


Charles Rolls.


Henry Royce

Charles Stuart Rolls and Frederick Henry Royce came from very different backgrounds, they had very different educations and, until shortly before they met, their careers were going in very different directions. Yet in 1904, they joined forces to build and sell motor cars. And, just two years later, the partnership had produced the Rolls-Royce Silver Ghost: a car acclaimed as the best in the world. This is the story of those two remarkable men, of the cars they and their successors built and of the range of Rolls-Royce motor cars today.


1n the late 1800 's Henry Royce and Charles Rolls were going through experiences which, with hindsight, made their meeting and the cars they produced almost inevitable. Royce was the son of an impoverished miller from Alwalton near Peterborough and he had, by any standards, a difficult start in life. He began work at the age of ten, selling newspapers for W. H. Smith at Bishopsgate and Clapham Junction. But he soon left that to find his first real job working as an apprentice at the Great Northern Railway works in Peterborough. It was while he was there that he learnt most of the basics of engineering, and it is also obvious that even at that age Royce was determined to do well because he set about teaching himself foreign languages, algebra and the fundamentals of electricity. Three years later, in 1880 , he moved to a firm of machine tool makers in Leeds where he worked a 54 hour week for just I I shillings (55p). His next move was to London, where his self taught knowledge of electricity enabled him to get a job with one of the pioneer electric light companies. From
there, at the age of I 9 , he went to Liverpool as technical advisor to the Lancashire Maxim and Western Electric Company. And then, just three years later, he and a partner, A. E. Claremont, set up in business in Cooke Street, Manchester, making electric light fittings, dynamos and cranes. Such was Royce's determination that by the turn of the century the order books were full and the business was going from strength to strength.

All this,of course, was quite an achievement for someone who had started, almost literally, with nothing. But the real turning point in Royce's career was yet to come. That happened in 1903 when Royce bought himself a second hand French Decauville car for the journey between his home and the factory. The car, he found, was difficult to start, it overheated with depressing regularity, it vibrated; it was unreliable and the ignition system was hopelessly inefficient. (This may be the point which annoyed Royce the most. He was, after all, quite an expert in electricity in his own right). Royce eventually became so disillusioned with the car that he decided, in characteristic style, that he could do better himself. And, just a few days later, he announced to his colleagues that he was going to build three 2 -cylinder motor cars of his own design. The first of these, designed and built almost completely by Royce himself, rolled out of the factory gates in the spring of 1904. That first car was a success in almost every way: it started easily, ran smoothly and quietly and was very reliable, something which never failed to impress everyone who saw or rode in the car.

At about the same time, Charles Rolls was also in business for himself (like Royce, very successfully). But achieving this had been rather less of a struggle for Rolls than it was for his future partner. Rolls was born into the aristocracy, being the third son of Lord and Lady
Llangattock. The landed gentry, of course, were never expected to work in those days and Rolls, like most young men in similar families, was groomed for a life of ease and luxury. He was educated at Eton and Cambridge University where his natural flair for engineering work enabled him to gain a degree in Mechanical Engineering and Applied Sciences. It was while he was still at Cambridge that he began to take an interest in the fledgling motor industry. He went to France with his father and on his return bought himself a $3 \frac{3}{4} \mathrm{hp}$ Peugeot, a car which soon made a name for itself with Rolls at the wheel. It was the first car ever seen at Cambridge and when he drove it to the family home at Monmouth, the journey took him two days including many hours spent working on the car at the roadside to keep it going. By the time Rolls left Cambridge University, he was probably the most skilful driver in the country. And he proved his skill by winning the first rooo mile ( 1600 km ) reliability trial promoted by Sir John Harmsworth so convincingly that a special gold medal was struck in his honour. Later, in 1903, Rolls set a new world land speed record of $150 \mathrm{~km} / \mathrm{h}$ (93mph) driving an 80 hp Mors at Phoenix Park in Dublin.

In the next year, 1904, Rolls went into business for himself selling motor cars and
the firm, known as C. S. Rolls and Co., quickly became a leading motor car distributor. (A few months after its formation Rolls persuaded Claude Johnson to join the firm as a partner. Johnson had built up a reputation as a brilliant organiser of motoring events and

was the first secretary of what is now the RAC. Often known as the 'hyphen' in Rolls-Royce, he was responsible for much of the growth of the Rolls-Royce company, especially after Rolls' death in i910 and Royce's breakdown shortly afterwards).

Rolls, however, still had two major ambitions. First, he wanted his name to be associated with cars in the same way as Chubb's was with safes and Steinway's was with pianos. And, secondly, he wanted to find a British car as good as or preferably better than the foreign cars he was then selling. But he very nearly missed his chance to achieve both these aims at once, because when Henry Edmunds, a director of Royce Limited, told Rolls about Henry Royce's new 2-cylinder car, Rolls assumed that it would be as noisy and

C. S. Rolls in a zohp Rolls. Royce at the start of the 1906 Isle of Man Tourist Trophy.
inefficient as all the other 2-cylinder cars on the road. He was, of course, wrong and Henry Edmunds persuaded Rolls to make the trip up to Manchester to see the car. Rolls, Edmunds and Royce met at the Grand Central (now the Midland) Hotel in Manchester and the meeting was an immediate success. Rolls tried the car and became a wholehearted enthusiast and he said afterwards that Royce 'was the man I have been looking for for years'. An agreement was quickly reached giving Rolls exclusive sales rights for all the cars Royce could produce and the two men then really got down to work. A iohp car, a rohp chassis and engine, a I 5 hp chassis, a 20 hp car and a $30 h \mathrm{p} 6$-cylinder engine
were all exhibited at the Paris Salon in early December 1904. And then, on December 23rd, a contract between the two companies was signed, including a clause stipulating that all the cars should be called 'Rolls-Royce'. The company which would soon be building the best cars in the world was in business.

Unfortunately, Rolls was only to enjoy the success of the company which bore his name for a few more years because on Jelly II, ig Io he tragically met his death in a flying accident at Bournemouth. In contrast, Royce was to spend many more years at the head of the company stamping his unique personality on Rolls-Royce motor cars right up to his death on 22 April 1933.



Since the day in 1904 when Henry Royce's first car left the factory, a total of 34 different models have been built by the company.

Included amongst these are the various Bentleys produced since the acquisition of Bentley Motors by Rolls-Royce in I93I From I906 to 1939, the company produced chassis only and it was left to specialist coachbuilders to construct coachwork to the individual requirements of customers. After the Second World War, it was decided to produce a complete car with Rolls-Royce becoming responsible for the coachwork of the newly introduced standard steel saloons. To do this required more extensive factory space for paint shop and assembly areas and so the motor car production line was re-established at Crewe in a factory which had built aero engines throughout the war. The Mulliner Park Ward Division of Rolls-Royce Motors is today the only organisation maintaining the traditional crafts and skills of English coachbuilding.

In this publication, the emphasis is on the Rolls-Royce models which can be
regarded as milestones in the development of the best car in the world.

## The 40/50hp (The Silver Ghost). 1906-1925.

The 40/50hp, which Royce himself considered to be the best car he had ever made, was the first Rolls-Royce to be known as the 'best car in the world'.

An extract of the first reference to the 40/50hp in The Autocar dated 20 April 1907, reads "the motor beneath the bonnet might be a silent sewing machine . . . there is no realisation of driving propulsion; the feeling as the passenger sits either at the front or back of the vehicle is one of being wafted through the landscape".

But silence, reliability and quality were not the only things that impressed the press and public alike in that year.

Soon after covering $3,218 \mathrm{~km}(2,000$ miles) in the Scottish Reliability Trial, the same car covered 23,120km (14,371 miles) without a single involuntary stop, beating the existing long distance record of I $1,400 \mathrm{~km}$ ( 7,089 miles).

1913 saw further success for the Silver Ghost when four cars were entered in the Austrian Alpine Trials and took virtually every prize awarded.

During the First World War, Rolls-Royce 40/50hp motor cars were commissioned as ambulances, staff cars and armoured cars. Later, armoured cars earned fame under the legendary Lawrence of Arabia. Even with heavily armoured bodies weighing up to 4 tons they still managed $80 \mathrm{~km} / \mathrm{h}$ ( 50 mph ).

The car actually received its name from a $40 / 50$ hp which Claude Johnson had built


The $40 / 5 \mathrm{hpp}$ (The Silver Ghost).


The zohp.
for himself. He took the thirteenth chassis built and fitted it with a $4 / 5$ seat touring body which was finished in aluminium paint and adorned with silver plated lamps and fittings. A handsome silver plated brass plaque mounted on the car bore the name "The Silver Ghost" and this car is still owned by Rolls-Royce Motors and is in perfect running order after over $800,000 \mathrm{~km}$ ( 500,000 miles).

The Silver Ghost stayed in production for nineteen years and 7,870 were built. 1,700 of these were produced in Springfield, America, where a factory had been
established in 1921. Production in the USA ceased in I93I because American customers preferred to buy Rolls-Royce motor cars built in Britain.

## The 20hp. 1922-1929.

The 2ohp, or the 'baby Rolls-Royce' as it became known, sacrificed none of the Rolls-Royce standards of silence, comfort and ease of control but its excellent performance for its size, with a top speed of lookm/h ( 62 mph ) made it very popular with the owner driver. In the seven years of its production, 2,940 were built.


The New Phantom (Phantom I)


The Phantom II.

## The New Phantom (Phantom I). 1925-1929 at Derby. 1926-1931 at Springfield,USA.

The New Phantom was a development of the Silver Ghost fitted with an overhead valve engine giving it superior performance and this model was the first Rolls-Royce to be fitted with servo-assisted brakes. Of the 3,450 Phantom I cars built, 1,240 were produced in America where they were usually fitted with coachwork by Brewster and Co. In England most of the bodies were by Hooper, Barker and Windover.

## The Phantom II. 1929-1935.

The Phantom II was evolved from the Phantom I with an engine of the same capacity but with an improved suspension system. This model was often fitted with very rakish coachwork, a fact which makes it a much sought after motor car today. A Phantom II Continental model was also produced which had a shorter chassis and a different axle ratio. In all, 1,767 Phantom II's were produced before production ceased in 1935.


The 20/25 hp.


The Phantom III.

## The 20/25hp. 1929-1936.

The 20/25hp was a natural progression from the zohp but it had an increased cylinder bore which made it considerably faster, with a top speed of around $124 \mathrm{~km} / \mathrm{h}$ ( 77 mph ). The $20 / 25 \mathrm{hp}$ was also capable of carrying much heavier coachwork. A total of 3,827 were built.

## The Phantom III. 1936-1939.

The Phantom III had a 7340 cc VI2 engine and was capable of more than I $60 \mathrm{~km} / \mathrm{h}$ ( r 00 mph ). The car was the first

Rolls-Royce to be fitted with independent front suspension and this, combined with many other new features, made the Phantom III one of the most advanced cars in the world at the time. 710 were built.

## The Wraith. 1938-1939.

The Wraith was an entirely new model introduced to bring the 2ohp range in line with its bigger brothers by fitting independent suspension. It had a modified 4257 cc engine, an improved carburation system and an improved engine mounting which


The Wraith.


The Silver Dawn.
resulted in probably the quietest of all Rolls-Royce motor cars built between the wars. All told, 49 I Wraiths were produced.

## The Silver Dawn. 1949-1955.

The Silver Dawn was the first Rolls-Royce with coachwork built by the company, the first Rolls-Royce produced wholly at the Crewe factory and also the first produced mainly for export. The car was initially fitted with a 4257 cc engine but later the engine capacity was increased and the car was made available on the home
market. A few of the 760 produced were fitted with bodies built by specialist coachbuilders

## The Silver Cloud. 1955-1959.

The Silver Cloud was the last in the line of 6-cylinder engined Rolls-Royce motor cars, as the ultimate in development was considered to have been reached. Its long streamlined coachwork was an instant success throughout the world and this, combined with many mechanical and coachwork improvements, made the Silver Cloud


The Silver Cloud.

the best selling Rolls-Royce up to that time. Almost 6,000 were built - including Bentley counterparts.

## The Silver Cloud II and III. 1959-1966.

The Silver Cloud was re-engined in 1959 with a new aluminium $62300 c$ V8 engine and was known as the Silver Cloud II. The Silver Cloud III, introduced in 1962, had an updated version of this engine and the bonnet line of the car was lowered for improved visibility. Further im-
provements to the technical specification and coachwork including four headlamps were also introduced. Just over 2,700 Rolls-Royce Silver Cloud II's were built and 4,000 Silver Cloud III's.

It is an interesting fact that well over half of the 70,000 cars produced by Rolls-Royce since 1904 are still on the road today.


n 1906, the Rolls-Royce Silver Ghost was hailed as "the best car in the world" and today Rolls-Royce Motors still maintain standards of design and construct ion which justify the continuance of this accolade. But how have these standards been maintained? How has this reputation been carried over such a long period of production? The answer undoubtedly lies in the care with which every car is built and the fact that the company has moved with the times. Rolls-Royce has never stood still.

The current Rolls-Royce range of motor cars is built with meticulous attent ion to detail. The bodyshell, for instance, receives at least twelve applications of primer and paint,each rubbed and polished until the highest possible standard of finish is obtained. The $6750 c c$ V8 engine fitted to all cars except the Phantom VI is run for the equivalent of 240 km ( 150 miles) on natural gas on the test bed, during which a
tester listens for unnatural variations in noise with a stethoscope. The independent suspension has a sensitive self-levelling system which even compensates for the gradual emptying of the fuel tank. The multiple braking system is designed to ensure that braking remains on all four wheels in the event of the failure of one circuit. The automatic three speed torque converter transmission, operated by a unique electric gear selector, gives the car almost imperceptible gear changes. And the air conditioning system has the cooling capacity of 60 domestic refrigerators and pours out as much heat as four domestic radiators.

The interior of every Rolls-Royce motor car reflects the same fastidious care. The door locks, windows, front seats, the retractable aerial and the petrol filler flap, for instance, are all electrically operated and they can all be controlled from the driving seat. Stereo radio and quadraphonic tape playing equipment are fitted as standard equipment. Italian burr walnut veneers are used for the facia panels and door trims and they are coated with lacquer, hand polished and joined down a centre line to produce a perfect mirror image on either side of the car. The seats and door panels are covered in the finest English leather and the forty five skilled coach trimmers take great pains to ensure that the hides for each seat are perfectly matched for colour and texture. And, finally, the famous Rolls-Royce radiator is made entirely by hand. The columns may look straight but they are in fact slightly bowed, an effect the Greeks called 'entasis' and built into the Parthenon. All this,


The Camargue
naturally, makes the building of a Rolls-Royce motor car a very long and involved process, with the result that only ten cars are produced each day.A fact which makes the 'best car in the world'also one of the most exclusive.

## The Camargue.

The 2-door Camargue is the latest motor car in the Rolls-Royce range and it has many new features. The most important is the unique automatic air conditioning system designed by Rolls-Royce Motors. This is a two level system, with separate temperature controls for the upper and lower levels, and the unit maintains the chosen temperature inside the car no matter what climatic changes occur. The coachwork for the new Camargue was designed by Pininfarina of Turin and each one is hand built and finished by Mulliner Park Ward.

## The Silver Shadow.

The Rolls-Royce Silver Shadow is built by Rolls-Royce Motors in two different versions : the Silver Shadow saloon and the Silver Shadow long wheelbase saloon. The long wheelbase version is longer by rocm (four inches) which gives even more leg room in the rear than normal. A separating division can also be specified allowing passengers in both compartments complete privacy.

## The Corniche.

The Rolls-Royce Corniche is a two door motor car fitted with an uprated version of the $6750 c \mathrm{C}$ V8 engine used in the Rolls-Royce Silver Shadow. The coachwork is by Mulliner Park Ward.

The convertible model has an electrically operated hood which takes one man a week to make. And to match the more sporting character of the Corniche, additional instruments are fitted in the facia.

## The PhantomVI.

The Rolls-Royce PhantomVI, fitted with a $6230 c c$ V8 engine has style and elegance in the classic Rolls-Royce tradition. The coachwork by Mulliner Park Ward is 604 cm ( I 9 ft Io in) long and offers exceptional comfort for seven passengers. In the rear compartment, provision is made for both television and radio telephone installations and a cocktail cabinet is fitted as standard.

The Phantom VI is also available as a Special Landaulette.This model is designed specifically for state occasions and has an electrically operated folding hood over the rear compartment. The PhantomVI Special Landaulette is built only to special order and production is strictly limited.





