## The 1906 Rolls-Royce Legalimit Vee-8

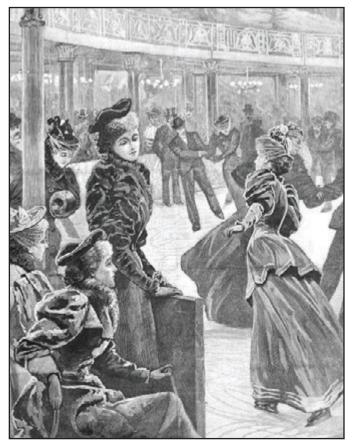
lan Irwin O.A.M. © 2023

By the close of the 19th century, there had already been a significant number of motor vehicles on the roads in Europe and the United States. Britain however, had been impeded in motor vehicle production due to the disincentive imposed by prohibitive speed limitations, but a handful of cars had been built by hardy souls to 'test the water.' Australia's on-the-road automobiles in that era collectively totalled several dozens at most.

Steam cars, internal combustion-engined vehicles and electric automobiles had all made their grand entry and were all represented in the mix competing in the marketplace. Rolls-Royce Ltd had manufactured 2, 3,4 and 6-cylinder cars up to and including the year 1905, but the entry of what we know now as the V8 engine was not simply a natural progression.

As its name implies, the 'Vee-8 Legalimit' was Charles Rolls' response to the constraints imposed by Britain's draconian road speed limits that had imposed harsh restrictions unchanged for more than half-a-century when steam traction engines for farms in particular, and inter-town steam carriages 'threatened the lives' of pedestrians and cyclists.

One of the largest purveyors of the early electric cars were Paris Singer. Singer, of sewing machine fame, opened the City and Suburban Electric Carriage Company, in Westminster in c1900 offering the USmanufactured Columbia Electric cars to the London-Market.



The Niagara Skating Rink in 1895, previously the site of The London Panorama. (London Illustrated News 19 January 1895.)

The very title of the firm clearly recognised the limited functionality of its vehicles. The electric car has always been faced with limited ranges of use due to battery power. Recharging was a constant responsibility then as it remains today, although modern electric cars have greater mileage capacity than their forebears.

The City and Suburban business managed to secure a sale to Queen Alexandra in 1900-1901, an image of which appeared as the Frontispiece in one of the earliest popular motoring books, The Badminton Library's 1902 publication *Motors and Motor Driving*.

Singer purchased the huge and popular Niagara Ice Skating Rink at Westminster, and claimed that apart from its founder premises in Denman Street, which held 100 vehicles, Niagara could accommodate 200 vehicles.

Storage alone cost  $\pounds 12/10/-$  a month1 which only the well-heeled could afford. Full maintenance for a year was  $\pounds 186.2$  For a short while, the familiar sound of the electric bell in Bond Street hailed the passing of a Columbia electric,

But the death knell was looming!

So what were the essential features that society was desperately seeking to address its reasonable expectations?

This is perhaps an appropriate moment to mention that while not many authors have given much attention to these cars, but within those that have, not many have absorbed the information and been competent to pass it on correctly. Don't accept without consideration what you read on the Web on this. There are many errors there for the unwary.



The interior of the Niagara Skating Rink by 1913 was accommodating hire cars, storages for private cars in individual lockups, and Wolseley cars awaiting circulation to dealerships likely both in Britain and overseas and an elevator was installed to move vehicles and people between the floors. Maybe commercial advertising billboard spaces earned a tidy income for the building's owners.

In a flurry of heavy investment, Columbia Electrics were bought in quantity direct from America. They were quiet, clean and efficient, but purchase of a Columbia, or any other electric vehicle proved to be expensive in every respect. While there were 250 charging stations in Britain3, and their Surrey Carriage could achieve 120 miles on a single charge, they rapidly depreciated in value as they failed to achieve anywhere near their potential.

It was against this somewhat tumultuous developing phase of the motor industry that we find the concept of the Vee-8 Rolls-Royce had hastily emerged in the minds of the Directors of Rolls-Roye Limited.

The industry's client base was seeking vehicles that were quiet, but as we have seen, the electric car was unable to attract and maintain the support it needed. That client base also sought cars that did not generate excessive foul odours and dust as they moved about on the unsealed roads. With comfort a major expectation for many in the potential buyers, cars such as Holland's renowned Dustless Spyker managed to secure a strong body of support in England where they were selling in significant numbers, using a largely enclosed undercarriage, accompanied by an unprecedented marketing campaign.

Comfort and convenience were major requirements of the motorist, and due to unforeseen circumstances, were challenges that the electric car manufacturers had failed to properly address.

However, the City and Suburban Electric Carriage Co enterprise soon proved to be unsuccessful and a costly folly. Columbia sales slumped, and the entire premises at both Denman Street and The Niagara were sold via the Company's liquidator in 1904-05, to the Wolseley Tool and Motor Car Company.

Clearly the heyday of the Electric carriage was gone in something of a flash, with rapid advances in motor technology and the dictates of society's fashion trends.

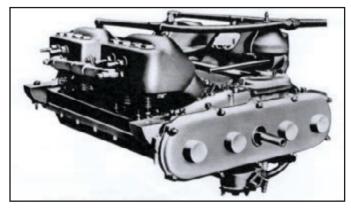
Henry Royce's Vee-8 was an attempt to address all three vital criteria. The 1907 Sales Brochure revealed the company's selection of 4 cylinder cars, the innovative 6 Cylinder 30hp cars, but also introduced four basic body concepts, built around the new V8 format engine. It was still an era in which many potential customers had yet to finally break away from their long-held affections for transport that retained some of the vestiges of the horse era. For many, the era in which the horse was dominant was clearly declining, but the carriage concept was still maintaining a strong customer favour.

It would have been very difficult for all manufacturers in the motor trade during this time, as the society was adapting to fleeting changes in taste. It was a period when many firms entered the manufacturing of motor cars, while new ideas and community expectations were regularly changing. Numerous firms lasted only a short while in the motor industry, and bankruptcies were not uncommon. Unfortunately, no director of the Company would have been immune to the society's poor uptake response to the Legalimit, and one imagines the directors would have been unanimous in scrapping the model altogether from the stock inventory. So serious was the situation, that the only Legalimit known to have been sold was returned to the company to avoid further embarrassment and allow the Company to dedicate time and resources to the newly designed 40/50hp Silver Ghosts that arrived in 1907.

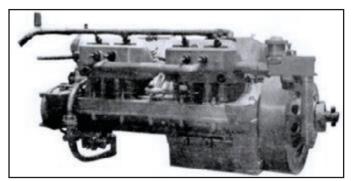
Eight large skating rinks in the Central London area succumbed to the unfolding social changes, to compete for leasing or sale in that tumultuous phase of London life. The ice-skating and roller-skating phase had been in vogue since the early 1880s. These huge buildings were not readily adaptable to alternate uses, and the flood onto the real estate market meant buyers were in a prime position.



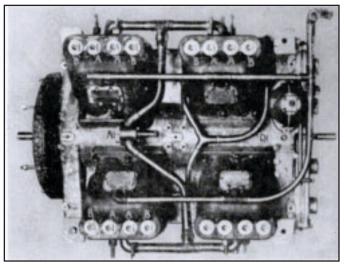
Singer's vast cavernous storage facility, The Niagara, by the beginning of The Great War had become a cheap central location for the Wolseley Tools and Motor Car Company, sub-let to other firms in the industry. A pre-delivery 1913 Silver Ghost (centre) awaits its coachwork, as does a Delaunay-Belleville (right foreground). The completed car beyond is likely a Wolseley.



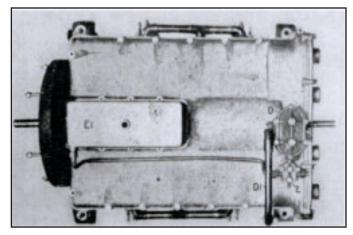
Three-quarter off-side front view of the 1905/6 Rolls-Royce Legalimit Vee-8 Engine.(Morton)



Three-quarter rear off-side view of a the 1905 Legalimit Vee-8 engine. Enthusiasts of early Rolls-Royce cars may well recognise some characteristics that have been carried through from earlier cars and became pilot designs to follow-on further to the 40-50hp cars.



Bird's eye view of the Legalimit Vee-8 engine. (Morton)



Below: the worm's eye view. (Morton)

Unlike most other Rolls-Royce models manufactured at Manchester and later at Derby, there are relatively few images of the mechanics of the Legalimit Vee-8. I acknowledge these images as being taken from archival photos from Rolls-Royce Limited, and first reproduced in CV Morton's great work in 1964, and maybe never again since, until now.



Off-side profile of a Legalimit Vee-8 reveals both the locations and the shallow depth of the engine above the chassis rails, together with the steering column bevel-case.

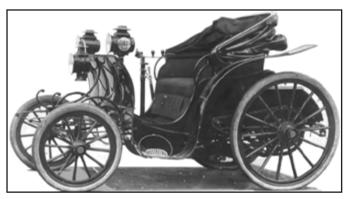
In his retirement from a career as a trials driver and racing driver, SCH 'Sammy' Davis turned to journalism and writing. He became the Sporting Editor of *The Autocar*, magazine and in 1965 wrote his memories of early motoring, under the title *Memories of Men and Motor Cars*. In this he reflected in part on the Legalimit. In referring to his close colleague of the era, the Australian-born SF [Selwyn Francis] Edge, he

commented that 'Napier was about to open a new era in motoring.' But his next sentence revealed that it was not Napier, but Rolls-Royce that 'gave the industry and hearty shock'. [SCH Davis *Memories of Men and Motor Cars*, Seely, Service and Co. London 1965. P 34]

When primitive attempts at flight were in their experimental stages, Frenchman Leon Levasseur, in 1902, 'envisioned a V8 engine design with eight cylinders split into two banks ninety degrees apart from each other'. Jules Gastambide, a wealthy industrialist embraced the idea, and a prototype working model was created in 1903. [www.autoevolution.com]

One would expect that such an engineering development of that magnitude had taken place, that its significance would not have gone unnoticed by Frederick Henry Royce. And faced with a plethora in interlaced considerations, it was logical in Royce's mind that a somewhat horizontal V8 engine could go a long way to helping to overcome many challenges facing Rolls-Royce production and sales.

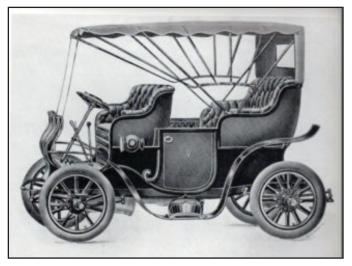
The idea of an under-floor engine was very attractive to Henry Royce, and the world had seen many automobiles with bodies similar to the horse-drawn carriages which society was reluctant to abandon. The marriage of the under-floor V8 engine to the carriage coachwork was seen as a winner.



The chain driven 1898 Pre de Houf automobile with its engine mounted beneath the seat, and forward of the rear axle. (Image from the Houf Archive) is an earlier example of an under-floor-mounted engine, fitted to a chassis carrying classic horse-era styled coachwork. In this primitive attempt, the engine is mounted beneath the seat of the carriage.

In late 1905, Lord Northcliffe commissioned the Legalimit Chassis 40518 which, when completed was to be painted dark green. It was displayed at the 1905 London Olympia Motor Show, sans moteur, but delivery to him did not occur until 23 May 1906. In its early developmental stages in November 1905, it had been registered AX-144. Within His Lordship's family circle and friends it was known as 'The Little Green Bug.'

At that November 1905 London Motor Show, along with Lord Northcliffe's car also displayed was a Legalimit in chassis form, the identity of which is unknown. There is no surviving expansive photograph like those of 1904 and 1906 known to exist, of the display of the Rolls-Royce range of models at that Motor Show.

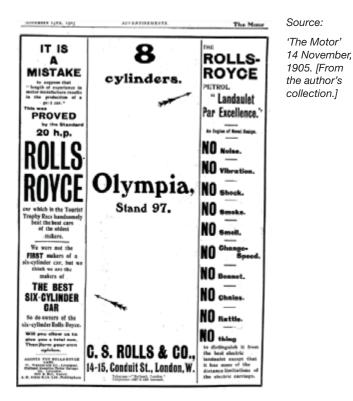


The Barker & Co proposed Touring Car body style as illustrated in the Rolls-Royce 1906 Catalogue. The network of hood support irons looks awkward and clumsy in the extreme, and not a single one was ever built. (1906 Rolls-Royce Catalogue.)



The image from the 1906 Rolls-Royce catalogue shown above differs little from that of the 1905 Catalogue. Called a Side-Entrance Roi des Belges, it had been offered previously.

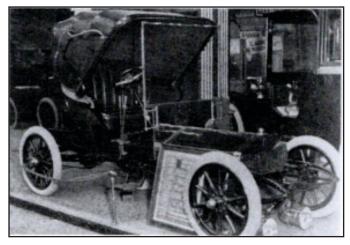
Similarly, the 1906 Park Phaeton was a slightly larger version of that offered in 1905.



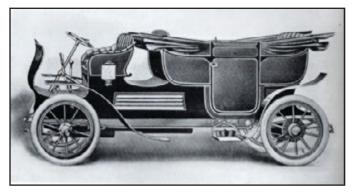
The Landaulet Par Excellence is seen here in much sharper detail from the 1906 Rolls-Royce Catalogue. As we see it here, Failed to find appeal in British society. It was only a visionary's pipedream and did not eventuate.

The 1906 Rolls-Royce Catalogue included details and specifications along with illustrations of examples of a small range of proposed body styles. The four body style variants to be offered by Barker & Co were illustrated, and copies of these accompany this article.

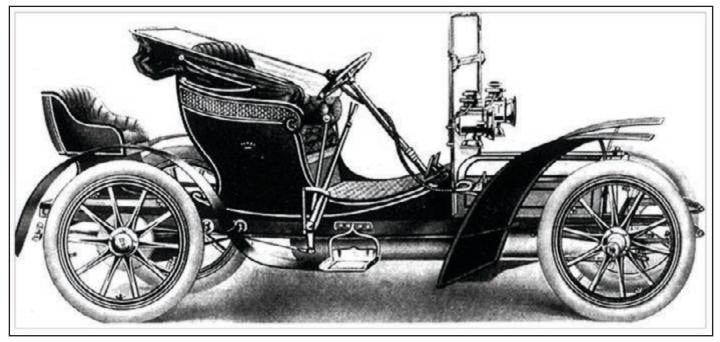
The Legalimit Landau wheelbase was 103 inches, while from the dash to the rear cross-member measured 95 inches. The wheelbase of Northcliffe's Park Phaeton was 106 inches. The chassis frames were respectively of 37.5 inches and 33.5 inches in width.



All dressed up and nowhere to go! External appearances are an illusion, for there was no motor fitted on that occasion. We are fortunate indeed to have this lone image of Lord Northliffe's Vee-8 Legalimit, 40518 at the 1905 Olympia Motor Show. It is the only image we have of the car with the hood erected Note the framed promotional placard. (Photo: Hugh Driver.)



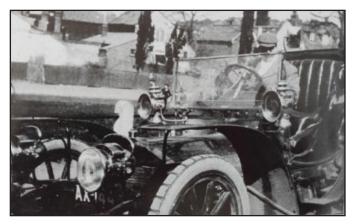
Here we see another Barker concept design. This was conceived for long-wheelbase Rolls-Royce Motor Landau with the Invisible Vee-8 engine and also illustrated in the 1906 Rolls-Royce Catalogue



The Legalimit with Park Phaeton coachwork was, for many years, the only example known to have been sold. (1906 Rolls-Royce Catalogue.) During its development, Lord Northcliffe played a key role in its ground-breaking design.



Baron Northcliffe of London and Kent had a passion for the automobile. As the founder of the London Daily Mail and other major British and global publications. Under construction from late 1905, he was able to take delivery of his car on 23 May 1906. It is seen here outside the factory at Lillie Hall, with the owner at the wheel, and it is believed, his chauffeur Pine beside him.



The reader's eyes may take a moment to adjust to this photo/ It depicts 40418 around 1909 when owned by Rolls-Royce Ltd. It had been owned in Ireland in c1915, It is thought that the driver is Claude Johnson, the Company's Managing Director.

At that time, Henry Royce's attention was heavily on focussed up the 6-cylinder 30hp, which had its own mechanical issues. But the 40/50hp Rolls-Royce was also on the horizon. Royce recognised the desperately low public take-up of the Legalimit and acted quickly to abandon that project. One might say, with the benefit of hindsight, that it was ill-conceived from the outset. That may be a bit harsh, so let's be a touch more generous, and just say that it seemed like a good idea at the time. And times were ever changing in those earliest years of the twentieth century.

It appears, however, that apart from Lord Northcliffe's car, that no other Rolls-Royce Vee-8 chassis was ever bodied at the time. The actual total number of Legalimit cars believed to have been manufactured is two, or at best three, before the Company wisely withdrew the Legalimit from the market. Lord Northcliffe returned his car, against one of the new 6 Cylinder 40/50hp chassis.

40518 was returned to the Company's ownership in November 1906, against a new Six-Cylinder 40/50hp Rolls-Royce, and to be subsequently dismantled. Facts are scant on what occurred in the several years that followed, but it is recorded that it was sold again c1908. It had been many months in the development stages, and only six to seven months in service.

Chassis 40518, like the legendary Phoenix from the ashes, makes a reappearance. Factory records reveal that a Mr H. Church, a farmer of Curragh, in County Kildare, near Dublin, Ireland was owner of the car until at least 1915.

As the relevant accoutrements, including radiator and 'bonnet', of the Legalimit shared the same chassis as the Light Twenty model it had a second chance. But like most other early Twenties, both Light and Heavy, it soon disappears from the Rolls-Royce landscape and all records. John Fasal, a globally acknowledged early Rolls-Royce enthusiast acquired some minor components from the Curragh farm in the 1970s, including the vital wheel nuts (hub caps), and rumours from back in time would suggest it had been broken up on the farm, and its engine used in a boat.

A second assembled Legalimit, of which the chassis number is undocumented in factory records, also survived for some time, working for its keep in the grounds of the Manchester Rolls-Royce factory. Its date of sale is unknown. Fasal considers it likely that it was given the chassis identity as 26539.

Today, no Legalimit Vee-8 hardware is known to have survived. Of the 42 Light and Heavy Twenties manufactured, only three survive, along with a few other minor components remain in existence.

At the 1906 Olympia Motor Show, Rolls-Royce Ltd displayed a 30hp Limousine, the 20hp car that CS Rolls had driven to great success in the recent Isle of Wight Tourist Trophy, a 40/50hp chassis along with a Barker Pullman Limousine 40/50hp, and the Legalimit 40518.

But the 40/50hp car stole the show. With the phenomenal success of the 40/50hp six-cylinder cars, the bold decision was effectively made for Rolls-Royce, that the company would cease manufacturing a diversity of models and adopt the 40/50hp as their only model to be offered thereafter. It was to prove to be a very wise decision.

One may assume that Lord Northcliffe rarely, if ever, reflected on the shortcomings of his Legalimit Park Phaeton, for he went on to purchase Chassis numbers 60560, 1407, 1758, 2532, 14TB, and 19RB. Simultaneously, Lady Northcliffe acquired Chassis numbers 1377, 1866, 2005E and 19CA. All of these family cars were purchased between 1907 and 1913. Similarly, we may be sure that Sir Henry Royce also moved on from his brief dalliance with the Legalimit, without any regrets, for the 40/50hp Silver Ghost was shortly proclaimed to be the undisputed 'Best Car in the World'.

From that moment onwards, Lord Northcliffe thoroughly enjoyed the delights of a six-cylinder Silver Ghost as his principal car, with always another for his wife.

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## Recommended Reading:

Clarke, Tom. A dissertation on the pre-40/50hp cars. Contained within Fasal & Goodman, *The Edwardian Rolls-Royce*. Thames Publishing. 1994.

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Fasal J. and Goodman, B, *The Edwardian Rolls-Royce*. Thames Publishing. 1994.

Ferris, Paul. Northcliffe. *A Biography of an Empire*. The World Publishing Company. 1971

Morton, CW *A History of Rolls-Royce Motor Cars*. Vol 1, 1903-7, Foulis, 1964. (Vol 2 was never published.)

Nockolds, Harold. *The Magic of a Name*. Foulis, London. 1938.

Oldham, Wilton J. *The Hyphen in Rolls-Royce. The Story of Claude Johnson*. Foulis. London. 1967



From 'The Autocar'. 25th November, 1906. [From the collection of Ian Irwin.] Refer to the full article on page 16.