

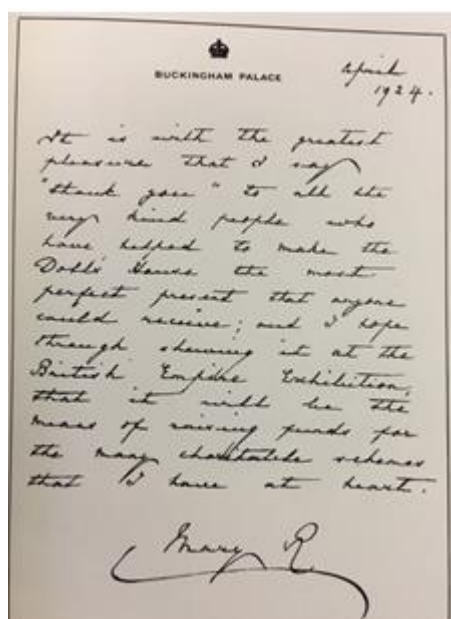
## Queen Mary's Dolls' House Lifts

Built between 1921 – 1924 for Queen Mary, Consort of George V, by the leading British Architect Sir Edwin Lutyens, the Dolls' house includes contributions from over 1,500 of the finest artists, craftsmen and manufacturers of the early twentieth century.

From life below stairs to the high society setting of the saloon and dining room and from a library bursting with original works by the top literary names of the day, to a fully stocked wine cellar and a garden created by Gertrude Jekyll, no detail was forgotten. The house even includes electricity, running hot and cold water and working lifts.

The Dolls' house was presented to Queen Mary in 1924 and exhibited at the British Empire Wembley Exhibition in 1925. The Lifts, one passenger and one goods, are electrically operated and are to the scale of 1 inch to one foot, with a speed of 140 inches a minute.

Waygood-Otis received a letter of thanks from Queen Mary, written in April 1924 for installing the lifts. Along with the other leading companies in their different fields, the firm of Waygood-Otis had duly contributed an exact model of its product in the Queens honour.



*"It is with the greatest pleasure that I say 'thank you' to all the very kind people who have helped to make the dolls' house the most perfect present that anyone could receive", wrote the Queen in her own hand.*

The newspapers of the day were equally enthusiastic. *"The tiny machines fitted on the roof of the house are exact models of the standard automatic electric passenger lifts", wrote The Times. "They are worked by push buttons which enable the lift to be stopped at any floor. These buttons are very little greater in size than a pinhead".*

There is a complete worm and wormwheel winding machine with motor and brake and controller, just as in the full scale lift. The steel guides for the car and the counterweight are only 3-16ths of an inch in diameter.



The lifts were built in 1924 mainly by the Waygood-Otis employee **John Nevil Maskelyne** and the Waygood-Otis apprentices at the time.

**John Nevil Maskelyne** was born on 3<sup>rd</sup> January 1892, at Wandsworth Common, London S.W. The eldest of 3 brothers, he was brought up in a highly mechanical atmosphere, both his paternal grandfather (also **John Nevil Maskelyne**), father (also **John Nevil Maskelyne**) and his youngest brother (**Jasper Maskelyne**) were world renowned stage illusionists and magicians. His grandfather founded the magical entertainment of Maskelyne & Cooke in 1873. His grandfather was also an inventor and invented the coin operated lock for public toilets, hence the term “to spend a penny” – one old penny was required to unlock the door.

His father as well as being a magician & Inventor, also had a profound knowledge of Telegraphy, and in 1903, in the early days of radio, he hacked the wireless telegraphy of Guglielmo Marconi who advertised “secure and private communication”. Maskelyne broadcast his own message in order to prove Marconi’s claims wrong.

**John Nevil Maskelyne** (junior) - he later was to become known by his initials J.N.M. - was educated at St. Paul’s School, Hammersmith, and his technical training was taken at King’s College, University of London, from 1911 to 1914. Being unfit for Army Service, he joined the staff of Waygood-Otis Ltd as a junior member of the Engineering Department.

He spent much of his childhood helping to build the props for his fathers illusions and consequently became a very competent model builder, especially in the field of model railways, which was his main interest. After he left the employ of Waygood-Otis he became a Model Engineering Consultant in 1932.

He devoted a great deal of his leisure to the study of Locomotive Engineering and History, with considerable attention to the design and construction of model railways and locomotives. In 1909 he began writing for Railway and Model Railway periodicals and joined the Stephenson Locomotive Society in 1911. He was elected Chairman in 1916 and President in 1925, a position which he held until he retired in April 1960.

In 1917 he joined the Society of Model and Experimental Engineers, subsequently serving several years on the Committee (later the council), then, as Vice-Chairman and afterwards as Chairman. In 1919, he was elected an Associate of the Institution of Locomotive Engineers. In 1926 he published his "History of the Locomotives of the L.B. & S.C.R. 1903-1923", thus completing the History by G.F. Burt, published in 1903. In the same year, he actively associated himself with the Preservation of the Locomotive "Gladstone" in collaboration with Mr G.F. Burt, on behalf of the Stephenson Locomotive Society. In 1928 he began his regular monthly series of articles "Railway Topics" in the "Model Railway News". He subsequently left the employ of Waygood-Otis, to become a Model Engineering Consultant, and in 1935 became the Editor of the "Model Railway News" and Technical Editor of the "Model Engineer." These two posts he held until he retired from business in 1956.

A kindly man, he endeared himself to all members and to everybody, everywhere, with his sincere interest and his quiet approach to the subject on which he was an expert and very keenly interested. His death occurred on 24<sup>th</sup> May 1960.

One of the Waygood-Otis apprentices who helped build the tiny lifts was **Charles 'Charlie' Scholefield.**

**Charles Scholefield**, universally known as Charlie, was born in South London in 1904. His parents were from York and his father worked in a building contracting firm in London. Throughout his life Charlie remained very proud of his Yorkshire parentage and often gave this as the reason when he was stubborn. After attending school in Battersea, where he was often top of his class, he joined Waygood-Otis as an apprentice in 1920. The factory was within 2 miles of his home. As an apprentice he worked on general engineering but soon showed his talents in the electrical test area. So it was, in 1924, that he became involved as an apprentice in the construction of the model lifts.

He was subsequently employed as a fitter with the Service department and as a tester. In the 1930's at a time when new electrical equipment was being imported from the USA, he was put in charge of the Service "Trouble Shooting

Squad”, sometimes known as the Crazy Gang, whose job it was to solve all service problems. He collected around him a number of well known assistants such as Graham Lambie, Basil Pirie, George Burleigh and Ted Perry. His prowess as the man who could solve every technical field problem became widespread, along with his ability to teach others. He had at all times the desire to strive after perfection and his attention to detail was beyond most people. He had very strong views on a number of basic lift subjects and was never afraid to expand these views to anyone. His general dignity and bearing was such that he commanded respect at all levels and he became one of the best known figures in the lift industry in the UK.

During the second World War, he continued to keep lifts running under very difficult conditions at the same time spending time on war work in the factory and as an air raid warden. He always dressed conservatively and always wore a bowler hat. This he was known to use to show the effectiveness of safety edges on power-operated doors. After the war he was appointed as Superintendent of branch offices, a job which he never liked because it was administration and not technical. However, he always found ways of introducing the technical aspect into these activities in his tours of branch offices. For the last few years of his active service with the company he again became the field engineer responsible for both construction and service. It was at this time that he was responsible for the field prototype testing of the 155HT machine.

After his retirement at 65, he was invited to South Africa and Kenya to help train field engineers and adjusters and spent a year there in which he endeared himself to all and became known as the “gentleman in the bowler hat”. After his return from South Africa into full retirement he enjoyed his hobby of gardening. A life-long bachelor, he continued to live in the family house and to tend the large garden which was always a delight to the eye.

Soon after this, Otis was invited to re-build and overhaul the two model lifts which Charlie had helped install as an apprentice. Charlie was the obvious choice to undertake this task, so he happily returned to continue his work that he started nearly 50 years earlier.

The lifts are not visible when installed in the house, so removing them in their steel structure presented Charlie with a bit of a problem. The structure fitted neatly in its well and was pressed in by hand over the last few inches. Charlie could gain access to the lift well doors only by opening the first floor windows on each side of the house and inserting a horizontal timber batten through the windows to prise the structure gently upwards. It was taken out through the roof and then transported in a specially constructed container to a workshop in London.

When Charlie got to work, he removed the diminutive call buttons, replacing them with an external operating panel. They were also re-wired and given new electric motors and new ropes. The cars were re-polished and the whole installation tested with the same care lavished on lifts for real, live, human beings.

He completed the work and the model is on display at Windsor Castle. Although at the time of writing this article, it is temporarily closed to the public. For a number of years after the refurbishment, the lifts actually had a Service Contract with Otis.

Charlie Scholefield was a loyal supporter of the Otis Long Service Association and a regular attender at all of their social events, he was always in great demand as an after-dinner speaker in which role he had a superb style all of his own.

He died in 1978 and his death at the time removed one of the greater characters from the Otis family.



*Charles "Charlie" Scholefield pictured next to one of the model lifts during their refurbishment.*