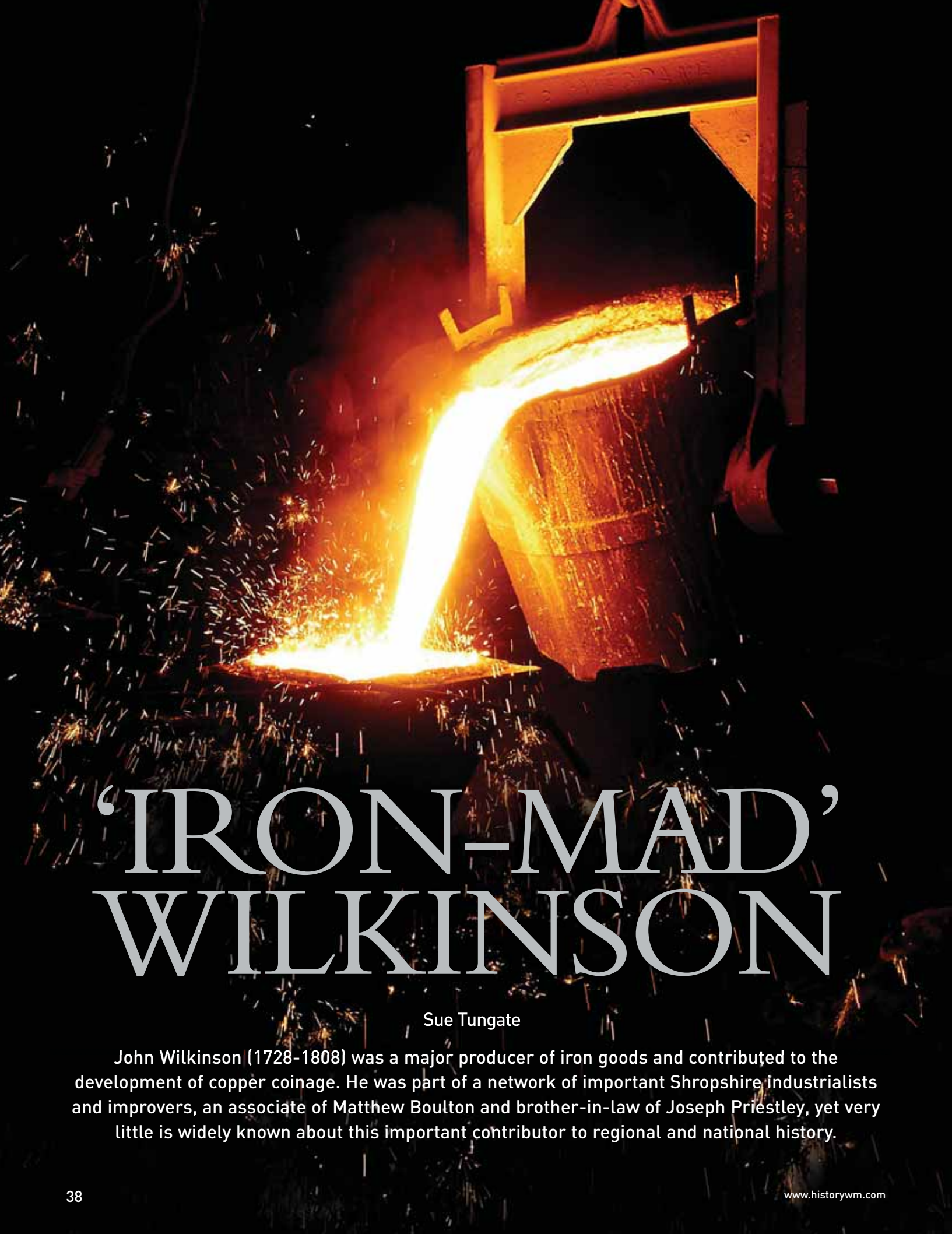

‘IRON-MAD’ WILKINSON

Sue Tungate

John Wilkinson (1728-1808) was a major producer of iron goods and contributed to the development of copper coinage. He was part of a network of important Shropshire industrialists and improvers, an associate of Matthew Boulton and brother-in-law of Joseph Priestley, yet very little is widely known about this important contributor to regional and national history.

A Non-Conformist

John Wilkinson was born in Cumberland, brought up in a non-conformist family and educated at a dissenting academy in Kendal. These academies were higher education institutions which provided an advanced education for non-conformists, who were prevented from attending Oxford and Cambridge for religious reasons.

His father, Isaac, worked at Little Clifton Blast Furnace, near Workington, now in Cumbria. The family invested profits from a patent for a box iron, used to frill cuffs, in a small iron foundry near Back Barrow, Furness, and later moved to the West Midlands area.

Portrait of John Wilkinson by an unknown artist.

Following his Father's Trade

By 1753, Isaac Wilkinson was based at Bersham, near Wrexham, taking over the lease of an iron furnace, and John worked at an ironworks in Bradley, near Bilston, Staffordshire.

At Bradley, Wilkinson experimented in using raw coal to produce cast iron. At its peak, the site included a number of blast furnaces, a brick works, potteries, glass works, and rolling mills and became John Wilkinson's largest and most successful enterprise.

In 1757 in partnership with others, he erected a blast furnace at Willey, Broseley in Shropshire, near to Coalbrookdale. By 1761, he had taken over his father's iron foundry at Bersham, which produced high-quality castings, guns and cannon.

Finding New Solutions

Traditionally, cannon had been cast with a core and then bored. In 1774 John Wilkinson invented and patented a boring machine which rotated the gun barrel rather than the boring-bar, which made the cannon more accurate and less likely to explode.

Using this machine he was also able to bore accurate cylinders for Boulton and Watt's steam-engines and from 1775 until 1795 most of their cylinders came from his works. Wilkinson contributed to the commercial success of the engine. He also saw new possibilities for steam power to drive machinery such as forge hammers and rolling mills. One of the first Boulton and Watt steam-engines was used by the New Willey Company in 1775, and Wilkinson installed their first rotary steam-engine in 1783 to power the bellows of a blast furnace.

In 1775 John Wilkinson was a prime mover behind the building of the Iron Bridge across the Severn at Coalbrookdale, leading a committee of subscribers. When work started in 1777, Wilkinson sold his shares to the builder, Abraham Darby III, leaving the latter to steer the project to its successful opening in 1781.

From Iron to Copper

Apart from iron, Wilkinson invested in the copper industry with his friends, Matthew Boulton (1728-1809), whom he had known since 1766, and Thomas Williams of Anglesey (1737-1802). He produced cylinders for the Boulton and Watt steam-engines which drained Cornish copper mines and supplied Williams with large quantities of equipment and scrap-iron, to precipitate copper out of solution at the Parys Mine, Anglesey. He held shares in Williams' copper enterprises at Holywell in Flintshire, St Helens, near Liverpool, and Swansea, South Wales, as well as in the Anglesey Mines. Wilkinson and Boulton were also partners in the Cornish Metal Company, which Williams eventually controlled. The three men conceived an ideal way of making money – literally – by selling the surplus copper to make coins. This led to Wilkinson's involvement in the production of copper trade tokens.

Trade Tokens

At the end of the eighteenth century, because the Royal Mint did not make sufficient small change, trade tokens were used as a substitute currency for industrial workforces. The first trade tokens had been made by Thomas Williams, who issued Anglesey halfpenny tokens from May 1787. Boulton and Williams were initially rivals for a contract to supply sufficient copper coin. Wilkinson was instrumental in arranging for the two men to make joint approaches to the Government. When Boulton was asked to attend a meeting of the Privy Council for Coin in December 1787, he invited both Williams and Wilkinson to Soho, near Birmingham, to accompany him to London.

Boulton expected a very large order for coins and set up the Soho Mint for this purpose in 1788, but a regal coinage contract did not materialise. Wilkinson advised Boulton to 'push all private channels that offer'd' to gain minting expertise, so he started to produce tokens in 1789. These copper halfpennies enabled Wilkinson and Williams to pay their employees with quality pieces, until the issue of regal coins at Soho Mint after 1797.

WILKINSON TOKENS

Wilkinson issued his own tokens from August 1787 until 1795. Normally the only portrait on a coin was that of the monarch, but Wilkinson advertised himself. His tokens show his bust facing right on the obverse, and the inscription JOHN WILKINSON IRON MASTER. They are 29mm in diameter, made of copper, and weigh between 10.3g and 14.4g depending on the date. The first version of the reverse shows the interior of a forge, with a large drop hammer, and a workman holding a piece of iron on an anvil. The edge was marked WILLEY SNEDSHILL BERSHAM BRADLEY, the places where Wilkinson had his main works.

The reverse of a 1792 forge token.

A different token was struck, dated 1788, to celebrate the launch of Wilkinson's iron barge at Willey on the river Severn. This was a seventy-foot-long boat, which was used to transport iron to Birmingham. A third reverse design, with Vulcan seated at his anvil, was introduced in 1790 and issued again in 1791 and 1792.

'Forge' tokens, made in 1787 and 1788, were produced at Parys Mint, run by Williams, and later over 700,000 were made at Soho Mint in 1790, 1792, 1793 and 1795. Boulton initially used dies produced by the original engraver, John Gregory Hancock, and then used his own engraver, Rambert Dumarest.

The tokens with the Vulcan reverse were produced by John Westwood between 1790 and 1793, also in Birmingham, but after a quarrel with his brother William in 1795, no more tokens were made for Wilkinson.

Wilkinson tokens are now valued by collectors and Birmingham Museum has a good selection. All tokens with Wilkinson mis-spelt are forgeries, as are versions with other reverse designs.

A Wealthy Businessman with a Moral Compass

By 1796, Wilkinson's vast iron empire was producing one-eighth of Britain's cast iron; he had become very wealthy. He bought into partnerships with banks in Birmingham, Bilston, Bradley, Brymbo and Shrewsbury to finance his business interests and to service his trade tokens. He also held shares in canals and in lead mines where he installed steam pumping engines to remove water. He exported lead via Chester and sent it to his lead pipe works at Rotherhithe in London, where he supplied pipes for the Paris waterworks.

Like Boulton, Wilkinson had a good reputation as an employer and built cottages for his key employees and their families. He supported his brother-in-law Joseph Priestley financially, provided a cast-iron pulpit for Bilston, was a church warden at Broseley and served as High Sheriff of Denbighshire in 1799. He also invested in estates at Castlehead, Cumbria and Brymbo, Denbighshire, where his agricultural improvements drew contemporary praise.

Last Resting Place

Wilkinson wanted to be buried in the garden at his Castlehead home, but a later owner objected to the forty-foot-tall obelisk marking his grave, and so his iron monument, weighing twenty tons, now lies in Lindale in Cartmel, Cumbria (formerly Cumberland), where Wilkinson had previously lived.

Dr Sue Tungate is Assistant Editor of *History West Midlands*. She recently completed a PhD at the University of Birmingham on Matthew Boulton's Soho Mint.

Further Reading

W.H. Chaloner, 'New Light on John Wilkinson's tokens', *Seaby Coin and Medal Bulletin*, 1948, pp. 306-308.
Frank Dawson with David Lake, *John Wilkinson: King of the Ironmasters* (The History Press, 2012).
Barrie Trinder, *The Industrial Revolution in Shropshire* (Phillimore, 2000).
David Vice, 'The Tokens of John Wilkinson', *Format* 40 March 1990.

There are a variety of websites which give further information about John Wilkinson. A good starting point is the Broseley Local History Society incorporating the Wilkinson Society and its Journal at http://www.broseley.org.uk. Its archives can also be accessed via http://www.oldcopper.org.uk/wilkinson.htm where there are other articles on Wilkinson.

One of Wilkinson's cylinders is part of the oldest working steam-engine in the world. Known as the Smethwick Engine, it was installed on the Birmingham-Wolverhampton canal in 1779 to refill the canal at the top of the locks, pumping the equivalent of 1,500 buckets of water each minute. A branch of this canal passed Wilkinson's Bradley works. The engine is now housed at Thinktank, the Birmingham Science Museum, located at Millennium Point.

Visit http://www.thinktank.ac/