

The Cutty Sark



The Cutty Sark was once the most famous of the great clippers, the name 'clipper' referring to the fast sailing ships of the nineteenth century that traversed the world's major trading routes.

Commissioned by shipping magnate Jock 'Whitehat' Willis, she was built in a Scottish shipyard and launched at Dumbarton in 1869. The Cutty Sark's unusual name derived from a poem by Robert Burns called 'Tarn O'Shanter.' In this ode, a hero is chased by some witches,

with the fastest one's revealing shirt being known by the Scots as a cutty sark. The Cutty Sark was a masterpiece, the pinnacle of sailing ship design. Her composite hull of timber and iron was sleek and strong, while her three masts could hold a spread of canvas that propelled the ship at up to 17 knots. As a result, she spent the 1870s speeding across the high seas, establishing a reputation as one of the fastest ships afloat.

Not only did her speed translate into prestige, it also translated into profits: the Cutty Sark brought the new tea crop from China, which was incredibly fashionable amongst the tearooms and parlours of Victorian Britain. The first batch of the new tea harvest was highly coveted and thus the first tea cargo to arrive fetched the highest price. Indeed, the annual tea race was a Victorian sensation: the ships' progress was reported by telegraph and could be followed in the papers. Huge bets were laid on the outcome. The Cutty Sark was never first to the finish line, but she was still one of the fastest. In 1872 she was involved in one of the most famous tea races of all time, against the *Thermopylae*. The two ships were neck and neck until the Cutty Sark lost her rudder in heavy seas in the Indian Ocean. The accident meant *Thermopylae* beat her back to London by 7 days, but the Cutty Sark's performance was nevertheless remarkable.

When the ship was launched, it was already the Indian summer of the great sailing ships. The Suez Canal, which had opened the very same year, offered steamships a shorter route to the Far East, slashing approximately two months off their journey time. The winds of the Red Sea and the Mediterranean were not suited to the clippers though. Consequently, the increasing speed and cargo capacity of steamships soon rendered sailing ships unprofitable. By the late 1870s, the Cutty Sark had been pushed out of the tea trade.

The Cutty Sark's future looked bleak: in 1880, she set off on a voyage to Japan to deliver coal for the American Pacific fleet. It was a voyage she never completed. A fight amongst

the crew left one man dead, and when the man responsible was allowed to escape by the captain, the rest of the crew mutinied. The ship's captain, realising his career was ruined, committed suicide by stepping off the ship's stern into the sea. These dark events gave the Cutty Sark a new reputation amongst sailors, as a 'hellship' and a cursed vessel.

The ship's owner, Jock Willis, was determined to turn her fortunes around and so, in 1885, he hired an excellent, albeit eccentric, clipper captain named Richard Woodget. Captain Woodget recognised that the Cutty Sark's commercial edge now lay in the dangerous wool run to Australia. In this arena the Cutty Sark once again excelled, setting speed records between London and Melbourne and Sydney. For a decade she established her fame through her lightning voyages, but by 1895, she was approaching the end of her life expectancy and had ceased to be profitable.

After her heyday, the Cutty Sark was sold to a Portuguese company, who renamed her the Ferreira. The ship spent 25 years transporting cargoes between Portugal, Africa and the Americas, and managed to avoid German U-boats during World War I. In the 1920s, she was purchased by Captain Dowman, a former clipper who remembered the Cutty Sark from her glory days. Dowman renamed her the Cutty Sark and brought her to Falmouth, where she was restored and opened to the public.

Upon Dowman's death in 1936, the ship passed to the navy Training College at Greenhithe to be used as a training ship by British naval cadets. Aboard her, a generation of Royal and Merchant Navy cadets were trained on how to work a sailing ship. Time finally ran out for the Cutty Sark after World War II, when the Training College got a new training ship.

Now facing the scrapyard, the Cutty Sark was once again rescued from obscurity. In 1951, the Cutty Sark Society had been established by her admirers. With the support of the public and the Society's patron, the Duke of Edinburgh, funds were raised to rescue her. In 1954, she was placed in dry dock in Greenwich, London. There she served as a unique example of breathtaking ship design and as a symbol of Britain's proud maritime heritage. She also became the memorial to the Merchant Navy and its losses in two world wars.

Over the decades, the same timbers that were once pounded by the storms of the Cape Horn came under new threat. Years of exposure to the elements took their toll. Her wooden hull was waterlogged and rotting and the iron frame that supports them was rusting. In 2007 comprehensive conservation of the ship was embarked upon.

Hercules Linton

Hercules Linton (1 January 1837 -15 May 1900) was a Scottish surveyor, designer, shipbuilder, antiquarian and local councillor, best known as the designer of the Cutty Sark and partner in the yard of Scott and Linton which built her.

He was born in Inverbervie, Aberdeenshire, Scotland. On his nineteenth birthday in 1855 Hercules Linton was apprenticed to Alexander Hall and Sons who at the time, were the leading shipbuilders in Aberdeen and whose schooner Scottish Maid (1839) with its sharp bow and entry helped coin the term Aberdeen Bow. Linton progressed through his apprenticeship and eventually rose to a senior position at Alexander Hall and Sons.

Eventually he left Alexander Hall and Sons to become a Lloyd's Register Surveyor based at the Lloyds offices in Liverpool and subsequently moved to the Liverpool Underwriters Registry where from early in 1862 he was assisting John Jordan who was the Chief Surveyor. It is thought that he left the Liverpool Underwriters Association in May 1864 but still associated on a free-lance basis.

Scott and Linton shipbuilders

In May 1868, Linton entered into a shipbuilding partnership with William Dundas Scott to form the firm of Scott & Linton, shipbuilders of Dumbarton, on the River Leven near its junction with the River Clyde

Approximately £600 of the £1200 capital to set up the business was provided by Scott's father. The rest was a borrowing against Linton's life insurance policy and some cash. Hercules Linton managed the design and shipbuilding and William Scott managed the counting house and engineering.

In May 1868 Scott & Linton rented part of the Woodyard. The yard was previously occupied by Denny's until they moved across the river Leven upon expiry of their lease. However the lack of business experience in the two partners showed as early as August. Correspondence between Scott and his father shows that cash flow problems emerged during the building of their first order, the small iron steamship 'Camel', for which there appeared to be no contracted stage payments during the build. Work had to be completed in October and the completed vessel delivered to J. Bibby & Co in Newcastle at which point Scott & Linton would then receive the full purchase price of £980.

Cutty Sark and John Willis



The agreement to build the Cutty Sark was signed by John 'lock' Willis (also known as "White Hat" Willis) on 1 February 1869 with a contracted completion date six months later on 30 July 1869. Willis had been an experienced shipmaster in his father's business and now was also an experienced ship owner on his own account. How Willis found and selected Scott & Linton to design and build a state of the art extreme clipper is not known. Linton certainly had many contacts made through his career as a respected surveyor and probably also did design work as surveyors often did at that time. Linton's experience gained at Alexander Hall & Sons probably contributed to his design skills.

On the surface it seems Willis must have been taking a risk but he used all his business experience to negotiate an agreement which provided a high degree of protection. Willis with his practical experience also approved the drawings and specifications. The agreement provided for a payment of a deposit to Scott & Linton upon signature followed by seven stage payments as the construction progressed. However there were also penalty clauses.

Cutty Sark was contracted for at a price of £17 per ton but if the tonnage exceeded 950 tons there would be no extra payment. The price of £17 per ton was extremely competitive and given the total lack of experience in building a composite clipper ship of anything close to the size and complexity of Cutty Sark makes one wonder how the price was calculated to win the order and yet still make a profit. The completed vessel was to be delivered by 30 July 1869 with a penalty of £5 per day to be paid by Scott & Linton for every day of delay unless the delays were due to changes in specification or labour strikes. If Scott and Linton were unable to complete then Willis had the right to enter the yard and finish the work paying for materials out of the withheld stage payments.

Cutty Sark was to be built to Lloyds A1 classification and in addition to the regular visits from the Lloyds surveyors, Willis had one of his experienced skippers, Captain George Moodie, superintend the construction prior to taking command of Cutty Sark upon completion. Captain Moodie was said to be very particular regarding the quality of the materials used in the construction and only accepted the best quality materials and workmanship which all added to the cost (this may have contributed to why the Cutty Sark is still in existence today).

The vessel took her name from a line in Tam O' Shanter - one of the best known works of Robert Burns, Scotland's national Bard, whose father was also a man of Kincardineshire

Tam, who drank too much John Barleycorn (whisky) was on his way home when he across a group of warlocks and witches dancing to the music of the devil beside the J Alloway. Tam watched the hag-like witches and spotted a young and beautiful lassie name was Nannie. She was wearing nothing but a "cutty sark", a short shirt or chemi of Paisley linen.

"Her cutty Sark, o' Paisley horn
That while a lassie she had worn,
In longitude tho' sorely scanty
It was her best, and she was vauntie
An' how Tam stood, like ane bewitch'd
An' thought his very een enriched.
Tam tint his reason a 'thegither
An' roars out "Weel done, Cutty Sark".
An' in an instant a'was dark.

During the construction the Lloyds surveyors wanted additional strengthening around the bilges and other areas. Agreement was eventually reached with Lloyds but not before causing a delay which in turn delayed the receipt of stage payments, affected cash flow and reduced the profit by causing Scott & Linton to absorb the extra cost of labour and materials to comply with the negotiated additions.

The problems with the surveyors were made worse by the fact that Linton's father Alexander Linton was one of the Lloyds surveyors involved. He was normally based in Belfast but in May 1896 he was temporarily seconded to Glasgow due to the resident Lloyds surveyor's involvement in a shipyard accident.

Financial Problems

Cash flow problems were such that all work in the Scott & Linton yard was suspended in the first week of September. Rather than apply for the Company to be liquidated, the creditors met and decided to complete some or all of the outstanding contracts and a financial agreement was reached with William Denny & Bros to complete the ships. Cutty Sark was eventually launched on 22 November 1869, nearly five months late, by Captain Moodie's wife. Cutty Sark was then moved to Denny's yard on the other side of the River Leven to have her masts installed and on the 20 December towed down the River Clyde to Greenock to have a specialist firm install her running rigging.

In the midst of the collapse of his business, Linton's wife gave birth to a baby son in October 1869 but soon after Linton was forced to hand over his house to the creditors. After everything was finished and final costs taken into account, the creditors were owed even more money than the amount outstanding when they made the ill-advised decision to complete the three ships.

Hercules Linton in later years



After the troubles at Scott & Linton, Hercules Linton joined Gourlay Brothers as assistant manager at their yard in Camperdown, Dundee.

In December, 1869 Linton took a job as head of the modelling and design department at Leckie, Wood and Munro who were shipbuilders and engineers. At the beginning of April 1870 he resigned due to his involvement with a new firm of shipbuilders Morton, Wyld & Co. who started operations at the yard previously occupied by Scott

& Linton. Unfortunately in November 1870 they also went bankrupt.

Memorial to Hercules Linton at Inverbervie,
Aberdeenshire, Scotland.

Linton was appointed a Fellow of the Society of Antiquaries of Scotland in November 1876.

Linton went south to Woolston, Hampshire in 1880 and eventually left to go to Montrose where his tenth and last child, a daughter was borne in December 1884. Linton's wife Marjory died in January 1885 which affected him deeply.

In 1895 he was living in Inverbervie and in November of that year was elected to the town Council. Hercules Linton was aged 64 when he died on 15 May 1900 due to heart trouble.