## SIR HENRY ROYCE

## "An Abridged Life"

This is an edited version of the article that was published in the Rolls-Royce Owners' Club of Australia - Victoria Branch "Newsletter" No. 50 (May 1963) to mark the centenary of the birth of Sir Henry Royce.

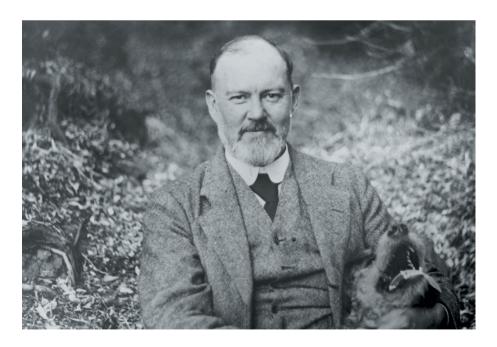
Sir Henry Royce's name today stands for the highest standards of achievement in the automobile and aeronautical professions. In peace and in war his motor cars and aero-engines were recognized as being world-leading and performed feats of endurance under exacting conditions that demonstrated the brilliance of their design and the very high quality of materials and workmanship that went into their building.

Frederick Henry Royce was born on 27th March 1863, in the village of Alwalton in the County of Huntingdonshire, the son of a miller and the youngest of five children. There he lived until he was four, when he went to London with his brother and father who was in financial straits caused mainly by his refusal to keep up with the times and install modern machinery in his mill. From the age of four until he was nine, when his father died, he had only one year's formal schooling. From the age of ten to eleven he sold newspapers to help eke out his family's pitiful income and then he had one more year at school.

Then, for about a year, he was employed as a telegraph boy in Mayfair until, at the age of fourteen he was apprenticed by an aunt to the Great Northern Railway (GNR) at Peterborough, where he worked in the locomotive workshops and where, in his own words, "I acquired some skill as a mechanic but lacked technical, commercial and clerical experience".

In London he had already started the hard process of self-education which involved long hours of study at night after his work and which stood him in such good stead later. During his subsequent periods of employment he continued with his studies in his spare time.

After two years at Peterborough his aunt was unable to continue the annual premium of £20 and he had to leave the GNR and look for a job at a bad time, for England was then in a depression. He found work after a period of unemployment and tramped as far as Leeds where he was taken on by a firm of toolmakers for whom he worked from six in the morning until ten at night (and sometimes all through Friday night) for 11/- per week. Once more he suffered from undernourishment which, with the long hours he worked, helped to undermine his constitution.



His interest in electricity, which was then in its infancy, had already become evident and he next went to London in answer to an advertisement and obtained a job with the Electric Light and Power Company as a tester and at a better salary. This company later sent him to a subsidiary concern in Liverpool at the age of nineteen as a technical expert, later becoming first electrician.

After about two years the liquidation of this firm cost him his job but his grounding in engineering and his specialised knowledge of electricity enabled him to set up in business with another young engineering enthusiast, E. A. Claremont. Royce's total savings of £20 with £50 from Claremont formed the initial capital of F. H. Royce and Company, Electricians, Cooke Street, Manchester, founded in 1884 when he was twenty-one.

Whilst at Liverpool Royce had conceived the importance of the three-wire system of sparkless commutation and of the drum-wound armature for continuous current dynamos. But in the early days the Company made lamp holders, filaments for lamps and other simple electric gadgets, and for some time they had barely enough money for food they lived very frugally in a room over the workshop. Then, Royce designed a simple household electric bell that sold for I/6d which kept the wolf from the door and the meagre profits enabled him to experiment with a small dynamo.

Times were difficult and Royce worked well into the night on many occasions, rarely sleeping enough and neglecting to eat properly. By degrees the dynamos, which were superior in design and workmanship to those of his competitors, became well known and sold readily to ships, factories, and mills, and so the company at last achieved some prosperity.

The two partners in 1893 married sisters - the daughters of Mr Alfred Punt of London. Henry Royce bought a house at Knutsford near Manchester, where he had a beautiful garden, the cultivation of which soon became his hobby and relaxation. To this house he brought his mother who had been keeping herself by working as a housekeeper, and there she lived until her death in 1904.

In 1894 the partners converted their business into a limited company. Royce, Claremont, and a friend, Mr James Whitehead who subscribed additional capital, became the directors of Royce Limited. Mr. John De Looze, who had joined the company a year earlier, was named as secretary and over forty years later he still held that position with Rolls-Royce Limited.

The extra money thus provided was used to extend the products of the firm to include larger dynamos and electric cranes. These were beautifully made, completely reliable, and soon became very popular. The business flourished and new capital was sought to enlarge the factory to cope with the increase of orders.



Everything went well until the slump just after the Boer War which, combined with an influx of cheaper dynamos and cranes from Germany and America, caused a serious drop in orders.

Royce stoutly refused to cheapen his products to meet the challenge as that policy was directly opposed to all his instincts and principles and as a consequence the firm's financial affair deteriorated.

It was at this time (1903) that he bought a small French car, a "Decauville". Ever the perfectionist, Royce spent most of his waking hours re-engineering the "Decauville" to his

design and standards. In this endeavour he was assisted by two apprentices Platford and Haldenby. Somewhat disillusioned by the Decauville, in the autumn of 1903 Royce decided that he could design and manufacture a better car and in a miraculously short space of time his first "ROYCE" was completed. It was a 10 h.p. 2-cylinder car, which made its maiden voyage from Cooke Street, Manchester to Knutsford, fifteen miles away, on 1st April 1904.

Royce did much of the precision work with his own hands and insisted on only the very finest of materials. Any part of which he was suspicious, either in design or workmanship, was scrapped and remade. Claremont, who was worried over the expense incurred, used to refer to the project as the "Two guineas an ounce job". On one occasion Royce overheard an employee say that something was "Good enough". It is reported that Royce carried on in an alarming manner and said - "Nothing is good enough - there is always a way to make it better - a way which we must all strive to learn."

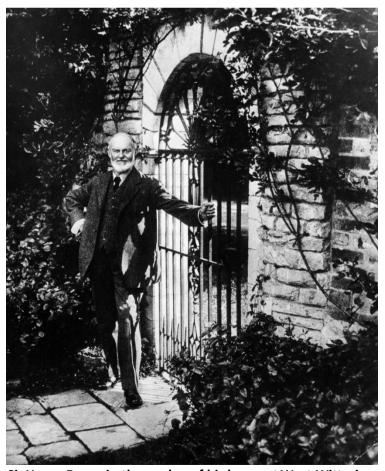
There were no startling new ideas in the design of this car, but Royce improved on what he considered the best features of current design. The engine had two vertical cylinders with overhead inlet valves and water cooling. The three-speed gearbox and the carburetor were his own design and he provided battery ignition and made his own trembler coil and distributor. It was his knowledge as an electrical engineer and his personal skill with tools that made his ignition system so much superior to that installed in other cars of the day. To put it quite simply, it worked - and, more importantly - it went on working, which was an important contribution to the efficient running of the engine.

This meticulous attention to detail in materials and in the making and the fitting together of the component parts gave this motor car an overall refinement, a silence, a lack of vibration and a reliability that made an outstanding contrast with the noisy and unpredictable cars of the day. Thus, the little "Royce "became the forerunner of the long line of famous cars that bear his name to this day.

With typical foresight Royce made the parts for this car in triplicate and, following the success of the first one, there were soon two sisters. The first "Royce" car (Chassis No. 15196) was used as a trials car, as Rolls' demonstration car and by Royce as an experimental platform for development testing. It remained Royce's car until December 1907. It was subsequently used as a factory "hack" when manufacturing was transferred from Manchester to Derby in 1908. Research suggests that it was scrapped sometime thereafter.

The second "Royce" car (Chassis No. 15881) was used by A E Claremont the brother-in-law and business partner of Royce and the Chairman of Rolls-Royce Limited. In 1909 the car was acquired by the Manchester firm W T Glover & Co. (with whom Claremont was associated). Repairs were recorded for 15881 until 1915. Around 1921 Glovers donated the engine and gearbox from 15881 to the Royce Laboratory of Manchester Technical College. The engine itself, with fan, water pump, magnets, flywheel, clutch, and gear box mounted on a metal frame is now on display at the Science and Industry Museum, Manchester.

The third "Royce" car (Chassis No. 15880) was initially assigned to CS Rolls & Co as a demonstrator. The car was subsequently owned by C H Benton of Knutsford. At some point it was returned to Rolls-Royce Limited, became the Derby "hack" and is believed to have been scrapped in the mid-1920s. Just after the turn of the century, the Honorable Charles Stewart Rolls, third son of the first Baron Llangattock, was in the retail automotive business in London. The firm was called C. S. Rolls and Company and was engaged in selling French manufactured cars. Claude Johnson, later to be known as "the hyphen in Rolls-Royce", was employed by C. S. Rolls & Company as an administration and marketing specialist. Rolls was educated at Eton and Cambridge. He left the University with a degree in Mechanics and Applied Science. His all-absorbing interests since he was at school had been in cycling, motor cycling and driving cars. He was also a keen balloonist. He was an experienced, well-informed, and expert pioneer motorist. In 1900 he won the Thousand Miles Reliability Trail driving a 12 h.p. Panhard and in Dublin in 1903 he created the world's speed record of 93 m.p.h. in a 70 h.p. Mors. As a schoolboy he installed in his father's house at Hendre, Monmouthshire, one of the first electric light systems. He was one of the first men to import a French car. Later he was the holder of Britain's No. 2 Pilot Licence (which he



Sir Henry Royce in the garden of his home at West Wittering.

obtained on the same day as Lord Brabazon who held licence No. 1). He was the first man to fly across the Channel and back - a daring feat in those days just after Bleriot's famous first flight across the Channel from France in 1910.



Henry Edmunds, a friend of Rolls and Claude Johnson, knew that Rolls was searching for a British-made car that was at least as good as the French cars he was selling. Rolls believed these French cars to be the best available at the time. Edmunds told Rolls about the little "Royce" car in Manchester and eventually persuaded him to go there in May 1904 to see it and meet its designer.

To quote Harold Knockolds - "He came, he rode and was conquered" - by the car and by Henry Royce. Both men took to each other at once - each a perfectionist in his own way - and so impressed was Rolls by the "Royce" that he there and then offered to take and sell the entire output of Royce Limited. At last, he had found what he was looking for - an English car worth selling. Later it was agreed that the subsequent cars should be called "ROLLS-ROYCE"; and so, the name was born. With Henry Edmund's assistance, an agreement to this effect was drawn up and signed in December 1904. Edmunds thus became the "Godfather" of Rolls-Royce Limited, which was formed later.

Charles Rolls later wrote of the famous meeting between Royce and himself. Among other things, he said - "Eventually, however, I was fortunate enough to make the acquaintance of Mr. Royce, and in him I found the man I had been looking for four years.....in quality and other respects he has more than fulfilled my requirements.....his extraordinary genius - for Mr Royce is no ordinary man but a man of exceptional ingenuity and power of overcoming difficulties - his extraordinary genius has enabled him to effect clever improvements in general and in detail which have been possessed in no other make of car.....the result is the vehicle you now know under the joint name of Mr Royce and myself and which I think I may go so far as to say has now to be reckoned amongst the first rank of automobile manufactures in the world."

Rolls saw the golden market of Edwardian England and he was looking further ahead than ten horsepower and two cylinders. He knew that his clientele wanted cars that were silent, comfortable, elegant and, above all, reliable so he persuaded Royce to design larger cars with more cylinders. In the next two years the following models were made:-

Seventeen 10 h.p. 2-cylinder cars. Six 15 h.p. 3-cylinder cars.

Forty 20 h.p. 4-cylinder cars ("Heavy Twenty" and "Light Twenty")

Thirty-Seven 30 h.p. 6-cylinder cars

Three 20 h.p. V-8 engined cars (One of these was the "Legalimit", geared

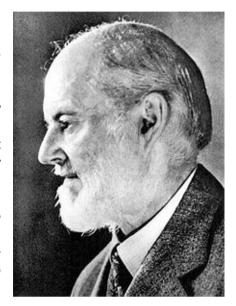
so that it would not travel at more than the then speed limit of 20 m.p.h.)

Charles Rolls genuinely believed that the "Rolls-Royce" car was the best in the world, and it was English - a fact that meant a great deal to him. So, he and Claude Johnson (or "CJ" as he was affectionately called) seized every opportunity of demonstrating and publicising its outstanding qualities.

In August 1904 Rolls arranged to drive H.R.H. the Duke of Connaughton on a tour of inspection of military establishments on the south coast. He drove from London to Folkestone early one morning, met the Royal Duke at 9 a.m., drove him around all day and then returned to London - 250 miles in one day without a hitch. The following summer he again drove His Royal Highness around on summer maneuvers, this time in a 15 h.p. 3-cylinder car.

- In December 1904 Rolls had taken the little 10 h.p. car to the Paris Salon where it won a gold medal and a diploma.
- In September 1905, in the Isle of Man a 20 h.p. Rolls came second in the very first Tourist Trophy Race ever held.

Rolls and CJ continued to demonstrate the capabilities of the cars at every opportunity. They stopped a "Twenty" in the middle of a Sydenham (south London) hill with a gradient of 1 in 6 and with nine men with an average weight of 13 stone on board, the car was easily re-started. The record for the journey between London and Monte Carlo had just been created by Charles Jarratt in a 40 h.p. Crossley. Rolls very quickly took up that challenge and drove a "Twenty" at an average speed of 27.3 m.p.h, for the 771 miles from Monte Carlo to Boulogne in 28¼ hours - over three hours less than Jarrott who had averaged 24.2 m.p.h. CJ drove a 30 h.p. Rolls-Royce in the Scottish Reliability Trials in June 1906, which he won. This was the only car to complete the 671 miles (non-stop absolute) over rough hilly roads.



Then came September 1906 and the second T.T. race in the Isle of Man in which Rolls drove the light "Twenty" to a brilliant victory at an average speed of 39.3 m.p.h., almost half an hour ahead of the next car. He reached 70 m.p.h. on occasions in a car whose designed maximum speed was 54.5 m.p.h. He took the car to New York and won the 5-mile race at the Empire City Track.

So, the first appearance of yet another "Rolls-Royce" in the Autumn 1906 Motor Show would in any case have been greeted with interest by the public - in fact, the interest it aroused was sensational. It was the "40/50 HP" (later to be named the famous "Silver Ghost") rated at 48.6 h.p., it had six cylinders, a bore and stroke of 4½" and a capacity of a shade over 7 litres.

In 1906 and at the age of 43 Henry Royce whose capacity for work was astounding, besides producing the light "Twenty" and 30 h.p. models for the market, the two special "Twenties" for the T.T. Race and taking part in the search and negotiations for new premises, had found time to spend months designing, developing, and testing this new car.

The "40/50 HP" set new standards of comfort and mechanical excellence because of the improvements to the engine and chassis Royce had incorporated in its design. This model, more than any other Royce made, carried the "Rolls-Royce" name round the world. It was years ahead of its time and Royce said it was "The finest thing I have ever done." He just managed to get two of these cars ready for the 1906 motor show, one was a bare chassis with its sump removed and the engine illuminated within and the other was an enormous Pullman-bodied Limousine with coachwork by Barker - a truly grand and sensational car.

About this time, it was realised that the existing workshops in Manchester were no longer big enough to cope with the demand and the decision was made to build a new factory in Derby. To raise the necessary funds it was decided to increase the capital to £200,000 and a public issue was made with the proviso that a minimum of £50,000 must be subscribed. Only £41,000 was forthcoming until, at the last moment, the Secretary Mr De Looze appealed to Mr Arthur Briggs, who had bought at the 1905 Motor Show the first heavy "Twenty" sold. Mr Briggs immediately wrote a cheque for £10,000 - thus saving the company from possible liquidation and earning himself a seat on the board. It should be emphasised here that in 1906 a decision had been made at CJ's instigation that, for at least a year, the company should concentrate on one model only – the "40/50 HP". In fact, this model, basically unaltered but with many improvements as time went on, was produced for nineteen years, for sixteen of which it reigned alone until in 1922 a smaller model,

the "20 HP" (more commonly known as the "Twenty") was introduced. Royce then started to design the new factory - in detail, even to the positions of the machines. As soon as construction had progressed enough, the gradual transplanting from Manchester to the new building was started. Without stopping production at all he completed this mighty job of planning and organisation in 1908. On July 9th Lord Montagu of Beaulieu performed the official opening ceremony.

Meanwhile, CJ was strenuously continuing his publicity work. In 1907 he had fitted to the 12th "40/50 HP" chassis, (60551), a smart touring body which was painted a silver colour and all the external fittings were silver-plated. He christened this car "Silver Ghost" because of its colour and silence and set out to beat the world's record for a non-stop run which then stood at 7,089 miles and was held by a Siddeley.

Driving with Johnson in relays were Rolls, Platford (an apprentice with Royce in 1903 at age 11 – "The World's Best Tester") and McReady who was a demonstration driver. An R.A.C. observer was a passenger. The target was 10,000 miles and the run was timed to take in the Scottish Reliability Trials on the way. So, on 23rd June, 1907, the "Silver Ghost" left London for Glasgow and the start of the trials in which the car lost no marks, came top of its class and was awarded a gold medal.

All went well until at the 629th mile the car stopped due to rough roads shaking the petrol cock into the "off" position. In less than a minute they were off again and for forty days the Ghost ran to and from London and Scotland without pause. During this time CJ decided to make it 15,000 miles and he finally stopped the car when it had covered that distance, for 14,371 miles during which the engine had not once stopped running.

The car was then stripped by the R.A.C. and examined carefully for wear. The valves needed grinding-in and the water pump needed re-packing - total cost of repairs was £2/2/7d. A staggering performance in those days, attracting wide attention – the Rolls-Royce "name" was well and truly made.

For the 1908 International Touring Car Trial of 2,000 miles a special car was made. Basically, the same as the "40/50 HP", it had a bigger engine of 70 h.p. It was called the "Silver Rogue" and driven by Platford it easily won the trial.

In 1910 a tragic accident at Bournemouth brought Rolls' life to a sudden end at only 33. He was flying his own plane which failed to come out of a dive during an aviation display. And so, the country and the company lost a courageous man who had already left his mark as a pioneer and who seemed destined for even greater achievements.

During this time Royce wasn't idle. He was working at an impossible rate designing new machines for the workshops and improvements for the "40/50 HP". Testing and experimenting endlessly he used to say, "There is no sure way of judging anything except by experiment." He was highly critical of anything but the very best in design, materials, and methods and even the best wasn't good enough. He once walked round the workshops asking, "Who Is the author of this 'sinker'?" and carrying a part that was too heavy for the job it was designed to perform. In Manchester he once caught someone bending a front axle "cold" to make it agree with the drawing dimensions. His engineering instincts were outraged, he denounced it as "This foul practice" and ordered the much-needed axle to be scrapped. He used to say, "above all things be accurate" and caused notices to this effect to be hung up everywhere.

For nearly all his life he had neglected his health and had grossly overworked. In 1910 he had a serious breakdown. He was ordered complete rest and Claude Johnson dropped everything and took him away to the Mediterranean and Egypt for a long holiday. It was decided that he must in future keep away from the factory. He designed and built a house at Le Canadel in the South of France and CJ found him one at St. Margaret's Bay, near Dover. He spent the winters in Le Canadel and lived in St. Margaret's Bay during the warmer weather. Then he was stricken again, and he had to undergo a grave operation - pulling himself through by sheer will-power. Until he died in 1933, he went on designing his cars and aero engines from his home and often from his bed.

A "Silver Ghost" driven by James Radley failed to climb the dreaded Katschberg Pass in the 1912 Austrian Alpine Trial. The fourth gear had by then been dropped and so was replaced in time for the 1913 Trial. The Company entered three "Silver Ghosts" and James Radley the fourth as a private owner. For the whole 1,645 miles of one of the most difficult courses imaginable the four "Rolls-Royces" dominated the trial. The alterations to the cars were immediately successful and it was a wonderful sight to see these four cars sweeping round the course faster than anyone else. Bonnet to tail they flew up pass after pass effortlessly, running with monotonous regularity. Their outstanding performance excited favourable comment from everywhere. Another laurel was added to the "Rolls-Royce" "name".

Radley, a lone Rolls-Royce entrant in the 1914 Trial which now lasted ten days and included twenty-seven passes, took on and beat single-handedly the very best of the Continental cars. The only British car to lose no points was Radley's "Silver Ghost" and he finished the course forty-five minutes before the next best entrant.

Henry Royce was persuaded to turn his attention to the air in the Great War. In 1915, six months after he had started designing his first aero engine, the V-12 "Eagle" was giving 225 brake horsepower (bhp) on test. He also designed the smaller 6-cylinder "Hawk" which gave 75 bhp in 1916 and was used in "Blimps". By the end of the War the "Eagle" was giving 360 bhp and the "Hawk" was increased to 105 bhp. In April 1916 the "Falcon" appeared - virtually a scaled-down "Eagle". By August 1918 Royce had completed the 600 bhp "Condor" which, though used by the R.A.F. afterwards, was not completed in time for use in the War. Over 50% of Allied aircraft in the Great War used Rolls-Royce aeroengines.

In 1919 Alcock and Brown made the first crossing ever of the Atlantic in a Vickers Vimy Bomber, powered by two "Eagle" engines. A stupendous achievement which wasn't repeated for eight years. In the same year Ross and Keith Smith made the first flight to Australia in a similar aircraft. Later came the "Kestrel" and "Buzzard" aeroengines.

Henry Royce did not go to Le Canadel during the War and CJ found him a farmhouse in a village called West Wittering in west Sussex, more peaceful than near Dover which was on the route taken by the Zeppelins intent on bombing London. So, Royce and his ever-present team of assistants, moved there and work continued under much better conditions.

After the War he went on with his improvements to the "Silver Ghost" - the most significant of which perhaps was the addition of a starter motor in 1919 and in 1923 his brilliant servo-motor which operated brakes on all four wheels.

The 21.6 h.p. car which appeared in 1922 is known as the "Twenty". The prototype for this model was called "Cinderella" which name was engraved on the hub caps. This, however, was thought unsuitable and the first production cars were called (in the Derby works at any rate) "Goshawks".

In 1921 the company started making "Silver Ghosts" in America at Springfield, Massachusetts. The "Phantom I" were also made but the venture wasn't entirely successful as the Americans preferred English-made Rolls-Royces.

In the winter of 1921 Royce was able to go back to Le Canadel for the first time since the war started. It should be borne in mind that from 1910 when he had his first breakdown his health was indifferent, to put it mildly, and frequently he was a very sick man. From the War until he died, he was in the constant and devoted care of his nurse, Miss Aubin, who watched over him while he went on with his work of designing and improving cars and aeroengines.

Some mention should also be made of Claude Johnson who was an infinitely resourceful man and almost a genius at organisation. If CJ had not been present it is very doubtful if Royce would have lived as long as he did. It was CJ who took Royce out of England in 1910 and stayed with him until his house in the South of France was under way. CJ saw to it that Royce's path was as smooth as possible, that the factory came to Royce and that his small team of assistants and draughtsmen were organised to the best advantage. In his capacity as Commercial Managing Director he steered the company to prosperity. His business and organising ability were such that during the war he was sent abroad at least twice on important government missions.

Having seen firsthand what overwork and neglect of proper food and rest had done to his Chief who, incidentally, was referred to as "Pa" by all his "boys" at the factory, CJ went to some lengths to see that this sort of thing didn't occur again. But the one person he forgot to take care of was himself, and his untimely death at the early age of 63 in April 1926 was directly attributable to overwork and strain brought about mainly by the tremendous responsibilities he carried on his shoulders during the War. I t was a sad day for everyone who knew him and probably nobody missed him more than Henry Royce.

In 1925 the "40/50 HP" series was extended to include another model - the "New Phantom" which, after the appearance of the "Phantom II" in late 1929, was referred to as the "Phantom I". Both were large, powerful (43.3 h.p.) cars with six cylinders. Then in 1936 the "Phantom III" made its debut. This car was a complete departure from the previous cars; it had a vee-twelve-cylinder engine with a rated horsepower of 50.7. The first "Rolls-Royce" with independent front wheel suspension, it wasn't all Royce's creation. Mr Elliott, who had been working with him for years, brought the design to a highly successful conclusion.



In the small car field, the "Twenty" was followed in 1929 by the 20/25 HP (25.6 h.p.) and in 1936 by the 25/30 HP (29.4 h.p.). This car, in 1938, was developed into the "Wraith".

In 1931 Rolls-Royce Ltd. bought out the famous firm of W. O. Bentley. For some time nothing was done with the Bentley name until a "20/25 HP" style engine was put into a chassis and a "Bentley" radiator fitted. An open four-seater body completed the picture. The engine was "hotted-up" and the car was taken down to West Wittering to get Royce's approval. They were somewhat apprehensive of what he would say, but he gave it his blessing. He told them that such a fast car should have a means of varying the stiffness of the springing. The night before he died, he sat up in bed and drew a sketch on the back of an envelope which he gave to Miss Aubin telling her to see that the "boys" in the factory got it safely. He died before it reached Derby. This was the "ride control" adjustable shockabsorber. Thus, in 1933 the first "Bentley" made by Rolls-Royce Ltd. made its appearance and another famous name was carried on.

On a visit to the Calshot seaplane base Royce had had to sign the visitors' book. He wrote "F. H. Royce - Mechanic" - which indeed he was, and of the very highest order, but that act, when he was at the top of his profession, indicates what a very humble man he really was.

In February 1929 Royce set to and designed the famous "R" engine that won for the UK that year's Schneider Trophy race for seaplanes. Elliott and Rowledge were his assistants and the then Mr Hives organised the production. The Ramsay MacDonald Government then decided not to finance the next attempt in 1931. However, Lady Houston felt that Britain must on no account be left out of this contest and she wired the Prime Minister that she would guarantee £100,000, if necessary, towards the cost. This left the Government with no alternative but to reverse their previous decision. The result was that Royce found that the "R" could be made to produce more power and the Supermarine S.6B seaplane won the Trophy at 340.08 m.p.h. Later in the year the same aircraft with an improved engine flew at 407.5 m.p.h - the world's airspeed record.

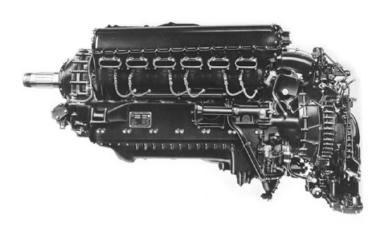
It was clear to the Directors of the Company that in the "R" engine they had an engine that would be of use to the Air Force. No Government assistance was forthcoming at first so, in the national interest, they went ahead with the development of what became the "Merlin". The idea was to produce an engine of about the same performance, but with a much longer life. It was then called "P.V.12" - P.V. standing for Private Venture. Royce was directing this project at first but unfortunately, he did not live to see its completion. The engine completed its first test in 1934, the year after he died.

Royce, who had already been awarded the O.B.E. after the War, was created a Baronet in 1931 for his services to British Aviation. Sir Henry died at his home in West Wittering on 22nd April 1933. He left behind him not only his wonderful cars and aero engines, but a host of men who had much higher ideas and standards in more than just the engineering world.

His motto was "Whatever is rightly done, however humble, is noble", and the two words "Rightly done" are surely the key to his whole life.

The "R" to "P.V.12" to "Merlin" engine development is a living monument to his greatness. It was these "Merlin's" in the "Hurricane", the "Spitfire" and the "Lancaster" (and the host of other aircraft used in the War) that gave them technical superiority over other aircraft. The gallantry and skill of the airmen in the "Battle of Britain" are legion. Their Rolls-Royce powered aircraft enabled them to win.

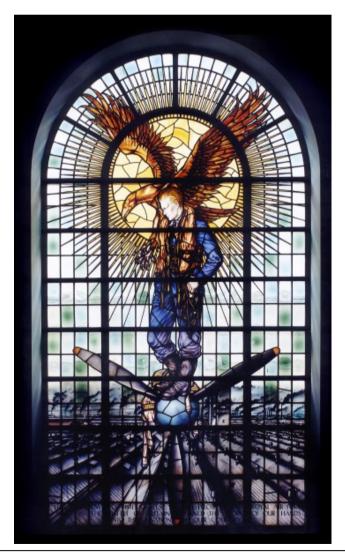
Sir Henry Royce was probably more responsible than most men can ever hope to be for changing the course of history. He extended himself to impossible limits and he spent his life in attempting the almost impossible task of improving on perfection.



A memorial window to his memory was unveiled in Westminster Abbey. That in itself should be a measure of his greatness - the only engineer to be so honored.

But perhaps his greatest monument is that after he died his work was carried on so well by the men he inspired by his own high ideals of craftsmanship. His refusal to compromise, his immaculate attention to detail, his brilliant brain with its marvelous practical intuitions combined with his innate modesty to endear him to all his "boys" who were profoundly influenced by his personality.

Sir Henry Royce was indeed a great man!



The Battle of Britain Memorial Window for Rolls-Royce, dedicated in 1947 in the Lady Chapel in Westminster Abbey