

William Tierney Clark civil engineer (1783 -1852)

and

Hammersmith

Tierney Clark, one of the most distinguished if not widely-known civil engineers in the first half of the 19<sup>th</sup> century, spent all of his professional life in Hammersmith.

He was born in Somerset, Sion House, in 1783. His father, a distiller, died when Clark was still young and so he was apprenticed age only twelve to a Bristol millwright. From there he made his way to the Colebrookdale Ironworks then the best place to learn the mechanics of cast and wrought iron fabrication for structural use. Clark must have been a talented, ambitious and diligent worker for when John Rennie, the famed builder of the Second London Bridge and Waterloo Bridge, came to visit invited him to his Blackfriars works. There, Clark continued his hand-on education and did not disappoint his mentor. In 1811 the position of Engineer became vacant at the moribund West Middlesex Waterworks in Hammersmith. Rennie recommended Clark who was duly chosen after an interview session. He moved to the works premises and lived there for the rest of his life.

Clark made important contributions to the development of Hammersmith's infrastructure. First, by turning around the Waterworks with the installation of more powerful pumps substantially increasing its capacity. In 1838 the Company acquired 110 acres at Barn Elms on the other side of the Thames for the building, according to TWC's designs, of settling and storage reservoirs. After the reorganisation of the waterworks Clark's duties became routine and he wished to taken on a range of civil engineering commissions. Hence in 1819 Clark struck an agreement with the directors of the Company that he would remain Engineer, stay in his house and receive a reduced salary in return for free time to undertake independent work.

The need for a bridge at Hammersmith to shorten the journey to the Surrey side was becoming apparent in the early 1820-s. The Hammersmith Bridge Company was formed in 1823 and it accepted Clark's proposal for the building of a suspension bridge at an estimated cost of £ 49,627 including land purchases. Clark was strongly influenced and the promoters reassured by Thomas Telford's successful large span bridge over the Menai Strait

(176 metres). The Hammersmith crossing completed in four years was the first suspension bridge over the Thames and set the pattern for Clark's three subsequent bridges at Marlow, Shoreham and Buda-Pesth (later Budapest). The towers to support the chains were in the form of Roman triumphal arches forming a ceremonial progression over the Thames. In the design of the bridge he demonstrated that his architectural design was equal to his engineering talents. The relatively low cost of the bridge derived from the large distances suspension bridges were able to span and thus keep the numbers of piers to the minimum. The foundation stone was laid inside the Middlesex cofferdam by the Duke of Sussex on 7<sup>th</sup> May 1825. The building of the bridge aroused great popular interest particularly when the chains were raised. In 1829 the Boat Race was transferred to this part of the Thames and the bridge became a convenient viewing platform. Count Széchenyi, the Hungarian aristocrat behind the Buda-Pesth Chain Bridge, was immediately captivated by the sight of Hammersmith and this led eventually to Clark's greatest challenge building, or as he wrote *throwing*, the bridge over the Danube. Széchenyi visited Clark several times in Hammersmith during 1832 to discuss his initial designs and answer detail questions of how he would tackle the great difficulty of building over an icebound river.

I have tracked down Clark's domains in the Borough with the help of Anne Wheeldon of *Hammersmith and Fulham Archive* as well as by obtaining Clark's *Will*. He lived and died in Grove Road just to the north-east of St Peter's Church. The 1866 OS map indicates a large house in this location with a substantial garden with its own fountain that must have been fed from the Waterworks. The house has been pulled down, perhaps, after the Waterworks became part of the Metropolitan Board of Works.

In Black Lion Lane, just opposite the present Black Lion pub, is where Clark's mother Susannah and sister Harriet lived. This house still stands and it is likely that he would have been a frequent visitor coming for tea after a day working at the adjacent Waterworks. Sadly for Clark these very close relations died within a year of each other in 1818. He erected a memorial tablet to them that can still be seen in St Paul's Hammersmith. Clark died a bachelor and that is probably the reason why virtually nothing of his personal effects or his archives have survived. He was a wealthy man though and his estate was

valued at £ 35,000. In his Will he named seventeen beneficiaries. To his housekeeper, Mary Wells, he left the copyhold (virtually freehold) of No 5 Hammersmith Terrace. He also left various items and shares to members of the Croker family who were related to him but I have not been able to determine whether paternally or maternally. The most remarkable of the objects was a gold diamond studded snuff-box he received at the foundation laying ceremony of the Danube Chain Bridge on 24<sup>th</sup> August 1842. This box had the letter **F** on its lid for Emperor Ferdinand of Austria was mentioned in a contemporary report in The Times. He left it to Mary Elizabeth Croker who erected the memorial tablet in St Paul's. The whereabouts of this box like everything else that Clark owned is unknown (as the Crokers were Anglo-Irish it is likely that the box is somewhere in Ireland).

Another Hammersmith connection or rather records are in the Budapest History Museum and at the Hungarian Academy of Sciences. Prior to and during the building of the Chain Bridge he corresponded with Count Széchenyi and with his Clerk of Works, Adam Clark (no relation). There are well over one hundred envelopes (usually integral with the letters) bearing the Hammersmith postmark and of course starting as:

*Dear Sir,*

*Hammersmith October 5<sup>th</sup> 1843*

William Tierney Clark was a reserved and conservative Victorian civil engineer (there are disparaging remarks in his letters about the Chartists) of great distinction and one of the most remarkable residents of Hammersmith during the first half of the 19<sup>th</sup> century. Perhaps the time has come to make those walking along the Thames aware of his achievements.

October 2009

Sandor Vaci RIBA