## WOMEN AND CHILD WORKERS

# AT THE SOHO SITES OF MATTHEW BOULTON AND JAMES WATT

### Caitlin Russell

In the 1770s, a partnership developing practical steam power began between the English manufacturer, Matthew Boulton, and the Scottish steam engine inventor, James Watt. This partnership was successful and in 1796 they established a foundry in Smethwick, Birmingham, to have a specialised production unit for their steam engines. It joined Boulton's Manufactory and Mint, in Handsworth, to form the Soho Sites. These enterprises contained a wide range of workers, including women and teenage boys. Documents kept by the company reveal the nature and extent of the relationship between employers and employees.



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Women workers polished silver items such as this

#### Women Workers

There is not a lot of evidence for women workers, but one of the few tantalising pieces is provided by Dorothy

Richardson, a contemporary who

visited the factory in 1770 and wrote a detailed account of what she saw. Her evidence indicates that there were women workers at the Manufactory who have been hidden from history in the secondary sources.

Some women were also shaving off the edges; they stand upon their right foot, with their left they press a treddle, the left hand is used for putting buttons into an engine, the right for turning the engine, and with their right elbow upon an iron, they make them drop out. They were also boring holes in the shanks with the same kind of engine.1 Sugar bowl manufactured by Boulton & Fothergill, 1776.

Richardson described women making buttons. However, this

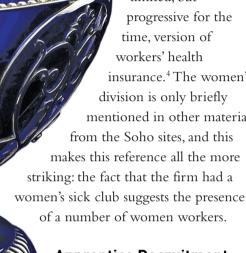
was not the only task women could perform. Some of the women workers were burnishers, who polished silver items such as dish covers, bottle stands, and egg cups with gilt insides, using burnishing tools.2

These items were produced by the M. Boulton and Plate Company, a company about which not much is known. These women kept a book between 1815 and 1823 where they documented their bi-weekly output of items burnished, so we can learn about their tasks, wages and the objects produced by the company.<sup>3</sup> The book also provides insights into the company's relationship with its workers. In the book, each woman had her own collection of pages identified by their individual names as titles and variations in handwriting. Every now and then a clerk wrote in a red ink about their wages. Clearly this was an official document.

Sometimes this red ink mentioned when money was 'left off for club', referring to the women's division of the Soho Insurance Society, commonly

known as the Soho Sick Club.

which provided Manufactory workers with a limited, but progressive for the time, version of workers' health insurance.4 The women's division is only briefly mentioned in other material from the Soho sites, and this



### **Apprentice Recruitment**

Apprentices were hired by the Boulton and Watt enterprise to be trained as future loyal workers and to ensure there were always enough hands available to

perform skilled tasks. The Soho Foundry hired apprentice boys once they reached the age of 14. For the boys who had contracts, or indentures, their birthdays were figured out using baptism notes.<sup>5</sup> Birthdays were important as the indentures stated they would be apprentices until their 21st birthday. There were, however, many boys who did not stay for the full term: some ran away, a few became soldiers, and a few died before their contract was completed.<sup>6</sup> All Boulton and Watt's apprentice boys came from the local villages and towns surrounding the Soho sites. Their mothers and/or fathers were sometimes already working for the firm, but the vast majority of the guardians' occupations were in other skilled labour such as lapidary work.7 Apprentices agreed to a list of rules laid out in their indentures and their parents or

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guardians acted as their guarantors. Rules appeared in the same format across all indentures from 1796 – 1819 and included keeping company secrets and not attending ale houses:

... to serve from the day of the date hereof, unto the full end and Term of [x amount of years] until fully complete and ended. During which Term the said Apprentice his Masters faithfully shall serve, their Secrets keep, their lawful Commands every where gladly do: he shall do no damage to his said Masters nor see it done by others: but to the best of his Power, shall let, or forthwith give Notice to his said Masters of the same: he shall not waste the Goods of his said Masters nor lend them unlawfully to any: he shall neither Buy nor Sell without his said Masters License: he shall not play at Cards, Dice, Tables, nor any unlawful Game; he shall not haunt Taverns, or Ale-houses, nor absent himself from his said Masters Service, Day or Night, unlawfully; but, in all things as a faithful Apprentice, he shall behave himself towards his said Masters and all theirs during the said Term.8

It was important to instil the values required of a good worker from an early age. Personal behaviour was managed, which shows the company wanted to have workers who were sober, trustworthy and frugal.

However, not all the working boys were recruited in this way. Others were labelled as 'Boys not



The Soho Foundry with boring mill in the foreground, 1895.

Bound' and were usually much younger when they started their work. They appear on lists of workers and were paid much less than the adult workmen and the indentured apprentices. Boys' wages seem to have been graded in several ways including by age, on the type of labour they performed, their skill, and their own diligent behaviour. What the boys themselves thought of this pay gradient we do not know, yet many of them chose to stay on after their apprenticeships expired, which would indicate they were not unhappy with their work.

The labour expected of the boys varied considerably. Indentured apprentices were assigned a specific skill to learn and most continued with that skill for the rest of their lives. They became highly skilled foundry workmen, producing the parts for Boulton and Watt's world-renowned steam engines. The most common job assigned to the boys was filing and fitting iron; others included moulding and casting iron, and pattern-making. <sup>10</sup> This foundry work was the start of a new form of mechanical engineering and these boys were challenged to keep up with the exciting pace of advancing techniques.

The company had a paternal attitude towards these apprentices and boys, and many apprentices were housed with workmen's families for board and lodging whilst they were trained in the Foundry. This paternalist attitude was also revealed in the provision of Christmas presents, an annual occurrence where boys and apprentices were given small amounts of money as gifts from the company.<sup>11</sup>

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### WOMEN AND CHILD WORKERS AT THE SOHO SITES OF MATTHEW BOULTON AND JAMES WATT

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Boulton and Watt Christmas present lists 1799 – 1809: this page indicates cash gifts given to boys in 1800.

These lists were drawn up by clerks but often edited by James Watt Junior and Matthew Robinson Boulton who made comments about the apprentices and boys' behaviour. A regular feature of these lists were accounts of how many windows the boys managed to break each year, with a respective reduction to their gift. In 1804, 22 windows were broken in the fitting department. Whether this indicates clumsiness, malicious intent or the collateral damage of the work in the engine fitting department is left to the imagination. As a penalty, they were made to pay for the replacement of the windows through a reduction of their Christmas gift. This punishment was spread across a large number of boys which meant it had a minimal impact in terms of individual losses. Clearly it was not a serious misdemeanour. The more serious examples were dealt with by complete removal of Christmas gifts, as shown in the case of two

brothers who stole fruit from the magazine and had to forfeit their presents entirely. 13 This use of gifts as a way of disciplining the apprentices and boys not bound shows just how close a relationship there was between the boys and the adults surrounding them. They were not fired from work at the first sign of disobedience and they were given rewards for working well.

#### Children's Education

This paternal attitude continued from Boulton and Watt to their sons and successors Matthew Robinson Boulton and James Watt Junior. It was applied to the workers' own children as well. In 1813 the new Handsworth National School, which was linked with St Mary's Anglican parish church, opened nearby, and parents sought James Watt Junior's approval to help their prospective pupils gain entry. The recommendation from a well-respected man such as James Watt Junior would boost a child's chance of attending the school. Lists were drawn up of children of the Foundry and Manufactory employees, and James Watt Junior ranked the children he recommended to the school, most of whom were under the age of 10.14 Both girls and boys were endorsed by James Watt Junior, and some girls were placed higher in the rankings than the boys. There does not seem to be any correlation between the parents' roles or status at Soho and the children chosen, so that it seems as if James Watt Junior had at least met the children to get a grasp of what they were like rather than depending on judgements of their parents. James Watt Junior's involvement in the lives of the children of workers to help them to gain an education reveals much about the nature of relationships at the Soho sites.

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St Mary's Church, Handsworth by Thomas Thomas, 1854. An image of Handsworth National School does not seem to survive, but it was built next to the church and was under the management of the vicar.

Caitlin Russell is a BA History Graduate at the University of Birmingham and produced this article whilst working as a funded History West Midlands Research Scholar, to conduct research on James Watt.

#### Notes

- <sup>1</sup> N. Goodison, *Matthew Boulton: Ormolu* (London, 2002), p. 24.
- <sup>2</sup> Wolfson Centre for Archival Research, Library of Birmingham (WCAR), Matthew Boulton and Family Papers, MS 3782/5/6, Burnishing Book.
- <sup>3</sup> WCAR, Matthew Boulton and Family Papers, MS 3782/5/6, Burnishing Book.
- <sup>4</sup> WCAR, Boulton and Watt Collection, MS 3147/8/47, Soho Manufactory Insurance Society Charter.
- <sup>5</sup> WCAR, Boulton and Watt Collection, MS 3147/8/26&27, Apprenticeship Indentures 1796-1810 & Apprenticeship Indentures 1810-1819.
- <sup>6</sup> WCAR, Boulton and Watt Collection, MS 3147/8/42/7-8, Lists of Articled Men and Apprentices 1797-1813.
- <sup>7</sup> Lapidary work involved the engraving, cutting or polishing of stones and gems.
- <sup>8</sup> WCAR, Boulton and Watt Collection, MS 3147/8/26/5, Apprenticeship Indentures 1796-1810.
- $^{9}\,$  WCAR, Boulton and Watt Collection, MS 3147/8/26, Apprenticeship Indentures 1796-1810.
- <sup>10</sup> WCAR, Boulton and Watt Collection, MS 3147/8/26&27, Apprenticeship Indentures 1796-1810 & Apprenticeship Indentures 1810-1819.
- <sup>11</sup> WCAR, Boulton and Watt Collection, MS 3147/8/43/2-6, Christmas Presents lists 1799-1809.
- <sup>12</sup> WCAR, Boulton and Watt Collection, MS 3147/8/43/4, Soho Foundry Christmas Presents 1800-1804.
- 13 Ibid.
- <sup>14</sup> WCAR, Boulton and Watt Collection, MS 3147/9/29/22&23, A List of Children Whose Parents Are Desirous of Having Them Educated & List of Children at Soho Foundry Recommended by James Watt Junior.

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