

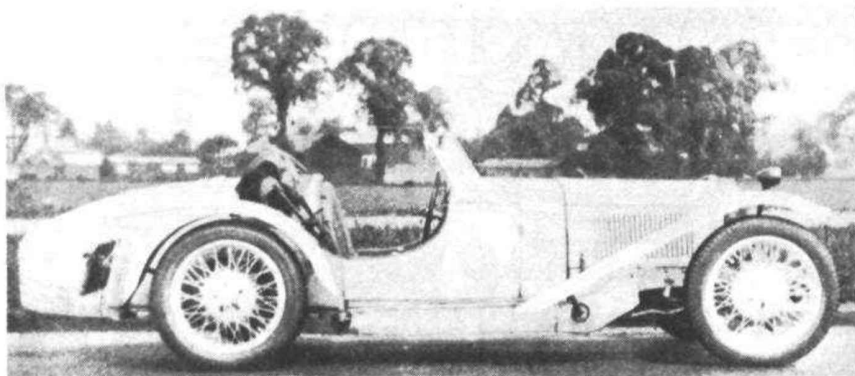
# The Brooklands Speed Model Riley Nine

HAVING WRITTEN at some length about the Brooklands Model, or Super Sports, Austin Seven in *MOTOR SPORT* for October 1968, it seems worthwhile devoting a little space to the Riley Nine Brooklands Speed Model, a car which has survived better into the present vintage era than that specialised edition of the immortal Austin Seven in one of its quicker forms.

It is a well-known fact of motoring history that the Riley Nine caused a sensation when it made its appearance at the London (Olympia) Motor Show of 1926, not so much on account of its chassis, which was fairly normal for the period, but because of its power unit (which incorporated overhead valves inclined at 45 degrees in the classical hemispherical cylinder heads, these valves, moreover, being operated by short, light pushrods prodded by camshafts placed high up in the cylinder block), the unit four-speed gearbox which had a constant-mesh third speed, and, later, the exciting lines of the fabric saloon (Monaco) body.

In fact, the design of the engine had been started prior to 1925 and it was of iron construction, with the separate crankcase, block and head of the times, and the crankshaft ran in only two bearings. Nor, perhaps, had the great potential of this design drawn up by Stanley and Percy Riley at first been realised - an output of approximately 28 b.h.p. at 4,200 r.p.m. from this 60.3 x 95.2 mm. four-cylinder engine hardly presaged the good use which was to be made eventually of Percy's clever cylinder head, culminating, for example, in the potency of the supercharged six-cylinder ERAs.

At that Olympia Show of 1926, on Stand 98, Riley (Coventry) Limited showed the new 1,087-c.c. model as a tourer finished in carmine lake, but were still concentrating more on their older, side-valve 1½-litre cars. However, the



A 1929 Brooklands Model Riley Nine which was sampled by *MOTOR SPORT* that year.

possibilities of making a sports-car out of this new Nine were soon recognised. The long-established Riley Company had shown a creditable interest in sporting side-valve cars for many years and it appears that work on a faster edition of the new Nine was put in hand while early development-work on the car was still being undertaken. It can, I think, be accepted that whereas the engine of the Riley Nine had been designed by the Riley Engine Co. circa 1924/25, the following year must have been needed for finalising the chassis into which it was to be installed. This is surely borne out by the fact that, at Olympia that year, only the Riley 9 tourer was shown, whereas there were six examples on view of the older Rileys, and that when the Press were given 9-h.p. cars to test in 1927, and in Sammy Davis' case to drive in the MCC Land's End Trial at Easter, these were tourers. Between late in 1926 and the 1927 Motor Show, then, Riley's had not only to modify the 9-h.p. chassis in the light of road experience, Capt. Cecil Riley having, for instance, tested one in the Alps, but they had to think about the body-types they would be exhibiting at the 1927 Show, which in the event numbered a two-seater, the tourer, the San Remo fabric saloon and the Monaco fabric saloon. It can be argued that with three new body styles in the offing and the original chassis requiring a slightly lower compression-ratio, a

steady-bearing for its propeller-shaft, alterations to the wheels and brakes, and the engine a one-piece block and crankcase, they would have little time for turning the great little Nine into a sports-model. Riley's had, in addition, the



A front view of Ashby's car, showing the low build of the Brooklands Model Riley Nines and the beautiful little radiator used on these cars.

production facilities to sort out, the first 1,000 production Nines having been made in their engine factory. Thus it is quite possible that they sub-contracted the sports-car ambition. A writer in one American publication has stated quite categorically that this was the case. On the other hand, it might be thought unlike the Riley Co. not to undertake all such development work themselves.



This stripped Brooklands Model Riley is the car which the late A. F. Ashby raced, after running a side-valve Riley at Brooklands for many years. It was tested by *MOTOR SPORT* in 1930, round the Brooklands Mountain circuit, before the Whitsun Meeting and proved capable of 100 m.p.h. and 6,000 r.p.m. in second gear, running on benzole fuel, but was thought to have rather low-geared steering. This compares with the maximum speed of about 65 m.p.h. of the twin-carburettor Monaco Special saloon of this period.

The fact remains that J. G. Parry Thomas, then at the height of his fame as a racing-car designer and driver, had, among a busy programme for the 1927 season, a Riley 9 project. It may be that, in branching-out from pure record-breaking and outer-circuit work, into long-distance and road-racing, for which purpose he had built his two "flat-iron" Thomas Specials, Parry Thomas was looking for a 1,100 c.c.-class car and saw in the Riley engine just what he wanted, before he had reduced his own straight-eight engine to this capacity. Or it could be that, as our American-Published scribe says, the Thomas Inventions Development Co. was commissioned by Riley's to produce a sports-Nine for them. The truth of this matter may never be known. But whichever way it was, some fast work was done, because Parry Thomas could scarcely have set eyes on a Riley 9 before 1926, yet, in spite of the set-back of his untimely death at Pendine in March 1927, Reid A. Railton, who died recently in Canada, and was, I believe, now more a friend than an assistant of Parry Thomas, had the prototype racing Riley 9 completed by the autumn of 1927, in sufficiently

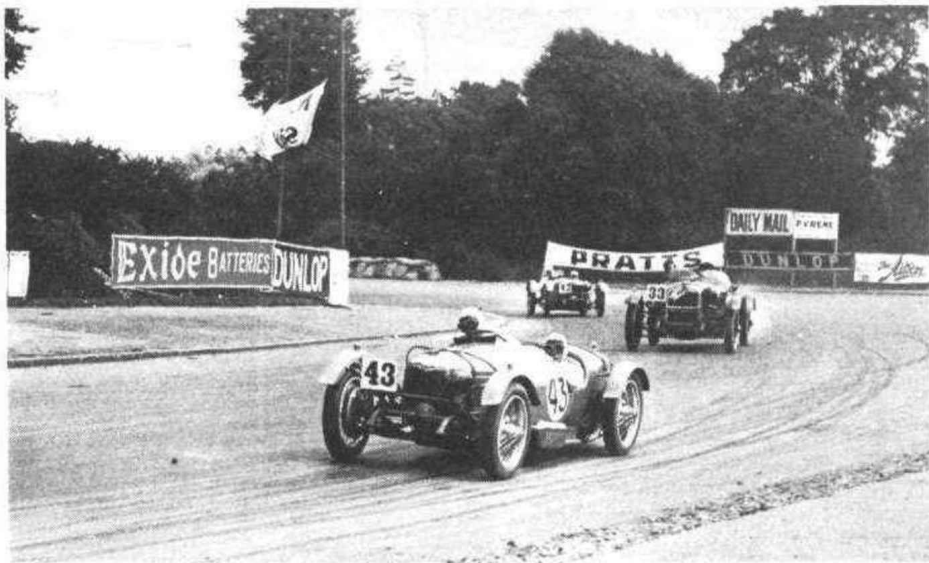


A Brooklands Model fitted with road equipment at the Shelsley Walsh "Amateur meeting, 1931. Whose car was this?

good heart for it to romp away and win its very first race.

Some substance is lent to the theory that at this time the Parry Thomas project was unassociated commercially with the Riley Company and that Thomson & Taylor Ltd., at Brooklands (which absorbed the Thomas Inventions Development Co. after Thomas had been killed in "Babs" at Pendine, and for whom Railton worked at Chief Engineer) for a time marketed the sports version of the Riley Nine, because I have in my possession a folder issued by T. & T.'s relating to the sports model Riley 9.

Whatever the facts of this matter, by August 1927 the project was well advanced, and was announced in the Press. It was seen that Railton had shortened the wheelbase from 8 ft. 11½ in. to 7 ft. 7½ in. and by altering and dropping the side-members had drastically lowered the frame. It was usual for sports-cars to have slightly-lowered chassis but that of this new Riley was so low that the occupants could put an arm over the side of the car and easily touch the ground. This is interesting, because at the time it was thought that a very low c. of g. was essential for fast cornering and that the best aerodynamics were achieved by having the undershield as close to the ground as possible. The current Grand Prix Delage and Talbot cars adhered to this line of thought and so did the Thomas Specials and the Eldridge Special. This presumably explains why the new Riley was built so low. To conform, it was given a newly-positioned, beautiful little radiator and the back springs were placed inside and parallel with the side-members. The seats were just six inches from the road and the height of the body at the scuttle was only 36 in. The



Two of the team of Riley Nines sandwich an Alfa Romeo in the 1939 Irish Grand Prix at Phoenix Park.

engine was given a water-pump, h.c. pistons, a four-branch exhaust system, and twin Solex carburetters, and the oil-pressure was raised, but otherwise, apart from a slightly higher axle-ratio, standard components were used. The output was given as 50 b.h.p. at 5,000 r.p.m.

Thus was Britain provided with a 1,100 c.c.-class sports car capable of standing up to the strong prevailing competition from Salmson, Amilcar (to which Thomas had been very partial), BNC, Vernon-Derby, Senechal and others. The formula adopted by Thomas and Railton proved effective from the start. The prototype racing Riley Nine was entered by Railton for the 90 m.p.h. Short Handicap at the BARC Autumn Meeting on September 17th and it caught the handicappers completely napping. Although not a racing driver, Railton elected to drive the little red car himself. He was put on the 48-sec. mark, giving the limit Morris-Cowley a start of 17 sec. and having to contend with a scratch Bugatti. Two side-valve 1½-litre Rileys started five seconds and eleven seconds behind Railton, driven respectively by Frank Ashby and Victor Gillow. These two never saw the Nine

again, for Railton did his standing-lap at 83.42 m.p.h., his flying lap at 98.62 m.p.h. to win by a mile (!) at 91.37 m.p.h. from an Austin 7 and Gillow's Riley. It is interesting that the sensational new car had been entered by Victor Riley and that its engine dimensions were declared as 60 x 95 mm. (1,074 c.c.).

Everyone concerned must have been absolutely delighted with the new Riley's performance (the best lap speeds at the same Meeting by the side-valve Rileys had been 82.31/92.74 m.p.h., by Gillow, who was in winning form, and 73.02/82.59 by Ashby). Victor Riley was so impressed that at a Charity Meeting in November George Duller drove the red car for him, and lapped at 100.01 m.p.h., gaining a second and a third place. (The race card gives the engine size as 1,099 c.c. but I think this is an error for 1,087 c.c., which shows the pitfalls awaiting motoring historians - that Railton declared a smaller capacity than is now ascribed to the Riley 9 may have been due to Thomas preparing an experimental cylinder block, or carelessness in not rounding out the bore and stroke dimensions, because from the



C. R. Whitcroft/H. G. Hamilton in a rain storm during the 1930 JCC Double Twelve race at Brooklands. They won the 1100cc class, averaging almost 70 m.p.h. for 1,679 miles. The cars had, of course, to carry road equipment for the two days of the race.



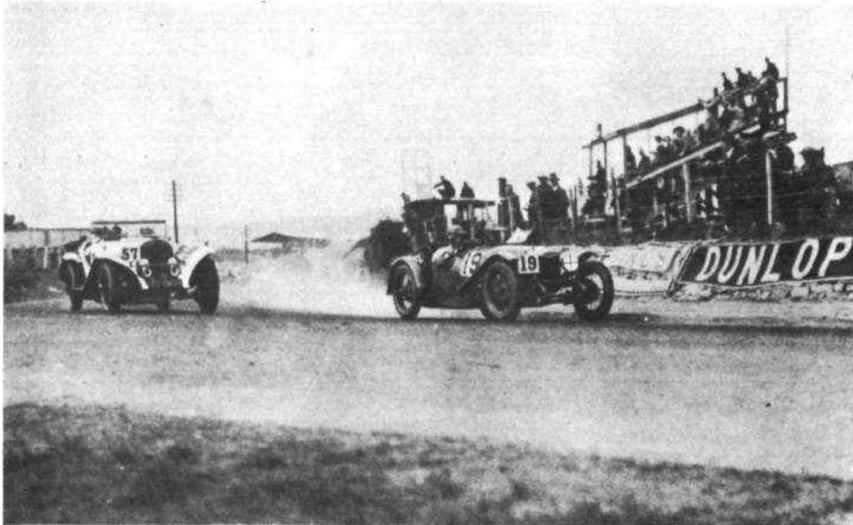
Victor Gillow won outright the 1930 Irish Grand Prix at Phoenix Park with a Brooklands Model Riley. Gillow previously raced a side-valve 1½-litre Riley.

commencement the Riley 9 engine was quoted as 1,087 c.c.).

It was no doubt the excellent *debut* of the racing Nine which decided Victor Riley to build these cars in sports form in Coventry as soon as possible, although for some time T. & T.'s would make them in their works on the Byfleet side of Brooklands Track. At all events, a long-tailed car with road-equipment, obviously hurriedly-prepared, was rushed to the Riley stand at the 1927 Olympia Show, where the exhibits were originally intended to comprise a two-seater, a tourer and a Monaco saloon. It was a fabric-covered blue-and-white job, described as having a replica of the 99-m.p.h. racing chassis; it was priced at £395, compared to £298 for the touring Nine and £285 for the fabric Monaco saloon.

It was obvious that much more would be heard of the sports Riley 9 in 1928. Apart from the works making good use of the new car on

various occasions to take Class G (1,100 c.c.) records, as detailed in my "History of Brooklands", the Brooklands Model, as it was generally called, although sometimes known as the Speed Model, was beginning to get into the hands of private owners. At the 1928 Brooklands Easter Meeting A. V. Wilkinson had a blue-and-white car which lapped at nearly 84 m.p.h., and Duller with the original red car lapped at just over 95 m.p.h., to take a third place, before the crankshaft broke. Dr. Benjafield then had a go in it and at Whitsun Chris Staniland drove it for Victor Riley, lapping at 100.61 m.p.h., before trouble again stopped play. Wilkinson's car (which was in fact, the first production Brooklands Model and presumably metal panelled, not fabric-bodied), lapped at 90.55 m.p.h., to take a second place. (Incidentally, the engine-size of both cars was declared as 1,074 c.c., suggesting that the early engines were slightly smaller than subsequent



Thistlewayte's Mercedes overtaking Davis's Brooklands Model Riley during the 1928 Ulster Tourist Trophy.

ones, although I have seen this capacity quoted in conjunction with the full dimensions!). Lionel Martin had a black car, which his wife raced, and a team of three was entered for the Essex M.C. Six Hour Sports-Car Race at Brooklands. Sammy Davis had a long-tailed green car which T. & T.'s prepared, under the direct supervision of Reid Railton and Ken Taylor, with such modifications as the race-regulations allowed, including quick-action fillers, the oil filler being connected to the sump level-tap, a cockpit brake-adjuster, and a special hood. Wilkinson had that first production model, Peacock a new Speed Model. Davis has described his car as able to hold 5,000 r.p.m. and to corner beautifully, feeling "all alive". Alas, an external oil-pipe taking the lubricant from a crankshaft journal to a big-end came adrift and the latter melted, after two hours. Wilkinson retired with gearbox trouble but Peacock finished at an average of 61.39 m.p.h., winning the 1,100-c.c. class.

Thomson & Taylor's, a firm still extant today, then entered a team of three red "Brooklands" Rileys for the TT in Ireland, the cars now with fixed cycle-type front mudguards, modified crankshafts, shorter tails, improved hoods, larger fuel tanks, and better shock-absorbers. Moreover, whereas the cockpit of the original cars had been very restricted, by the Nine's original right-hand gear lever, later replaced by a long central lever, the splendid, very stubby, remote gear lever, typical of the Brooklands Model Riley, had now appeared. The drivers were Davis, Gallop and Staniland. A "works" car with its water pump repositioned was driven by E. Maclure (which suggests perhaps that production was now just commencing in Coventry) and Peacock had entered his Riley which was provided with a new body for the TT. MacDonald had a normal Brooklands Model. In the race Maclure hit a bank and retired with a damaged back-axle, Davis and Gallop also crashed (cinics suggested that the very low build of the Rileys made the beginnings of a slide difficult to detect) and Staniland had the oil-filler blow open and let all the engine oil escape, wrecking the bearings. Peacock, however, again won the 1,100-c.c. class.

The Brooklands Model Riley was by now well in the public eye and at the end of 1928 was fitted with twin Zenith carburettors and had gear-ratios of 4.75, 5.93, 7.83 and 11.38 to 1, whereas the ordinary Riley Nine had ratios of 5.25, 7.66, 13.125 and 20.3 to 1½. The sports model did 84.7 m.p.h. at 5,000 r.p.m. and cost £420. Apart from its racing successes Sammy Davis took one through MCC Land's End Trial, its small ground clearance proving no problem, and a girl used one, equipped with what we would now term a "hard-top", for an important *Concours d'Elegance*.

By 1929 the Brooklands Model was justifiably popular for competition work. At the Track Marsh did well with what may have been the ex-Wilkinson car (the engine size of the Rileys racing there varied from 1,083 to 1,089 c.c., in spite of the correct bore and stroke declarations!) Brian Lewis was second to a Salmson in its class in the JCC "Double-Twelve," and the Martin/Stapleforth car finished the BRDC "500". Then, in view of earlier comments, it is interesting, and may be significant, that a team of Speed Models was again under T. & T.'s jurisdiction for the Tourist Trophy Race. They put in two of the 1928 cars, and a new one to replace the car Gallop had crashed the previous year. Davis' car had larger brakes than normal, all three Rileys had increased compression-ratios, and their brake operation was modernised. I suspect that the later crankshafts were also used,

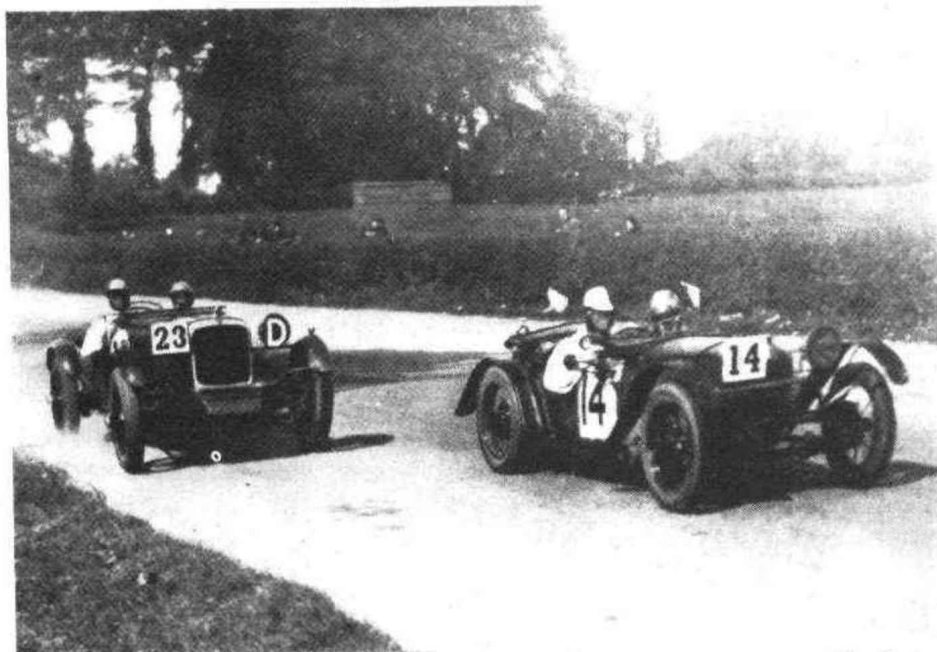
as 5,500 r.p.m. was now permitted in the indirect gears. Bolt-on wheels were still required, of course, by the regulations. Cobb crashed, the Hon. Brian Lewis retired with piston failure, but Davis, in spite of a solid clutch which made the refuelling stop a problem, won the 1,100-c.c. class at 61.97 m.p.h. in the rain, his being the first non-supercharged car to complete the course.

So popular was the sports Riley 9 that during 1930 the Brooklands' authorities held a separate race for them, the prizes being presented by Victor Riley and the Riley MC. Perhaps it was left until too late in the year, however, because this two-lap handicap attracted only five runners, of whom two non-started. It was won by R. T. Horton's red car, which lapped at 92.74 m.p.h., from Burcher's green-and-cream one. That season A. F. Ashby had taken to a Brooklands Model and W. C. Iliffe, Oliver Bertram, King-Farlow, M. B. Watson, J. Johannsson, S. Bird, D. Herrtage, H. S. Barton and E. M. Thomas were racing Riley Nines. Railton had put a blower onto a Brooklands Model, which gave Davis a second place in a Mountain Racing Handicap and took him round the "Outer" at 111.17 m.p.h., the entry that time being made by Victor Riley, indicating that the Riley/T & T association lasted at least into 1930.

In the bigger races that year the privately-entered Brooklands Model of C. R. Whitcroft and H. C. Hamilton finished third overall in the JCC "Double-Twelve" and won its class, at 69.96 m.p.h. Then, Gillow having followed Ashby in buying a Brooklands, he did extremely well with his, in somewhat modified form, at the 1930 Phoenix Park races and in the TT Ron Horton won his class, at 64.71 m.p.h. I think enough has been said here about this extremely effective little British sports-car, for although I am aware that its successes continued long after 1930, Whitcroft and Eyston finishing first and second in the 1931 TT for instance, the bigger Riley models were soon competing alongside the famous Nine, and the latter was emerging in some rather special forms, like Ashby's "flat-iron" with its astronomical compression-ratios, Dixon's single-seater outer-circuit "Red Mongrel" (I regret that no-one has made a replica of that, and driven it on the road!), Herrtage's Kum-Bak-Special, etc. and so on. Rupert Riley, Manager of the Racing Department, beat a blown Amilcar in winning the 1,100 c.c. class of the 1931 German GP, but his car was hardly a Brooklands Model Riley.

MOTOR SPORT got a Brooklands Speed Model for road-test in 1929 and although I suspect it wasn't driven out of London, the driver was full of praise for it. It climbed Fitzjohn's Avenue in top gear, did 70 m.p.h. in 3rd, would cruise silently and with a complete absence of fuss at anything from 35 to 60 m.p.h., and had a guaranteed road-speed of 80 m.p.h. The price was £420 fully-equipped, with those flowing front wings and untidy hood, or £395 stripped for racing.

I recall how, many years later, when I was enduring a series of very used Austin 7s, friends used to try to persuade me to change to a Riley 9 - "better brakes, a proper chassis, a real engine", they said. The ploy, I gathered, would have been to visit Bill Bragg on Brixton Hill, where I would have had a choice of several Monacos at £10 each and if I hadn't liked the one I chose, would have been welcome to have returned and changed it for another. I never fell for this, being fearful of back-axle trouble and those brakes which, if I remember rightly, had



An anxious moment as Dykes's Alvis pulls out to overtake Wilkinson's Brooklands Model Riley during the 1928 Ulster Tourist Trophy.

eleven pulleys in the cable-run.

Maybe I missed something, although I had many good runs as passenger in a Riley Gamecock, following the pre-war motoring events. The number of genuine Brooklands Models still racing in VSCC and similar events today, backed up by others which look right if you look at them from far enough away, with half-closed eyes, and yet other imitations (including my own) perhaps too horrible to contemplate, is certainly significant. The fact is that the Riley engine lends itself to hotting-up and thus it soon became rather specialised, as I have said, after about 1930 - there were the four-carburettor TT cars, Dixon's TT Special, and so on, and here I think I must work in that the aforesaid writer in that American publication says that it was the Riley Company and George Eyston who adopted the ploy of a single carburettor per cylinder on a Riley Nine engine,

before Freddie Dixon thought of it - which comment I will leave with you . . .

Reverting to the great little Brooklands Speed Model, in its day it came nicely between the by then out-dated Brooklands Super Sports Model Austin Seven (which was guaranteed to have done at least 75 m.p.h. over a flying half-mile, in stripped trim) and the current Type 37 Bugatti, and apart from having a lower c. of g. it can also be said to have had a more efficient engine than either the side-valve Austin or the overhead camshaft, twelve-valve Bugatti.

After 1928 the Riley Company seem to have ignored their sports Nine, which makes one wonder whether, in fact, it was T. & T.'s who continued with its production? That apart, the real reason for compiling these notes is the hope that our Production Department will produce some nice pictures on which to hang them. - W.B.



RILEY TAILPIECE: Can anyone identify this errant Riley Brooklands, photographed at Donington Park, we believe? Its registration number appears to be PK 2706.