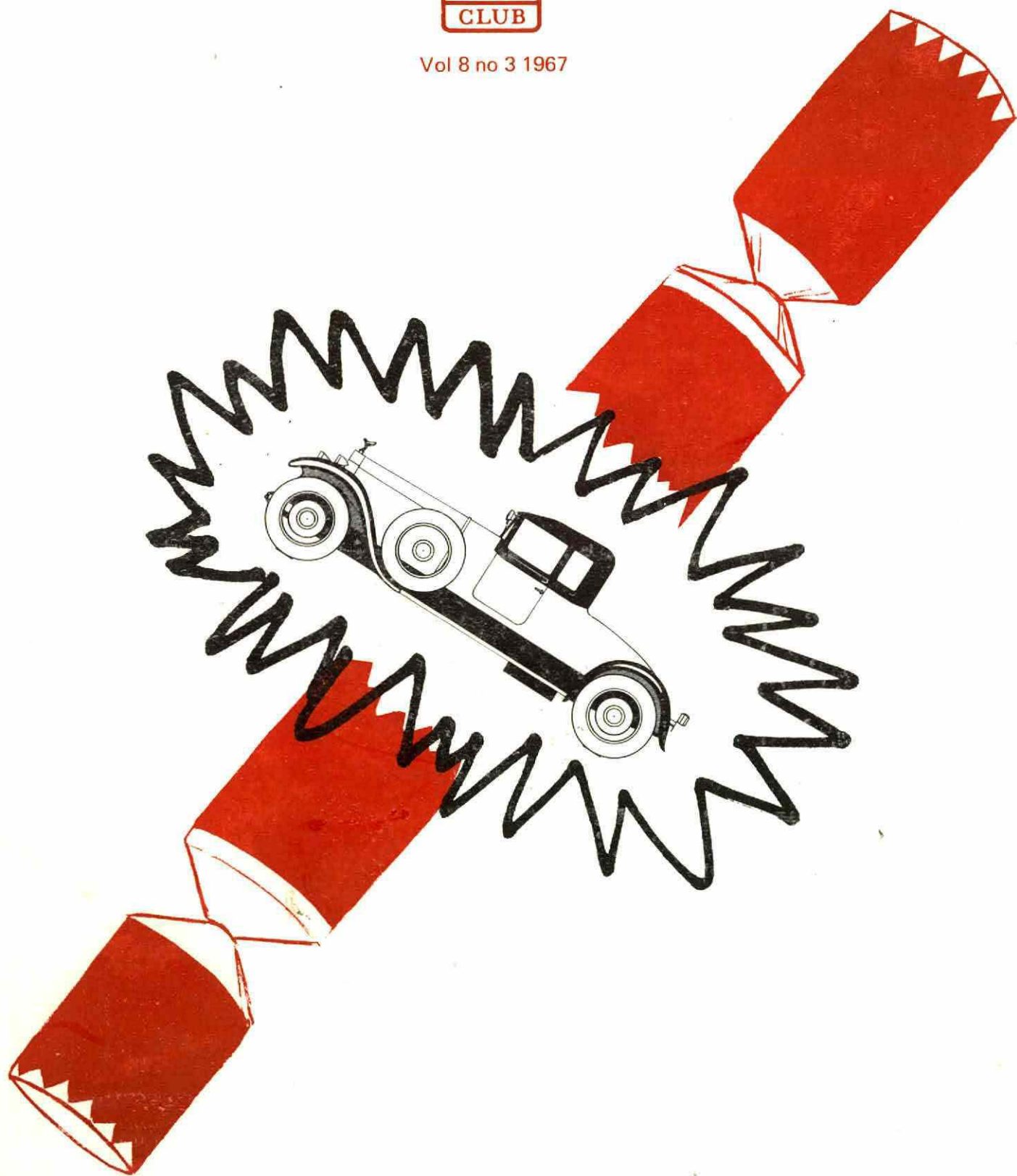


THE 20-GHOST



CLUB RECORD

Vol 8 no 3 1967





ALPINE COMPETITION—1968
ENTRY PARTICULARS

As for previous years, the Alpine Trophy will be awarded to the owner of the car which gets the most marks according to a formula—the total distance travelled during the year, whether on business or pleasure, at home or abroad, multiplied by the age of the car from first registration in complete years, to 31st December 1967, multiplied by a factor of 4 for early cars and Silver Ghosts, 3 for Phantoms, and 2 for Twenty's, 20/25's, 25/30's and Wraiths.

Those who entered for 1967 need only inform the competition organiser of their intention to enter for 1968.

Those members who are entering a car for 1968, which was not entered for 1967 should fill in the form below and despatch it subsequent to January 1st. Members should get a separate individual to check their milometer reading. Members may enter more than one motor car, but scores by separate cars will not be aggregated. The score divided by 100 contributes to marks for the Annual award of the Stanley Sears Trophy.

To: C. Meachen, Esq.,
Linden Hill,
Near Twyford,
Berks.

I wish to enter my motor car for the 1968 Alpine Competition.

PARTICULARS: MODEL DATE of FIRST REGISTRATION

MILOMETER READING—JANUARY 1st or subsequently

CHECKED BY

NAME

ADDRESS

.

.



On behalf of the committee, I send you greetings and best wishes for Christmas and the New Year. I think all will agree that 1967 has been a very good year for the club; many varied events, for the most part well attended. It was indeed very interesting meeting our American guests and we now have many friends in the States. I would like, on behalf of you all, to express thanks to those members who did so much to entertain our visitors, who were so appreciative of the hospitality accorded them. I would have liked you all to see the letters of appreciation that were sent after their return to the States. All those who brought their cars over have accepted their invitation to membership.

At the A.G.M. in June, the chairman sought members' views on extending the eligibility of cars, as the committee felt that the time had come when it was necessary to expand to prevent the club from slowly dwindling. The consensus of opinion was that this should indeed be done. The matter was therefore examined very fully at the next committee meeting, and it was decided that all models before the introduction of the 8-cylinder Silver Cloud II should be eligible. I am delighted to report that, though this decision was only taken at the end of June, there has been a most satisfactory increase; despite some 10 resignations, the membership is 325 at this date.

The alteration of the financial year, though it caused some difficulty in the change over, should greatly ease the work of club officers in the future.

You have done me the honour of re-electing me President for a further term. Thank you; I am most gratified. It is indeed an honour to serve such a pleasant community.

I wish to thank all the members of each committee for their work on our behalf, above all our chairman, John Dymock-Maunsell. we are a very lucky club to have such a tower of strength organising our events and conducting the business of the club in general.

My best wishes to you all.

President.

From the Master...

After enjoying 18 months in Bermuda, I felt that it was a good time to return to England during July and August, when it is a little too hot here to be comfortable, and one could expect good weather in England.

On arrival I had to spend two days in London which coincided with a heat wave! I found the noise of the traffic and the all permeating stench of diesel exhaust almost intolerable, and I wondered how you can stand it. But of course it is a question of habit and usage.

Then, going into the country to visit many of my friends, I was enchanted with the beauty of the trees and the colourful cottage gardens, and the rolling fields of golden corn ripening for a bountiful harvest. One can travel the world but there is no place like England in high summer.

Jack had got the Wraith ready and licenced for me, but I was appalled at the increase in volume and frustration of the traffic since I left. After the leisurely pace of 20/25 mph on Bermuda's uncongested roads, this seemed a madhouse, and I was continually getting caught up in queues of lorries belching out their noxious diesel fumes to which I am really allergic. Therefore I confined my motoring to the shorter runs and went by train on the longer ones. I was pleasantly surprised with the speed and comfort of the new diesel hauled expresses, and the gay blue and grey colours of the coaches.

I drove the Wraith to the driving tests at Sandhurst and it was delightful to be welcomed so enthusiastically by all my friends. As I walked along the line of the cars to have a talk to the occupants I was offered so many glasses of high octane refreshment that if they had all been accepted, the end of the line would never have been reached. This was a splendid event very well organised by all concerned. It is interesting to note that it was the tenth consecutive year that we have been invited to the Royal Military Academy.

Many of you will remember our tour to Denmark in 1964 and the very enjoyable time we spent with Baron and Baroness Raben-Levetzau at Aalholm Castle. I stayed a few days with them and was amazed at the enormous increase in the size of his Motor Museum. You will recall that the 20-Ghost Club was the first to visit this Museum when it opened with approximately 35 cars. The total is now over 300 and in spite of it being situated on the Southern tip of Denmark, more than 85,000 people have visited it in two years. To my delight as a steam lover, the Baron is in the process of laying down a narrow gauge railway around his beautiful park, as an added attraction. He has acquired, from a local sugar beet factory an 0-6-0 Henschel steam locomotive, made about the turn of the century, and this is now being restored in his own well equipped workshops, where all the car overhauls, including painting and upholstering, are carried out. He still has, of course, his father's 1911 Silver Ghost and also a 20hp, a Phantom I, II and III.

Unfortunately I missed the event with the Disabled Drivers Club at Lancastrian Schools near Chichester because I was staying with Dennis and Joan Flather at Barlow near Sheffield. This coincided with the Veteran Car Club North East Section run from Hull to Scarborough in which we took part in his 1913 London-Edinburgh replica. It was raining hard and blowing half a gale when we started out for Hull, and you can imagine it was pretty bleak on the Yorkshire Moors under those conditions. We passed the famous Car and Fiddle Inn where I could almost imagine seeing the Silver Ghost and sister cars lined up for that historical photograph in 1907. By lunch time, however, the weather had cleared and we enjoyed an interesting run. R-Rs were well represented by several examples, including Oliver Langton's 1904 10hp 2-cylinder car.

I stayed with Bill and Marion Cook and John and Marion Hampton and thoroughly enjoyed runs in their Silver Ghosts. John kindly organised a little private rally to lunch at the Compton Arms at Cadham where I was delighted to see John Dymock-Maunsell on his 20/25 open tourer, Capt and Mrs Honnywill on his Phantom III also open; Fred and Joan on the 1913 Alpine, and Bill and Marion on the 8-litre Bentley, for a change.

Then I went to stay with John and Margaret Oldham in Jersey. He had just finished the monumental task of writing the story of Claude Johnson which has been published under the title of *The Hyphen in Rolls-Royce*. It is a most interesting book. I had the great pleasure of driving in one day his 20/25, Phantom II and Phantom III, the latter cars rather large to handle on Jersey's winding and congested roads.

Finally I nearly frightened myself by competing in the Brighton speed trials and the Firle Hill Climb in the 1931 8-litre Bentley.

So you can see that I kept well in touch with *The Magic Name*, and had great pleasure in renewing my acquaintance with many different models.

Staying with Fred and Joan Watson for several days I was able to see at first hand what an enormous amount of work is entailed in his triple role of President, Hon Secretary and Hon Treasurer. He really does this extremely well, ably backed by Joan. Members are very fortunate, and I know appreciative, to have them to minister to their needs.

It is very good news that John Dymock-Maunsell will continue as Chairman. He has done monumental work in this capacity and as Chairman of the Events Committee, and I do hope that some younger members will be forthcoming to assist him with this important task.

All members of the various Committees are contributing their best for the benefit of members and I am very glad to see that the Club is in such good heart and good form. Long may it continue to thrive and to expand with the inclusion of some of the younger cars.

Well, after a most enjoyable nine weeks in England I found that the time had passed so quickly that I was unable to contact all the people I wanted to see. I look forward to a return visit next year to rectify this omission.

It is time to be back in the sun and warmth again. Without wishing to rub it in, as you are approaching mid-winter, the shade temperature here is 81°F and the sea water still 80°F!

I am enjoying 'messaging about in boats', bathing, sunbathing and fishing.

Very best wishes to you all.

Stanley Sears
Stanley Sears

THE DEVELOPMENT OF THE SILVER GHOST



THE 6-cylinder 40/50 h p Rolls-Royce was introduced at the Paris and Olympia Motor Shows in 1906 and continued in general production in England until 1925 and in America until 1926. Furthermore, a number of War Office chassis were still being made in England in 1927. The Rolls-Royce company in their modesty assessed this period as nineteen years and allowed Henry Ford's Model T to claim the world record of twenty years for the longest period of production.

Between 1906 and 1925, there were many changes and modifications. They can be verified from the seven Silver Ghost parts books published periodically from 1909 to 1925, or from the sales catalogues, some of which are reprinted in *Rolls-Royce, the Living Legend*. It would require a book of many pages to enumerate all the modifications to small parts. The more important modifications are described in the following paragraphs.

Battery Ignition

From 1906 to 1925, a trembler coil of Rolls-Royce design was used. With series P (1919), the modern (non-trembler) coil was employed, with a ballast resistance. A condenser was fitted inside the make-and-break cover of the distributor and the angle of the rotor was altered slightly.

Before 1911, the distributor included a circular rotor which made contact with the six carbon brushes in the contact ring. The distributor was modified in series 1600 (1911) and had an oblong rotor and six adjustable platinum points instead of the carbon brushes. During R to U series (1923-25), a change was made to the modern type of distributor with a moulded Bakelite cover.

Brakes

Originally, the hand lever operated internal expanding brakes on the rear wheels, the drums being of about 12 in diameter with holes drilled through the friction surface to permit the regular washing out of the metallic dust from the cast iron linings with paraffin. An emergency footbrake operated external contracting shoes on the transmission brake drum situated at the rear of the gearbox. With Series A (1913), the transmission brake was abandoned in favour of 18 in diameter rear-wheel brakes with finned drums concentric with the smaller hand-brake drums. These brakes sufficed until 1923 when servo-operated four-wheel brakes were introduced during R series. Some earlier models were converted by the company to f w b at a cost of about £250 which included the modified gearbox cum servo.

This review, by Mr. F. M. Robinson, is reprinted from the Quarterly Magazine of the Rolls-Royce Owner's Club of Australia with the kind permission of the author.

Carburettor

The 1906 carburettor was of single-jet type. There were several early changes including the introduction of twin jets. Until 1909, the air valve chamber was secured to the carburettor body by two screws and the air valve cover was held on in the same way. From series 1100 (1909), both these joints were threaded in order to avoid distortion. For the London-to-Edinburgh model in 1911, the throttle valve assembly was increased in diameter from 3¾ in to 4½ in and there were several other changes which require to be checked carefully if parts are exchanged. All the early carburettors, including the larger L-E model, were joined to the induction manifold by a flange with four bolts. From series D (1914), a threaded union was used in place of the four-bolt flange and the large throttle and other modifications became standard. Excluding the earliest carburettors, the throttle body was water jacketed but during series R to U (1923-25) it was heated by exhaust gas. (R to U series parts book unfortunately does not state the series in which any changes were made).

Carburettor Mixture Control

Originally, the carburettor mixture control was mounted on the dash, consisting of an operating handle, quadrant plate and a long vertical spindle. With series 1400 (1910), the mixture control was moved to the top of the steering column.

Carburettor Starting

In 1919 with Series J, a priming device on the induction manifold replaced the earlier priming cup. The device was operated by a lever and remote control rod from the dash and drew petrol from the float chamber. During series P (1921), a more elaborate starting carburettor replaced the priming device.

Chassis Frame

From the somewhat slender proportions of the 1906 chassis frame which continued in the same horizontal line to the rear end, the process was one of gradual strengthening and development. By 1909, the chassis had been stepped up some 4 in height over the rear axle and by series 1700 (1911) massive tubular cross-members replaced the channel section.

From series 2600, the front cross tube was increased in diameter from 1½ in to 2¾ in and at the same time the headlamp brackets, previously held in tapered eyes in front of the cross-member, were now inserted through the tube. In 1913 with series A, a system of tie rods, fixed underneath the chassis to a number of kingposts, added further strength. Some earlier examples have been seen, but tie rods are not listed in the previous parts books.

Chassis Lubrication

During series P (1921), a change was made from hexagonal lubricators to oil gun lubricators.

Chassis Numbers

In the absence of the chassis number plate which was originally fixed to the trembler coil cover (not used after 1915) or to the dash, the chassis number may be found by diligent

searching in one or more of the following places:

- 1 On one front dumb iron (early models).
- 2 On the front 'bridge' of the gear box.
- 3 On the crankcase ledge under the carburettor.
- 4 On the cross-tube in front of the gear box.
- 5 On the shaft between gear lever and box.
- 6 Beneath pedal footplate.
- 7 On each of the diagonal tubes between the universal joint and chassis.
- 8 On lower edge of dash.
- 9 On the inside face of the bonnet hinge (later models).

Cylinder Blocks

From 1906 to 1910, the blocks each had a single water outlet pipe on top and the twelve plugs were in line in the valve cover plugs. From series 1400 (1910), there were two water outlet pipes per block, different water jacket covers and many other minor modifications, the blocks being tapped for six sparking plugs in the intermediate portions. The valve guide holes are about $\frac{1}{2}$ in further from the centre of the bore. Blocks are thus not interchangeable with the earlier engines because the valves will not be in line with the tappets.

Engine

The bore and stroke were originally $4\frac{1}{2}$ in x $4\frac{1}{2}$ in and the capacity was 7.036 litres. In about 1909, the stroke was increased to $4\frac{3}{4}$ in giving a capacity of 7.428 litres. The records of Rolls-Royce Ltd. state that the change took place with series 1100, but as the long stroke crankshaft U.1748 was listed in the earliest parts book of 1909, it appears likely that the change was made somewhat earlier.

Engine Coupling

The double universal joint connecting the drive shafts between the clutch and gearbox consisted of a cage at each end, housing the cardan blocks and driving pins, and in the centre a distance piece to which the two cages were bolted. From series 2100 to series A in 1913 a friction-damped spring coupling was substituted but it proved to be unsatisfactory and was omitted in later models. When the spring type gave trouble, it was replaced by the standard type of coupling.

There were minor modifications in the shape and size of the couplings and from series B in 1913 an adjustable bracket was inserted in the distance piece, to take up the end float.

Wear and lack of lubrication over many years result in alarming vibration and rattles from the engine coupling. These can be remedied partly by fitting new or built up pins and blocks and partly by the fitting of springs to prevent end float and also springs inside the cardan blocks to reduce the radial movement.

Engine Numbers

Engine numbers were stamped on the engine mountings on each side of the motor and they first appeared in about 1911. From 1911-1915, the number was usually followed by one letter but no particular sequence appears in the lettering. In 1919, the chassis number letters appeared in some engine numbers but soon a definite system emerged—a letter followed by a number, the letter representing the Derby chassis series from J to U. The identification of the series from the engine number becomes of importance in following the various chassis modifications. Other letters such as H, L or Z are sometimes stamped with the engine number, but their significance does not appear (except when L is on the left hand side only).

Exhaust System

From 1906 to 1925, the same general exhaust layout was used to maintain the R-R principle of silence—twin exhaust boxes and a front and rear silencer. Until 1909, the rear manifold included a pipe union for petrol tank pressurisation. Before 1913, the rear silencer, of which there were two sizes depending on chassis length, had a fishtail outlet. From series A in 1913, a tail pipe replaced the fishtail and was curved up and over the rear axle.

There were two down pipes from the exhaust boxes until during the R-U series (1923-25) the rear down pipe was eliminated and the exhaust boxes redesigned. This occurred on the introduction of four-wheel brakes when the magneto was moved back to make room for the dynamo, both being driven in tandem.

An exhaust cut-out previously available as an extra (judging by illustrations) was fitted to the intermediate pipe from series A (1913) onwards.

Front Axle

Before 1909, the front axle was bent downwards in the centre and the end portions between spring and pivot pin were curved. With series 1100 (1909), the central portion was straightened and the ends were angled rather than curved. Between 1909 and 1923, the front axle underwent many minor modifications but the general appearance remained unchanged, until finally four-wheel brakes were introduced with major changes.

Fuel Delivery

The petrol tank was originally under the front seat. Delivery to the carburettor was by gravitation, assisted by pressurisation from a hand pump and exhaust gas pressure from the manifold through a regulator device with wire gauze filters.

With series 1100 (1909), the tank was moved to the rear of the chassis, the exhaust gas system was discontinued and a mechanical air pump was mounted vertically on the near side front quarter of the gear box. This was a delicately designed compressor working from an eccentric on a shaft driven from the gearbox. A connecting rod, steel piston, brass cylinder, an inlet poppet valve and a brass delivery valve, all of minute proportions, delivered air at 8 lb/in² or more, and the pressure was then reduced to 2 lb by a relief valve bolted to the chassis.

Series J (1919) introduced a redesigned air pump which was installed horizontally on the front of the governor casing and driven by an eccentric on the distributor shaft. A built-in pressure regulator maintained pressure at 2-3½ lb more efficiently than the previous relief valve. The air pressure system was finally replaced by the Autovac vacuum tank during the R-U series (1923-25).

Gearbox

From an examination of the gearbox, one can tell to within a year or two when a Silver Ghost was manufactured. Until 1908, the Silver Ghosts and earlier models were manufactured at Cooke Street, Manchester. The circular inspection cover for the gearbox was accordingly inscribed ROLLS-ROYCE MAKERS LONDON & MANCHESTER. When production commenced at the new factory in 1908, DERBY was substituted for MANCHESTER. At this stage, it was a four-speed gearbox with direct drive in third, and the fourth gear was the overdrive or sprinting gear. Before engaging reverse, it was necessary to push the gear lever through the first gear position, which was not unusual in veteran days. The quadrant positions were:

R
1 3
2 4

From series 1100 (1909) to series B (1914) inclusive, the three-speed gearbox was used, the quadrant positions being:

R 2
1 3

The mechanical air pressure pump was installed on the near-side front of the gearbox commencing with series 1100. With all three-speed gearboxes, the inspection covers were oblong in shape with the corners rounded, and were flat in appearance except for the raised lettering LONDON ROLLS-ROYCE DERBY. From series 1100 to 1600 (1909-1911), the reverse pinion cover on top of the gearbox had a curved surface. From series 1700 (1911), the reverse pinion cover was rectangular in shape, with the front edge cut at 45°—and this applied to all later three-speed boxes.

Commencing with series 2400 (1913), and somewhat earlier with the Continental models for the Austrian Alpine Trials of 1913, a four-speed gearbox was introduced and for a short time both three-speeds and four-speeds were available. The reverse pinion cover was eliminated and the air pump was continued in the same position. Between series 2400 (1913) and series D (1914), the inspection cover was of similar oblong shape and flat appearance with the raised inscription ROLLS-ROYCE, and from series E (1914) the inspection cover had a slightly curved surface. The 1913-25 quadrant positions were:

R 1 3
2 4

From series J (1919), the four-speed gearbox continued but now incorporated the starter motor fittings in place of the air pump. The inspection cover continued as in 1914. The only other external change was on the introduction of the gearbox-driven servo motor for four-wheel brakes during the R-U series (1923-25), when the top side of the inspection cover was extended into an irregular shape.

Throughout the whole Silver Ghost production, straight cut gears were used, with many changes of design, except that from series H (1915) onwards the constant-mesh pinion and gear wheel were helical for greater silence.

Magneto Types

1909 Catalogue	Simms Bosch
Chassis 1100 to 1050	Bosch D6
Chassis 1051 to 1699	Bosch ZR6
Series A to H	Watford C6
Series J to part of Series P	Watford E6
Part of Series P to Series U	Watford EO6

Pistons and Connecting Rods

The changes in pistons and connecting rods were many and various. The main modifications, some of which prevent the exchanging of parts between series, are as follows:

- 1 Reduction in big-end bearing length during series 1600 (1911).
- 2 Increase of gudgeon pin diameter in series F (1914).
- 3 Reduction in length of small-end bearing in series H (1915).
- 4 Length of connecting rod was reduced in series J (1919) and gudgeon pin was correspondingly lower in piston.
- 5 Aluminium pistons were introduced for the special L-E models used in the Austrian Alpine Trials in 1914 replacing the cast iron pistons, and later became standard in 1919.

Radiator

The earliest radiator cores of vertical finned tubes were several inches less than the 20 in high core which applied from 1909 to 1925: it will be noted that the veteran radiators are 6 in deep at the top tank and those made after 1919 were only 5½ in. Colonial and Alpine Eagle models had a core 22 in high with the capacity of twelve gallons for the whole cooling system.

Rear Axle Ratios

Year	Series		Bevel Wheel Teeth	Pinion Teeth	Type	Ratio
1907	500	(long)	65*	22	Straight cut bevel	2.95:1
		(short)	65	26†	Straight cut bevel	2.5 :1
1909			65	22	Straight cut bevel	2.95:1
1909-12	1100-1800	(low)	65	22	Straight cut bevel	2.95:1
		(high)	65	24	Straight cut bevel	2.71:1
1912	1900-2000		52	18	Straight cut bevel	2.89:1
1912-15	2100-H	(low)	52	16	Straight cut bevel	3.25:1
		(high)	52	17	Straight cut bevel	3.06:1
1919-21	J-O		52	16	Gleason Spiral Bevel	3.25:1
1921-25	O-U	(low)	52	14‡	Gleason Spiral Bevel	3.71:1
		(high)	52	15	Gleason Spiral Bevel	3.47:1

* The 1907 catalogue does not state the number of teeth in the bevel wheel. The ratio is therefore an assumption, but it corresponds approximately with the speed given for the four gears—12, 20, 35, 43 (long) and 14.5, 24.5, 41.5, 55.5 (short) m.p.h. respectively. The calculated overdrive ratios are 0.81:1 (long) and 9.75:1 (short) giving an overall ratio in 4th gear of 2.40:1 and 1.91:1.

† A 26 tooth pinion is also mentioned in 1100-1300 parts book.

‡ Note in parts book: *For chassis of 50 cwt gross weight and over.*

Shock Absorbers

Peugeot type friction shock absorbers at front and rear were introduced with series 1100 (1909) according to the parts catalogues. The rear shock absorbers were discontinued after series 2300 (1913) and Hartford friction shock absorbers were introduced with series P (1921).

Springs

Semi-elliptics plus a transverse platform spring comprised the rear suspension in 1906-7. A change was then made to three-quarter elliptics and this method was used until series 2100 (1913) when cantilever springs were introduced. Cantilevers had previously been successfully tried on the London-Edinburgh model of 1911 and the subsequent replica chassis. On the first half dozen or so, the cantilever was underslung.

The same type of front spring was retained throughout the production period, but on the introduction of front-wheel brakes in 1923 the moving shackle was placed at the front end. Evidently Sir Henry decided that this was the best position so that the rear of the spring would be rigid to take the braking torque at a stronger part of the chassis. The same system was maintained on all models until i f s was introduced in 1936, although other manufacturers disagreed.

Starter Motor

Before 1919, electric starters were not supplied on production models. With the first post-war SG's in 1919, an electric starter was provided. This drove a shaft in the gearbox by means of sprocket and chain, the jaw clutch being engaged at the same time by means of an electro-magnetic device.

Starting Handle Bracket

The space between the front cross tube and the starting handle is of course taken up by the bracket. Whenever the height of the crankshaft was changed, the height of the starting handle bracket changed also. Thus the size of the brackets was reduced year by year from 1909 ($4\frac{5}{16}$ in) until finally with series B (1914) the starting handle was hard up against the cross tube.

Steering

In the 1909 parts catalogue, provision is made for 'A' and 'C' type steering, but in all later catalogues four types appear—'A', 'B', 'C' and 'D'; the angle of elevation of the steering column varied, 'A' being the shortest and most upright. This necessitated four lengths of steering columns and control tubes, the difference between 'A' and 'D' being $4\frac{1}{8}$ in. There were also corresponding variations in the length and shape of pedals and the gear and hand brake levers, too numerous to describe.

The stationary tube for 'A' and 'B' type steering was secured to the dash by a small bracket. Commencing with series 1700 (1911), the stationary tube for 'C' and 'D' types was secured by a supporting tube at right angles, the top being bolted to the dash and the bottom end to the chassis cross member. The letters 'A', 'B' or 'D' may be found stamped across the join at the top of the aluminium steering box.

Thermostat

A large thermostat was installed in the front water outlet in series O (1921) with consequent alterations to the water pipes, the pipe to the radiator becoming almost horizontal. The thermostat was not supplied on chassis shipped to the United States, according to the parts book.

Transmission

From 1906, the drive was taken by open tail shaft from the spherical universal joint to the straight cut crown wheel and pinion differentials, the housing of which was slender but beautifully made with ROLLS-ROYCE in large letters on the flat side of the crown-wheel cover. Two radius rods held the rear axle in position and the torque was taken by a large torque arm fixed to the chassis amidships with an adjustable spring loaded coupling. With series 1700 (1911) when no doubt the housing of the transmission—strong by comparison with lesser breeds—had failed on the bumping test machine, Sir Henry introduced the enormously strong torque tube and differential housing of massive proportions held together by countless bolts. This prevailed right through the PI era until it was superseded by the 'Hotchkiss drive' open tail shaft on the PII in 1929.

Vibration Damper and Timing Gears

With series 1200 (1910), a spring drive device was installed between crankshaft and timing gears and then during series 1500 (1911) the crankshaft vibration damper was introduced. The twin friction flywheels were of $13\frac{5}{8}$ in diameter with 20 springs to provide tension for the friction surfaces. At this stage, the engine wheel case (timing case) was redesigned to house the damper and its circular contours are unmistakable. Some earlier chassis were subsequently returned to the company and fitted with vibration dampers outside the timing case.

From series J (1919), the flywheels were reduced to 11 in diameter with 10 springs (later 20 springs again) although the timing case remained unaltered until Series O (1921). The timing gears were straight cut until series 2300 (1913) when a change was made to helical gears.

Wheelbase

The advertised wheelbase in 1907 was 136½ in for the short chassis and 143½ in for the long. Two lengths in transmission parts are shown in parts books up to series 1600 (1911). From 1911 to 1915, parts are only shown for the longer chassis although some short chassis (e.g. 2320E) are known. In 1919, the advertised wheelbase was 144 in with a special long chassis of 150½ in, both of which were available until 1925.

Wheels and Hubs

Most of the early Silver Ghosts were fitted with wooden artillery wheels, ten spokes for the front and fourteen for the rear wheels. By 1909, 895 mm x 135 mm was the standard size

Concluded on p 72

From Bala to Berkshire— the Saga of 42EF

THE story begins back in March 1966. When I was convalescing after leaving hospital, my wife and I decided to spend a few days in Wales in the footsteps of the previous year's club tour. The weather, alas, was not so kind as in those golden days of June. It rained, and then it rained some more—in fact, it hardly stopped! The Wraith's windows steamed up; one fuel pump did not like the damp either, and showed its disapproval by maintaining a stony silence when selected, but we had decided to tour Wales, and that was that. We were Ghost hunting!

Hopes sank low as our enquiries proved fruitless, until one evening in Bala, taking refuge in the Ship Inn from the steady downpour outside, our proffered pint of foaming ale refreshed the local's memory. 'Iachyd-da, an old Rolls-Royce? O you had better see Jones the Garage. He might have something'. Sure enough, Jones the Garage had something, 42EF, not a Ghost but a 1927 Phantom I with landaulette coachwork by Hooper. There she lay in the shed behind the main street, as she had lain for thirteen years, having served as a school bus before that: looking rather sad and battered, but original and complete. There was, of course, an obstacle to our acquiring this collector's piece—Jones the Garage did not want to sell it. He did, however, promise that he would let me know if he changed his mind. And there we had to leave her, under a leaking roof, standing on flat tyres, and almost hidden behind stacks of oil drums and other garage equipment.

Another brief visit to Bala during the Summer led no further; the old car was still there, not for sale, but some time in October a letter arrived with a Bala postmark, causing much excitement, intimating that an offer would be considered. A short visit to Bala ensued and my offer having been accepted I found myself in possession of a large piece of venerable machinery with no means of getting it home! Lunacy prevailed at length, and I decided to work on the car for a couple of days and drive her back home to Berkshire. So, two weeks later saw my wife and I back in Bala, armed with a hundredweight of tools, a puncture repair outfit and a pair of overalls. The following morning, before the fun started, my wife departed to stay with relatives in Birkenhead, having been blithely assured that I should have the car ready in a couple of days.

The exhaust system did not require any attention, being beyond that! It fell apart, and I never did find the intermediate pipe. A temporary system was fabricated from odd lengths of pipe discovered in the garage, together with an old lorry silencer which had audibly seen better days, secured to the improvised piping with a Jubilee clip, Gun-Gum and hope. London Airport residents have no real grounds for complaint considering the noise heard in Bala when I eventually got her going, but more about that later . . .

The tyres retained pressure, miraculously: the cooling system did not retain water, unfortunately, but new hose and clips cured this, and the original honeycomb radiator leaked not a drop. Three days' hard work so far, and on the morning of the fourth day I started her up, having primed the cylinders well and changed the oil. Two or three cylinders seemed to be receiving their sparks at the right time, the others only occasionally. Apart from the shattering roar

previously mentioned, and a loud clank reminiscent of the noise from a Pacific steam locomotive's connecting rods, everything sounded reasonable. The clank disappeared quite suddenly, not, as some may conjecture, with one end of the connecting rod emerging through the crankcase, but of its own accord, so I assume that it was not serious, possibly a sticking cam follower or tappet.

After a few minutes' running, grumbling noises from the internals and steam from the radiator cap proclaimed further troubles, and the water pump was found to be stone cold. To get this off, the carburettor had to be removed first, and depression began to set in at the mounting number of tasks and the shortage of time in which to do them. Thoughts of Henry Royce working, as he so often did, right through the night overcame despondency, and at length the pump was repaired, the carburettor cleaned and replaced, and the engine started up again. The improvement in running justified the extra work and it seemed that the car would be ready the following day, until the clutch was found to be stuck up solid! As everyone knows, this can mean a complete dismantling of the clutch, so, with heart in boots, I squirted some acetone into it and, while it was soaking in, turned my attention to general lubrication of the chassis.

These Rolls-Royce oil guns are the goods, I thought, as a blocked oil way seemed to clear suddenly. Alas, the oilway had not cleared, but the flexible pipe on the gun had burst near the union. Oily flexible pipe does not kindly take to solder, and even when nicely cleaned with thinners and fluxed, the heat from the soldering iron summoned up oily froth from nether regions to spoil things. It took two hours to do the job. Four days' work and still with the clutch stuck!

Without much hope, I climbed up, depressed the clutch pedal, and pressed the starter. The starter worked, but did not turn the engine, and then it suddenly dawned that the clutch had freed and was as sweet as ever it had been after all those years. This was encouraging indeed!

Odd tasks occupied the following day. The horn needed repairing—not the original Klaxon, sad to say, but a nasty cheap thing—then the lights were fixed, the car filled up with tools, rusty relics of exhaust system etc, and locked up for the night, ready for a morning departure on Monday 21 November.

Excitement was mounting in Bala that day! Somehow the news had circulated that the old Rolls was due to leave in the morning, so the local Press photographer was there, plus all the garage staff, who had been so helpful and encouraging during the days of toil, and forty or fifty townspeople, several of the younger ones having ridden to school in the old car. The old man who used to drive her still works part time at the garage, aged eighty-nine, so I decided to take him for a short run before setting out on the homeward journey. With eager anticipation the throng outside awaited the emergence of the Rolls, and sure enough she glided out, as silently as a Rolls-Royce should, with six strong men pushing behind, the battery having become discharged during the previous day's operations. The surprise of the onlookers at the shattering roar when the engine started may well be imagined and away we went down the Dolgellau Road with the old man thoroughly enjoying himself. 'She runs well', he shouted above the din, being very deaf. The lightness of the steering was surprising at speeds above thirty m. p. h. and the brakes worked reasonably well, but more about these later. The less

said about gear changing the better, as I had not previously driven a Phantom I. At length, we turned round and returned to the garage for last farewells, eventually departing in a cloud of smoke, the local policeman listening somewhat dubiously.

The scenery is magnificent on the high road from Bala to Llangynog, the Milltir Cerrig pass over the Berwyn Mountain. As we climbed the long hill the landscape opened out to give glorious vistas of the mountains. The colours of faded bracken and heather on this late November morning were memorable, and, far behind, Lake Bala lay, a glimpse among the hills.

Just why the old car chose the top of the pass to stop, I do not know. Perhaps she wished to bid a last farewell to her old home, but just as she reached the summit, before the view of the lake faded, she hesitated and came to a firm stop, at the six-miles-from-anywhere point.

Before getting to work, I took a few minutes' rest to enjoy the view myself. The great sweep of the valley south-eastwards towards Llangynog was magnificent, with here and there a lonely farm, but rain clouds were gathering on the hills, and I started work. The fuel stoppage was quickly cleared, being merely a kink in the temporary plastic piping I had rigged up from the tank, but the brakes were quite firmly on, and the servo adjustment was plainly causing this.

So far so good, but it took an hour and a half to loosen the adjusting nut, and much bad language was expended on the clear mountain air, especially as it rained steadily all the time. When the nut condescended to loosen, the rain stopped, and the long descent to Llangynog was commenced. Sufficient braking (just) was available to control things and a much needed pint was partaken of at the New Inn, Llangynog: in fact it was at once followed by a second, before departing on the next stage.

Almost immediately on starting, it was apparent that the long descent had not done the sparking plugs any good whatsoever, and after five or six miles running on various numbers of cylinders, gradually decreasing to an estimated two and a half, I found a small garage, and removed all twelve for cleaning. Much interest was displayed in the engine by the owner/mechanic, who would not accept any payment, so after topping up the petrol tank, once more adjusting the carburettor and washing my hands, off we went.

Things went splendidly at last, but dusk began to fall, so I put up for the night at Bishop's Castle Hotel having a conveniently sloping car park for starting in the morning. This is a quiet town, by-passed by the rush of traffic along the main road two miles to the East, but mine host at the Castle did us proud for dinner, and the Three Tuns across the way even brews its own beer. Well worth a visit!

Departure was set for 9 a. m. the following morning, a further 140 miles remaining to be covered, so shortly after 9 a. m. Bishop's Castle was awakened from its siesta by our stately progress down the High Street. On gaining the main road to Ludlow an ominous bump-bump, varying with speed, indicated that one of the tyres objected to having stood for so long in a flat state, but it grew no worse during the day's motoring, thank goodness.

A fairly quite route was chosen for obvious reasons. Through Ludlow, Leominster, Ledbury, Stow-on-the-Wold and Abingdon, a sharp lookout was kept for policemen and I waved to what few there were as we coasted past, to resume half throttle travel at a safe distance down the

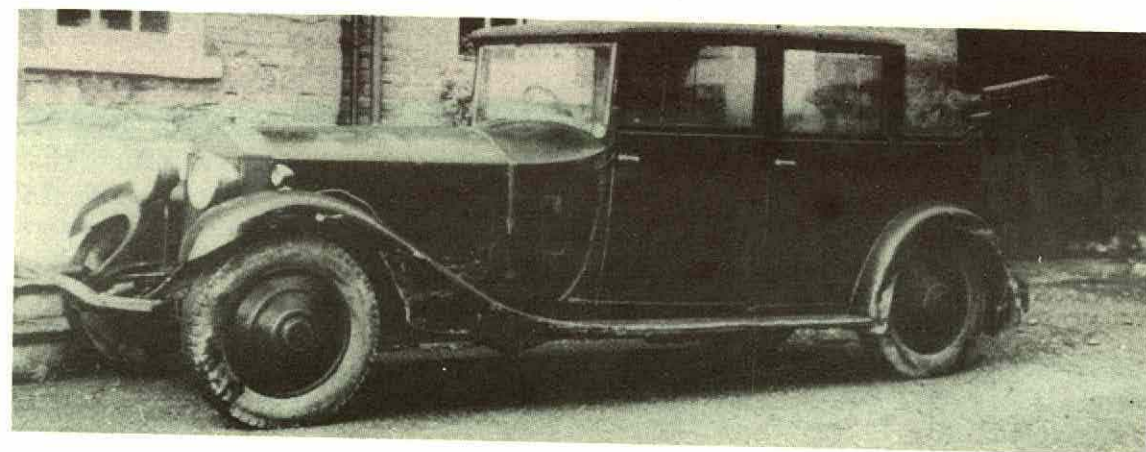
road. Occasionally, spittings from the engine indicated partial blockages of the main jet, but these cleared themselves. In fact, things were going so well that I expected to get home by 3 p. m. Then it started to rain steadily. The temporary windscreen wiper did its best, but mud and dirt thrown up by tank transporters, etc. overtaking made frequent stops for cleaning necessary. Small modern cars shot past, drivers crouched furtively over the wheel, eyes three feet above road level. Sitting as I was about seven feet up I appreciated being able to see over hedges and walls, and other cars too. This certainly makes for safer motoring.

There is a long hill south of Oxford on the Henley road complete with a double white line, and too narrow for overtaking anyway. Elsewhere, this road is quite wide. Evidently the devil lurking in the fuel system decided to have another go before allowing us to get home, and he chose this hill, halfway up, making sure that there was plenty of traffic behind us and coming the opposite way too. It rained! Desperate attempts to keep her moving failed, so there we were, and the things that must have been said in the queue behind were nobody's business. Frantically, the Autovac inlet union was disconnected, and sufficient fuel syringed in to enable me to investigate the trouble at a lay-by further on. Then after engaging bottom gear, releasing the handbrake, getting under the car in order to hammer off the hand-brake actuating levers as they were binding on, removing the floorboards in front, applying the footbrake, and thumping the starter motor on the rear end in order to free sticking brush gear, we moved off to carry out maintenance a little further on.

The Autovac had lost its suction, owing to a sticking valve, and had to be taken to pieces. Remarkably little sediment was present in the system, considering the long years of standing. The rain gave up south of Henley, having succeeded in soaking both the car and myself, and we arrived home at 5 p. m. one hour later than originally intended, the old car announcing her arrival with a deafening explosion as the ignition was switched off, which destroyed the last remnants of the temporary silencer I had rigged up in Bala.

She is lying now in a dry airy place, awaiting restoration. In two years or so, I hope to have her looking as she was in days gone by, when she must have been a former owner's pride, but much work will have to be done before she is ready for her first outing with the Club. Perhaps a West Country luncheon, or an Autumn meeting: I cannot say, but, at least, another fine old car has been saved from an untimely end.

V H Twomey



Running costs of a 20/25

by T D Hadrill

STATISTICS are tricky things to handle, and although we may feel sure in our own minds, and probably most of us will say, that an Rolls-Royce gives no more costly motoring than any other car of comparable size, or even a good deal smaller, it is quite another thing to prove it. Here, however, are the figures of our car, BAR888, covering 6½ years and 48,000 miles.

It is when one tries to get comparative figures that one runs into difficulty, but the Summer 1967 number of the A.A. magazine, *Drive*, quotes some figures of 8 cars of varying size costing between £1,500 and £1,750 (i.e. something approaching twice what one would expect to pay for a 20/25 or a 25/30) which are not without interest.

Their figures, based on a mileage of 10,000 a year over the first two years of the life of the car range from £8.4s. a week for a secondhand Bentley (1957) to £11.11s. a week for a Vauxhall Viscount. These figures include depreciation, but so does the £5.3s. for BAR888, depreciation being nil or (more probably) negative.

Postscript—Since writing this I have sold the car (thereby most regrettably evicting myself from full membership of the 20-Ghost Club) for £250 more than I paid for it, which reduces the running cost per mile by 1¼d to 7¼d.

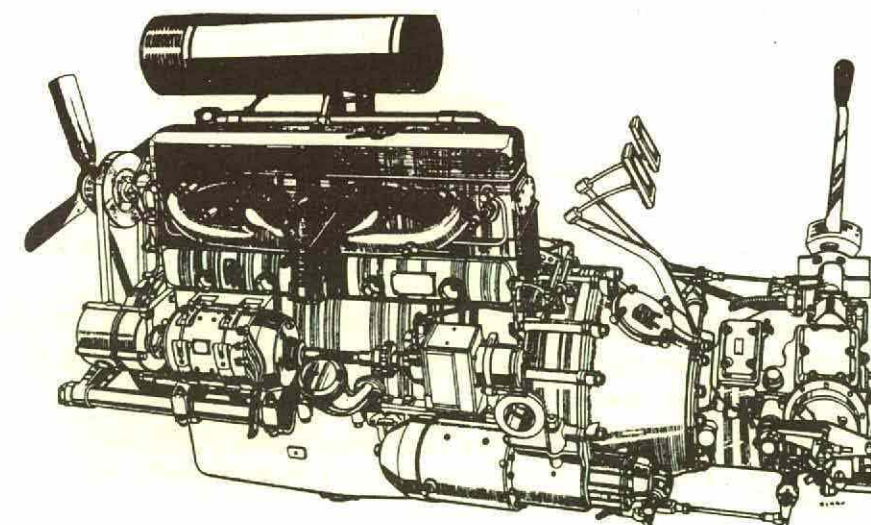
Total expenditure

	£	s	d
Engine*	188.12.	5	
Chassis†	204.19.	6	
Electrical	35.13.	0	
Tyres and tubes	176.	7.	9
Servicing	125.10.	0	
Tax and insurance	260.	0.	0
Petrol and Oil	750.	0.	0
Total	1,741.	2.	8

which is almost exactly £5.3s. per week or 8½d. a mile.

*Includes decarbonising, grinding in valves and general refurbishing after 40,000 miles.

†Major items, new radiator, new silencer, brakes relined, new bottom to petrol tank.



The story of 3AZ146

by W J Oldham

TO DESCRIBE the manner in which I first discovered my Phantom III, I must go back to the year 1957. I was engaged at the time in writing a book, which incorporated the history of the White Star Line (Oceanic Steam Navigation Company) and also the lives of the founder of the Line, Thomas H. Ismay, and his son, J. Bruce Ismay.

My interest in this subject had been roused by a film which had been released and by extracts in serial form of a book which was about to be published. Several other books published previously, dealing with the terrible disaster of the sinking of the *Titanic* in 1912, had used the ship as a central theme. She was the largest ship in the world and was the finest example of British design and craftsmanship the world had ever seen.

It was in the days when Britain was still one of the greatest and most powerful nations of the world and was the foremost maritime power. The sensibilities of the general public had not been dulled by two world wars, thousands of road deaths every year, and the daily bulletins of disaster and violence to which we are becoming so used today. So it was with a sense of complete horror and unbelief that the news was received that this magnificent new ship had struck an iceberg and sunk (with the loss of over 1,500 lives) on her maiden voyage.

J. Bruce Ismay was the chairman and managing director of the White Star Line. As was his usual custom, he had travelled in the new ship for her first Atlantic crossing. He was saved by getting into the last life-boat to leave the starboard side of the vessel, in which there was ample room, and when the boat was actually being lowered away, as there was nobody else available to fill the places. For this action, he was cruelly criticised, both by the press and public. He was completely cleared of all allegations made against him at two enquiries, one in America and one in London; but his life was ruined, and although he lived another twenty-five years he was never the same man again.

The films and books which I had seen and read on the subject all portrayed J. Bruce Ismay in this unfavourable light. I could not believe a leading British shipowner would behave in the way he was reported to have behaved. I became more and more incensed, until finally a friend of mine, knowing my interest in the Mercantile Marine (I had been a cadet in *H.M.S. Conway* for two years) said one day: 'Well, if you feel so strongly, why don't you write a book about it!'

So began my long quest to find the truth and clear the name of J. Bruce Ismay. First of all I managed to discover that J.B.I.'s widow was alive and living in London, I went to see her and was greeted by both her and her elder daughter, Mrs. Ronald Cheape, with kindness and courtesy. They put all Bruce Ismay's personal papers and letters at my disposal and eventually, after five years' research, my book, *The Ismay Line*, was published in 1961.

Mrs. Ronald Cheape suggested that it might be of interest to me to visit her aunt, Mrs. Bower Ismay, of Haselbech Hall, Northampton, who was not only her mother's sister-in-law but also her sister as two Ismay brothers had married two Schieffelin sisters, and she, of course, had known J. Bruce Ismay extremely well. I was invited to go and stay a night at her country home.

I motored up from Kent, where I was living at the time, in my Phantom II Continental 101SK, and when I went to put it away in the garage block I saw, already in residence, two magnificent R-R's.

They were standing side by side. There was a Phantom III Hooper Pullman limousine, which bore a Bournemouth number, CLJ600, and looked just like a brand-new vehicle, but I did not, at that time, pay a great deal of attention to it. It was the other car that so greatly fascinated me, as I could see it was an R-R but at first I could not tell which model; it was by far the largest Rolls-Royce I had ever seen, and completely dwarfed the Phantom III. On examining it more closely, it turned out to be an early Phantom II.

The chauffeur told me that it had originally carried a limousine body by Arthur Mulliner of Northampton, and had been specially built for Sir Julian Cahn. Mrs. Bower Ismay had bought the car in 1932 from Arthur Mulliner in Northampton, and had her old Daimler 35/120 converted into a shooting brake at this time, to replace the former car used for this purpose.

In April 1939, a very old friend of hers happened to see the Phantom III, 3AZ146, in the window of Jack Barclay's in George Street, Hanover Square, and told Mrs. Ismay about the car she had seen.

She bought the Phantom III, after a trial run in it (during which she had her chauffeur follow them in the Phantom II in case she did not like it!) The Phantom II, 74GN, was sent to Grose of Northampton to have the original body removed and the present shooting brake body built on. The car was delivered back to Haselbech after the outbreak of war, and, owing to the petrol shortage, apart from being used once or twice about the estate and to take the staff on outings, it was never used again until I bought it in February 1964.

The Phantom III was also laid up in 1939 and great care was taken of it during its long period of rest. It was not put on the road again until 1953, when the Road Fund Tax of £12. 10. 0. came into being, and then it was put into running order by R-R mechanics.

From 1953 until her death in February 1963, Mrs. Ismay used the car to travel between Haselbech and London, and when she died the total mileage was just over 69,000. On her death, she left all her cars to Kenneth Hunnisett, who had been her chauffeur for over thirty years.

When my wife and I visited Haselbech in the early part of 1964, I was anxious to see the cars again, and it was then that my wife saw them both for the first time. She immediately

suggested that we bought 74GN and had the interior altered so as to make it into a first-class motor caravan.

Never in my wildest imagination had I ever thought of such a thing I knew full well that with Kenneth Hunnisett maintaining the car the chassis would be absolutely first-class, and I had visions of some enthusiast buying it for the chassis and putting on another body; no one could call the existing shooting brake body elegant by any means, but all the fittings were of the finest quality, and immediately my wife suggested a motor-caravan I could see the tremendous possibilities, having the best of two worlds, plenty of spaciousness, coupled with a Phantom II chassis which was virtually in brand-new condition. The overall length of the vehicle is 21 ft. 5 in and it stands some 9 ft high. I have never been able to gather why it was built so high, but for a person of medium height there is full head-room.

The engine had not been started for over fifteen years, but the chassis had been maintained all the time, strictly in accordance with the instructions laid down by the Rolls-Royce Company for cars which were in storage.

When Kenneth Hunnisett had the car running, we motored up to Haselbech in our Morris Minor 1000 to try it out. Of course, it ran superbly, with the beautiful sounding lower gears I remembered so well from my grandmother's Phantom II, 167GN.

Having purchased the car, we set off to Newbury to spend the night with Joan and Francis Hutton-Stott, the well known Lanchester collector. The following day, we did the long journey down to Cornwall. This was accomplished with no trouble at all, except for periodic boiling, which showed the radiator was partially choked; this was quite easily cleared on getting home by simply back-flushing it. The car then went down to Penzance to a coach-builder for the interior to be properly converted and up to the standard of the chassis. It can now sleep four and is fitted with a sink, Calor gas cooker, and lighting, has a wardrobe and cloakroom, with compartment for an Elsan, all carried out in mahogany marine ply.

We toured Scotland in it in the summer of 1964 and the car went most beautifully. When travelling, the most comfortable speed is about 55-60 mph on the open road, the only drawback being its great height which makes the steering tricky in a cross wind. The fuel consumption works out at about 12 mpg; the total mileage from new is just over 136,000.

In the meantime, still up at Haselbech, was the Phantom III. It was in quite outstanding order, but I had heard so many stories of the troubles that a Phantom III can give, and I knew so little about them, that I was nervous of it. However, after several long talks with Jack Compton, who has done all my work for me on both the Phantom II Continental and my 20/25 GGP28, I decided to take Jack's advice and try the Phantom III on the road. So once again, in December 1964, I left the Lizard Peninsula in Cornwall for the long run to Haselbech, 383 miles. Francis Hutton-Stott again kindly offered to put me up for the night and then accompany me to Haselbech. This time I had my Riley 1.5. The arrangement was that, assuming the Phantom III ran all right and did not boil, I should take it straight to Jack Compton, to his place near Godstone in Surrey, to have the engine modified from hydraulic to solid tappets.

I tried the Phantom III out and bought it, and we set off for the South, Francis driving the Riley. We had to go right across London with all the Christmas traffic, and so down to Woldingham. As soon as we arrived, Jack was so taken with the condition of the Phantom III, that he wanted to buy it from me there and then. However, I was, and still am, delighted with it; so he modified the engine for me, and I finally came up and collected the car and took it to Guildford for the night, to stay with John and Marion Hampton. As soon as John Hampton saw it, he said we must put it on the public weighbridge in Guildford; we were both very surprised to discover that unladen, with a tank full of petrol, the car weighs 2 tons 16 cwt. 10 lbs—a tremendous weight for a private car.

Once I had the car, I wanted to know its full life story, and this proved fairly easy to trace. It was specially built for a Miss Harriet Maconochie who lived in Bournemouth. She was a relation of the well-known food makers and was an invalid.

The car was ordered through the local R-R retailers Edwards & Co. Ltd. of Old Christchurch Road, Bournemouth, and the order was given by them to Hooper & Company for a Pullman enclosed drive limousine, which should be as spacious in the rear compartment as possible; hence the floor space in the rear compartment measures nearly 4 ft each way, and the occasional seats, which are of the disappearing type, face sideways, so as to allow more than ample room for people sitting on that seat. There was no question of the car ever being driven by anyone except a chauffeur, so a sliding division was fitted instead of a dropping one; this is the one thing that spoils the car to my mind, but it would be a major reconstruction in the partition to alter it, and this would spoil the originality of the design.

As this body work was built for an invalid, the rear compartment is in many ways its most important feature. The wood work is veneer walnut, incorporated in the back of the division is the heater, which is in a walnut case, and this is surmounted with an 8-day clock and speedometer reading to 110 mph. There are three cupboards in the back of the division, each with a self-closing device and ivory handle. There are two centre interior lights, a microphone to speak to the chauffeur, companion sets, with cigar lighters and vanity mirrors, ash trays and rope pulls, silk blinds all round and the rear windows open after the style of a casement window, which is a Hooper patent; the back seat on the off side adjusts for the angle of the squab. There is a concealed luggage carrier in the rear of the body, to which a Brooks' trunk, with three fitted suitcases, can be attached for touring; the running boards have a double step which folds down to make easy access to the rear compartment.

The original designs of the car are now in the archives of the Science Museum in London; the coachwork, although typical Hooper, is the only one of its kind, and is an example of coachbuilding in its very highest form. The order was given to Hooper and Co. for this car in April 1936, and construction of the coachwork commenced almost immediately. The chassis was delivered to the coachbuilders at their factory in Kings Road, Chelsea, in July, and the complete vehicle was licenced for the first time on 23 October 1936.

The original colour scheme was rather odd, black wings and black disc wheels and top, with the whole of the bonnet, including the sides, finished in black, and the lower panels of the body in light grey, which gave a peculiar broken-up appearance.

The car had only done 6,000 miles when Miss Maconochie died, and the car was bought by Jack Barclay. He immediately re-cellulosed the sides of the bonnet and the lower panels dark blue in the colour known as Hooper No 2, since as a big limousine the car was virtually unsaleable in its existing colour. It was here in Jack Barclay's showroom that it was seen by Mrs. Bower Ismay's friend and bought by Mrs. Ismay. She had a luggage rail built on to the roof and special ash-trays of her own design fitted in the rear compartment.

I am simply delighted with this car. It always seems absolutely huge on the road, far larger than either of my Phantom II's, although 74GN is 4 ft 2 in longer overall and looks far larger when the two are standing together.

Last year, after fitting a windscreen washer, wing mirrors and extra reversing light, I used the car extensively and took it to London where Mr. Francis, the well-known heraldic artist, removed Mrs. Ismay's initials, M.C.I. (Matilda Constance Ismay) from the rear door panels and put my family's crest on in their place. Then I took the car to Perth, later I took it back to Hooper and Co. and got them to mount a second spare wheel on the near-side, so that there are now two; as the car liver permanently abroad, there is always the tyre difficulty, especially when touring on the Continent.

In September last year, having been down to Brighton, I visited Derby works and went on to Perth for a few days, and then travelled South via Liverpool to Bournemouth to bring the car over to Jersey on the air-ferry. On arrival here it had to be re-registered, and the States very kindly gave me an old Jersey number, J376.

Not long after I brought the car over here, I found a really good coachbuilder, who re-sprayed the lower panels in grey cellulose, and put a white line round the body and on the discs, so now the car is exactly the same colour as the Phantom II Continental and the 20/25.

This was done last year and the appearance of the car is transformed. It no longer looks like a funeral and wedding car, but a most impressive motor carriage belonging to a bygone age.

There are plenty of roads in Jersey for motoring, but the speed limit is 40 mph all over the Island and, naturally, this cramps the car; but on the mainland I cruise effortlessly, in dead silence, at 60-65 mph, get a petrol consumption of 14 mpg and use slightly less than one quart of Castrol XL for every two hundred miles. As far as I know, apart from modifying the camshaft and tappets, the engine has never been down and as it goes remarkably well I shall leave it well alone; the total mileage is now 76,845.

As many people already know, during the last two years, I have been engaged in writing the biography of Claude Goodman Johnson, partner of both the Hon. C. S. Rolls and Sir Frederick Henry Royce, and it was with the Phantom III that I did most of the research for this book, *The Hyphen in Rolls-Royce*.

While doing the research, I discovered a curious coincidence. The index number of the Phantom II is UT7161; this was Claude Johnson's private telephone number at his London flat in Adelphi Terrace House!

OFFICERS AND COMMITTEE

Master
S E Sears

President
W F Watson

Vice-President
A J Belsey

Chairman
J C Dymock-Maunsell

Hon Secretary & Treasurer
W F Watson
*Aldwick Hundred,
Bognor Regis, Sussex*

Executive Committee
J C Dymock-Maunsell
Chairman

A J Belsey
W A L Cook
I S Hallows
S J Lovegrove
W F Watson

Events Committee
J C Dymock-Maunsell
Chairman

J G Hampton
F Hellings
R B Honnywill
S J Lovegrove
C Meachen

General Purposes Committee
W A L Cook
Chairman

Capt & Mrs Castle
Mrs F Hellings

Hon Technical Liaison Officer
J G Hampton

Hon Historian & Librarian
R O Barnard

Hon Editor & Press Liaison Officer
I S Hallows

Hon Solicitor
F Hellings

BOOK REVIEW

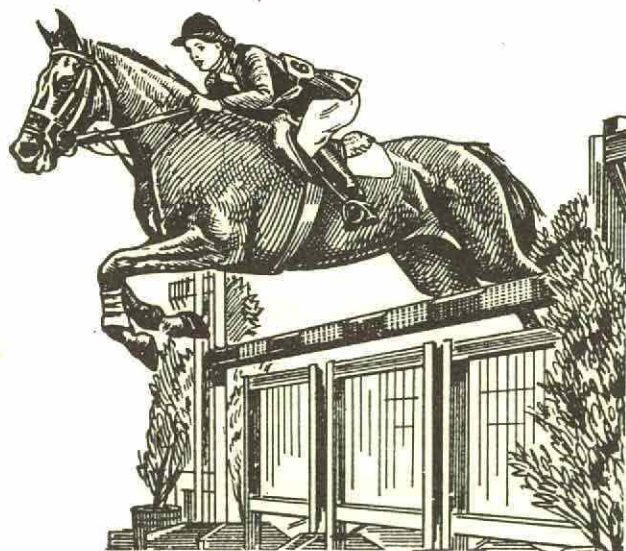
THE HYPHEN IN ROLLS-ROYCE

DURING the last 15 years of the 19th century the petrol-engined motor car made slow progress; in contrast, from 1900 to 1914 progress was astonishingly rapid. How interesting, supposing one's date of birth to have been about 1870, to have been in a position to play an active part in this rapid development, to experience at first hand the revolution that separates the belt-driven voiturettes of 1900 from the refined six-cylinder touring cars of 1914. Claude Johnson (1864-1925) was able to enjoy this experience. In 1896 he helped to arrange the pioneer exhibition at the Imperial Institute, a year later he became secretary of the Automobile Club of Great Britain (now the R.A.C.), in 1900 he organised and competed in the 1000 miles' trial, and when in 1903 he accepted a partnership in C.S. Rolls and Company he was well known and respected throughout the world of motoring. C J was a man of tact and sensitivity, who combined the love of music and painting with formidable energy directed toward the business; through all the fascinating formative years of Rolls-Royce his decisive presence can be sensed behind the scenes. His nature, at once shy and generous, kept him away from the limelight, but there can be no doubt that in the development of the company he was a figure of paramount importance.

Claude Johnson's life has not, up to now, been the subject of a biography, and it is a pleasure to welcome this new book by a member of the 20-Ghost Club, W.J. Oldham. It makes absorbing reading and is illustrated with a selection of photographs including several of great historical interest. The book is concerned with the human aspect of C J's life as well as the technical interest of his life's work and the author has garnered details of family life from C J's two daughters, who each contribute a short appreciation. The circle of friends around Royce is seen from the inside and it is interesting how often the reader seems to gain a new insight; how many of us knew that R owned a small Bugatti during the '14 war and said he 'liked an engine with plenty of fizz'? The influence of Lord Northcliffe was clearly of much greater importance than is generally realised and his correspondence with C J makes most interesting reading.

It is a merit of this book that it contains things to be found nowhere else and errata are rare; our President's 2260E was Radley's mount in 1913 not 1914 and perhaps the account of the accident to Charles Rolls' gearbox in the 1905 T.T. is a little misleading—the gears themselves were not at fault.—R O B.

■ *The Hyphen in Rolls-Royce: A Biography of Claude Johnson, by W.J. Oldham. 194 pp. Foulis, 45s.*



THE CAMBERLEY HORSE SHOW Saturday, September 16th

Dull with showers had been forecast, but fortunately the showers did not materialize. The authorities had allocated car parking space for us on Old College square close to the two show rings. Twenty-five motor cars arrived including five new and prospective members amongst them Lake's immaculate Phantom I Sedan, Valentine's Phantom I Weyman saloon that had been in the family over thirty years and Rossi's Freestone and Webb Silver Cloud I. Apart from the Silver Cloud I amongst post-war models there were two Silver Wraiths and two coachbuilt Silver Dawns. An 'unknown' Silver Wraith also found its way into our park.

The open motor cars had been parked separately and these included such old favourites as the Silver Ghosts of Colonel Gresham, Fred Watson and John Hampton, Clifford Meachen's 20, and John Lovegrove's 25/30 sporting polo pony mascot; was this the first time we have seen this motor car fully open? Two more open motor cars had been entered, but possibly the doubtful weather had decided their owners to bring saloons instead.

After expressing the club's gratitude our President presented Major Arthur Bell with one of the club's silver dishes as a token of appreciation for organizing the last three years' driving tests and our participation at two horse shows. Arthur Bell is due to join the Gurkhas in Malaya in March.

Apart from the club's motor cars there was plenty to do and see—numerous sideshows for young and not-so-young, whippet races, the coaching marathon with five four-in-hand stage coaches and the premier show jumpers of the county. It was unfortunate that the low cloud prevented the free-fall parachute jumping and glider demonstrations.

The Bentley Drivers Club had on display thirty representative and excellently turned out motor cars ranging from early 3-litres to a Park Ward Mulliner 2 door T series and they did a tour of the ring which was much appreciated by the spectators. Bill Cook won the concours d'elegance with his two-seater 8-litre Bentley. It will be our turn next year.

J C D-M

The Development of the Silver Ghost — Concluded from p 60

tyre, but 875 mm x 105 mm had previously been used for the front and 880 mm x 120 mm for the rear tyres.

Wire wheels and Sankey pressed steel wheels were also supplied and many Silver Ghosts up to 1913 were fitted with Rudge-Whitworth wire wheels with ½ in splines or the later fine-splined R-W 100.

The Dunlop patent wire wheel with automatic locking device was announced in *The Autocar* on 8 July 1911 and was soon supplied on some Silver Ghosts. The earliest wheels were fitted with small hub nuts (Pill size). With series B (1914), Dunlop wire wheels were fitted as standard, with the large hub nuts.

Wooden wheels, although not recommended for dry climates, were still available but were changed to 12 spokes, front and rear, from series 2500 (1913) onwards.