THE RONALDS–CARTER FAMILY IN 19TH-CENTURY BATTLE

Samuel Carter (1805-1878) began living in Battle after he purchased the Rose Green estate, which had been offered for sale in late 1854. Building a substantial new home with bluestone quarried on site, and acquiring adjacent land to give a total of 663 acres, he called his new property Quarry Hill. *Kelly's Post Office Directory of Sussex* noted that it was 'delightfully situated on the hill to the south of the town, commanding beautiful views of the Abbey'. The main building, which still exists, was renamed Telham Court by a subsequent owner.

Carter had made his fortune in the railways: he was company solicitor and advisor to the Board of two of the largest rail companies – the *London & North Western Railway* and the *Midland Railway*. Joining at their inception, for 40 years he helped each of them build networks that stretched from London terminals (Euston and St Pancras) across the length and breadth of Britain. He was 'a man of uncommon shrewdness and ability' who enjoyed 'the fullest confidence' of his chairmen. It was stated at his death that his 'influence in the development of the railway system will, probably, never be fully appreciated'.

Samuel Carter (1805-1878)
Reproduced from a photograph
Courtesy of Coventry History Centre

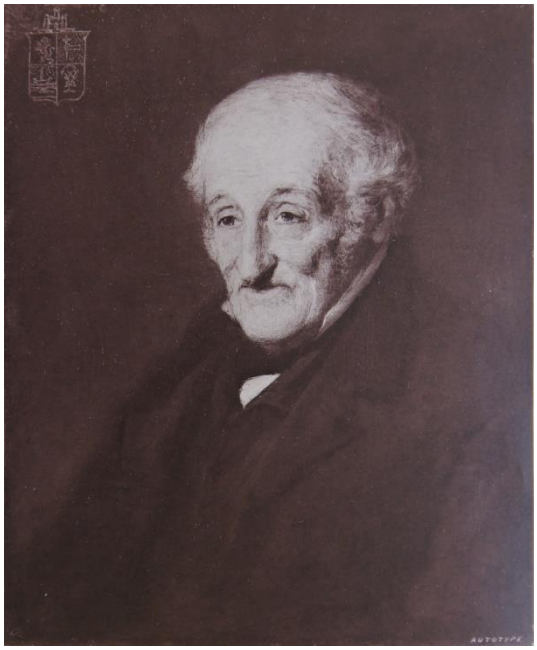
The acquisition of Quarry Hill signalled that Carter was beginning to moderate his railway commitments and pursue other interests. He invited many friends and colleagues to his new country home; it was designed for entertainment with a billiard room, seven bedrooms and a six-carriage coach house. Such friends included the renowned railway engineers Robert Stevenson and Thomas Brassey. He also oversaw his farms and tenants, and his gardener George Smith won prizes for grapes and other fruit at the East Sussex Horticultural Society shows. Beginning at the 1857 election, he became increasingly involved in politics, chairing campaign meetings in Battle and supporting his candidates at the hustings in Lewes. Being a staunch Whig cum Liberal, these candidates were John George Dodson and Lord Edward Cavendish. In 1868, Carter himself was elected to parliament for Coventry, the city of his birth.

Maria née Ronalds (1804-1880) was a year older than Carter and approaching 30 when the couple were married. She and her sister Emily had been active in the emerging ideas of education for infants, socialism, and the abolition of slavery in America, and counted thought leaders like Fanny Wright, Mary Shelley and Robert Owen amongst their associates.

Francis Ronalds (1788-1873), Maria's oldest brother, was a prolific inventor who documented 200 novel devices through his life. He was undertaking an extended scientific journey through Europe when the Carters moved to Quarry Hill but, on his return at the end of 1862, he too came to live in Battle. He was joined by his niece **Julia Ronalds (1828-1921)**,

who held a special place in his heart. She had spent much of her childhood with Francis and his mother, as her own mother and her only sibling had both died when she was a baby. It was while Julia was living in Battle that she signed the Women's Suffrage Petition in 1866.

Ronalds and Julia lived at 9 St Mary's Villas, a relatively modest home down the hill from the Quarry Hill estate. It was a simple symbol of how different Ronalds and Carter were from each other. Ronalds' nature was one of extreme 'diffidence': he had 'very retiring manners' and no interest in status or wealth. His life's work was conducted 'quietly, modestly, and with a single eye to the promotion of scientific knowledge without regard to any personal rewards'.

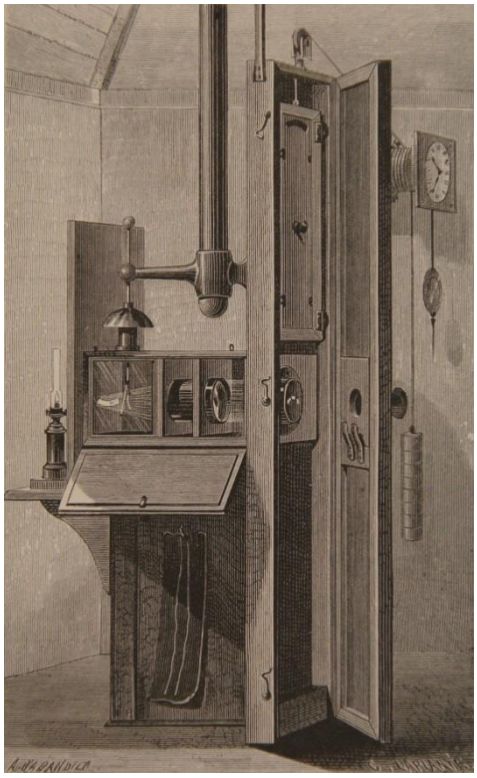


Sir Francis Ronalds (1788-1873)
Reproduced from an 1867 portrait by his nephew
Hugh Carter. Hugh donated the original painting to the National Portrait Gallery and a second portrait was acquired by the Institution of Electrical Engineers from his estate

Ronalds and Carter had been good friends for years before marriage linked them, however, and they recognised the strength of their complementary skills. Ronalds developed new transport options to help Carter's companies compete more effectively, while Carter (if Ronalds permitted) provided business and legal advice on inventions and promoted his work.

Ronalds was knighted while he was living at Battle. Although given just a day's notice and aged 82, he was able to make his way by train up to London and then to Windsor for the investiture with Queen Victoria. Carter had brought Ronalds' name forward with government but he and Maria were holidaying in Rome when the decision was made and were unable to help with arrangements.

Ronalds had built the first working electric telegraph in 1816 – a technology that by the time of his knighthood over 50 years later had wired the globe in what was effectively 'the first internet'. All those years ago he had described the possibilities of '*electrical conversazione offices*, communicating with each other all over the kingdom'. More generally, he had also foreshadowed a new era beyond the steam age where electricity would travel 'many hundred miles' and provide 'much public and private benefit' in practical applications. Ronalds can be considered to be the first electrical engineer.



Sir Francis Ronalds' photo-recording machine built at the Kew Observatory (1845)

Public recognition generated by his knighthood also highlighted several other important achievements through Ronalds' life, including setting up the Kew Observatory as inaugural Honorary Director in 1842-53. He created many new instruments for the observatory, of which the most important were probably the first successful cameras for continuous recording, which he built just a few years after the invention of photography in 1839. These cameras traced atmospheric pressure, temperature and humidity fluctuations through the day and night. They played a significant role in developing the science of weather forecasting, being used by the Met Office from its inception and elsewhere around the world. It was 1980 before the Met Office closed the Kew Observatory.

Ronalds' other inventions included the first battery-operated clock (in 1815); the portable stand with three hinged legs that still steadies cameras and surveying equipment; and an attachment to the turning lathe that enabled the exact replication of any particular shape and thus helped instigate the mass production of furniture.

At another level he made numerous practical devices for home and family, such as a pioneering fire alarm. He set up one of these at the Kew Observatory and others would have been installed at Quarry Hill and St Mary's Villas to warn occupants of incipient fire.

Ronalds (and the Carters too) had interests and talents across the arts as well as technology. In 1825, Ronalds had patented tracing instruments that enabled accurate perspective pictures to be drawn. He used them to create and publish a precise pictorial survey of the Neolithic standing stones at Carnac in Brittany; the value of this record and Ronalds' merit as an archaeologist have been reinforced in the 21st century. Carter was an early purchaser of the tracing instrument, which proved to be very popular in the era before photography. Ronalds' pencil portrait of a quite youthful Carter made using the device survives as do Maria's drawings from before her marriage.

The most renowned artist in the family was Samuel and Maria's second son **Hugh Carter (1837-1903)** – a studio was built for him at Quarry Hill. Hugh has an entry in the *Oxford Dictionary of National Biography*, as do his father and uncle, suggesting the family to be a noteworthy addition to the Battle community.

Ronalds died in Battle three years after he was knighted. He was buried in the local cemetery in a simple grave with no headstone and just a very short inscription, in line with his wishes. The grave's location is shown at http://www.sirfrancisronalds.co.uk/vault.html.

Julia was his primary financial beneficiary, while he bequeathed all his books and pamphlets to Carter to organise their donation to the newly-formed Society of Telegraph Engineers – Ronalds had collected papers on electricity all his life. Carter grasped this opportunity to create a memorial to his overly-modest friend and he shaped the bequest into the 'Ronalds Library'. He, his son, and grandson oversaw the library's progress for more than 75 years as trustees and before long it had become 'the glory of electrical engineers'. Its catalogue was republished by Cambridge University Press in 2013. Carter and later his sons also continued to publicise Ronalds' achievements in the press to ensure his name did not die, and commissioned a marble bust of him and a plaque for his former home where he built his telegraph.

The year following Ronalds' death, the Carters decided to sell Quarry Hill and they spent their last few years in London.

Through Ronalds' late knighthood and posthumous Library, he is now remembered to history. Carter himself is largely forgotten, despite having played a key role in the development of rapid transport across Britain. Battle was the place where Sir Francis Ronalds' work achieved recognition and it was due in large part to the efforts of his friend, relative and neighbour Samuel Carter.

Dr Beverley F Ronalds

Sources

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