

# MATTHEW BOULTON AND THE STEAM- POWERED SOHO MINT

Sue Tungate

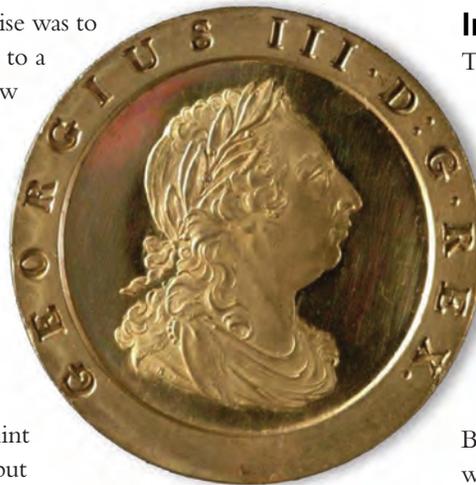
Together with James Watt, Matthew Boulton developed steam power in the 1770s, and by 1788 he applied this to minting by developing the first automatic steam-powered coining apparatus in the world.

In order to make a coin, the usual practise was to impart a heavy blow from coining dies to a metal blank. The Royal Mint used screw presses, each operated by four hefty men, to imprint an image, whilst a young boy placed the blanks manually between the dies. This was a laborious process, and it was more economic to mint gold coins than copper ones; thus small change was in very short supply. This shortage threatened to retard economic activity, as there was not sufficient coin to pay workers. Boulton calculated that the Royal Mint could make around 3½ million coin per year, but he reckoned that he could improve this rate considerably, and also make better quality coins.

In a letter dated February 1788, Boulton wrote: 'I was sent for to Town by Mr Pitt and the Privy Council about a new copper coinage which I have agreed for, but at a very low price; yet nevertheless it shall be the best Copper Coin that ever was made'. Following this meeting, he believed that he had secured a contract for a copper coinage, and began to build the first steam-powered mint in the world, next to his Soho Manufactory.

## Minting Apparatus

Boulton's minting apparatus consisted initially of eight presses in a circle, which were operated by a huge wheel turned by a steam engine. Vacuum presses operated by steam power were used in later versions. These steam-powered presses could work much faster than hand-operated presses, and gave a much more accurate strike on the die. They could also lay the blanks automatically 'true on ye die without care or practise', and keep 'an account of ye number struck', as Boulton commented in his 1788 Mint Note-Book. Each press could coin blanks of varying diameter, producing from 400 to 920 coins per minute.



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Obverse and reverse of eighteenth-century cartwheel coin, value 2d, from Soho Mint, Birmingham, 1797

## Impact

The Soho Mint was operational by 1789, but the regal coinage was postponed until 1797. Boulton initially produced coins for the East India Company and others, such as the Monneron Brothers in Paris, along with tokens for a variety of British customers.

Soho Mint eventually made 320 million coins for the British Government, and sent coins, medals and tokens all over the world. From 1789 until Boulton's death in 1809, 600 million items were struck at Soho Mint, an average of 30 million per year; a vast improvement compared to the Royal Mint.

A great part of the innovations at the Soho Mint were due to Matthew Boulton. His colleagues attributed the success of the steam-powered press to his 'indefatigable energy & perseverance'. Boulton not only exported coins, but also minting technology, supplying equipment to Russia, USA, Denmark, India and to the Royal Mint itself. Due to his improvements, modern money with uniformly-sized coins, straight edges and standardised images, is now used throughout the world. ●

**Dr Sue Tungate** completed a PhD on Matthew Boulton's Soho Mint in the School of History and Cultures, University of Birmingham and is currently an independent historian.

## Further Reading

Richard Clay and Sue Tungate (eds.), *Matthew Boulton and the Art of Making Money* (Brewin Books 2009).  
Malcolm Dick (ed.), *Matthew Boulton: a Revolutionary Player* (Brewin Books, 2009).  
Shena Mason (ed.), *Matthew Boulton: Selling What All The World Desires* (Yale University Press, 2009).