



THE 20-GHOST CLUB RECORD

WINTER 1965



Thouarce

H.M.S.

Most members will, by now, have heard of the tragic motor accident that occurred on Saturday, 16th. October, which took Hess Sears from us. We offer our profoundest sympathy to Stanley and their family in this terrible loss.

Hess epitomised one of the most important aspects of our Club life - that our events are family affairs; and I suppose many of us will first remember her as our hostess at Bolney on 1st. May, 1960, when about 150 members of the RROC of America came over. Since then, we had got to know Hess better and better as she attended events, presented prizes, and took part in our tours on the Continent and at home. Her kindness, her wonderful courage in adversity (so nobly displayed at Rochetaillée in 1962 when she was in great pain and again after she broke her ankle in 1963) and above all her selflessness were an example to us all.

Hess had many qualities which we envy but never acquire, and I believe her character can be summarised by saying that she lived to help others. I never heard an unkind phrase pass her lips and I doubt if she was "capable of an ignoble thought".

We shall all miss her greatly at our gatherings in the future, wishing that before she left us we could have said what we all feel:

"Good-bye, and thank you for your wonderful example".

J.C.D-M.

SANDHURST DRIVING TESTS

THE club's driving tests at the Royal Military Academy, Sandhurst, which were held on 25 July under the auspices of the R M A Motor Sports Club, took place for the first time in discouraging weather. In general, the tests were similar to those that had been arranged the previous year, but a new departure was the presence of teams of three cars each from the Rolls-Royce Section of the Vintage Sports-Car Club and the Rolls-Royce Enthusiasts Club to compete against a club team of three: the result of the competition was a win for the V S-C C. General opinion appeared to be favour of such an inter-club competition, and it is therefore to be hoped that it will be repeated in 1966: it might then be preferable for the representatives of the three clubs to carry out the tests first rather than last, although going last certainly gave them the opportunity of studying others' performances in the tests.

DRIVER	YEAR	CAR	CHASSIS NO	SLOW-FAST	PARKING	ZIG-ZAG	PEDESTRIAN	CAR HEIGHT	TOTAL PENALTIES
E R Fuller*	1933	20/25		22½	32 ^x	9 ^x	25	0 ^x	88½
J Heathcote		25/30		21 ^x	41	18	7 ^x	4	91
S E Sears †	1923	20	58S1	29	41	11	14	0 ^x	95
D Macmillan*		20		29	35	9 ^x	19	4	96
R M Harrison	1939	Wraith	WXA2	22½	41	19	21	0 ^x	103½
W A L Cook †	1912	SG	1895E	31	47	15	8½	4	105½
E Harris †	1924	SG		30	45	15	19	0 ^x	109
J Hamilton-Fish	1928	20	GWJ32	31	45	13	23	2	114
G B Lochée Bayne	1933	20/25	GAW22	28	52	26	10	0 ^x	116
C M G Keeping	1938	25/30	GAR25	26½	49	19	19	4	117½
J W E Banks	192	SG		30	48	14	25	4	121
R Brooks †	192	PI		29½	57	10	24	2	122½
J C Dymock-Maunsell	1936	20/25	GBK56	28½	64	16	13	2	123½
N J Streeter †	1921	SG		30½	55	16	25	4	130½
H B Poulter	1912	SG	2260E	30	60	17	22	4	133
G L Frost	1931	PII	168GY	29	54	17	15	20	135
J E Castle	1926	20	GCK63	36	48	20	31	2	137=
T D Hadrill	1936	20/25	GLJ49	26	60	13	18	20	137=
P Hoppé †	1930	20/25	GSR78	22½	94	10	13	0 ^x	139½
J G Hampton	1925	SG	120EU	33½	59	26	20	4	142½
F Hellings	1934	20/25	GLB28	36	79	17	12	0 ^x	144
H Savage	1926	PI	20TC	31½	59	14	20	20	144½
J A G Burchell	1913	SG	2297	50	58	16	23	0 ^x	147
S J S Boord	1933	20/25	GBA29	21	95	16	14	2	148
L E Dalton	1933	PII	24PY	33½	84	21	10	0 ^x	148½=
J F Denton*	1930	20/25	GXO95	24½	78	15	29	2	148½=
L M Carew-Robinson	1934	PII	141RY	33	74	22	19	2	150
H R Wilkins	1932	PII	28MS	29	64	29	11	20	153
W Holding	1935	PII	3TA	30	62	29	29	4	154
I Munro	1936	25/30	GXM24	28	68	32	25	2	155
D Hellings	1927	20	GWJ81	48	68	21	20	0 ^x	157
W D N Berry	1930	PII	9GX	30	61	31	21	20	163
Mrs I Munro		25/30		30½	83	31	11	8	163½
G E Mawer	1932	20/25	GBT52	21	104	18	9	20	172=
I Yates	1939	Wraith	WRB45	32	102	21	11	6	172=
R B Honnywill	1936	PIII	3AZ76	31	100	18	25	0 ^x	174
K B Wootton	1932	20/25	GHW16	21½	75	40	25	20	181½
C J Curtis	1936	25/30	GUL49	21	83	23	36	20	183
R Symmons	1937	PIII½		32	96	33	24	8	193
C A Chapman	1932	20/25	GRW10	32	72	32	59	0 ^x	195
H J T Channing	1924	SG		33	111	40	11	20	215
C Meachen	1926	20	GSK80	17 ^x	117	17	57	8	216

Non-members' results are given in red. ^x Best result in this section
† Rolls-Royce Enthusiasts Club team. * Rolls-Royce Section, Vintage Sports-Car Club team. ‡20-Ghost Club team

R.R.E.C. CONCOURS

OVER 500 Rolls-Royce and Bentley motor cars attended the annual concours d'elegance of the Rolls-Royce Enthusiasts Club which was held at Blenheim Palace on 18 July. The 20-Ghost Club was one of the four Rolls-Royce and Bentley clubs also invited to participate, and the organisation of the event, which was the sole responsibility of the RREC, went very smoothly and reflects great credit on the officials and members of that club. The results were as follows:

CLASS 1. OPEN TWENTY'S

- *1. J Mackaness 1926 Tourer
- *2. L H Jamieson 1923 Coupe
- *3. J A G Burchell 1929 Tourer

CLASS 2. CLOSED TWENTY'S

- *1. Mrs F Hellings 1927 Saloon

CLASS 3. 1929-33 20/25'S

- *1. A Leslie Banks 1930 Sports saloon
- 2. N H Hughes 1930 Saloon
- 3. E D Woolley 1930 Coupe

CLASS 4. 1934-36 20/25'S

- 1. P M G Perrow 1934 Saloon
- 2. A S Beer 1935 Saloon
- 3. D P Adams 1935 Limousine

CLASS 5. 25/30's and WRAITHS

- *1. S R Terry 1938 Saloon
- 2. A E Rose 1936 Saloon
- *3. P E F A West 1936 Coupe
- 4. G W Wrapson 1939 Touring limousine

CLASS 6. PRE-1920 SILVER GHOSTS

- *1. M R Neale 1914 Landaulet
- *2. E N Corner 1910 Tourer
- *3. J A G Burchell 1914 Tourer

CLASS 7. POST-1920 SILVER GHOSTS AND PHANTOM I'S

- *1. H Fergusson Wood 1921 Cabriolet
- 2. N J Streeter 1921 Limousine
- 3. H J T Channing 1924 Tourer

CLASS 8. PHANTOMS II'S and III'S

- *1. C G Duce 1933 Tourer
- *2. L E Dalton 1933 Continental
- *3. C A Miers 1937 Sports saloon
- 4. F Dale 1936 Sedan-de-ville

CLASS 9. POST-WAR ROLLS-ROYCE MOTOR CARS

- *1. W A L Cook 1963 Saloon

CLASS 10. PRE-1932 BENTLEYS

- *1. W A L Cook 1930 Two-seater 8 litre
- 2. J W Alington 1931 Limousine 8 litre

CLASS 11. DERBY-BUILT BENTLEYS

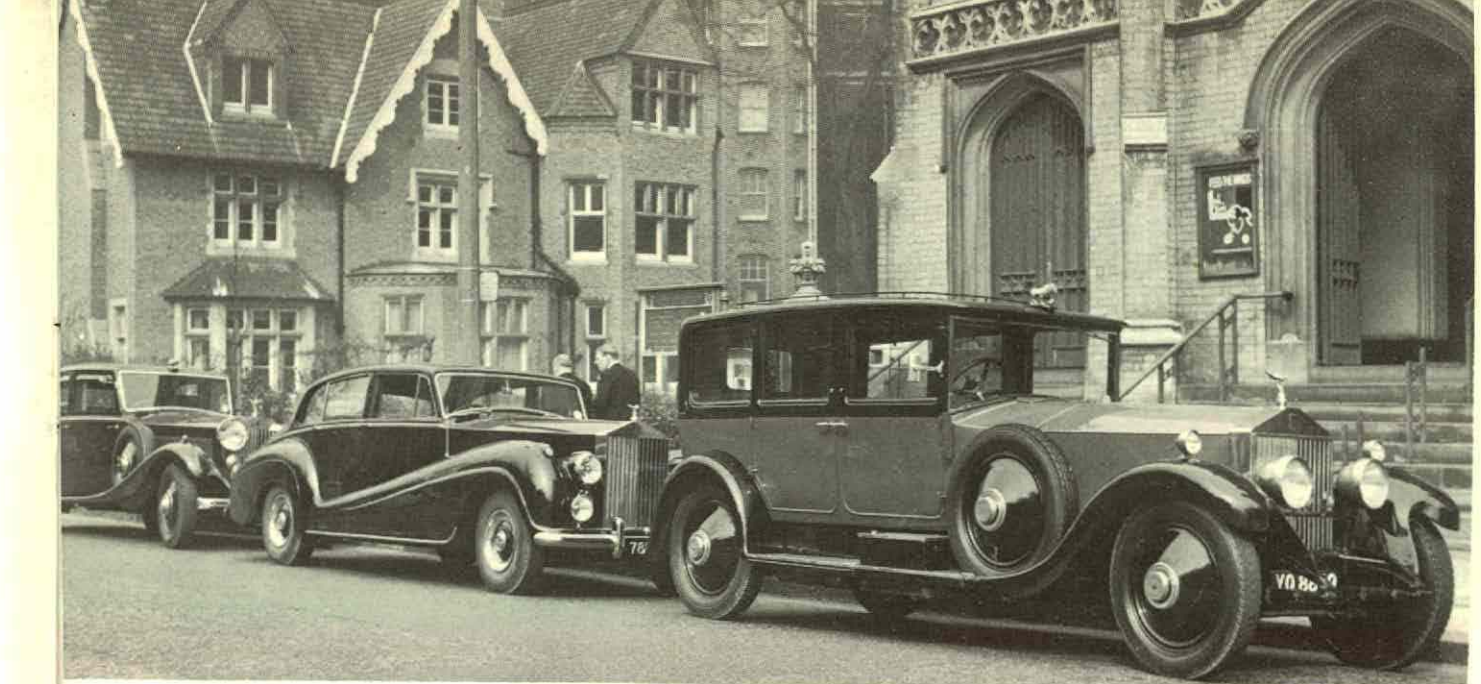
- 1. J R A Green 1939 Tourer

CLASS 12. CREWE-BUILT BENTLEYS

- 1. B R Eastwick 1954 Continental

The Visitors' Trophy for the best non-RREC car was won by *Mr H Fergusson-Wood and the prize for the best RREC car was won by *Mr W A L Cook, with Mr N J Streeter as runner-up.

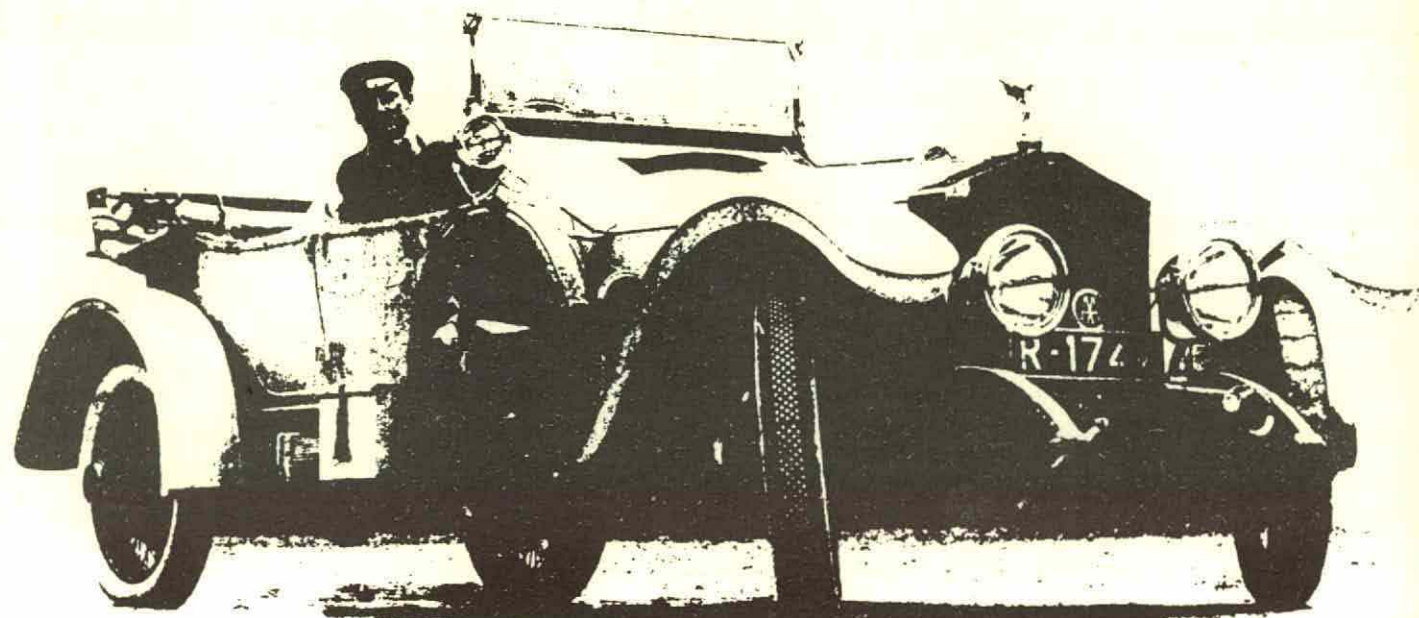
*20-Ghost Club Member



SPECIAL OCCASIONS

There are few of us, I expect, who have not loaned our cars to friends for a special occasion. The most common request, I feel, is to be asked to drive one of our motor cars at a wedding. While there is little doubt that this gives just a little extra something to a joyful occasion, it is a task I undertake with a certain amount of caution. On such occasions of celebration, people sometimes get a little too hilarious, and on one occasion I had young girls standing on the running board of my PII wearing stiletto heels, and excited children climbing over the bonnet; surprisingly little damage was done.

But apart from this, a certain amount of advance planning is required, mainly as to where the cars are to be parked, and who is to look after them. I recently provided three cars for a relation's wedding in the centre of London, and much to my surprise this was feasible, and worked without any major hitches. When the bride and groom come to leave, put them into the car quickly and get the car away quickly before frivolity starts, such as writing JUST MARRIED in lipstick on the back of the car. After all, the bride and groom will probably outlast whatever car they are driven away in; the car may be very expensively damaged!



THE SILVER GHOST

THE original Rolls-Royce 40/50 h p model, announced in 1906, remained in current production until 1925 when it was succeeded by the New Phantom. Its detailed development between these years demonstrates the gradual emergency of a vintage car from a veteran one. Not the least of the model's attractions is its name - Silver Ghost.

The epoch that ended in 1914 was a great one for trials and demonstrations of all kinds. The 40/50 h p car had been very well received at Olympia in November 1906 where it was exhibited in chassis form and with a Pullman limousine body. A practical demonstration of its virtuosity was needed. Chassis 60551 (the twelfth 40/50 by chassis numbers) fitted with a touring body painted silver-grey and named "Silver Ghost" ran continuously for 15,000 miles under RAC observation. The only involuntary stop was of one minute's duration when the petrol tap jolted shut, and at the end of the run the cost of replacements to bring everything to as new condition amounted to 42s 7d. In the course of this much applauded run, Silver Ghost gained a gold medal in the Scottish Reliability Trial. At the start of her run, she was accompanied by two other 40/50's carrying appreciative press reporters: The Autocar's correspondent lyrically recounted his drive 'sitting behind the wheel of the six-cylinder R-R as it takes the long straight stretches of the Glasgow road north of Carlisle steady as time, direct as an arrow, with its engine purring round so sweetly and smoothly that

the source of the draught on the car is quite unrealisable'. Those who admired Silver Ghost's exploits in 1907 could hardly guess that almost sixty years later she would be again proudly displayed by the company running superbly after nearly half a million miles. Soon, the name of this lovely machine came to be used more and more as a type name for the 40/50 model.

One of Silver Ghost's first cousins, chassis 60576, fitted with a detachable-top limousine body and named Pearl of the East, initiated the fame of Rolls-Royce throughout India by winning the Mysore cup in the Bombay-Kolhapur trial of 1908. Soon, orders from Rajahs began to join those from an increasingly distinguished European and American clientele. Chassis numbered as early as 69553 (now fully restored by Mr. Millard W Newman) and 565 were exported to New York.

The original 40/50 specification was an advanced one for its date. The engine was arranged in two blocks of three cylinders with a bore and stroke each of $4\frac{1}{2}$ in, giving a swept volume of just over 7 litres. On a compression ratio of 3.2 : 1, 48 b h p was developed at 1,200 r p m. Each cylinder was provided with two sparking-plugs, one for the trembler-coil and one for the magneto ignition. The superb carburettor of Royce's own design was originally a single-jet instrument, but this was quickly superseded by a two-jet model. The mixture was adjustable from a control fitted on the driver's side of the bulkhead. The fully machined crankshaft ran in seven bearings. The gear-type oil pump was located outside

the sump and delivered oil under pressure via individual pipes: an additional refinement was the arrangement of extra oil feed-pipes to the cylinder walls governed by a valve operated by the movement of the throttle-pedal through the last third of its travel. The drive was taken via flywheel and cone clutch to a gearbox providing four forward speeds with direct drive on third (2.708 : 1) and overdrive on fourth (2.174 : 1) giving 38 and 47 mph per 1,000 rpm. The petrol tank was placed under the front seats and the flow of petrol aided by exhaust pressure.

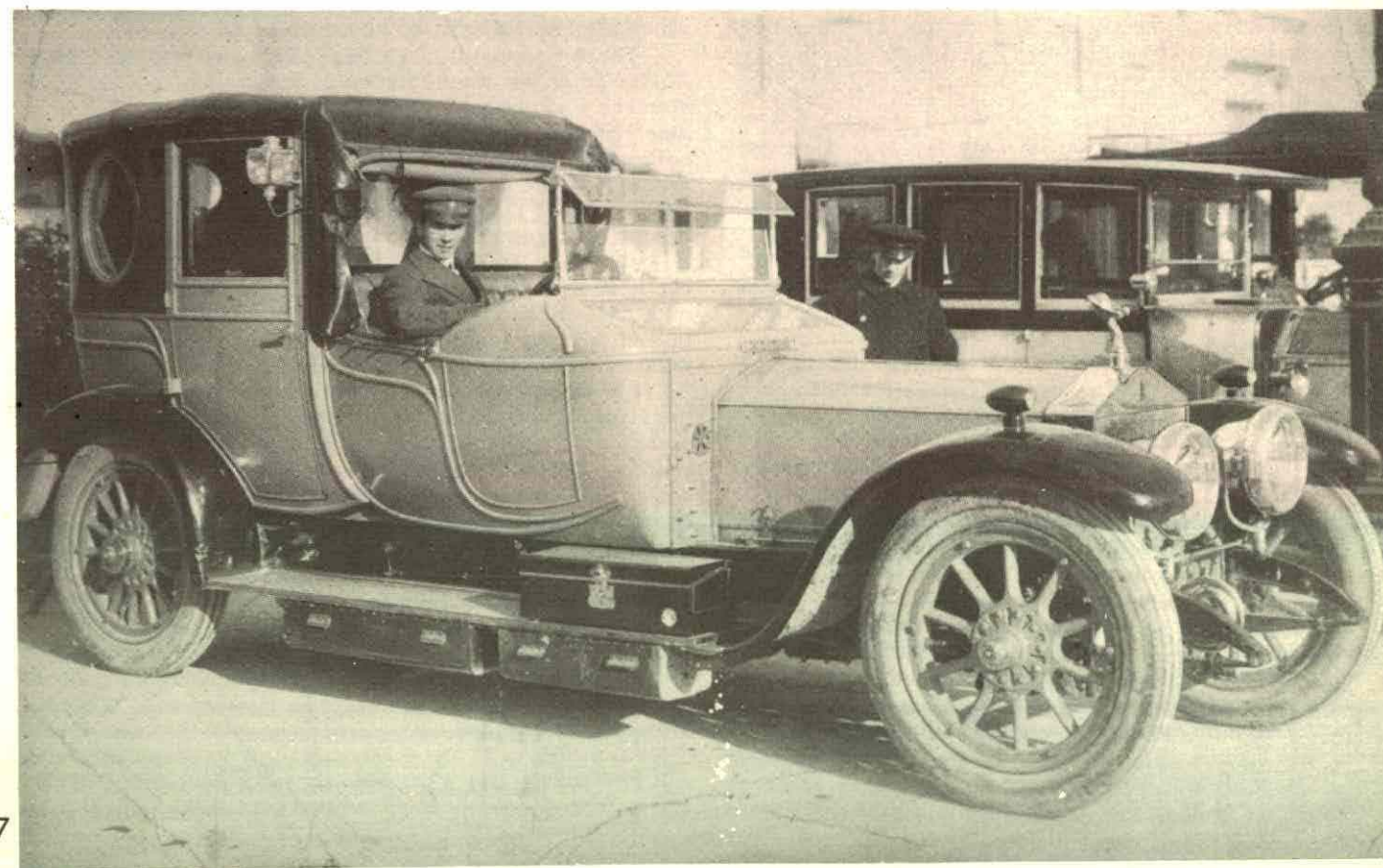
For the 1908 Scottish Trials, special cars were built, known as the 80 h p's. The stroke was lengthened to $4\frac{3}{4}$ in, the compression raised and overhead inlet valves were provided operated by exposed pushrods and rockers. One of these cars was subsequently named Silver Rogue* and after competing successfully in the trials passed into private ownership, to be used on King's Messenger work in the early part of the 1914-18 war. Another was fitted with a two-seater body of outstanding elegance for the use of the Hon C S Rolls, who sometimes carried his balloon strapped to the platform behind the high-backed seats:

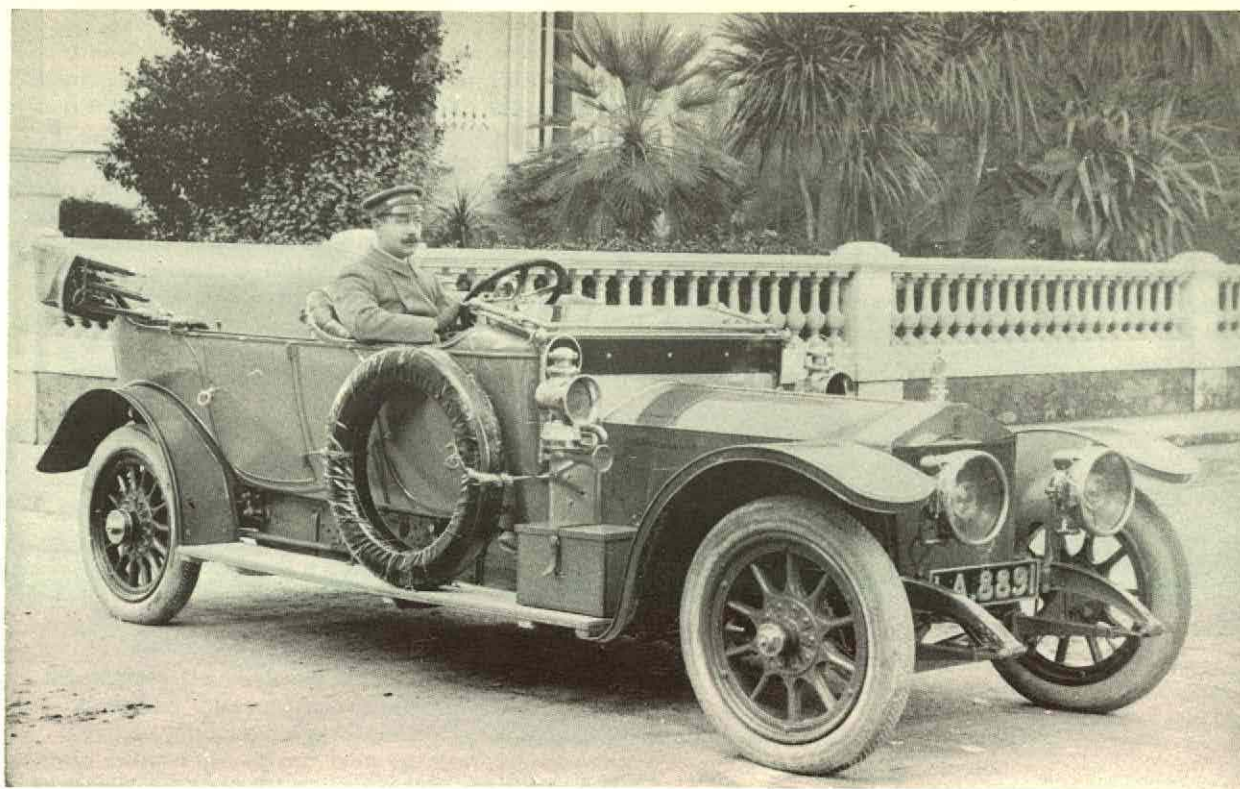
Detail improvements to the 40/50 h p during the first years of production included a new front axle design and the substitution of three-quarter elliptic rear springs for the early transverse 'platform' type. In June 1909, more substantial changes were announced for the 1910 model. The stroke was increased to $4\frac{3}{4}$ in, the frame was lowered and the petrol tank removed to

*Some years ago, I was informed by Harry Fleck that the name at first used was Silver Wraith - Ed.

the back of the chassis from where the petrol was fed by air pressure supplied by a piston pump driven from the gearbox: the overdrive fourth speed was abandoned. The next year, the carburettor mixture control and ignition switches were moved from the bulkhead to join the governor and ignition levers in a group surmounting the steering wheel: the restrained beauty of the design and the quality of manufacture of these controls are outstanding even in this chassis whose humblest part is a pleasure to examine. In 1911, a crankshaft vibration damper was introduced and from chassis 1701 the open propeller shaft was replaced by an enclosed torque tube drive.

In September 1911, a 40/50 h p car set out for Edinburgh from London under R A C observation to demonstrate that the journey could be made using top gear only, and that the car was both very economical and - on the same gear ratio - remarkably speedy. Driven by Ernest Hives, the car put up 24.32 m p g and at Brooklands clocked 78.26 m p h. This surpassed the figures recorded by the 65 h p Napier which won the Dewar Cup the year before. There were certain modifications to the chassis: most obvious were the cantilever rear springs mounted under the rear axle casing (from chassis 2100 onwards, all cars were supplied with cantilever rear springs, but fitted over the axle casing) the tapering bonnet and larger carburettor. Over the next two years, replica London-Edinburgh type chassis could be supplied and often were fitted with very graceful open bodies. One enthusiast, Mr James Radley, entered his for the 1912 Alpine Trials.





To the consternation of the company, it failed the Katschberg hill on the first day. The disgrace of this episode touched Rolls-Royce at a moment when its name was standing very high. Their cars had just won fame in the Prince Henry tour and eight landaulets had been officially ordered for the Delhi Durbar. To remove the shadow cast on the name by an obscure gradient became a point of honour.

For the 1913 Austrian Alpine Trials, a team of special Continental London-Edinburgh cars was prepared with four-speed gearboxes, larger radiators, extra fuel tanks and improved ground clearance. The official team of three cars driven by Friese, Sinclair and Hives was supported by the private entry of Radley whose new car differed from the team only in such details as electric lighting instead of oil and acetylene. This car, chassis 2260E, has survived to the present day: after a period of service as a breakdown car with the body truncated, it was acquired and restored by Fred Watson and has graced many of our club's events in the last ten years. In 1919, it lapped Brooklands at 82 m p h. In the Alpine Trial, nothing could equal the Rolls-Royces for speed and hill climbing: in Charles Freeston's words, they 'seemed to be the living embodiment of grace and power.' Sinclair in No 3 was rammed by a non-competing Minerva and Rolls-Royce lost the team prize: however, the demonstration was effective enough and their performance much admired. In the Spanish Grand Prix, a contest for fully equipped touring cars held in the Guadarrama mountains at a temperature of 95° in the shade, Don Carlos de Salamanca (for many years R-R agent in Madrid) won first place in his new 40/50 at an average speed of 54 m p h. The following year, he scored

again with a car bearing a special cariolet body by Barker which afterwards came to be known as the Salamanca.

There was no official Rolls-Royce entry in the 1914 Alpine Trial, but James Radley entered alone and out of 75 starters was the only English car to lose no marks. To discourage competitors from using specially low gear ratios, a speed test was arranged for the last day and Radley's speed of 68.9 m p h was 7 m p h faster than his nearest rival. The name Alpine Eagle was commonly used for the Austrian trial cars and the replicas delivered in 1914-15. From late 1913, the transmission brake was replaced by a second set of shoes in the rear drums and most 1914 cars were fitted with the four-speed gearbox. Indeed, with the last Ghosts made before the war, the transition to a vintage car was becoming obvious.

Let us pause for a moment to consider what it is like to drive a 1914 Ghost today. Before starting up, we check the petrol level with a dipstick and tighten the tank plug with a spanner. The oil level is checked by opening the overflow cock: a gallon is carried in the plated tank mounted on the frame for filling up on the road. Close to this tank is the lever of the four-way cock now turned to 'Both Pumps'. The petrol is switched on from a tap on the other side of the chassis and after pumping up pressure the carburettor is flooded. If necessary, we place a coin under the slow running jet lever to improve the mixture. We pull up the starting handle, listening for appropriate sucking noises; above the steering wheel, the mixture is at STRONG, the ignition LATE and the governor just open. We twist the central switch to M and B (magneto and battery); the four-volt coil buzzes like a bumble-bee and - with luck - the engine starts. With a screwdriver, the extra oil valve is held down

for a good minute and when the engine has warmed up a little it is ready for use. Since the cone clutch has been left propped out, its action is very sweet: we are away on the first speed.

The gear-change is quick, thanks to the close ratios and the clutch-brake, but timing has to be precise. Our impressions are dominated by the tremendous torque at low speeds and the precise light steering. The Elliott combined speedometer and distance recorder recommended by the makers (15 guineas in 1914) is now showing over 50 m p h, the engine is just as silent as before, and only the absence of front brakes restrains our speed. On uncrowded roads, a Silver Ghost is a wonderful experience today, untiring after hours at the wheel. The petrol consumption of 12-14 m p g tends, however, to discourage too great a mileage, as does the time required for periodic chassis lubrication (for which a full-time man would certainly have been employed in 1914). No other car of the golden age provides so much performance in silence and with none other is driving pleasure so entirely commensurate with appearance. Discounting the fascination and mystique surrounding the model, the most remarkable fact about it is its versatility: luxury car, trials car, armoured car or ambulance, it excelled in whatever use was demanded. The 1914-18 war proved the sterling quality of Silver Ghosts as never before. Whether on shell-holed pavé or roadless desert, the Royce standards of manufacture resulted in unfailing reliability. As T. E. Lawrence wrote, 'A Rolls in the desert was above rubies.'

MEMBERS' LETTERS

FROM G E CLEGG

I READ the article on "Starting on the switch" in the Autumn issue of the Record with interest. I am not technically competent to answer the series of 8 questions but I can record a personal experience at Cooke Street early in 1906.

A tester (I think it was Billy Hallam) had brought a 4-cylinder 20 h p car in off test just before noon one Saturday morning. The car was left in the shop all weekend. On the Monday morning he went to it, switched on, and smartly moved the ignition lever up and down, when the engine started after nearly 48 hours. The carburettor was not fitted with any "strong or weak control" at all but they used to accelerate for a wee while before switching off.

The first carburettor control was fitted on Charlie Rolls' 20 h p which won the T T in September 1906. I know that quite definitely because I made it out of sheet brass, cutting the teeth of the quadrant with a file. That was fitted on the dashboard and was the forerunner of the control mounted on the centre of the steering wheel.

For an engine cylinder to retain an explosive charge for 40 odd hours in 1906 was a tribute to the excellence of the boring and the

After the Armistice, production was started again as soon as possible. Aluminium alloy pistons were now used, the air pump for pressure feed was redesigned and driven from the governor: electrical equipment comprising engine starter, dynamo and double pole wiring was fitted as standard, the trembler coil was replaced by coil and condenser. In order to meet the heavy demand in the United States, Rolls-Royce of America was formed in November 1919 and in February 1921 the first car was delivered from the plant at Springfield, Massachusetts. From then until 1926, 1703 American Ghosts were produced: originally identical with the British cars, they were gradually modified with different hubs, 6-volt electrics, 3-speed central change gearbox and left-hand drive.

The British model too, continued to be improved: 33 x 5 straight-sided tyres replaced 895 x 135 mm beaded edge and from late 1923 the 4-wheel braking system with gearbox-driven servo was available. A starter carburettor replaced the priming device on the inlet manifold. On late 1924 and 1925 cars, the pressure fuel feed system was replaced by Autovac. Thus the last Ghost had come a long way from the original 1906 design. Yet they still seem to have that indefinable charm that makes a Rolls-Royce what it is, in a particularly pure and concentrated form. It is a notable tribute to the model that so many examples are in full running order today.

ROB

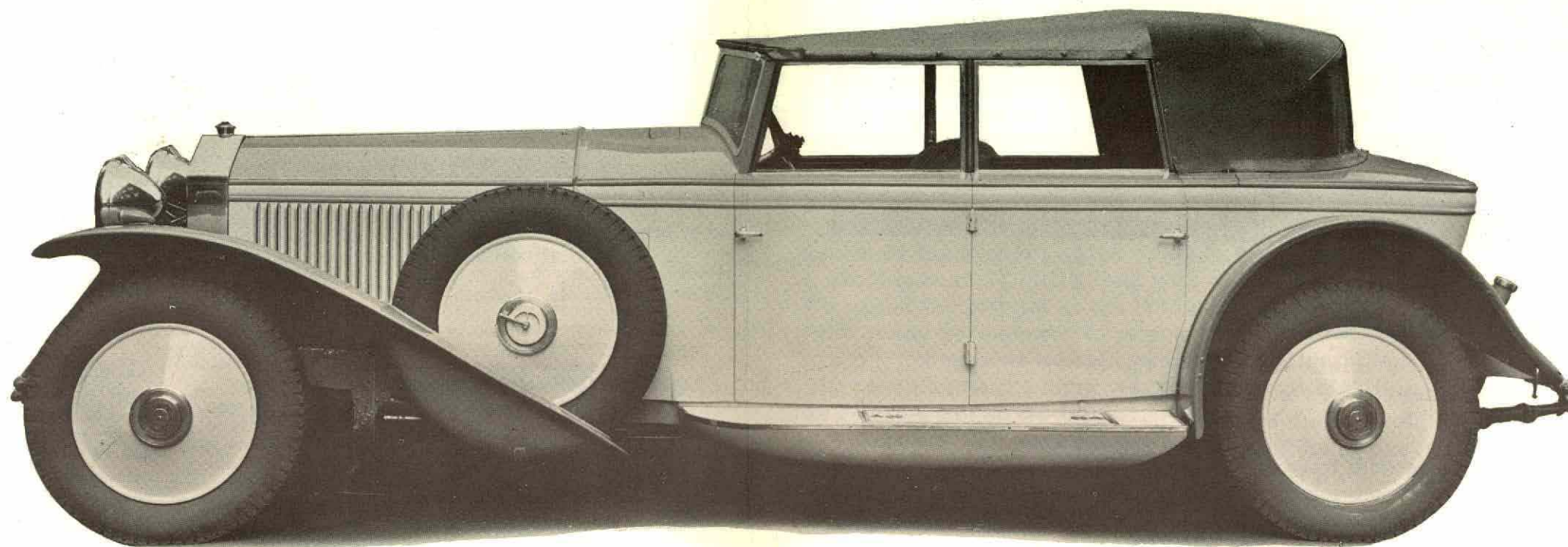
the photographs used here came from Harry Fleck

machining of the pistons, all performed on the most weird collection of rattleguts machines you ever did see. We had no internal grinders so the cylinder bores came straight off the tool and we had no external grinders either (I remember vividly the first grinding machine being installed).

The excellence of the product was determined by the genius of Pa Royce and the craft of the men on the floor.

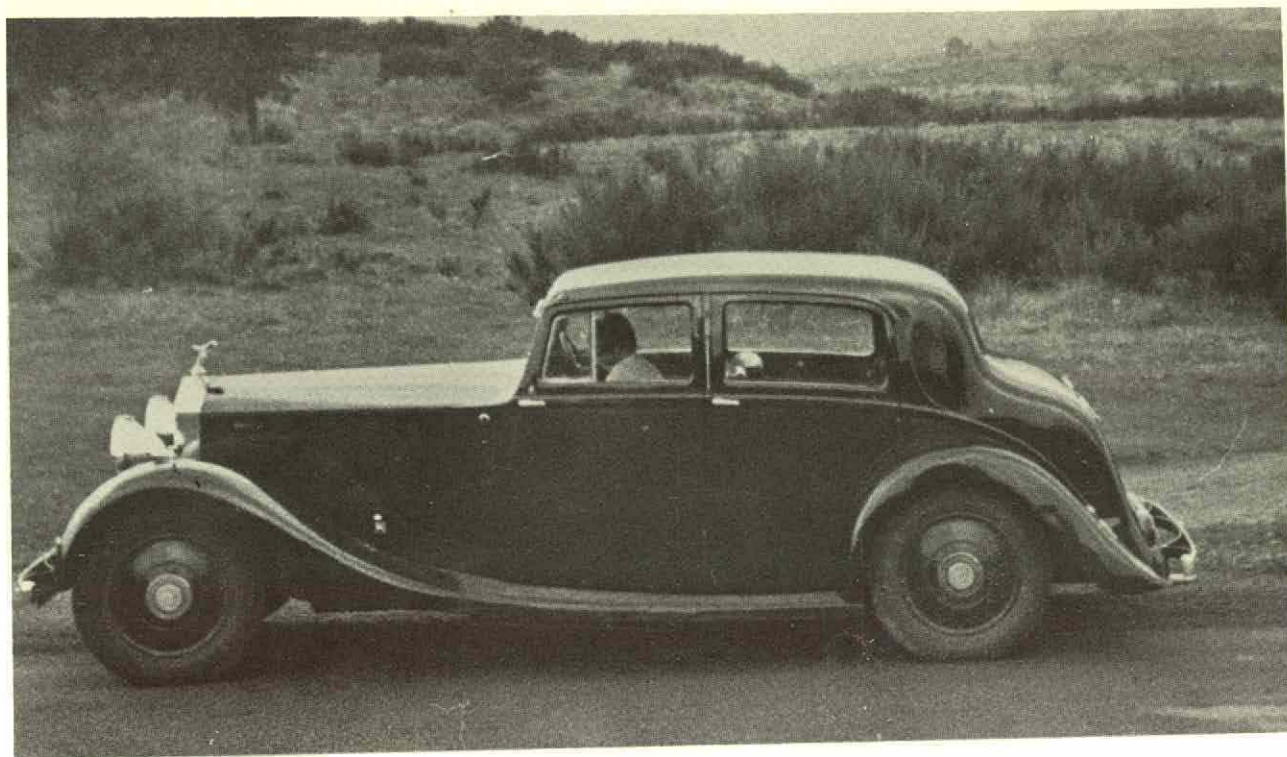
FROM R O BARNARD

I was interested in JCD-M's comments on 'starting on the switch' in the autumn Record. I think that by far the most important factor is the competence of the valves. A couple of years ago, 54PB was laid up for the winter shortly after the valves had been ground in and the compressions restored to what they should be. About two months later, I switched on, thinking that I had disconnected the battery, only to find the engine tried its best to start as I had forgotten to do so. It did not, in fact, run as the carburettor was drained dry. Obviously, the condition of the ignition system affects the certainty of firing and I am sure that the old Ghost system with trembler coil gives the best spark for 'off the switch'. Incidentally, I found the centrepiece showing 27RG of much interest. I knew the car some 10 years ago: it was as shown in the photograph with aluminium 'decking' and 'prow'. I think it went to the U. S. A.



Portrait of 23WJ

1929 Phantom II with torpedo cabriolet
body by Barker. Chassis no 23WJ, E steering
column. Colour of body blue and ivory.
Body price £875.

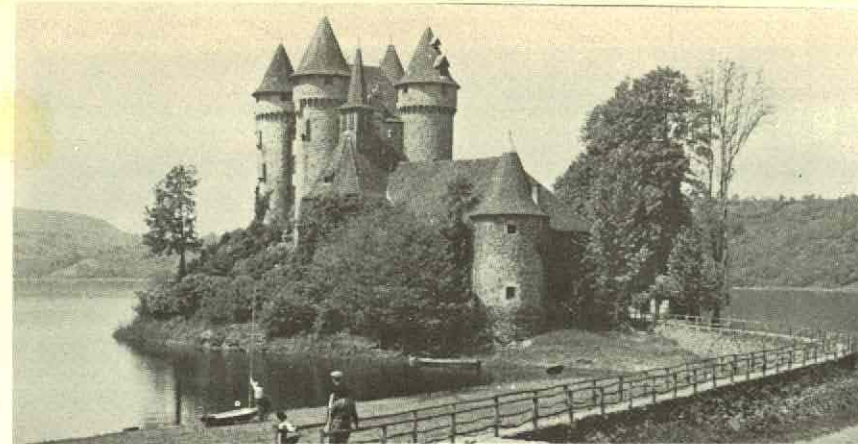


A 25/30 IN FRANCE

FOR a peaceful holiday far from tourists and traffic, the Auvergne and Perigord in the heart of France are hard to beat. We took our 1936 25/30 down south by easy stages via Montlucon and Vichy, and made our first headquarters in the little village of Pont Gibaud, 14 miles from Clermont Ferrand.

When touring France, we always take our handbook of Routiers inns, many of which are far from being lorry drivers' pull-ins and have had modern extensions built. The food is usually excellent, if unpretentious, and the cost unbelievably low. Our three nights stay at Pont Gibaud, dinner, bed and breakfast, cost us the equivalent of £3 each, and we had excellent clean rooms with the friendliest service.

When we arrived, we parked in the village square and were immediately surrounded by a hoard of adults and youngsters anxious to know more about the 25/30. Preliminary homework enabled us to give petrol consumption, engine capacity, speed, horsepower and age in French, and there were many mutterings of 'Formidable' as the locals tapped her sides. We were given a barn on the edge of the square as a garage, and the next morning as I was polishing up I was startled to hear a piping little voice from a window high up at the back exclaim in best schoolboy English:



'How she is bee-u-tiful'. A small boy had somehow climbed up and had been watching me entranced for some twenty minutes.

Driving slowly through the isolated villages in this area, we constantly heard shouts of 'Regardez-un Rolls!' or 'Comme elle est belle!' as we negotiated our way through the narrow streets.

We felt a trifle nervous about making the steep ascent to the summit of the 4,500 ft. high Puy Dome by a winding road $2\frac{1}{2}$ miles long with a gradient of 1 in 8. We asked the official at the bottom for his advice. 'How many horsepower have you, Monsieur?' he asked. His jaw dropped as we told him. 'Well, if the 2CV Citroens can do it I think you should be all right!' he replied, and so we were.

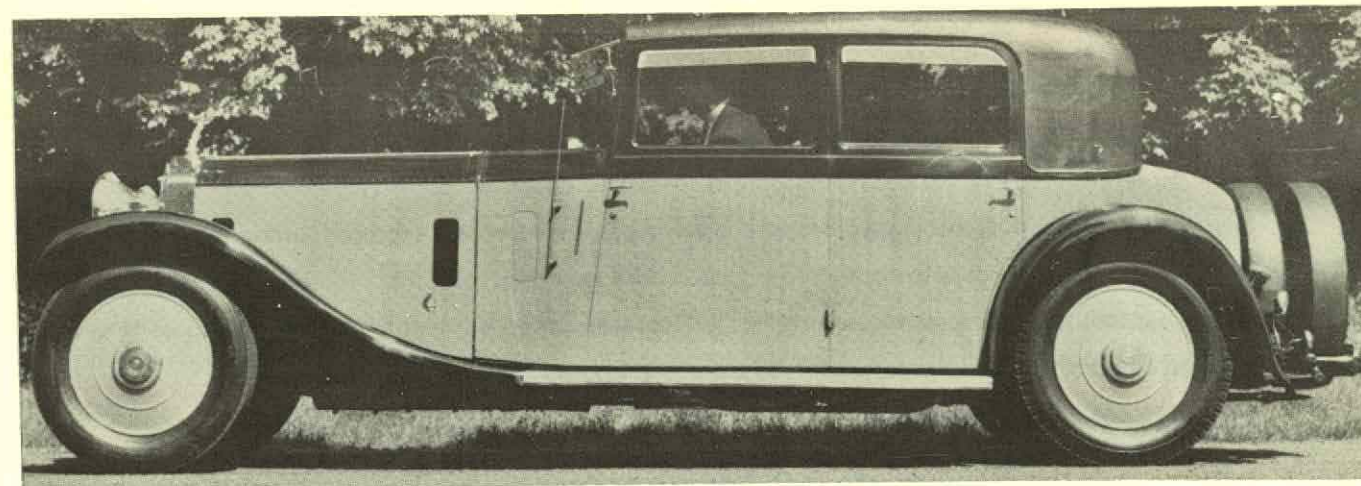
Further east, as we moved slowly back in the direction of the Channel ports, we had parked the car by our hotel when we discovered a slow puncture. The local garage man, - he had no more than a shack really, - was terrifying red-faced character with a body like an all-in wrestler, who overwhelmed me with a seeming torrent of objections when I sought his aid. Eventually, I discovered that his only real trouble was that he had no jack. Tools are very expensive in France, and his had been



stolen. That was easily dealt with, but disaster seemed to threaten when we discovered that we had brought no C spanner. There developed a comic scene on the road verge with this huge man wrestling with a recalcitrant tyre, and my wife and myself hanging on grimly the other side. Passers-by stopped to watch and applaud, while our massive friend, by now entirely helpful, muttered joking remarks about Rolls-Royces and the need for bringing a chauffeur to cope with these problems. Eventually, he found the hole, happily some way from the valve, since otherwise he could not have reached it. He put on a patch. 'Come back after lunch and we will see if it is still holding', he told us. An hour later, we returned in trepidation to be met with a triumphant 'Il tient', the pleasantest two words I had heard for a long time. The cost for most of a morning's work? About five shillings. On our way back, we paused for a few days in the Loire valley to revisit some favourite spots, and in particular to see the Son et Lumiere at the entrancing Chateau of Chenonceaux. Here again, another 'Routier' provided excellent accommodation.

We had a delightful 'Rolls incident' as we passed through a Loire village on our way to Tours for the second day running. We had slowed to decide which of two petrol stations we should choose for a fill-up when the man in charge of one of them ran out into the road and beckoned us imploringly to use his. We duly obliged, and he explained that he had seen us the day before and had been hoping that we should pass by again. It transpired that before the war he had driven the French President's Rolls-Royce, and had been trained by Rolls-Royce in England. Much voluble chatter followed about the excitement of seeing a Rolls again, and his days across the Channel. A very pleasurable little encounter.

All told, we found that our 2,500 miles' tour gained much extra spice and interest by travelling in our 25/30 instead of using a lesser breed. The magic still held at Dover, where a beaming Customs Officer let us through with scarcely a question.



THEY NEVER WEAR OUT...

8 pm on Sunday 25 July after the Sandhurst Driving Tests found us in 9GX surging up to the crest of the Stevenage by-pass on A 1 - en route for Yorkshire with the children asleep on the back seat.

'Very smooth and effortless progress tonight, 'I said to my wife, as the speedometer needle crept up towards the 70 mark on the downward gradient, 'She's really running well. 'In answer to this, without any warning, there came a frightful thump and clatter from the back of the engine. 'It's sticking valves', I said, pulling into a convenient lay-by to provide that most undignified spectacle - one of our cars off the road with the bonnet open! However, dollops of RedeX made no difference, so I proceeded gingerly and the thump lessened, and eventually resolved itself to a clicking at low engine speeds only - we reached home only half an hour behind schedule.

Some prodding round with the stethoscope soon convinced me that the trouble was INSIDE the top of No. 5 or 6 cylinders, and so work on taking down the engine began. Procedure for cylinder head removal is described in full on pp 84, 85 and 86 of Handbook No VI, and is straightforward except for bonnet removal, and possibly the easing of the union nut securing the outlet pipe to the exhaust jacket of the carburetter.

I found it best to remove the bonnet by standing on the near side of the car, having previously opened the off side, then lifting the whole unit over the nearside wing. Great care must be taken meanwhile not to scratch the top of the radiator, which can be covered by felt or a cloth.

This part of the job took me 5 hours, and an extra pair of careful hands is desirable, but not essential, for bonnet removal and lifting the head. The head should then be decarbonised and cleaned out in the usual way.

The tops of pistons 5 and 6 were a horrible sight when exposed, and are shown on the accompanying photograph. Their outer edges had disintegrated in places to a depth of about 1/8 in., allowing pieces of broken piston ring to jump up on top of the piston - hence the thumping when these got trapped against the head!



I now gather that this is not an unknown occurrence in PII's when the ignitions are set too far advanced. (I did not know that mine were!)

As a matter of interest, these pistons had been fitted at Derby in 1937 at a mileage of 46,500, the blocks having then been bored out to +0.015 in. The mileage of the car on dismantling was 127,450. At 95,000 miles, bore wear was 0.003 in. and at 113,354 around 0.0045 in. These statistics are quoted in case they are of use to others.

It was then necessary to draw the pistons. The handbook refers to this operation in one paragraph on p 89, but there is a little more to it than that - in fact the purpose of my writing this is to set out the procedure in detail as it does not seem to be covered in the Service Instruction Leaflets and may therefore help others.

After draining the oil from the sump, you will need:

- 1 A trolley jack, preferably of 5 tons lifting capacity.
- 2 A 'top and bottom overhaul' set of gaskets and washers from Crewe.
- 3 1 pair axle stands.
- 4 Endless patience and a resolution never to hurry.

I also found my copy of the Parts Book (published by our Australian colleagues) invaluable.

5 Remove radiator:

- (i) Unscrew two spring-loaded securing nuts and remove.
- (ii) Disconnect outlet union and renew dermatine washer.
- (iii) If you are a 'Charles Atlas', stand astride radiator and lift, using top pipe as a handle (the radiator weighs about 1 cwt). Otherwise, put a lifting block in the ceiling over and attach a chain round inlet (top) pipe. Lift radiator clear of car, push the latter backwards and then lower radiator on to blocks. It can then be moved by hand. Take great care not to drop on to the studs in its base.

6 Remove rear shield.

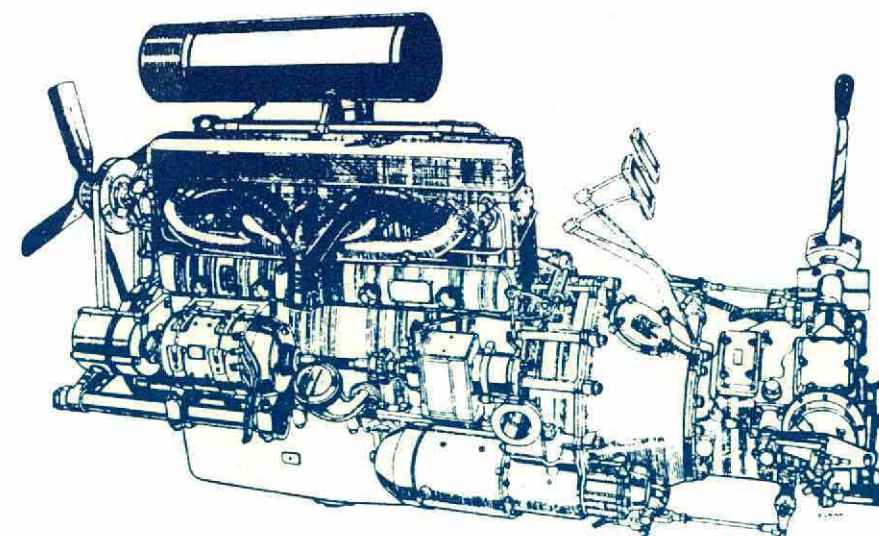
1 hr.

Remove o/s shield. (Not essential but useful to clean.)

1½ hrs.

7 Disconnect starter wires and two oil pipes. Remove unit after unscrewing securing nuts. Tap with mallet to loosen if necessary. Take care not to drop.

8 Disconnect oil delivery pipe to relief valves. I found a small adjustable spanner easiest to fit in confined space.



THE ROLLS-ROYCE 20/25 H.P. ENGINE

- 9 Unscrew oil delivery pipe end of crankcase.
- 10 Unscrew two nuts securing oil pump to crankcase - these are a size larger than those securing the pump together.
- 11 Draw off oil pump and delivery pipes as a unit.
- 12 Remove two screws securing oil-level indicator and draw up unit. (Not essential, but a precaution against damage to control rod).
- 13 Remove 43 nuts and washers securing lower crankcase and bolts securing to wheel cover and clutch housing.
- 14 Remove two long securing bolts located below main bearing.
- 15 Drop lower crankcase. To loosen, place wooden spar on offside rear bolt housing and give short, sharp blows with mallet, alternatively with similar procedure on wheelcase at nearside front. Then prise gently round flanges. (It is O K to lie underneath - I found its weight to be much less than I anticipated!)

Items 7 - 15

4 hrs.

PISTON REMOVAL

- 16 Draw pistons upwards, after:
 - (i) Removing split pins to big end joints.
 - (ii) Unscrew securing nuts.
 - (iii) Draw off lower caps with liners. Take care to keep these matched. They can be screwed together loosely after removal to ensure this.

The oil pipe on the connecting rods for Nos 1, 2 and 3 faces the rear, and that for 4, 5 and 6 the front. The crankshaft (and cam faces) can be inspected now, as well as the big end bearings.

On 9GX, these showed no apparent wear, except for No 6 cam, which was superficially scored on one face (127,500 miles). The crankshaft journals showed 0.0005 in average wear.

The big-end bearings were in good condition, with no disintegration of the white metal, except on No 5 where one piece cracked and fell away after cleaning. New bearings were therefore fitted here, with the 0.0005 in journal wear taken up.

Item 16

3½ hrs.

REMOVAL OF CYLINDER BLOCKS

Commence at offside rear.

- 17 Remove water pipe to rear block.
- 18 Remove water pipe to front block.
- 19 Undo joint on top of water pump.
- 20 Remove bracket supporting control pillar to block.
- 21 Undo two nuts supporting ignition control pillar and draw bracket away from block.
- 22 Undo magneto advance control rod. This passes between distributor tower and block, and can bind when the block is drawn.
- 23 Undo four nuts and washers securing fan bracket.
- 24 Undo bolt securing magneto control bar (front) to vacuum pump, complete with aluminium washer.
- 25 Disconnect magneto control rod (nearside).
- 26 Draw off fan bracket forwards.
- 27 Unscrew two brackets securing magneto ignition h t lead tube to blocks.
- 28 Unscrew magneto distributor cover and remove this from car, complete with leads, rod, spring and ring.
- 29 Unscrew two brackets securing vacuum pipe to bottom of blocks.
- 30 Stand over engine and draw blocks, taking same precautions as for cylinder head. Each block is a reasonable load for 1 person.

TAPPET WITHDRAWAL

Removal of the blocks will have exposed the tappets along the Near side of the engine. These are numbered (etching on the stems), each tappet being fitted with the number facing towards the rear of the car.

- 31 Undo six nuts securing the forked bridge pieces.

In theory, the tappets can now be drawn upwards by hand and removed, but in practice the top guides will be wedged solid with sludge into the crankcase. So first clean this off, and apply Plus Gas liberally. Leave to soak overnight.

32 Place blunt pliers round collar of guide and gently work backwards and forwards, up and down, etc. The guide should then slide up until it is free. Pour more Plus Gas down the stem and this should free the tappet in the lower guide, and the whole unit can be withdrawn.

Items 31 - 32

3 hrs.

33 Check and regrind faces if necessary, and renew tappet springs. The tappet guides appear to act as a sieve and a large amount of sludge seems to collect here.

34 Remove carbon deposit and sludge from upper and lower crankcase using Gunk and a high pressure spray (if you have one) or elbow grease and patience if you haven't!

35 Oil relief valve, undo three nuts. Draw off. Clean according to the instruction book. Replace with new washer.

36 Call in your friends to see the pieces and have a drink!

No 6 cylinder bore was found to be scored (presumably by the jumping ring), so both blocks were bored out professionally to +0.045, and new pistons fitted (with the now standard Duaflex rings). I found reassembling quicker and more fun because:

1 The engine was clean.

2 I knew from experience gained what to do next!

I was rather worried about the correct way round for reassembly of nuts and bolts, but need not have been because the shape of the facings on the engine casings makes it quite clear where square heads, or hexagonal nuts should fit.

Nuts, bolts and washers etc, were put into labelled envelopes in groups, immediately after removal. This eliminated the problem of remembering all the different sizes together and minimised the possibility of error or loss on reassembly.

On Sunday afternoon, October 23, when you were probably setting off homewards from the Lewes meeting, I pressed the starter button with great trepidation after the work was finished! However, the engine started straightaway, albeit slightly stiff at the bones, and the job SEEMED successful. If it hasn't been, I'll tell you next season!

Before 'switching off', I must acknowledge my very grateful thanks to various people who gave me a lot of help during the progress of the work. My wife, who saw little of me, and the children for keeping at a distance. Mr. Aspinall at Woodall Nicholsons, Halifax, who did the block boring and other 'professional' work, and gave me the necessary confidence and advice as I went along ('It's quite simple, sir.'). Members Cyril and Mrs. Miers, of Harrogate, who lent me the jack. Dr. Llewellyn Smith and the company at Crewe for speeding delivery of a new batch of pistons.

W D N B