton-under-Whitecliffe, in the shadow of Sutton Bank. Major A. L. Galloway has a 1924 Rolls-Royce "Silver Ghost" out in Ceylon which he is reconditioning, fitting 7.00-in. by 21-in. tyres, h.c. "Specialloid" pistons, twin S.U. downdraught carburetters, K.E. 965 exhaust valves and multi-valve springs. He proposes to have one engine converted thus for high-speed leave touring on the Continent, normally using a standard engine, and he would like experienced persons' views on this scheme, and on the possibility of obtaining a speed of 85–90 m.p.h., cruising at 65–75 m.p.h., using a very light, low body, with lowered steering column.

W. Jackson has disposed of his "Ulster" Austin Seven and runs a 1931 TJ Alvis "12/50"—he needs new front mudguards and a dynamo with Simms-coupled magneto, if anyone can oblige. Walker, of Airspeeds, is using a delightful old 4-cylinder A.C. and owns an ex-Partridge f.w.d. Alvis for light entertainment. Birkett has bought a Type 38 Bugatti Jarvis-bodied 4-seater for use next winter as a touring car, and J. D. Edisbury is using a works-reconditioned 12.8 f.w.d. Citroen saloon, which he describes as definitely a good example of *type agricole sportif*. Edward Hyde has found a 328 B.M.W. which suits him—a car with only 10,000 miles on the clock and with three S.U. carburetters in place of the usual Solex or Zenith, bought from Wm. Arnolds, of Manchester. Sqdn. Ldr. R. H. Bardens has acquired several "Grand Sport" Amilcars for the purpose of building up one good one, a task he is undertaking for sentimental reasons.

Edmund Williams, the T.T. rider, is thinking of selling his blown "Ulster" Austin Seven which he ran at Shelsley and Prescott, and of building a "special." Amongst the early small cars at Bromyard are a 1914 Hillman, 1925 solid-tyred Trojan, 1925 "Chummy" Austin Seven, and a flat-twin Stellite-Wolseley. Is there a coming cult in Trojan motoring? We know of several people who covet them, Boddy included. Apologies to H. G. Symonds, Hornsted and R. F. Oats, for wrongly spelling their names. And to old-school Bentley folks for a recent reference to removing the head of one of these cars—head and block are in one, of course.

W. L. Jennings, 212, Victoria Road, Thorpe Bay, badly needs a French-built G.P. Salmson, any date or condition, and also a 1926–7-type long-tailed *metal* body for one of these cars. There is a 4-litre Bentley for sale at Stratford. At Alcester a 1906 V-twin Riley has been found in a bed of nettles, but having been there for 30 years, it is in a very poor state. Routledge is rebuilding a 1933 open A.C., which he intends to use with a rather special three-carburetter engine. His Firefly-engined "Speed Twenty" Alvis coupé is still his regular business car. Lt. Norman Riddle, R.N.V.R., has a Type 40 Bugatti awaiting rebuild, and is using a 1934 Talbot 105 2-seater. Lt. Dick Straddon has a Type 37 Bugatti, and his brother an "International" Aston-Martin.

★

B.O.C.

The Bugatti Owners' Club was scheduled to hold a social event at Bagshot on August 25th, the Prescott films—a 1¼-hour show—being put on after tea. The club confidently hopes to run meetings at Prescott next year—the R.A.C. permitting. Hon. secretary, E. L. Giles, 2, Queen Street, Mayfair, W.1.

THE VALUE OF THE SPORT !

It is very pleasing to find proper recognition of the value of the Sport to the war effort in the S.M.M.T.-sponsored book "Drive for Freedom." Two other instances of this can be quoted. Sqdn. Ldr. C. N. S. Pringle, one-time secretary of the C.U.A.C., has his personal Jeep in the Far East. This he modified as only an enthusiast for the Sport could. Lord Louis Mountbatten noted these alterations and promptly sent along his own Jeep for similar modification. Robert de Rovin, Ltd., of Paris, have announced a single-cylinder, o.h.v., 1½-h.p. 3-speed car to cost £125, and carry two persons at up to 44 m.p.h. This is an answer to the economic problem prevailing in Europe, and there is little doubt that de Rovin's experiences at Montlhèry in 1927, when his J.A.P.-engined de Rovin took records in the 500-c.c. class, have contributed to this new car.

★

DECEMBER "REMBRANDT"

The 14th and last meeting in the war-time enthusiasts series so ably run by Rivers-Fletcher, is due to happen at the "Rembrandt" not on September 16th as originally planned, but on December 2nd. The fixture list is already becoming crowded for September, so this must be regarded as a *good* thing.

★

V.S.C.C. FIRST POST-WAR RALLY

This event will take place at "The Pantiles," on the London–Basingstoke road, at Bagshot, on September 15th. Members are asked to arrive by 2.30 p.m., and a general meeting, to hear the president's statement and reports by the acting secretary, treasurer and competitions secretary, will follow. Club officers for 1945 will be elected, and there will be tea at 4.30 p.m. Tickets, at 4s. each, must be bought by September 10th. Wives and lady friends will be welcome.

At a recent committee meeting it was decided that all members who had paid subscriptions in 1939 should continue membership up to the end of 1945. The club is now open to receive applications for membership from owners of vintage sports cars. The entry fee is 5s. and the subscription to the end of 1946, 15s. 0d. If the club is run on former lines, this represents about the best value in the club world. A large number of new members is hoped for, and the acting hon. secretary wants to hear from old members, as to their whereabouts and the cars they own. Write to A. S. Heal, Red Hill Cottage, Denham, Bucks.

★

BADGES

We have never enthused over the practice made by certain competition drivers and others of fitting so many club badges to their cars as to give a Christmas-tree effect. To display the badges of one's more favoured clubs, however, is another matter, especially when one's personal car has, perforce, to be a humble vehicle, when display of a badge picks it out effectively from the common run of such cars. So we hope that badges, within reason, will begin to appear again, and that club secretaries will take steps to replenish depleted supplies as soon as production can be resumed.

★

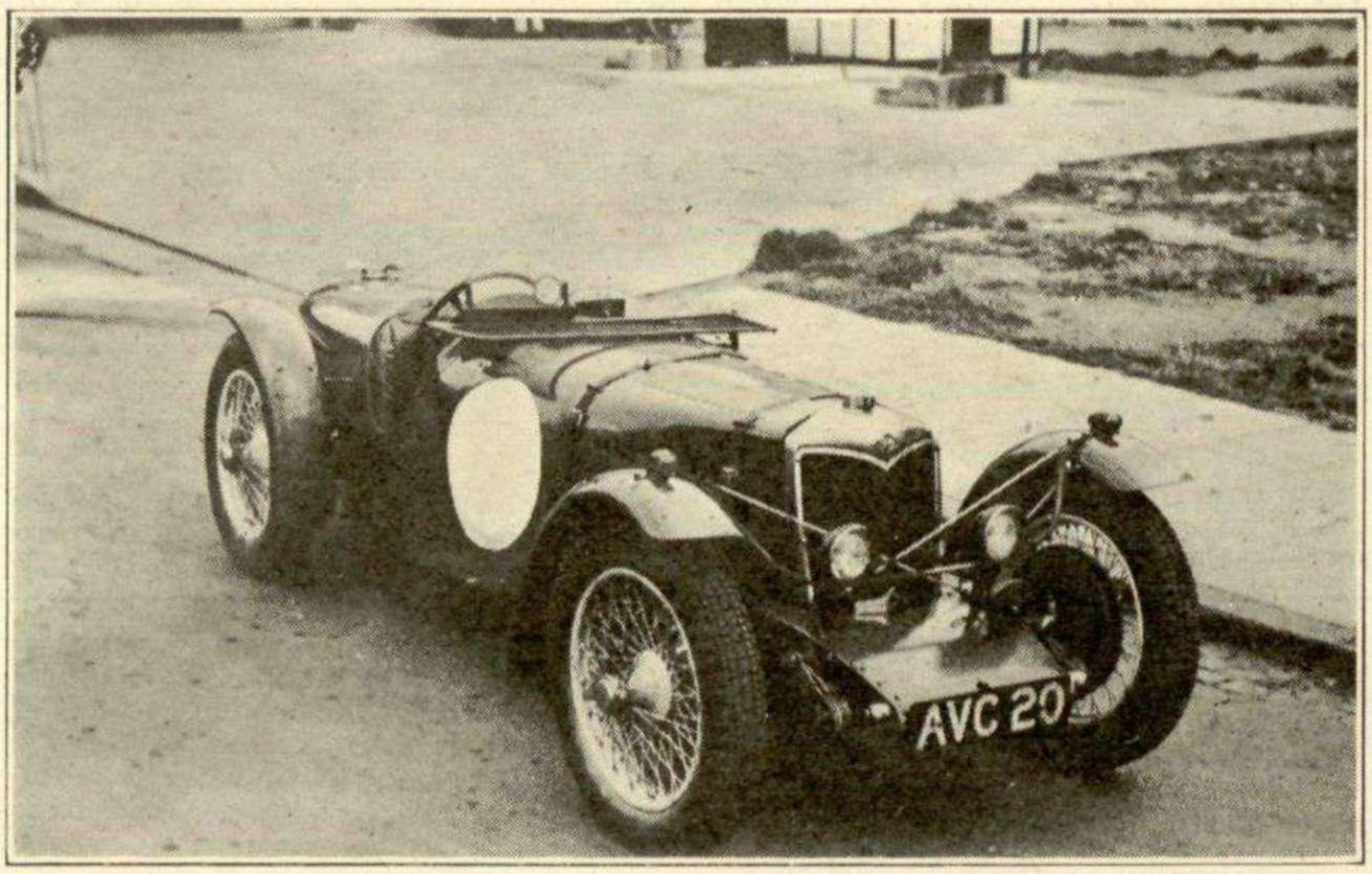
N.L.E.C.C.

The July meeting of the N. London Enthusiasts' Car Club was devoted to talks by members on their experiences. Rivers-Fletcher recounted how he rode as mechanic with Malcolm Campbell in the 1½-litre Delage in the 1928 J.C.C. Junior G.P. Philip Turner described last-minute preparation of E.R.A.s for racing. B. G. Limbrey recalled the 3-cylinder Lafayette and Bleriot-Whippet, and S. J. Humphries the detail work he has put into one of his cars. The club held an evening social run last month and hope to have a talk on trials this month. Meetings now take place on Wednesday evenings. Hon. secretary, G. Bance, 15, King's Avenue, Muswell Hill, London, N.10.

★

COVER PICTURE

This month's cover picture shows Ian Connell driving his E.R.A. at the Crystal Palace, during the 1937 London Grand Prix, in which race he finished second



And for a change something more modern—a 4-cylinder 1½-litre Riley "Ulster Sprite."

behind " Bira's " E.R.A., at 53.02 m.p.h. Alas, whether we shall ever see any more racing over this circuit is very dubious.

★

750 CLUB

A gymkhana is scheduled for early this month, at a field near Oxted, in Surrey. At a meeting on July 29th, the committee came up for re-election, and now comprises : S. H. Capon as secretary, Bill Merrilees as treasurer, Birkett as captain and *Bulletin* editor, Chiles as competition secretary, Ballamy as chairman, Sqdn. Ldr. Gibson, Frost and F/Lt. Mallock. Boddy and Tubbs were not re-elected. The club's aims are now quoted as being to foster enthusiasm for 750-c.c. cars, the Austin Seven in particular. Full members must run cars of up to 750 c.c., but associate members can own any size car. The subscription is 5s. up to next March, when a new club year commences, and a higher rate will be charged for the full year. Hon. secretary, S. H. Capon, 159, Upper Tulse Hill, London, S.W.2.

★

VETERAN CAR CLUB

The Veteran Car Club has decided to organise a rally for veteran cars now that " basic " fuel is available. We hope the Chancellor of the Exchequer will be dutifully appreciative of the extra revenue which this taxation of veterans will produce. The scheme is to rally to the " Ely," at Hartford Bridge on September 29th, by kind consent of C. A. Smith, who is a keen owner of many veteran cars. There will be no competitive event, but every veteran arriving under its own power by 1 p.m. will be given a special plaque to commemorate this initial post-war rally. Cars will be divided into two classes, (*a*) those built not later than December 31st, 1904, and (*b*) those built not later than December 31st, 1915, presumably for use when discussing the arrivals. The entry fee is 5s. per car, and entries, to F. W. Hutton-Stott, Junr., Speen Place, Newbury, Berks, must be received not later than September 18th. Members in modern cars will be very welcome. The venue is 32 miles from London on A30. This is splendid news and should round off a very full month of most interesting fixtures.

The luncheon at the Waldorf Hotel was very well attended, and was followed by a film show. G. James Allday, the chairman, announced a rally for this month, and said that the Brighton Run would be resumed in 1946, when it will form part of the celebrations commemorating the jubilee of the Motor Industry. Capt. Phillips, of the R.A.C., assured the V.C.C. of all possible assistance, and said that we must concentrate on getting rid of restrictions. George Lanchester presented the club with a beautiful photograph of the second Lanchester car to be built, taking part in the 1,000 mile trial of 1900. Geoffrey Smith suggested that a cable be sent to the V.C.C. of America, as they took a keen interest in the British club. Cecil Clutton spoke of the club's new policy of recognising cars built down to 1914 and enlarged on the need for restoring some of the more outstanding Edwardian touring cars. Amongst those present were : Lt. Cdr. Graham-White, George Reynolds, Air Marshal Sir James Robb, Chief of Fighter Command, Sam Wright, H. Egerton, F. S. Bennett, Mrs. S. F. Edge, R. Waddy, St. John Nixon, J. W. Stocks, etc. Boddy sent a telegram expressing regret at his non-attendance.

★

GOOD SHOW, SIR !

As a result of the Cockfosters Rally, Rivers-Fletcher has been able to hand the sum of £322 18s. 8d. to the Victoria Hospital, Barnet.

★

STOP PRESS

H. L. Benn hopes to again run his 1924 Austin Seven in competition ; he also has the ex-Aylward Aston-Martin. A. S. Heal has sold his 1926 " 14/40 " Sunbeam to Seth Smith, and is running a 1926 F-series twin o.h.c. 3-litre Sunbeam, the Claudel Hobson carburetters of which have been attended to by John Wyer, so that it now gives 16 m.p.g. of " Pool." Norman Smith, with the B.L.A., has a f.w.d. Citroen and a D.I.S.S. Delage in safe storage and craves a 3-litre Bentley or a Bugatti. F/Lt. Hannah seeks a differential drive pinion for a 1926 4-cylinder Star owned by a New Zealand friend. Has anyone any suggestions ? F/Lt. Woodhead has acquired a 3-carburetter Alvis " Silver Eagle " open 4-seater. Lush has bought a very early " Chummy " Austin Seven, which did a very long journey quite satisfactorily after eight years in storage. Birkett is building an Austin Seven " Special," composed of a " Ruby " chassis, " Ulster " engine, L.M.B. front axle and 2-seater body. F/Lt. Mallock is contemplating a P-type M.G., and J. S. French has one of these cars and also an Austin Seven saloon. The Mercédès-Benz which featured in these notes last month was a " 38/250," *not* a " 30/250."

★

HISTORY

Late in June the R.A.C. relented and stated that it was now prepared to issue permits for Closed Invitation events of a suitable nature. This is historic news. The first event held under this ruling was apparently the Bristol M.C. and L.C.C. Naish Hill Climb on August 18th, followed by Sunbac's Evening Trial on September 12th. Many rallies and gymkhanas are due this month. Things really are beginning ! But we must wait patiently until 1946 for a really full fixture list and real racing and, meanwhile, the Editor asks for continued support in the matter of contributions to MOTOR SPORT.

★

GENERAL NOTES

The special Austin Seven 2-seater the recalcitrant doings of which concluded these notes last month, had to be tested on behalf of its owner. So one weekday evening we occupied the passenger's seat, cold evening air streaming past unbroken by a screen, as we were driven spiritedly along 20 miles of the very beautiful Skipton road to Bolton Abbey. The plot was to try a track, rising very steeply, and reputed very rough, over Pock Stones Moor. Alas, misfiring set in before the start and became steadily worse, so that after the initial climb we could go no further, and clouds gathering and the light nearly gone, it seemed that we might, indeed, have to face a night on this barren hillside. At last the little car, still very sick, descended to civilisation and eventually dragged itself home, in time for a meal at midnight.

Next there was a chance to accompany a friend in a perfectly standard 1930 Riley Nine " Monaco " saloon on a business trip to London. Hardly had we arranged to go than Holland Birkett wired to say he wanted our company on a trip to Manchester from Fleet, in Hampshire, in his 1923 Type 30 Bugatti, to tow back the ex-Kaye Don Type 54. So we anticipated gleefully some 1,000 miles' motoring.

The Riley left Harrogate fairly early and, the crew aboard, cruised purposefully down A1 to the south. The North Road was joined over the bridge at Wetherby. Over the only traffic lights, towns apart, where the York–Leeds road crosses A1 near Bramham, and we were through Aberford, with a large church on the right. An ugly coal-mine came up and

receded, we went right where the telegraph poles go confusingly left along the road to Selby and passed the stretch of road before Ferrybridge, with permanently-flooded ground away below on the right. So to Doncaster, with its racecourse now a German prisoner-of-war camp and its aerodrome on the opposite side of the road. On through Barnby Moor, quite a nice village, and into Retford, the approach to which is attractive, where we went right in the town and on into open country, forking right before Tuxford for Newark. We took the bridge over the railway by Crow Park Station, and so down the tree-lined straight to the level-crossing outside Newark. To leave this town, of course, we turned right. A large, disused aerodrome loomed up, road work was in progress, and one day a fine wide road will happen hereabouts. So uphill and downhill into Grantham, where the narrow main street and three sets of traffic lights lower the average. Straight on at the last lot of lights, we climbed a hill flanked with surface air-raid shelters to the higher ground, overlooking patchwork fields backed by the railway, further on. 100 miles came up on the trip, the Riley still purposefully at 40 m.p.h. Past an extensive stone-walled estate, left fork for Stamford, past an aerodrome, and we were taking that straight where overtaking is prohibited; the final sign, *end of prohibition*, must have cheered the souls of countless American soldiers! Someone had swung the 30 m.p.h. limit sign round outside Great Costerton. Uphill to so-narrow Stamford, we climbed the hill out of the town, set in a cutting, passed a park on the left and a disused aerodrome on our right, and took that cutting with more no-passing restrictions. Over an ugly bridge over the river, and we came to the level-crossing, which is the first to be encountered if you are coming up from London. That curious last-war memorial looms up on the right before Stilton, and near Sawtry a veteran Sizaire-Naudin is noticed derelict beside a small garage. A deserted American airfield comes up, the road grows twisty, a cutting for a new road is noted on our left, and then A1 goes right and we go on for Huntingdon, past an American Army camp extending for miles.

Woodford duly appeared, passengers were dropped, and we went on through London to Fleet, ready for a 200-mile run in the Type 30 Bugatti on the morrow. Incidentally, cars of interest noted included a V12 Lagonda; a 4-seater Rover Speed Twenty; a big Daimler, possibly a V12; a very early "14/45" Rover saloon; two R.A.F. men in an M-type M.G. inspecting a sports 3-wheeler Morgan in Huntingdon; an Alvis "Firefly" lorry, many big Yanks and a "40/50" Rolls; a 1923 or thereabouts Jowett 2-seater with lamps on scuttle, the whole very nicely preserved; two of the original saloon Austin Sevens; a grand 6½-litre Bentley saloon for sale at Motor Stocks, Ltd., in London; a white open 3-litre Invicta, at Gladfield Lawrence's on the North Circular; a 4-seater "18/80" M.G. Six in London and another at Sunbury; a Star hearse, and two Star saloons.

Next day, not too late, we were off for the North again in the Type 30, cruising steadily and easily at some 55 m.p.h. The car handled as a Bugatti should, had very powerful brakes, emitted magnificent sounds on the indirects in towns, while on the straights the rev.-counter would creep up beyond the driver's self-imposed limit of 3,000 r.p.m.—"three-two," "three-three," "three-four"—64, 65, 66 m.p.h.

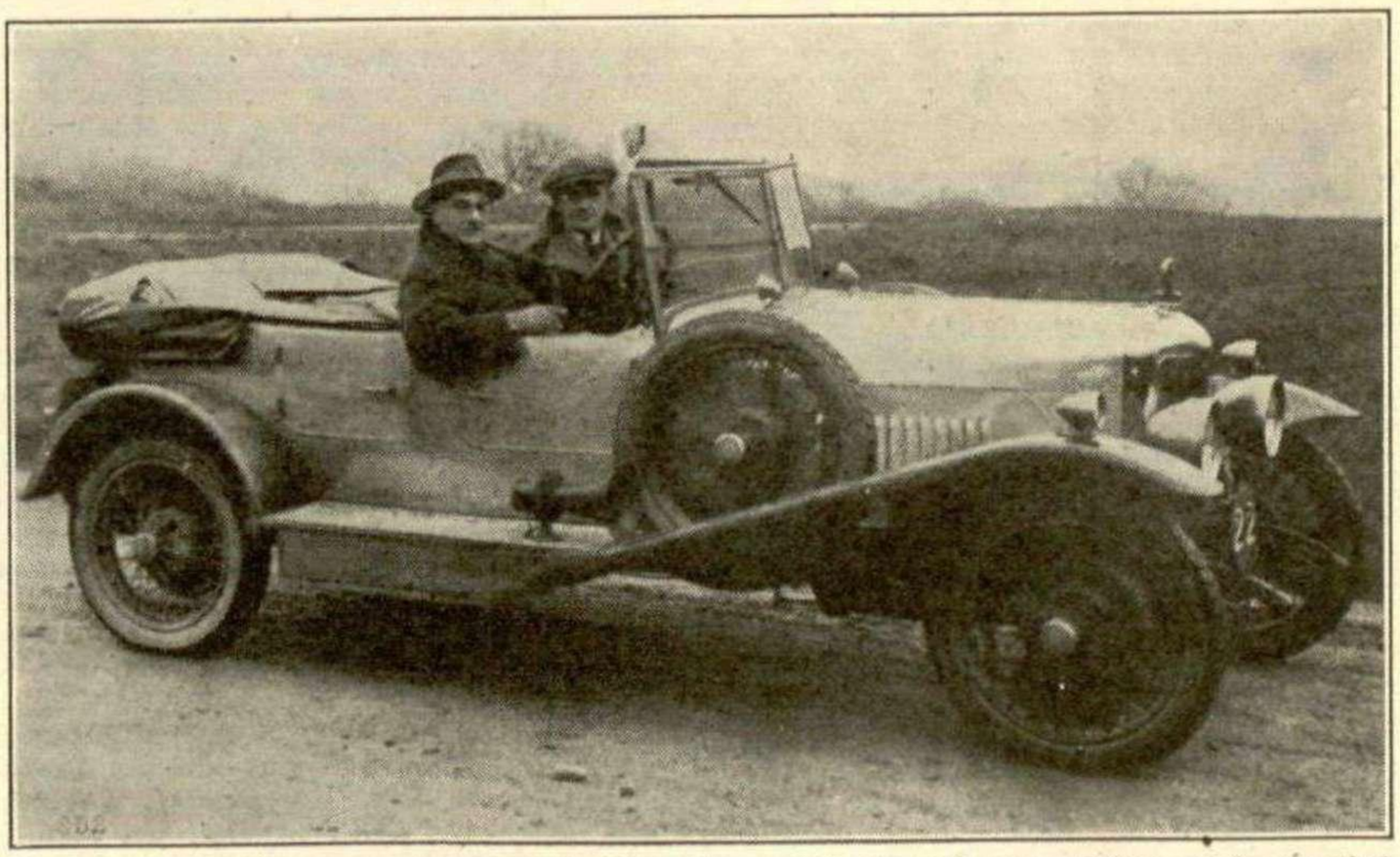
Meanwhile there was ample oil pressure, the water temperature remained low, and, when the flat belt was replaced over the pulleys, the dynamo gave a most healthy charge. It was all most inspiring, and most fascinating. Birkett seems to have a happy knack of keeping off main roads and yet still getting to his destination without much extra mileage. On this occasion we went *via* Reading to Henley, along that picturesque route we last took one very cold morning in our Gwynne Eight, to visit Forrest Lycett and sample his 8-litre Bentley. Near Henley we looked in at a firm with the delightful name of Bodgers, Ltd., and saw a very decent example of blown "Hyper" Lea-Francis 2-seater and a Delahaye saloon, not, we gathered, for sale. Then on through Banbury and dear old Oxford and after a hasty snack at a Woolworth's, of all places, up to Rugby, Hinckley, Donington, and so to Derby and Belper, a route reviving many memories, first of happy race-day visits to Donington Park, later of grim duty calls at Rolls-Royce, Ltd., in the earlier part of the war. A Bugatti never runs quite without trouble it seems, but, unless a serious blow-up occurs, this adds to the fun. On this run a leaky water tap was partially cured after we had fed and, nearing Donington, the plugs were removed for examination and the mixture weakened in the twin S.U.s — soon to be replaced by ex-"Lambda" Zenith triple diffusers. From Belper there was a gloriously fast run through most interesting scenery to Matlock, and so to Buxton and over the Peak by the famous and impressive Snake to the dreary, tram-infested outskirts of Manchester. Just as we entered Urmston the sky broke and the hood had to be hastily erected, the downpour well and truly upholding Manchester's reputation.

The prospect of returning with the Type 54 seemed dismal enough on our damp arrival. The chassis was in very many pieces, beds were at a premium and no labour was available. However, eventually excellent accommodation was fixed up, appropriately enough at Brooklands Crescent, near a Brooklands station, and after dinner the various bits were sorted out and things looked brighter.

Next day it was a question of toiling almost unceasingly in sunshine and shower outside a lock-up which seemed to be in grave danger of being walled-in by some high-speed builders who were extending the Higher Road Garage. Gradually the Type 54 went together. Lush assembled the front axle and steering, your Editor grappled with mating the back axle halves, the axle going up with no drive, for towing purposes. Over all, Birkett presided. True, time was snatched for a brief ride in an interesting Lancia "Atena" with a 3-seater cloverleaf body off a 1925 Darracq, a car with much promise and a very distinctive exhaust note, but temporarily spoilt by bad wheel wobble. And, later, there was a prodigious dice in West's Singer Bantam coupé, which is apparently standard save for stiffer rear springs and some weight taken from the flywheel of the two-bearing engine—standard, that is, except for a pre-selector gearbox from a Rapier, which handled beautifully and "made" what is a very lively little car, in contrast to the rather funny-feeling steering.

Late that afternoon the Type 54 looked like a car again, and it was possible to clean down the bonnet and body, the former badly carved-up when the Villiers engine was installed. Late that night the car, very large and impressive, was put to bed on a hoist in the main garage and, a hard day's toil over, we were free to celebrate at Molyneux's until the small hours.

Next morning, which reference to a calendar showed to be Saturday, we were ready. The 54 was hitched to the 30 by a stout tow-bar, Lush went off to buy some cycle clips in view of the absence of



"Redwing." This particular example of the famous 1½-litre side-valve Riley which preceded the Nine was driven with great success in reliability trials about twenty years ago by V. Walsgrove.

flooring in the "ricer," Birkett advanced the Scintilla magneto and cleaned all eight oil jets on the 30, a Press photographer arrived and did his stuff, and we were off. Out through traffic-infested Altrincham and Tarporley, and so on to Whitchurch, the Type 30 proved adept at towing, and we got along rapidly enough. A stop to tighten the towing connections and a café adjacent quickly served us with an excellent lunch. After which we proceeded *via* Wem (near that delightful village, Wig Wig) and Shrewsbury (where the public lavatory is an old house with oak-beamed ceiling!), to Much Wenlock, where a farm provided water after the long uphill grind. At Bridgnorth wet roads were encountered, spray from the unshielded wheels of the 54 flying higher than the car, drenching the unfortunate Lush. Rain began at Kidderminster and was falling heavily as our passage aroused mixed comments and expressions in busy Worcester. The run thereafter was rendered an exceedingly damp business by reason of a cloudburst. At one point we actually ran into a solid sheet of rain from dry roads, an old man literally rushing into his cottage as the storm arrived. So soaked were we—screen flat in the 30, Lush *sans* all protection—that in Broadway we stopped in heavy rain and thought it had turned out a fine evening! Fish Hill was taken in style, and the rain *did* cease eventually. Chipping Norton and Woodstock came and went, and then, entering Oxford, the tow-bar snapped, fortunately as we were entering a roundabout at very low speed. Watched by a very interested small boy, we replaced bar with clothes-line, a garage proprietor (who ran a "20/25" Rolls) later kindly presenting us with a steel rope against all eventualities. The brakes, rigged to the 54's rear wheels only, were more effective than expected, so we came on without further incident *via* Henley and Theale and cross-country to Fleet—the 2s. 9d. clothes-line breaking at the very gates! It was a grand bit of motoring and even Lush, in his sodden state, had no complaints.

Looking back, we recalled some more interesting encounters. There was a Vernon-Derby 2-seater; a sports Lea-Francis; a very old Humber saloon at the top of Fish Hill (probably a "15.9"); another early Rover; a 1928 Swift Ten saloon; several nicely-kept vintage Sunbeams and early Morris; a 3-litre Bentley; an Aston-Martin whose driver waved to us in Oxford; two worm-drive Standard Nine saloons; four "Chummy" Austin Sevens and an Avon Standard 2-seater. And, at Higher Road Garage, we encountered a very well-preserved 1926 "12/22" Lagonda saloon, which has had one owner since new and has only stopped once, with a punctured float—a nice tribute to early small cars in general and to the Staines products in particular.

On the Sunday we rose rather late, but eventually got under way in the Riley. Having to pick up a passenger at Hendon Central Station, we went first of all up the Great West Road and then along the North Circular. After that, as we could not stand any more of A1, we went *via* the Watford By-pass to Aylesbury, stopping to peer at a large breaker's on the way, wherein could be seen Lagonda, A.C., Isotta-Fraschini, rear-engined Trojan, etc. Then on, on another cross-country route, *via* Bicester, Banbury, Stratford-on-Avon, to Alcester, and thence to Worcester and Evesham to inspect some old cars at Bromyard. In Worcester a "14/40" Delage went by in style, Dr. Ewen's car we believe, and later we noted another worm-drive Standard Nine and four more "Chummy" Austin Sevens, one being a 1930–31 type. Late that evening we retraced our steps and came *via* Bromsgrove into Birmingham, two early Morgans, one an "Aero," and a white "30/98" Vauxhall 4-seater outside T. A. Gray & Co.'s garage, attracting attention. Birmingham's lack of signposts and vague marking of its never-ending ring road has to be experienced to be believed—actually, give it a wide berth! We did find our way out of the maze at last and came on by Towcester, Buxton and Derby to Mansfield, Worksop and Doncaster (where we inspected an Aster saloon by headlamp beam), and so to Wetherby and off A1 to make Harrogate by 4.30 a.m. on the Monday morning.

After all this, pottering on "basic" in the Austin Seven seemed the thing to do. Even so, this took us to Sutton-under-Whitecliffe, past the broken bridge at Boroughbridge, in search of an elusive 1924 Delage. All we saw there was a Morgan, but we did take our small box up Sutton Bank, last stormed in style in a Chrysler, needing 1st gear for the 1 in 4 bit. There was also a trip to York in company with French's rapid Austin "Ruby" saloon—it left us well behind—to see a 1906 Colebri 2-seater in the Castle Museum, which we once saw in sorry state in Mr. Tye's yard, now very resplendent, it having been rebuilt and painted by members of an R.A.F. M.T. group—a good show.

THE FIRST POST-WAR SPEED EVENT

On August 18th, the Bristol M.C. and L.C.C. held the first post-war speed hill-climb, at Naish House, Clapton-in-Gordano. Organised primarily for the benefit of competitors, with spectators tolerated rather than encouraged, the event gave some hundreds of people their most enjoyable afternoon for a very long time.

The course used is a very promising one, winding up a steep hillside which is open except for a few scattered trees. It is virtually W-shaped, with three wide radius hairpin bends linking four almost straight legs, climbing some 200 feet in just under half a mile. The present surface is hard earth and grass, just adequate for a small number of fast cars in dry weather, but re-surfacing and perhaps some easing of the first and third bends would produce a really first-class course.

The entry, numbering about 30 cars and 20 motor-cycles, was mixed but very representative. Cars ranged from mass-produced saloons (in the "war-time hack" class), through vintage and modern sports cars to "specials" and pukka racing cars.

The war-time hack classes produced some very mixed times. For a while it seemed that honours would go to Maunsell's B.M.W.-powered Shelsley Frazer-Nash, but late entrant Raymond Way eventually bettered his time with a fruity-sounding B.M.W. coupé.

The sports car classes brought faster times, though many drivers wasted time in their quests for the appropriate gears for the slow corners. Parker, with chains on his 3½-litre Jaguar 100, slung earth in all directions. Bickerton was steady but effective in the Blackburne Frazer-Nash. Gerard, with four Amals on his Riley "Sprite," made a quick climb. But Baillie Hill, resplendent in white overalls, was fastest sports car, the 1½-litre H.R.G. pinking slightly up the straights.

The most impressive thing in the racing classes was undoubtedly the driving of Walter Watkins. During the war, his special has changed from a Watkins-G.N. to a Watkins-Nash, and having been introduced to an alcoholic diet, it is going as never before. The new-found power, and enterprising use of the bank on the outside of the sunken left-hand bend, produced an impressive series of climbs.

Salome, basically a 2-speed Morgan, disliked alcohol fuel but seemed hectic rather than fast on petrol. Taylor's ambitious A.M.A.C. special, an Aston-Martin with Gordon Armstrong i.f.s. and a blown A.C. engine, did one steady climb, but died on its second run. Poore brought the twin o.h.c. "R" type M.G., which Briault and Clive Edwardes have owned, but suffered from lack of urge at low r.p.m. McCormack, with aircraft type "spectacles" in place of a steering wheel on Stromboli, was only just able to better 60 sec. Northway had just acquired the well-known Anzani-Nash, and was beset by misfiring during most of the afternoon.

Gerard's E.R.A., the ex-Wilson car, now a 1½-litre with a plain gearbox, was playing tricks most of the afternoon. Very late in the evening, however, Gerard made a run on soft plugs, and despite a slow start, put up a fine run to make fastest time of the day.

With the promise of motor-cycle runs at Shelsley soon, the contrast between motor-cycle and car times at Naish House is particularly interesting. The fastest motor cyclist was P. Falconer, who rode extremely well on a speed twin Triumph, extremely healthy sounding, but said to be fairly standard apart from its telescopic forks, his time being 1 sec. better than that of the E.R.A.

Fastest Times.—F. R. Gerard (1,488-c.c. E.R.A. (S)), 49 sec.; W. O. Watkins (1,000-c.c. Watkins-Nash), 51 3/5 sec.; K. V. Baillie Hill (1,497-c.c. H.R.G.), 53 sec.

Fastest Motor Cyclist.—P. Falconer (498-c.c. Triumph), 48 sec.

On the Model Front

RECENT reference to model cars in the pages of MOTOR SPORT has resulted in quite a lot of correspondence on this subject. F. G. Smith, of Newbury, who has made a Jeep, a B.S.A. Scout car, an Austin Seven "Nippy," a 3-litre Bentley and two "specials," to 1/50th scale, "just to kill time," reminds us that our list of models given under the heading "In Miniature," was incomplete. Dinky Toys apparently produced an Alvis tourer, and either they or Minic a Sunbeam-Talbot tourer and a Frazer-Nash 2-seater, of which the last-named was the most realistic. Smith also recalls the 328 B.M.W. by Schuco, which had a clockwork motor, four speeds with, he believes, a clutch, electric lighting, and, in later models, an electric horn, all in an overall length of 6 in., and for 4s. 11d.

Rex Hays, scale model engineer, Wykham Close, Sussex, as already stated, is making many models for well-known drivers. These incorporate very realistic wire wheels with ribbed brake drums and treaded tyres, and Hays hopes soon to be able to supply sets of these wheels in four sizes—$\frac{5}{8}$-in., $\frac{11}{16}$-in., $\frac{3}{4}$-in., and $\frac{13}{16}$-in.—at about 7s. 6d. to 8s. per set of four. He disagrees with Deason that a small "solid" single-seater racing car can be built easily by anyone who can cope with a 1/72 aircraft model.

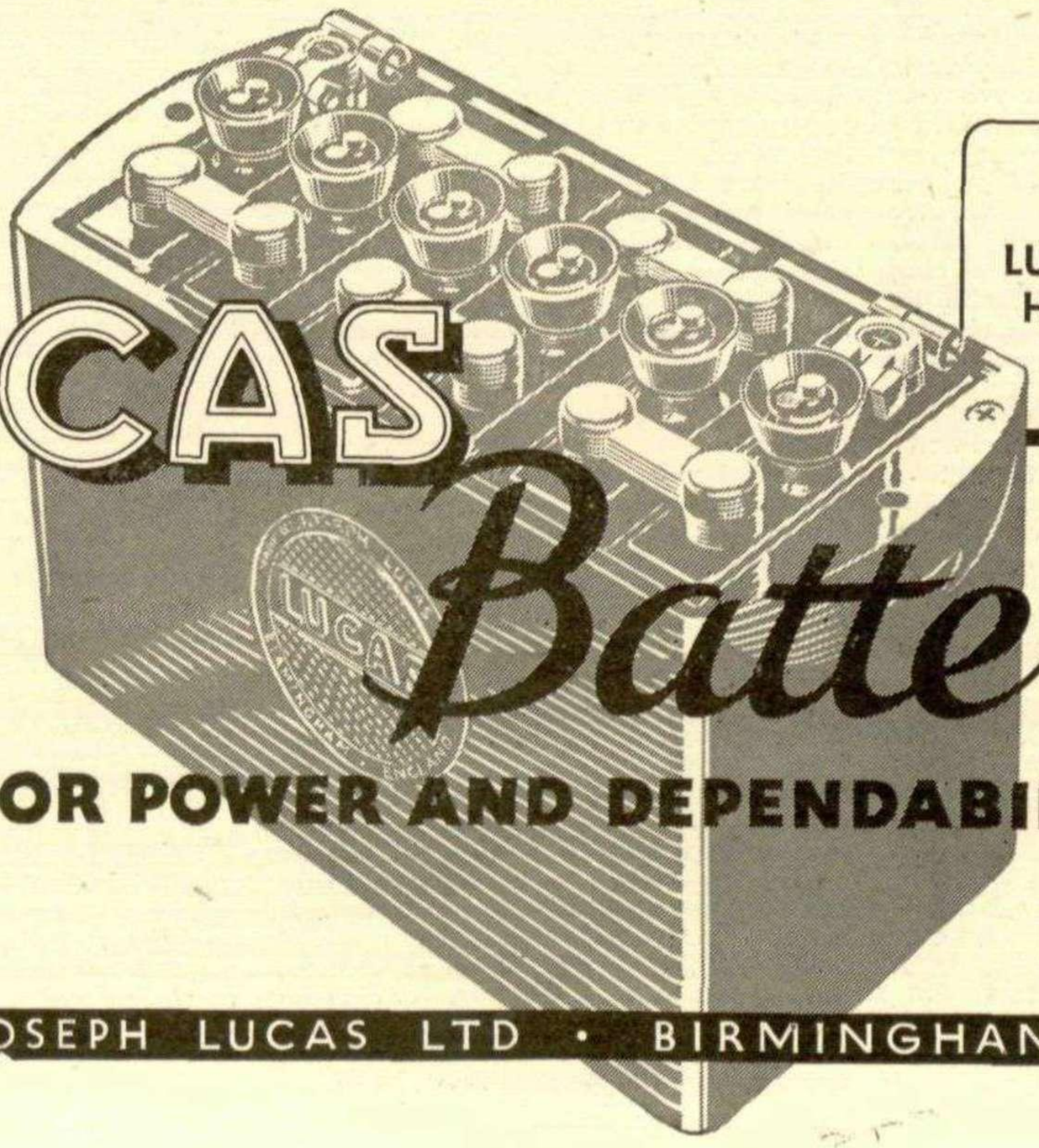
C. Posthumus, whose book on how to build a solid scale "Monoposto" Alfa-Romeo has not yet been published, has completed this model; an imaginary G.P. car with wheelbase of 3.3 in., with blown, twin-o h.c. V8 engine of oak, aluminium and wire scraps, and proper steering; a racing coupé of no particular type, with a wheelbase of 3.55 in.; and a motor coach and 6-wheeled lorry. He is prepared to build "solid" models of any car within reason, to order, using simple wheels, which, he remarks, have illusory spokes and may offend the high standards of such firms as March Models, Ltd., but which appear quite realistic when large brake drums are used. Wire wheels, real steering, etc., can be fitted, if desired, and the post-1924 Bugattis are mentioned as fine subjects. Enquiries should be directed to Motor Miniatures, 1, Bay Villas, Green Street, Sunbury-on-Thames, Middlesex.

R. S. Brown, of Wimbledon, says he derived his present interest in the real thing from a passion for model cars, and sends photographs of "3.3" and "2.3" G.P. Bugattis and the Seaman Delage. These are remarkable models, no longer than a matchstick, with wire wheels made from 10 amp. fuse wire!

Deason has completed a "solid" model of a 200-Mile Race "11.9" Lagonda, is building a small model of a Bedelia cycle-car for the Editor of MOTOR SPORT, and intends to try a larger model, probably of an early 200-Mile Race car, as a breakaway from "solid" modelling in wood. This last-named is a line, surely, which more model builders should follow, and reminds us that Ellis has done some good work in metal, to quite a modest scale, notably of an E.R.A.

Then Harold Biggs weighs in with some interesting information, saying that the model P2 Alfa-Romeos were made by a continental firm and that the cost of the dies was defrayed by Alfas, Michelins and Excelsiors, the shock-absorber people. He also recalls a clockwork model, about 1 ft. long, of Segrave's twin-engined 200 m.p.h. Sunbeam and the small German reproductions of the open and closed Auto-Union and Mercédès-Benz records cars. These later, he says, were produced in red as well as in silver, to please the Axis partner. Boddy is quite intrigued by all these toys and models, and will be glad to hear of anything in this line that has escaped the "breakers' yard."

Finally, the Pioneer Model Racing Car Club has been formed, additional to the British Model Car Club. One of its rules calls for all cars to bear a strong resemblance to a known type (not necessarily a given *make*) of full-size car and to have no unusual major projections—a most commendable requirement. The club is open only to i.c.-engined cars and recognises two classes: up to 5 c.c. and 5-10 c.c. Records up to one mile are to be recognised. Hon. secretary, J. Cruickshank, 105, Salisbury Road, London, N.W.6.



Letters from Readers

Sir,

I should like to thank Mr. Crowley Milling for his correction to my article on the point of the effect of gyroscopic action on tilting wheels. His figures strongly reinforce my conclusion that the swing-axle system is quite unsuitable for front suspension on fast cars, but dispose of what I had believed was a major objection to its use at the rear, and so help to explain why the extremely successful small Alfa-Romeos adhered to this layout.

I should also like to congratulate Capt. Moon on his latest article, which has provided me with a lot of food for thought.

I am, Yours, etc.,
C. W. MARRIS (Sqd./Ldr.).

R.A.F.

* * *

Sir,

Enthusiastus Extinctus, indeed! Having seen fit to allocate more than a page of precious space in the February MOTOR SPORT to an article accusing the fair sex of being responsible for the decline and fall of the automobile, perhaps you will be good enough to spare a mere column or so to a "preening popsie" that she may "prattle."

Being blessed with a little more courage than your contributor, I admit to there being some truth in what he says, but feel that quite a lot has been left unsaid, and the viewpoint expressed is, to say the least, biased and unfair. Certainly more often than not the more desirable a motor car as a car the less favour it finds in feminine eyes, but is this not equally true of the male lounge-lizard? And certainly more than one woman has been known to declare, "You'd rather have your wretched motor car than any woman in the world." But not, please note, because she was unable or unwilling to share his enthusiasm, but because he would simply not give her the chance. Man with his inherent vanity still looks upon things mechanical as being his own particular domain and, ostrich fashion, refuses to visualise Eve taking an intelligent interest, so that if she does try to take an interest she is brusquely swept aside with a lordly air and told, "You wouldn't understand, my pet."

How foolish and stubborn you men are at times! Hasn't it ever struck you that with a little broader vision and a deal more patience you could all—all of you who wish, that is—have an enthusiastic and knowledgeable girl friend sitting behind you near side aero-screen? All you vintage fans form a very small minority of motorists, anyway, and I am confident that there is at least an equal proportion of the fair sex keen enough to be educated in the art of appreciation if only you men would have sufficient patience to carry out this education, an occupation which could be quite thrilling and amusing for both parties.

Permit me to relate my own experience. During the past three or four months I have had the pleasure of showing a visiting Englishman the sights of Sydney; he in turn has been imparting the knowledge necessary for my anticipated qualification as a true vintagent. As yet I cannot claim to be very learned regarding technicalities, but I have grasped the glory that is the real motor car, and because my instructor has patience and is wise enough not to be scornful should I make a *faux pas*, I am able to ask every kind of question with impunity, knowing that I shall not be pounced upon should my query appear naive or silly. And it all provides a great deal of fun for us both. He, with masculine vanity, fairly relishes turning up at club meetings and rallies with that rare (quite unnecessarily so) phenomenon, a sincerely enthusiastic female, whereas I, with feminine coyness, simply adore watching his expression out of the corner of my eye, when at a post mortem on a f.w.d. Alvis, I whisper in his ear: "Why are the springs cross-way instead of the other way?" or at the screening of a Shell film at a club cinema show, ask: "Is that what they call the crown wheel?" when a cut-away rear axle reveals its private parts.

There have, of course, been times when a suspicion of a frown has crossed his brow, such as the occasion of my enthusing over an S.S., but his reaction on making the discovery that I was studying "The Motor Manual" made up for that.

So you men, do please get rid of that "Blonde or Bentley" complex. It is all of your own making. Have patience and confidence in your popsie's ability to learn what is and what is not a motor car, and how and why. It may be a little slow at first and even a little trying, but with perseverance and understanding, you will eventually reach the stage of *love my car, love me*.

I am, Yours, etc.,
JOAN MAXWELL.

Mascot,
Sydney, N.S.W.

* * *

Sir,

It's a long time ago since I last wrote to you, and a lot has happened in those five years. I do hope you are still there. I managed to survive the war quite well. I still have my cars and bikes, viz., an 1,100-c.c. "Brooklands" Riley in good state, and a 350-c.c. s.v. twin Douglas, a 500 o.h.c. Norton of 1929 vintage, a beautiful o.h.v. big-twin of 500 c.c. (to go in a heavy frame), etc. The Huns did not get a single one of my things, so I am quite content. Then there is the 4½-litre Bentley on which I had already paid a small sum to the owner. The S.S. took it away in April, but I am trying to track it down, and if it is still intact, I shall find it.

We're going to revive our N.A.R.C., but my chief work of this war and thereafter is the Road Racing Circuit Co. I founded it in 1943 after endless difficulties, and we bought a site near Zeist, and have now enough money to build the circuit. Building will probably start this autumn. The circuit will be 5½ kms. long and 11 yards wide. We intend to organise a Formula Grand Prix, 1½-litre race, international sports car race, and national motor-cycle race and, of course, some smaller events (team race, England–Holland, an old-style Grand Prix with old Alfas, Bugattis and Maseratis, up to 1934 models, etc.). You will like that last idea, I know. English money can be put into it. We should like to have some £10,000 British interest in it. We have already got some £30,000 in Dutch money together.

Let me know how you all are. I have written to Howe and Kay Petre.

I hope to be able to come over to England this autumn, or sooner if possible, and then we can talk things over.

I am, Yours, etc.,
JOHN HUGENHOLTZ.

Ammerstol,
Holland.

[If Holland can build a road circuit in time of war and raise £30,000 towards it, surely we should be able to re-open Donington and save Brooklands. This is an issue which might usefully be raised in the House.—ED.]

* * *

Sir,

It will not be necessary to detail to readers of MOTOR SPORT the present difficulties in the supply of synthetic tubes.

On behalf of the manufacturers, may I briefly stress the need to ease these difficulties by getting the greatest possible service from such tubes as are available?

Users are aware by this time that synthetic is a very different thing from natural rubber: they should not forget that this very difference demands different treatment.

Both the packages containing synthetic tubes and flaps, and the tubes and flaps themselves, are clearly marked—the latter with a coloured disc, or, alternatively, in the case of the tube with a coloured strip running round it. Attached to each flap are detailed instructions on exactly how to use the soap solution which is the main departure in fitting both.

May we appeal to users who want to get the maximum mileage to see that these simple instructions are followed with care? If they do, they cannot go wrong; nor will the synthetic.

I am, Yours, etc.,
For Tyre Manufacturers' Conference,
W. B. STOKES.

London, W.C.1.

* * *

Sir,

While fully appreciating that MOTOR SPORT is not, and should not be, interested in the problems of domestic and international social arrangements, I feel space should be available for news and views in so far as these affect the British Motor

Industry, upon which our Sport depends so much.

May I express the hope that all concerned undertake to employ only British men and women, thus making as great a contribution to the peace as they made to the war.

I am, Yours, etc.,
HAROLD PRATLEY.

London, E.18.

* * *

Sir,

As a Canadian reader of your estimable paper I have become very interested in European motor cars. MOTOR SPORT certainly has a most enthusiastic way of presenting technical information. Very regrettably we have no such magazine in Canada, and therefore I hope to continue as one of your fans when I return home. I also think that it is a sad state of affairs that British cars are not more popular in Canada. Perhaps that will change after the war.

Having so aroused my interest, I am now wondering whether you can satisfy my curiosity on some points. Would it be possible to find out the brake-horsepower, the revolutions at which it is developed, and the compression ratio of the following cars: 6½-litre Bentley, 8-litre Bentley, Rolls-Royce Phantom III, 4¼-litre Bentley, 4.3-litre Alvis, V12 Hispano-Suiza, Delage Eight, 4-litre Darracq, 4-litre Delahaye?

Any information will be gratefully received.

I am, Yours, etc.,
A. C. OLDMAN (L.A.C.).

R.A.F.

[Can anyone oblige with this data?—ED.]

* * *

Sir,

Captain Moon raises an interesting and far-reaching argument when he doubts the advisability of increasing too far the polar moment of inertia of a vehicle intended for high-speed cornering.

The more the weight is concentrated around the axles, the greater becomes the flywheel effect about a vertical axis. This means that, while the car will be slower to go into a skid (and, incidentally, slower to answer the steering), it will also be slower and more difficult to get out of a skid once one has started. It is, therefore, particularly necessary that any perceptible oversteer should be avoided in a car of modern layout, with the bulk of the weight disposed dumb-bell fashion. At the same time, the ultimate breakaway must come at the back-end. It therefore appears that the weight distribution, spring rate, and other relevant factors of chassis design on a modern car are far more critical, and call for more exact calculation than was the case in vintage types, where the driver had a much greater "dicing margin."

With the characteristically vintage layout, which perhaps found its most pronounced exemplification in the Anzani Frazer-Nash, nearly all the weight was amidships and skids of all kinds might occur with great suddenness. But by dint of high-geared steering, and the complete lack of flywheel effect, almost any skid could be quickly corrected.

While I have no scientific knowledge of the subject, my observation of the differing handling characteristics of vintage and modern motor cars has led me to the following two conclusions, with which, I wonder, if Captain Moon will agree:—

(1) The modern layout may, at best, get round a corner quicker than the vintage type, but the margin of control remaining after the moment of breakaway will not be so great. Maximum speed cornering with a modern layout therefore calls for much greater judgment than on a vintage car.

(2) Whereas high-geared steering was necessary to control the "lively" cornering characteristics of the vintage machine, it is no longer called for with the high polar moment of inertia of a modern layout. This is borne out by the remarkably low-geared steering of the German G.P. machines. I believe that an experimental high ratio steering gear was tried by Seaman, but he soon returned to the standard ratio.

Turning to another subject, may I say how cordially I agree with Peter Monkhouse's remarks in connection with "utility" sports cars. It is, I believe, a complete waste of time to mess about with Ford Tens and similar appliances. An altogether admirable machine, which may even be induced to go quite quickly, the Ford can never begin to represent a sports car. A true sports car has other characteristics than mere speed. The steering must be sensitive, accurate and free from excessive over- or under-steer. The gear ratios must be such as to enable the most to be made of the power available. By the time a Ford has been made to conform with these requirements, more will have been spent on it, or any similar machine, than the cheap, mass-produced groundwork merits.

By starting with a characteristically vintage machine such as the T.B. type M.G., Mr. Monkhouse has the makings of something in which a purchaser can feel some pride of ownership. But who could feel any pride of ownership under the bonnet of a Ford?

The performance figures quoted by Mr. Monkhouse (13½ cwts. and 13½ sec. from 0-60 m.p.h.) suggest that he has put the b.h.p. up to some 55 b.h.p., equal to the creditable figure of 40 b.h.p. per litre. Even as easily obtained an output as 45 b.h.p. should give 0-60 in 15 sec., and a standing ¼ mile in about 22 sec., which is not to be despised.

For a car of this kind, where frontal area may be kept remarkably low (probably less than 10 sq. ft.) I think Mr. Monkhouse is wise in eschewing completely streamlined coachwork, even though he may lose a little in timed performance.

As Mr. Monkhouse says, performance costs money, and I believe that any attempt to produce a car immediately suitable for sports-car racing, cheaper than he proposes, could only hope, at best, to attract the white-helmet brigade. People who cannot afford this much, must have their sport in one of the many cheaper, but none the less enjoyable ways that club membership affords.

Even those who are condemned to a "family" type of car can enjoy sports-car handling, even if they must do without sports-car performance. Such machines as the 1,100-c.c. Fiat or the D.K.W. give points to few, if any, sports cars in matters of handling, and one wonders if their

READERS' SALES AND WANTS

FOR SALE

GRAND PRIX BUGATTI
SPARES AND SERVICE
F. O. CLEVELAND HARMER
Bugatti Specialist
83, Old Oak Road, Acton, W.3
Shepherds Bush 5022

M.G. T.A. All engine parts, wheels, P.B. rear spring, 16-in. E.R.A. wheel. D. Bedwell, East Lewke, Loughborough.

LEA-FRANCIS block, pistons, gearbox complete. Morris 11.9 gearbox and pistons. Write King, 17, Park Road, Rickmansworth.

D,K.W, Saloon, first reg. Nov., 1939. Good condition, £175. Consider drop-head requiring attention, part exchange. 8, Dalton Road, Coventry.

SCINTILLA Vertex 6-cyl., almost new, £11. Farquharson, Holywell Farm, Watford.

ALVIS Silver Eagle, 1929, 17 h.p., good running order, £100. Thorpe, 11, Queens Road, Huddersfield. 'Phone 1753.

F. MAGNA. Front axle assembly complete, springs, Hartfords, less brake camshafts, £4 10s. Tooley, 28, Queens Road, Colchester.

M.G. J.2 (Oct., 1933) engine, less head assembly, carburetters and dynamo. Offers, 3, Thesiger Road, Abingdon, Berks.

FOR Sale, MOTOR SPORT, Vols. X, Nos. 2 and 12; XI, 1, 2, 5–12; XII, 1, 3–12,; XIII, complete; XIV, 3–12; XV, complete; XVI, 1–8: XVIII, 1. Offers to 2, The Chenies, Petts Wood, Kent.

RACING Ford Eight engine, ex-Stancer-Beaumont. Further particulars on request, offers. D. James, 106, Urmston Lane, Stretford, Manchester.

WANTED

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

EXHAUST and inlet manifolds, Laystall balanced crankshaft for Cozette-blown "Ulster" Austin. G. B. Hewitt, 233, Chellaston Road, Shelton Rock, Derby.

NEW or part worn Competition tyres to fit 12-in. rim. Hutchison, Vale House, Frensham Vale, Lower Bourne, near Farnham, Surrey.

LEA-Francis Hyper; set of wings for 4-seater, also 19 by 4.50/4.75 or 5.00 tyres. Shaw, 208, Chester Road North, Sutton Coldfield.

CYLINDER head for 1932 M.G. Magna, with or without rocker gear. W. J. Lee, Officers' Mess, R.N.A.S., Kinstock, near Market Drayton, Shropshire.

FORD Eight or Ten Alpine Sports, or "D.M." Special, or similar open-bodied model. D. James, 106, Urmston Lane, Stretford, Manchester.

1934 Riley Lynx body and scuttle, also radiator and bonnet. Daniel, 138, Carnarvon Avenue, Enfield, Middlesex. (Enfield 3103.)

HANDBOOK for 1934 Armstrong-Siddeley "Long Fifteen." Good price given. Turner, 70, Market Street, Wigan.

PAIR large brass headlights and horn required for 1903 car. Ward, 33, Elizabeth Street, S.W.1.

MAGNA or Magnette engine and gearbox complete. Price and condition reasonable. G. A. Meek, 167, Cranston Road, London, S.E.23.

2-LITRE Lagonda (1931) Crown wheel, pinion, or complete axle, either ratio. J. W. Rose, "Test View," London Road, Stockbridge, Hants.

CAN anyone lend or sell the 6½-litre Bentley Instruction Manual. Shier, 154, Mowbray Road, Cambridge.

M.G. cylinder block, P.B. type. New, if possible. Morrish, 15, Upper Cranbrook Road, Redland, Bristol.

AUSTIN "Nippy" cylinder head, also "Nippy" gearbox, urgently required. D. Allen, "Court Moat," Stone, Falfield, Glos.

Spares Section, MOTOR SPORT, 15/17, City Road, London, E.C.1

example may at last be followed by manufacturers of small British family cars. Graham Dix is certainly right in praising the D.K.W. as probably the finest economy car, from every point of view, that anyone has so far taken the trouble to make.

I am, Yours, etc.,
CECIL CLUTTON.

London, W.11.

* * *

Sir,

After reading with considerable interest the article of Graham C. Dix in praise of the D.K.W., I should like to point out that f.w.d. is not entirely unrepresented in this country.

I refer, of course, to the B.S.A. "Scout." At present I am running a 2-seater 1935 model which, when it came into my possession, had covered 29,000 miles, and some notes on its performance, etc., may not come amiss. Maximum speed on the level is 60 m.p.h. on the speedometer which, I believe to be accurate, 43 in second and 18 in bottom. The car weighs 11½ cwt. in road trim, and the side-valve engine develops 28 b.h.p. at 4,000 r.p.m. There is a 10-gallon rear tank, and over 400 miles recently the consumption was 40 m.p.g., cruising at 50 m.p.h. whenever road conditions permitted. Braking, although not outstanding, is adequate, and the front brakes are automatically balanced through the differential. Steering is light and high geared, and cornering and roadholding really first class. Cornering in particular is a long way ahead of any car I have yet owned.

From the maintenance point of view accessibility is very good, all the "works" being housed under the bonnet and radiator. The general standard of workmanship is high, and I think I am correct in saying that high-tensile nuts and bolts are used throughout.

For anyone who requires a small car of good performance with low first cost and economical running, the 9-h.p. "Scout" seems to me to be a very attractive proposition.

I am, Yours, etc.,
Exmouth. R. T. WARD.

* * *

Sir,

In an article in your August issue, Mr. G. C. Dix asks why the British public did not go crazy about the D.K.W. car.

Might I suggest that the British public are too sensible to waste their money on a shoddy, poverty-stricken contraption that makes a noise like a worn-out motor mower?

If anybody wants a car with poor springing, unresponsive steering, and virtually no brakes, then the D.K.W. is "just the job." The amateur electrician can have hours of fun trying to make the Heath-Robinson electrical system work, and, provided that he is a skilled contortionist, he has only to remove one front wheel and take some rusty screws out of a piece of tin, and he will be able to catch a glimpse of the contact breakers. Those who have struggled against the general beastliness and messiness of two-stroke engines in auto-cycles, mowers, lighting plants, etc., will, no doubt, be charmed to know that they can buy a two-stroke car. The gearshift is a good joke. It evidently was not made for rough typeslike Bolster.

But what have I said? The D.K.W. is a foreign car, and everybody knows that all foreign cars are perfect, and no British cars are any good at all!

I am, Yours, etc.,
Wrotham, Kent. J. V. BOLSTER.

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BENTLEY 1930 Speed Six. V.D.P. 4-seater. P. 100's. Teledraulics, well shod. Bentley service maintained till 1939, £215. Bugatti Type 37, G.P. cyl. block linered. New Bugatti pistons, K.E. 965 ex-valves. Full road equipment, including fold-flat screen and hood. Cellulosed Bugatti blue, £295. Cunliffe, 9, Spencer Road, Buxton.

FIAT 1,500, 1938, super-streamlined drophead coupé, engine tuned by expert, ports enlarged, cylinder head polished, con-rods, etc., balanced. Extremely fast, special low chassis. Black and chrome by Ghia, leather upholstery. The whole built to special order, £500. Write BM/WLTB, London, W.C.1.

RAILTON special 4-seater sports tourer. Very fine body by Berkeley, with cutaway sides, finished in original grey. Complete all-weather equipment. This car has been very little used and has recently been put on the road again after six years' storage. Taxed September. This is the straight-eight model and a very fast car. Can be seen and tried, North London Price £435. Box No. 188, MOTOR SPORT, 15, City Road, London, E.C.1.

RILEY Nine, complete, less body, late type axles and brakes, running order, tyres moderate, £35. Riley coachbuilt 2-seater body, and quantity engine spares also available. Wiltshire Cottage, Hartley Wintney, Hants.

30/98 Vauxhall, £383. Good condition. No modifications. Recently on road. Box No. 189, MOTOR SPORT, 15, City Road, London, E.C.1.

1927 12/50 2-seater Alvis tourer, re-cellulosed black/red, £50 spent recently on repairs, modifications, oil-coil, new hood, battery, brakes, £105. 10, Arcadia Avenue, Brooklands, Ches. Sale 4763.

MOTOR SPORT. 1932, Oct., Nov., Dec.; 1933, Jan., Feb., April, June, July, Oct.; 1934, Jan., Feb., Mar., April, June, Sept.; 1935, Jan., May; 1936, July, Aug., Oct., Nov.; 1937, Sept., Nov.; 1938, Mar., April, June, Sept. Oct.; 1939, May; 1941, Feb.; 1943, Jan., April; 1945, Feb. Exchange lot for 1932, Jan.; 1945, April and June; or 6d. each. Box No. 190, MOTOR SPORT, 15, City Road, London, E.C.1.

DIXON-Riley Special 1,100 c.c. unblown, in perfect condition and open to fullest mechanical examination, complete with four spare wheels and tyres as new, and four sets racing plugs. Car could be modified for road use, mudguards and lamps available. Further particulars and full history of car, which has changed hands but twice and covered negligible mileage. Box No. 193, MOTOR SPORT, 15, City Road, London, E.C.1.

ADVERTISER wishes to change his 1938 Standard Nine saloon, in perfect condition throughout, for an open sports car in similar respectable condition. Campion, 74, Gloucester Gardens, Cockfosters. Barnet 5095.

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FOR SALE—*continued*

FOR Sale.—"Lambda" spares; steering box; Zenith carb.; mag. cap with leads and advance and retard controls; starting handle and brkt.; 2 running-board tool boxes; petrol tank (oblong) with outside filler; set brake cables and brkts.; 1 door and 1 window handle; crankshaft, complete with flywheel; good cond. standard steering wheel; valve cover; under-tray; crankcase, complete with filters; oil pipe; rad. block with cap, chassis frame, complete with prop-shaft; holding cap and spaces for sp. wheel; 12-v. Ducellier dynamo, type B.D. 37/52 grd.; 3 complete wheels; 2 supports for front end; hand and foot brake assy., complete with brkts; Bosch ignition switch instrument; exhaust (manifold to silencer); manifold; set bearings for crankshaft; 1 piston/conn. rod assy. (16 h.p.); hub puller; Simms' coupling; 2 hub caps; Stewart carb., stock 25, series A2555 (U.S.A.); 2 rear wings, 1 front wing, 1 bonnet (8th series block); B.L.I.C. mag. 12-vt, type Z.A.4 (minus points assy.); Bosch 12-vt. starter assy.; brass magdyno. double Lancia coupling. Wanted: Genuine V.D.P. 3-litre Red Label Bentley. Norman Smith, BM/NADS, London, W.C.1.

MOTOR SPORT, vols. 2 to 11. "Motor Racing," by S. C. H. Davis. "Combat," by Lyndon. "Circuit Bust," by Lyndon. "Lure of Speed," by Seagrave. "Full Throttle," by Birkin. "Motoring Reminiscences," by Edge. "Speed," by Denham. "Steering Wheel Papers," by Cottenham. "All Out," by Cottenham. "Sicilian Circuit," by Cottenham. "This Motoring," by S. Cooke. "Casque Sketch Books" (2), by Davis. "Ten Years of Motors and Motor Racing," by C. Jarrott. Box 192, MOTOR SPORT, 15, City Road, London, E.C.1.

FOR disposal, MOTOR SPORT, vols. 8 to 15 (1931/9) inclusive; *Brooklands*, vols. 2 and 3; *Sports Car*, vol. 1; *Speed*, vols. 1 to 4 (1935/9). Also *Popular Flying*, vols. 1 to 7 (1932/9) inclusive. All clean, unbound, complete. What offers? Box No. 191, MOTOR SPORT, 15, City Road, London, E.C.1.

H.E. 1930 model 2-litre 6-cylinder three carburetter Weyman Sports Saloon. Good condition throughout, tyres good. Laid up for last six years. £150. Aked, 99, S. Promenade, St. Annes-on-Sea.

MOTOR SPORT. Sept., 1941, to date, all clean copies, two volumes in MOTOR SPORT binder. Best offer over three guineas. Pullar, Fair Oak, Rugeley, Staffs.

FOR SALE—*continued*

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MARENDAZ Special complete gearbox wanted or gears for same. Smallbone, 251, Cristhorpe Road, Birmingham. Selly Oak 0080.

RILEY Nine open 2- or 4-seater, 1932/4, mechanically sound. M. R. Crofts, 9, Petersfield Court, Stratford Road, Birmingham, 28.

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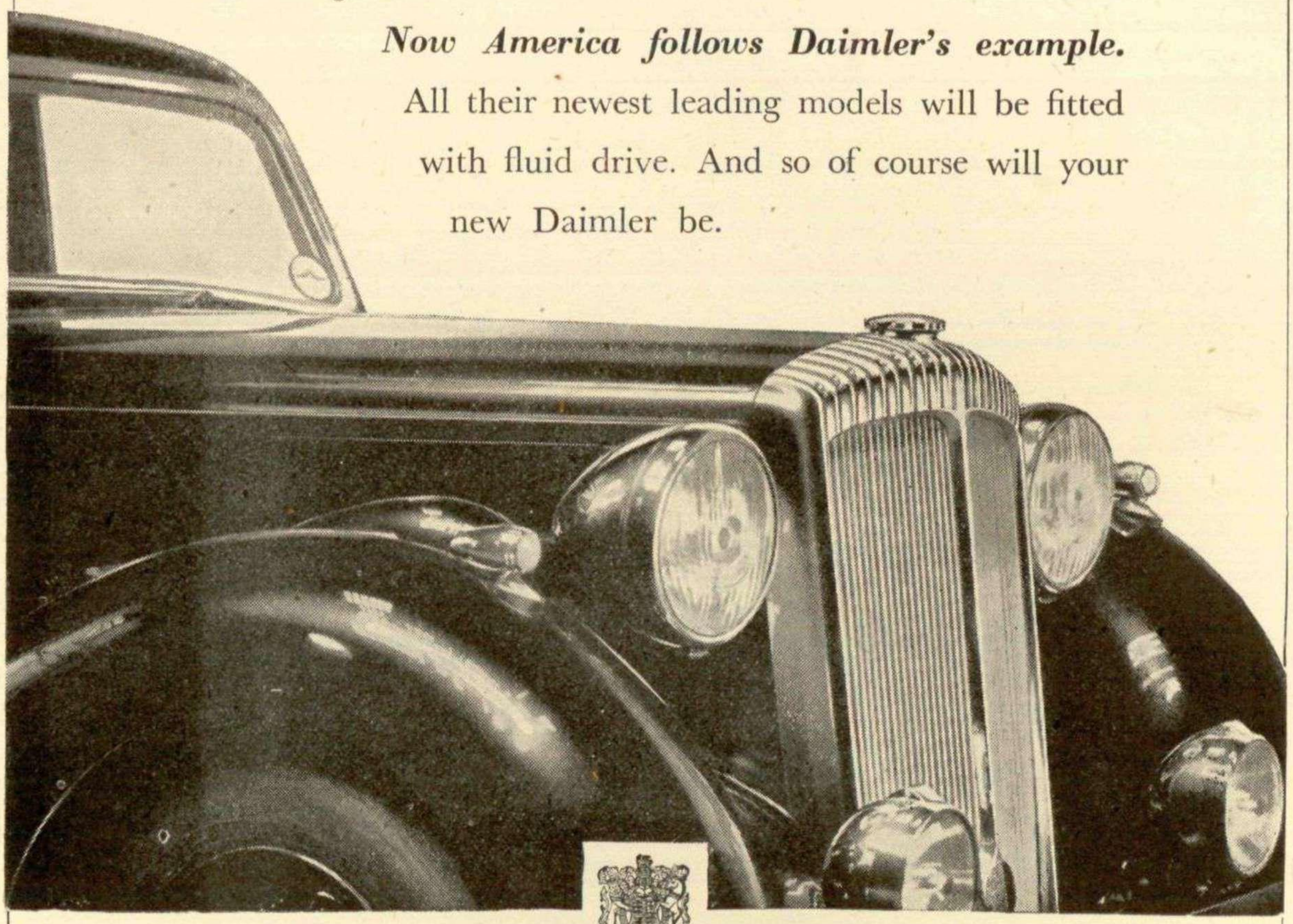

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