

## **George Collier 1815 – 1862**

George Collier was born at Ashton-under-Lyne, Lancashire in 1815. As a young man, he came to Yorkshire to work for Thomas Taylor and Sons at Barnsley. He took a great interest in the revolutionary principle of the power loom, inspired by the innovations of Massachusetts inventor Erastus Bigelow, who had adapted the principle for use in various capacities. Collier was soon devising improvements to the system; taking out patents and helping Taylors of Barnsley adapt the new power loom to manufacture linen.

Frank (later Sir Francis) Crossley of Halifax watched the course of the power loom with great interest, and, having seen it applied successfully by Collier to linen manufacture at Barnsley, in the spring of 1850, he invited the latter to Halifax. Here, he put the question to the inventor, could he accomplish as much for the carpet as he had done for the linen manufacture? Conditions were much less favourable, and, so far, failure had attended all efforts by inventors in that direction. However, Collier undertook to do his best to meet Crossley's wishes, and was soon paying a second visit to Dean Clough, bringing with him a model loom, with a special feature called a "wire motion." Crossley decided this showed great promise, and before Collier returned to Barnsley, he was engaged to work at Dean Clough, specifically to perfect a power-loom for the weaving of tapestry and Brussels carpets. However, when Collier came to work out his ideas, obstacle after obstacle presented itself; and had it not been for Crossley's firm belief in the inventor's genius, the latter would probably have given up. Much money was spent in carrying out Collier's various experiments, and after many months, the reward came, with the construction of a carpet power-loom which successfully passed all tests required. This was a commercial triumph, and thereafter all other carpet looms were superseded; Collier's patent took its place amongst the most remarkable inventions of the Victorian age. John Crossley and Sons immediately took full advantage of the new machine, and Dean Clough Mills were soon echoing to the sound of scores of looms, of which steam was the motive power. It was a complete revolution: the capacity of carpet production was increased about fourteen-fold at a stroke, and the cost of manufacture reduced correspondingly. And yet, Collier was not satisfied with his carpet-loom; he worked away at it, adding improvement after improvement, taking out patent upon patent, until he had made it even more successful. In December 1851, he took out a patent for a new loom for weaving velvets as well as carpets, which included several valuable improvements advised by Erastus Bigelow. Certain of Bigelow's rights were also purchased.

By this means, John Crossley & Sons became the proprietors of a series of patent rights which were of great value, and for many years yielded them huge revenue. Every carpet manufacturer in Britain found it essential to adopt Collier's loom, or give up in disgust, so that, for a while, Crossleys enjoyed a practical monopoly of the trade. The fortunes of the Crossley family was now made; wealth poured in upon the company at an enormous rate, and their patents and goods found their way into markets all over the world. Dean Clough was extended at an amazing rate, and every department was provided with the best skill that could be procured. In his own province, Collier was supreme.

George Collier, his wife Ann, and family, lived initially at 14 Hopwood Lane, moving later to 17 Milton Place. He died in November 1862, at the age of 47, leaving nearly £20,000. He was buried in Lister Lane Cemetery (Plot No. 536), where his tomb may still be seen.

Collier's two chief assistants at Crossleys, John Marsden and Charles Barraclough - talented local men who worked on his inventions with him - are also buried at Lister Lane (Plot No's 3738 and 3126 respectively).

It was the largely the inventive genius of George Collier, and the patent rights accruing from his inventions, owned by the Crossleys, which laid the basis of that family's great income, and much of Halifax's 19<sup>th</sup> Century prosperity. And yet Collier seems forgotten today, which seems unfair.