

The origin of Henry Cort's iron-rolling process: assessing the evidence

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ABSTRACT: This paper examines the available evidence relating to the disputed origin of Henry Cort's iron-rolling process. The principal primary sources, reproduced in the Appendix, do not support the contention that Cort acquired the process from enslaved metalworkers at John Reeder's foundry in Jamaica; nor that the foundry was dismantled and shipped to Portsmouth for Cort's benefit. The sources instead suggest that ordinary and widespread ironmaking processes were in use at Reeder's foundry; that no innovation occurred there; that the chain of events by which Cort is supposed to have heard of the foundry's activities certainly did not occur; that Reeder's foundry was destroyed because of the threat of a Franco-Spanish invasion force; and that no part of the foundry was removed from the immediate vicinity of the island, let alone taken to Portsmouth.

Introduction

Henry Cort is celebrated for his *rolling and puddling* process, a novel combination of ironworking procedures which contributed greatly to Britain's early industrial development. This new system was set out in two patents: in 1783, Cort specified a method for recycling scrap iron, which included a technique of passing white-hot billets through grooved rollers; and in 1784 he introduced *puddling*, the more consequential innovation, a method of producing wrought iron in a reverberatory furnace. Two hundred and forty years later, the origin of Cort's iron-rolling process has been called into question by Jenny Bulstrode (2023a), who argues that he in fact stole the idea from enslaved metalworkers in Jamaica.

Although Cort is widely considered one of the Industrial Revolution's most important inventors, details about his life are scant and almost nothing is known about the process by which he developed his method of rolling iron. The main primary source of information about

Cort's life is a collection of papers held in the Science Museum archive, which provides only the following short account:

Mr Cort entered upon a variety of experiments, with a view to the profitable conversion of [his] large stock of old hoops, and, at length, discovered and perfected the process for which he obtained his first patent (NCC: [Weale MS/0371](#), f. 199).

We have no further record of these experiments, and this lack of detail has provided Bulstrode with an opportunity to put forward her own theory. Her paper advances the following three claims:

1. A foundry in Jamaica was using grooved rollers to process scrap metal into wrought iron several years before Henry Cort obtained his patent.
2. This innovation was the brainchild of seventy-six enslaved workers at the foundry.



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3. Cort heard about the foundry and conspired to have its groundbreaking machinery shipped to Portsmouth.

The purpose of this paper is to consider each of these claims in turn, in the light of Bulstrode's principal primary sources (transcriptions of which can be found in the [Appendix](#)). If any one claim is substantially incorrect, Bulstrode's narrative regarding Henry Cort collapses.

The foundry in Jamaica

In an interview with the BBC World Service, Bulstrode explained that she first questioned the origin of Cort's process after reading an archaeological report of a Jamaican foundry 'which was doing what Cort claimed to do, with great success, earlier than Cort' (Uwonkunda 2023). The report referred to is presumably Candice Goucher's 1993 account of her excavations at the site of an 18th-century ironworks at Morant Bay (it should be noted here that nothing in Goucher's paper indicates that a process similar to Cort's was in use there). This was John Reeder's foundry, established in 1772 at the request of the House of Assembly of Jamaica, who deemed it 'highly necessary' to produce metalwork at scale 'for the commerce of the island' (DHC: 15). Planters formerly had to wait at least seven months for items to arrive from England, and often the products received did not match their specifications (DHC: 20). By 1781, Reeder's foundry was turning a profit of £4,000 per year, equivalent to several million sterling today, which is perhaps unsurprising given his sizeable captive market, enslaved workforce, and the plentiful supply of scrap metal to be found on the island (DHC: 15; 20).

But to Bulstrode, Reeder's success can only be explained by a significant technological advantage: the grooved rollers for which Cort obtained a patent in 1783. She asserts that the foundry had achieved the 'mechanical alchemy' of turning scrap iron into wrought iron 'years before' Cort's discovery, and by using the same process (Bulstrode 2023a, 19). Her paper cites a collection of letters and other documents in the archive of the Devon Heritage Centre, mainly relating to Reeder's persistent attempts to receive compensation for the destruction of his foundry in 1782 (see below). These documents form the principal primary source of information about Reeder and his business, and from them it is possible to build a fairly clear picture of the foundry's operations.

The market for metalwork in Jamaica was considerable, and the foundry supplied many items to the plantations, including gudgeons, axles, and rollers for sugar mills, and massive iron boilers for processing cane juice (DHC:

20; TNA: [CO 137/87](#), f. 248). The works also turned out maritime supplies such as wrought iron anchors, and military hardware including cannon, brass howitzers, petards, shells, shot, and lead bullets (DHC: 2; 20). From the items produced, we can conclude that the foundry's workers were skilled at melting, mould-making, casting, welding, turning, and in crafts such as carpentry. As for the actual technology in use, the works contained 'engines and implements', 'machinery for making [bar] iron', and a number of reverberatory furnaces (DHC: 1; 2; TNA: [CO 137/87](#), f. 254). The documents do not mention a water wheel but there seems likely to have been one, given the location of the works by a river and the fact that any 'engines' in use – probably forge hammers, bellows, and boring machines for artillery – would require a source of motive power. For fuel, coal was imported from Britain 'at a lower price than [it is] sold at in London', and wood and charcoal were obtained cheaply on the island (DHC: 20).

The foundry's feedstock was apparently an abundance of wrought and cast iron scrap, although the documents also mention that pig iron could, in theory, be produced from rich supplies of ore in the vicinity (DHC: 20). Reeder was granted permission in 1776 to construct a smelting works at the location of a nearby mineral spring (Goucher 1990, 41), but it seems that this was never built: while he mentions the possibility of smelting, Reeder does not discuss it at all in practice. Additionally, a blast furnace would leave a singular mark on the ground in footprint and slag, and Goucher points out that such a site has yet to be found (1993, 213; 2013, 183). It seems probable, therefore, that the bulk of Reeder's output was fashioned from recycled metal.

Bulstrode places great emphasis on the foundry's re-working of scrap iron, but this was common practice at the time (Hayman 2004, 117). In 1753, Charles Wood's forge in Cumberland was reported to be transforming scrap into iron bars using a technique which could yield six to seven tonnes per week, were it not for a lack of raw material (Berg & Berg 2001, 287–288). In 1766, the manager at the Coalbrookdale ironworks claimed that iron they had produced from scrap was 'the toughest [he] ever saw' (Hayman 2004, 115), and in 1775 Charles Wood's brother John was transforming large quantities of scrap from Northern Europe into bars said to be 'equal in quality [and price] to the best Swedish iron' (Mott 1983, 7). Reeder shipped in sixty experts to set up his foundry in the 1770s, and they likely brought with them the latest methods known in Britain at the time (DHC: 16; 30). To recycle iron, British foundries are known to have first cleaned the scrap, then heated

it in a reverberatory furnace (of which Reeder had more than one), before finally working it under a heavy water-powered hammer (Hayman 2004, 116–117; Berg & Berg 2001, 48, 180, 287–288). This process aligns with the description of ‘machinery for making [bar] iron’, and the presence of ‘engines’ at Reeder’s works.

Reeder’s considerable profits are easy to understand in the context of his operations: his overheads, in terms of labour (mostly unpaid) and materials (apparently plentiful), were comparatively very low. He enjoyed a captive market of planters and faced no competition from within the island. Importantly, he was also operating at the time of the American Revolutionary War and was conveniently located to supply the Port Royal Dockyard at Kingston. The British Navy consumed enormous quantities of iron, and contracts to supply it could be highly lucrative: in 1769, merchant Andrew Lindgren was awarded a contract worth £14,000 to provide Swedish iron to smiths at the naval dockyards in England, to be worked into items which were then worth up to three times as much; meanwhile, Henry Cort’s uncle by marriage, William Attwick, provided the Portsmouth dockyard with an estimated £8,000 worth of ironmongery (Mott 1983, 19–20). In just two months, immediately before it was dismantled in 1782, Reeder’s own foundry supplied munitions for the island’s defence worth over £500 (DHC: 2). In total, Reeder fitted out no fewer than seven warships, and it is not unreasonable to suppose that he would have charged a premium to equip vessels anchored thousands of miles from the dockyards in England with no other means of supply (TNA: CO 137/87, f. 248).

Was the foundry in Jamaica using grooved rollers?

A key claim, vital to Bulstrode’s argument, is that the foundry was ‘equipped with water-powered rolling mills’ where workers fed scrap iron ‘through grooved rollers’ (2023a, 13, 18). Rolling mills are not referred to in Reeder’s letters, and no mention is made of any kind of iron-roller, but Bulstrode nonetheless states categorically that:

They had a rolling mill; and they had grooved rollers (Bulstrode 2023a, 19).

Here, two sources are given. As evidence for the presence of a rolling mill, Bulstrode cites the deed for Reeder’s use of the land in 1772, kept in the Island Records Office, which states that he purchased land by a river for the purpose of erecting ‘mills with a water

work for the smelting and other manufacture of iron and other metals’ (IRO: [Indenture dated 29 April 1772](#)). This alone, however, does not prove the presence of a rolling mill, since water was also used to power forge hammers, bellows, and boring engines. As evidence for the use of grooved rollers, Bulstrode cites a petition from Reeder’s daughter Eliza to the British Parliament, which includes a brief account of her father’s foundry and its destruction (DHC: 30). Most of the information appears to have been copied from Reeder’s papers, with some additional detail which Eliza presumably learned from him while he was alive. The document makes absolutely no mention of a rolling mill, or of grooved rollers, and is entirely irrelevant to Bulstrode’s assertion (see full transcription in [Appendix](#)).

Bulstrode offers no further evidence to support her statement that Reeder’s foundry processed scrap iron using grooved rollers, and we can therefore reasonably dismiss this claim.

Did enslaved metalworkers at the foundry in Jamaica develop a revolutionary process?

Reeder’s workforce of over one hundred men included seventy-six enslaved labourers who were ‘principally employed in carrying on the operation of the foundry’ (DHC: 7). It is these workers to whom Bulstrode credits the groundbreaking invention later patented by Cort. We have seen that no such process was in use at the foundry, but let us nonetheless consider whether these men were likely to have developed a similar technique in the way that Bulstrode suggests. Here is her description of their process:

The Black metallurgists who ran John Reeder’s foundry [...] were not bound by European classificatory conventions and their practices and purposes were their own. They tied scrap iron in bundles like sugar cane, heated the bundles in the reverberatory furnace, and then fed them through grooved rollers like those found in a sugar mill. In doing so, they transformed scrap metal into valuable bar iron (Bulstrode 2023a, 13).

This brief passage contains all the information given in Bulstrode’s paper about the workers’ alleged process, and stands in marked contrast with the many technical details contained within Cort’s initial patent (Mott 1983, 91–98). Bulstrode describes a rather freeform, intuitive discovery; she imagines that, for these men, ‘sugar and iron shared much overlapping conceptual space’ and

thus they were inspired to replicate the use of grooved rollers found in sugar mills, with astounding results (2023a, 12–13). She offers no evidence for this assertion, and it is almost impossibly unlikely.

In reality, the development of new ironworking techniques was laborious and expensive, involving much trial and error. The survey by Mott (1983, 1–15) of the many prior attempts to create an improved finery process describes patient experimentation, sometimes lasting decades, involving the trial of different fuels and materials, the erection of modified furnaces, and the design and manufacture of new machinery and utensils. Even Cort's puddling process required further improvement by other ironmasters before it was widely adopted. I will leave the reader to decide how likely it is that Reeder, having invested large sums in building his foundry under the guidance of British experts, would allow his enslaved workers to embark on such an expensive and time-consuming endeavour 'for their own purposes' (Bulstrode 2023a, 3), and with no guarantee of success. As for the sugar rollers, Howes (2023) points out that these were 'almost entirely different in function and form', being typically orientated vertically with grooves running down their length, rather than horizontally with circumferential grooves, as would be required for the working of iron.

Bulstrode describes the enslaved workers as 'metallurgists', but there is no record of their specific roles within the foundry. Whatever skills these men possessed were clearly not immediately suited to European forge-work, since British ironworkers had to be brought to Jamaica for their training (Bulstrode says this took several years). Reeder wrote that his workers were then 'perfect [*i.e.* proficient] in every branch of the iron manufactory' (DHC: 20), and Bulstrode makes much of this, especially in subsequent interviews and articles. But she neglects to mention the revealing conclusion of his sentence: 'so far as relates to casting and turning mill cases, cannon, iron boilers [etc.] and in wrought iron anchors, mill gudgeons, axles [etc.]'. It is clear that their expertise was specific, and not sufficient to carry out all of the foundry's functions, as Reeder later complained that his badly damaged plant would remain useless until the 'proper people [were] procured from England to put it in order' (DHC: 1).

Bulstrode also fails to remove Reeder himself from the equation. She mentions that, when approached to establish an ironworks in Jamaica, Reeder declared himself 'quite ignorant of such a business' (DHC: 30) (her intention is clearly to contrast his lack of expertise with the

'perfect skill' of the enslaved metalworkers). But it does not follow that he *remained* ignorant, and he very likely gained considerable experience in the decade spent setting up and operating a large iron foundry. Bulstrode neglects to mention that Reeder was a coppersmith by trade (Goucher 1993, 206), and thus familiar with metalworking in general, and that his contemporaries believed him to be a capable entrepreneur and innovator: 'a gentleman of great industry and ingenuity', possessed of 'uncommon talents' and 'a most active mind' (DHC: 30; TNA: CO 137/87, ff. 249–50).

This is especially relevant because Reeder, in his letters and papers, never once mentions a new technique for processing iron, nor any kind of newly developed equipment. After the demolition of the foundry, he attempted to mitigate his loss by selling his remaining stock, but was unable to do so and found himself in debt and in a rather desperate state (DHC: 12; 16; 30). It is hard to believe that a man as driven and acquisitive as Reeder would not, on finding himself in such a situation, attempt to capitalise on a secret so valuable that it was later described as one of three inventions together 'more advantageous to Britain than thirteen colonies' (Holroyd 1784, 19n). We know that he made several patent applications to both the Jamaican House of Assembly and the British Parliament, and was awarded a patent in 1786 for his invention of a vessel for clarifying cane juice (DHC: 3; Jamaica Assembly 1790, iv; Woodcroft 1854, 287). Yet he made no such application for any invention relating to wrought iron. Reeder spent the remainder of his life seeking damages for the destruction of his foundry, but at no point did he try to obtain redress for the theft of intellectual property by Henry Cort, whose patent was widely known and discussed.

Did Henry Cort hear about the Jamaican foundry?

By consulting Parish records, Bulstrode has been able to establish the names of several of Reeder's enslaved workers, who were baptised in July 1780 and assigned new Christian names (RGD: 2 July 1780). The records describe the baptised men as 'belonging to Mr John Reeder of Morant Bay', and it is reasonable to assume that they laboured as metalworkers in his foundry. She also mentions a further baptism of four individuals, but examination of the records shows that these were in fact workers 'belonging to the Morant Bay Estate', a nearby plantation, and therefore not foundry men (RGD: 31 December 1780). The records also contain the following entry (RGD: 25 December 1780):

Baptised a Maroon Negro from Nanny Town formerly called Quashie in the church during divine Service
Name John Reeder

This is the man who shortly afterwards killed an outlaw known as Three-Fingered Jack and, in doing so, obtained great renown and a generous pension from the authorities. Contemporary accounts explain that he was baptised and took on a Christian name in order to defeat Jack's 'Obi', or magical powers (Moseley 1799, 177). Why he chose the name John Reeder is not recorded – perhaps he did so because Reeder was wealthy and successful, or once did him a kindness, or for any number of other reasons; we will probably never know. Enslaved workers were often named after their owner or the owner's friends – indeed, several of Reeder's own workers were so baptised – but Quashie was a free man and doubtless chose his own name. Bulstrode offers his choice as proof that he worked at the foundry, but since no other evidence exists to connect him with Reeder, her conclusion amounts to little more than guesswork. Nonetheless, her argument continues with another great leap of logic: that news of Quashie's deeds would necessarily have been accompanied by details of Reeder's foundry and the technology in use there. Specifically, Bulstrode claims that a relative of Henry Cort – John Cort, master of the merchant ship Abby – was in Jamaica at the time and sailed back to Portsmouth with the news. No evidence is provided that John Cort ever heard about the killing of Three-Fingered Jack, although Bulstrode does point to a single brief report in the supplement to the *Royal Gazette of Jamaica* (1781, 79), which names Jack's killer as 'John Reeder'. The report makes no mention of the foundry.

Here is Bulstrode's account of John Cort's voyage back to England:

[John Cort] exchanged the shoes, fine clothes, mahogany furniture, curled hair and candles of Lancaster for the sugar, coffee, rum, cotton, and lignum vitae of Jamaica. Later that same year he was returning from Jamaica in convoy, when the Abby was separated and taken off course. '[L]eaky, sickly and short of provisions', they abandoned their intended destination of Lancaster. By dint of 'incessant pumping', with just 'three days bread' to spare, they weighed in at Portsmouth, where John Cort's 'cousin', Henry, ran a struggling ironworks (Bulstrode 2023a, 16).

The description of the ship's difficulties, in quotes, is taken from a letter, dated 20 November 1781, from the captain of the Princess Royal, a 90-gun ship of the line.

Here are the relevant passages, with the portions quoted above by Bulstrode in italics:

You will please to inform their Lordships I sailed from Jamaica in company with Captain Bowyer, of the Albion, and convoy; on the 22nd August, separated from him by accident, with thirty-two sail of said convoy [...] that I used my utmost endeavour to keep the separated parts of the convoy with me till the 6th of November, when his Majesty's ship under my command became so *leaky, sickly, and short of provisions*, having only twelve days on board at the distance of 500 leagues from the Lizard I thought it prudent, for the safety of the ship and company, to make the best of my way to Portsmouth, where I arrived with *incessant pumping*, and *three days bread*; and for the convoy refer you to the following particulars; [here a list of ships is given, including the Abby] all parted from the Princess Royal on the 6th November (*Dublin Evening Post* 1781, 2–3).

It is very clear from the letter that the Abby, along with the rest of the merchant ships, parted company with the Princess Royal on 6 November. The writer even goes on to give the exact coordinates: lat. 44, 52, long. 38, 18 – the middle of the Atlantic Ocean. The details of the dangerous state of the ship, which Bulstrode quotes as referring to the Abby, in fact refer to the Princess Royal: 'his Majesty's ship under my command'. The Princess Royal proceeded directly to the anchorage at Spithead, a miserable journey during which fourteen of her crew were committed to the deep, and finally came to anchor on 21 November (TNA: ADM 52/1906).

What of John Cort and the Abby? Let us turn to the source cited by Bulstrode for the list of the Abby's cargo in the quote above: a brief passage in the *Manchester Mercury* of 4 December 1781.

ARRIVED at LANCASTER [...] The Abby, John Cort, from Jamaica, with 90 hhds 6 tcs sugar 152 casks prize coffee 10 casks B.P. coffee 26 punches rum 49 bags cotton 5 tons lignum vitae for Abraham Rawlinson, Sons, and Lindow, 49 puncheons rum James Handkinson, 4 tcs sugar 5 punches rum John Cort [*sic*].

Here, Bulstrode cites clear proof that John Cort did not in fact abandon course and make for Portsmouth, but instead arrived at his intended destination of Lancaster. Another contemporary report gives the date of his arrival: 21 November, the very same day that the Princess Royal anchored at Spithead (*Public Advertiser* 1781, 4).

Neither of the sources quoted above is ambiguous, and it is hard to believe that Bulstrode did not comprehend their true meaning when she cited them in support of her argument. Each contains a clear refutation of her claim that John Cort sailed to Portsmouth and there told his relative Henry Cort about Reeder's foundry. This alone is fatal to Bulstrode's case, but she makes one last assertion, which we must now deal with for the sake of completeness.

Was the foundry demolished and shipped to Portsmouth?

Bulstrode maintains that John Reeder's foundry was demolished under a pretext and its groundbreaking machinery shipped to Henry Cort in Portsmouth. The foundry certainly was demolished: in a period of twelve days commencing 20 March 1782, by order of the Governor Sir Archibald Campbell, Reeder's works and equipment were 'levelled to the ground' by a detachment of the island militia commanded by one Captain Christie (not by 'Black pioneers' as Bulstrode claims) (TNA: [CO 137/87](#), ff. 250, 254). Jamaica was at this time under martial law, being threatened with invasion by a combined force of fifty French and Spanish warships transporting an army of 30,000 troops, mostly regulars, who greatly outnumbered the 11,715 defenders of the island, the largest part of whom were militiamen raised from the local civilian population (BL: [King's MS 214](#), 7). This threat of invasion was very real: had Admiral Sir George Rodney not pursued and defeated the French fleet, on its way to rendezvous with the Spanish ships, the assault on the island would almost certainly have taken place. The primary sources are unanimous that the foundry was destroyed to prevent it from falling into the hands of this powerful enemy, 'at that time daily expected', lest it 'be of the same service to them which it had avowedly been to his Majesty's ships of war' (DHC: [1](#); [2](#); TNA: [CO 137/87](#), f. 248). But Bulstrode suggests a different motivation:

Campbell himself identified a further even more substantial threat, internal to the island. According to his survey, if armed men took up positions in the mountains, as [Three-Fingered Jack] had and the Maroons maintained, they would become 'formidable'. Black skill had made the foundry, and now the threat of Black retribution saw Campbell order it broken up by 'Black pioneers' (Bulstrode [2023a](#), 17).

This is simply untrue. The source Bulstrode cites as evidence here is Campbell's detailed report to the King, which is solely concerned with his plans for the defence

of Jamaica against the superior Franco-Spanish force (BL: [King's MS 214](#), 78). Campbell expected the coast and lowlands to fall quickly and planned, in this case, to retreat to the island's mountainous centre, where he believed the defenders could easily hold out until reinforcements arrived. The passage in question plainly relates to this plan (see [Appendix](#) for the transcription of this source), and nowhere in his lengthy report does Campbell take 'Black retribution' into consideration as a 'substantial threat'. Once more, the source is entirely unambiguous and in no way supports Bulstrode's statement. In a recent article written for the *Jamaican Gleaner* newspaper, she contextualises the dismantling as follows:

Cort's cousin told him [...] of a major foundry, where black metallurgists had discovered a way to convert scrap into valuable new metal and huge profits. Within a few months of their conversation, the British government had put Jamaica under martial law and ordered the destruction of the foundry. The public reason was that the foundry might fall into enemy hands. However, in private, the military governor warned the foundry was too dangerous, because if black Jamaicans could convert scrap metal into cannon, then they could undermine British manufacturers and overthrow British colonial rule (Bulstrode [2023b](#)).

In her earlier piece, Bulstrode implies a secondary motivation, but here she goes further and states clearly that Campbell's primary purpose was to prevent use of the foundry's powerful technology by black Jamaicans. Her wording further suggests that the martial law *itself* was a pretext. Both claims are entirely false.

Bulstrode asserts that following the destruction of the foundry, its components were packed up and 'loaded onto ships set for Portsmouth' ([2023a](#), 18). The implication here is obviously that the machinery was transferred to Cort, who then patented its secrets under his own name. The evidence given is a letter from Stephen Fuller, agent for the Jamaica Assembly, to the Chancellor of the Exchequer. Here is the relevant portion of that letter:

[Reeder] found all his works levelled with the ground; his reverberatory furnaces demolished; some of the materials buried, such of the stock as might be of use to the enemy (who were then assembled in great force at Cumberland Harbour) carried on board his Majesty's ships; and all the rest of his works irrecoverably dismantled & destroyed, by the order of the Governor, lest they should fall into the enemy's hands (TNA: [CO 137/87](#), f. 254).

Bulstrode's quotation of this reads as follows:

Reeder's reverberatory furnaces were 'demolished' [...] and anything 'that might be of use to the Enemy ... carried on board his Majesty's ships', absorbed into a maritime infrastructure that transported unused Naval stores and equipment, from Jamaica to the Naval base in Portsmouth, where Cort operated (Bulstrode 2023a, 17).

Note that the key phrase 'such of the stock' has been left out and replaced by Bulstrode with the word 'anything', giving quite a different impression. Reeder's papers are very clear on exactly what this stock comprised of: 'articles for ships of war, and utensils for sugar plantations' (DHC: 16). Shortly after the event, he presented the House of Assembly with an invoice for supplies of ordnance taken during the period of martial law, including a list of those that 'were returned' (DHC: 2). Thus, it seems likely that Campbell ordered the store of weaponry at the foundry to be taken out of reach of the enemy only for the duration of the crisis. Indeed, this was a stated policy of Campbell's, who instructed that 'the powder and provisions [at Fort Augusta] were to have been placed in vessels to lay at anchor to the eastward of the fort, out of reach of the enemy's artillery' (BL: King's MS 214, 66). Reeder's daughter wrote that some of the cannon were 'sunk', but it is clear that much of the stock was returned to him (DHC: 30).

There is no reason to believe that anything but items of stock 'as might be of use to the enemy' were taken on board the ships, but it is in any case improbable that anything usable remained of the foundry's machinery and equipment. Campbell was reluctant to order the destruction of the foundry, but when he eventually 'yielded to the solicitations of the inhabitants' his instruction was thoroughly carried out: the sources describe the works variously as having been 'irrecoverably dismantled and destroyed', 'ruined', and 'rendered totally useless' (DHC: 4; 7; 12). In a letter to William Pitt, Reeder noted that in order to rebuild his foundry, he would have needed to send to England for many articles to 'replace those that were destroyed' (DHC: 16); he does not say *those that were taken away*, and not one of his letters, nor any of his numerous and detailed applications for compensation, suggest that any part of his foundry was ever removed from Jamaica.

While Bulstrode portrays Campbell's fear of 'Black retribution' as leading to the destruction of the foundry, her paper also hints that Henry Cort himself might have used his influence to ensure that outcome. In a recent

interview, Bulstrode goes further and states directly that Cort used 'networks of power to put a word in someone's ear', gave his 'nepotistic networks a tug', and thus the 'whole concatenation of events' followed; she declares that Cort heard about the foundry and 'the next thing you see is that Jamaica is put under military law and the foundry is razed to the ground, packed up onto ships and transported to Portsmouth' (Renegade 2023). In more than one interview, Bulstrode suggests the possibility that 'some of the black metallurgists were also taken to Portsmouth' (Barber 2023; Uwonkunda 2023). With these statements, Bulstrode goes far beyond reasonable inference and veers into unsupported speculation.

Conclusion

Careful analysis of the key primary sources has shown the following:

- There is no evidence that the foundry in Jamaica used grooved rollers to process scrap metal into wrought iron.
- The foundry's operations were quite normal for the time, and the sources give sufficient detail to explain its notable success.
- The sources reveal little about the foundry's workforce, and there is nothing to suggest that any of Reeder's workers developed a valuable ironworking technique.
- There is no evidence that John Cort ever heard about the foundry, and the sources prove that he did not travel to Portsmouth and tell Henry Cort about it as claimed.
- The sources do not support the claim that the Jamaican foundry's machinery was transported to Henry Cort in Portsmouth. There is no indication that any part of the foundry was ever removed from the immediate vicinity of the island.

In short, there is absolutely no evidence to suggest that Henry Cort's iron-rolling process originated at John Reeder's foundry, or with any of the people who worked there. The allegation against Cort may be dismissed as baseless.

Appendix: transcriptions of selected primary sources

All the below sources are cited in Bulstrode's paper (2023a).

British Library, London

King's MS 214, A Memoir Relative to the Island of Jamaica, 1782, 78–9

It was suggested by many officers and prisoners of war, who came from the Cape, that the French and Spanish Generals were of opinion from their former success to windward, that by taking possession of the coast of Jamaica, with the principal harbours and forts erected for their defence; the reduction of the island would immediately ensue. But I can scarcely conceive that such reasoning would have had any serious weight in their councils.

An army posted in the healthy mountains of Jamaica, with fresh provisions at their command, sufficient to supply the inhabitants and them for two years most abundantly; were not to be subdued by the loss of the coast. On the contrary, an army so provided would become formidable and troublesome in proportion to the inactivity of the invaders.

It was most probable therefore, that as soon as the forts on the coast were reduced, the combined forces would immediately march against our first chain of posts in the mountains; where I meant to receive and seriously oppose them, from a confidence, that such attacks would be attended with great fatigue and loss on their part, and with little risque or disadvantage on ours. The following reasons corroborated my opinion on that head.

That troops occupying a chain of wholesome and extensive posts in the mountains, with every requisite for their comfort and defence, would continue in good health, and be enabled to undertake the usual fatigues of a campaign with cheerfulness.

That as the avenues leading to those posts were narrow, rough and intricate; and the heights bounding them, steep, wooded and full of honeycombed rocks; their access might easily be rendered so impassible to the invaders, that it would become a most laborious and hazardous operation to force them in the face of our army.

Devon Heritage Centre, Exeter

1160 M/C/J/1, Petition by John Reeder to Speaker of Jamaica, 1783

To the honourable the Speaker and other the honourable Members of the

Assembly in the Island of Jamaica

The Petition of John Reeder humbly sheweth

That in the course of the late Martial Law your Petitioners Foundry whose Erections with the Engines and Implements, requisite to working thereof with the necessary Artificers had cost him Thirty thousand pounds, to prevent its being employed towards the reduction of the Island by a powerful Enemy, at that time daily expected, was dismantled as hath been set forth in a former petition presented the last Year.

That his Machinery for making barr Iron hath been totally useless to him since and will remain so until proper people are procured from England to put it in order.

That one hath been engaged at the expense of a hundred and forty pounds but who died soon after his arrival without compleating it having effected any thing.

That thus circumstanced, your Petitioner respectfully presumes to submit his situation to the consideration of this honourable House, humbly requesting such relief as this honourable House in their well known humanity and Justice shall be pleased to extend. And your Petitioner as in duty bound shall ever pray

1160 M/C/J/2, Petition by John Reeder to Speaker of Jamaica, 1782

To the honourable Samuel Williams Haughton Speaker and other the Honourable Members of the House of Assembly.

The Petitioner of John Reeder

Humbly Sheweth

That in the course of the late Martial Law beginning on the third of March and ending on the third of May your Petitioner furnished the Publick with military stores as by his account on the opposite side to the amount of 539=6=11½ current money of this Country for which your Petitioner remains unpaid

That during the said Martial Law your Petitioners Foundry whose erection with the Engines and Implements requisite to the working thereof had cost him Thirty thousand pounds including artificers consisting of Negroes, to prevent its being employed towards the reduction of the Island by a powerful enemy, at that time daily expected, was totally dismantled and rendered useless in future without the Labour of many hands for months attended with an expense of more than two thousand pounds, and that his Machinery for making barr iron has been totally useless to him since

That thus circumstanced your Petitioner respectfully, presumes to submit his situation to the consideration of this humble House, humbly requesting such relief as this honourable House in their well known humanity and Justice will be pleased to extend, and your Petitioner & &

The following is the list of Articles furnished the Country with what were returned and those deficient

The Brass Howitzers	18 Pounders	returned			
Two Ditto Morters	6 Inches	Ditto			
Two D° Petards		Ditto			
Two Cannonades	18 Pounders	with Carriages D°			
Seven Cannon	6 D°	with D° on deficient and			
		2 carriages	£35		
Six D°	4 D°	with D° returned			
Sixty Shells	26 ditto smaller				
Fifty Double Headed Shot		weight	500 a 50/ PC ^t	12.10	
257 Round Shot	18 pounders	returned			
204 Ditto	12 D°	14 deficient		3.7.2	
35 D°	9 D°	62	558 a 40/ PC ^t	11.3.6	
409 D°	6 D°	deficient	2454	49.1.4	
104 D°	4 D°	deficient	412	8.4.6	
119 D°	3 D°	117	351	7 = 5	
41 D°					
333 D°	1/2	} deficient		13	
400 w Lead Bullets in a Cask					
4 Howitzer Carriages with Lumber and Ammunition boxes a					
			£100ea	£400	
			£539.6.11½		

1160 M/C/J/16, Report on consequences of dismantling the foundry, 1789 [extract]

It may be asked as the Foundry had been so productive how it came about that the articles had not been replaced and the Manufactory continued. My then unhappy situation in point of health, from the rupture of a blood Vessel, prevented my attendance which was highly necessary in order to arrange Matters, and to replace those that were destroyed, and for that purpose many articles must have been had from England from my Furnaces being taken to pieces. To console myself for my loss I found that my stock of articles for Ships of War, and Utensils for Sugar Plantations amounted to ten Thousand Pounds and that my demands in Jamaica were near Twenty Thousand with a paternal estate of Mrs Reeder's in this Country of about two hundred pounds a Year, which I considered as sufficient for my Family and I might have submitted patiently to the destruction of the Foundry had the sum been realised, but in this I was disappointed, by my demands being in the hands of Planters who were such sufferers by repeated Hurricanes as to put it out of their power ever to pay me the tenth part of their debts.

1160 M/C/J/20, Answer to objections to Manufactory, c. 1789

The objections to be stated to my Manufactory are as follow

The want of Iron

In answer to which more than three thousand Tons are in Jamaica useless to its Owners, but was there not a pound, Pig Iron may be obtained from the Ore on easier terms than it can in England from the abundance of wood being near to the Ore, which is very rich.

Want of Coals

Coals may be imported from Wales & Newcastle at a lower price than they are sold at in London. The advantage the Manufacturer has there which he has not in England are the low price of wood and Charcoal with Loam on the spot

The difference of Labour

This is obviated by my being possessed of Negroes sufficient, many of which are perfect in every branch of the Iron Manufactory so far as relates to casting and turning Mill Cases, Cannon, Iron Boilers & & and in wrought Iron Anchors, Mill Gudgeons, Axels & & The advantages arising to that Island are that Planters may be supplied with every Utensil they want on the shortest notice, whereas on the contrary, they are obliged to wait seven Months, at least, and then take whatever is sent whither it is executed to their directions or not nor will he be under the expensive necessity of keeping by him a double set of Utensils while there is a Manufactory in the Country

1160 M/C/J/30, Memorandum of Eliza Crosse concerning Reeder's appeal, c. 1850

My Father Mr Reeder as a young man became acquainted with a Mr Bailey (who was a West Indian proprietor) and being of an enterprising character determined to accompany him to Jamaica. Not long after his arrival, there was a meeting of the House of Assembly to take into consideration the great disadvantage the Planters were under from their being obliged to send to England for all their materials for the manufacture of sugar & & — A plan was proposed to erect a building on the Island; but where to find an individual equal to the task was the difficulty — Mr Bailey said a young man was with him who had some money & of a most active mind, he would propose it to him. On his doing so, my Father said he was quite ignorant of such a business, neither had he sufficient money — On meeting the Assembly they proposed to advance him £3000 currency on Bond — On this my father went to England and procured artificers such as were necessary under whom his Negroes worked to become, in course of time, sufficiently acquainted with the business to dismiss all the White men but two &

a perfect Foundry was established, where not only sugar utensils were made; but Cannon manufactured — as was proved by admiral Sir Peter Parker, & Sir Joshua Morley in the address to the English Parliament. — Some years had past & the Foundry realised £4000 a year. This was in the American War. My Father was ill from a spitting of blood, & ordered by Dr Mosely, who then resided in Jamaica, to keep at sea as much as possible as there the disease in a measure left him. In consequence he had a Flag of Truce & went much on the Spanish Main &&. In his absence it was generally believed that the French fleet was very near the Island. Sir Archibald Campbell the Governor ordered the Foundry to be entirely dismantled, the Cannon sunk && knowing that the wants of the enemy might here be supplied. My poor father returned and found himself a ruined man! The Governor told my father that his plan would be to bring an action against him; but this, which should have been done, appeared hostile against his friend — and he came to England with the credentials which you have seen. Year, after year, he wasted his time & sunk so much money that one Estate which my Mother had in Essex was obliged to be sold — at last the Government voted him £3000 — Mr Pitt stating they could not then give more money; but he should have a Pension, or place — My Father left the Island and resided in Devonshire, when there he received a letter from Lord Rolle (who was an old friend) requesting him to forward in as short a space as possible the particulars of his case, as he had a prospect of a Pension for him — at this time my poor father had a stroke of Paralysis and shortly after died. I was left young, & had no powerful friend to consult, and the matter lay dormant until after I was married — ; when the letter which Lord Rolle had written I forwarded to Sir Astell, he replied that he thought it too late as my Father was dead to gain any further redress; but the letter was not returned, & it was the only document on which I had any trust. When Mr Pitt was in Bath not long before his death I called on him in Pulteney Street; but he sent a gentleman to say that he was too unwell to see me. Our circumstances were then such not as at the present our hearts were light, & the world had its blessings & comforts. But from circumstances, too long & distressing to enumerate an awful change has taken place & now in old age left us dependent on friends.

Eliza Reeder Lawrence Crosse

National Archives, London

CO 137/87, f. 254, Stephen Fuller's letter to the Chancellor, 1788 [extract]

After your noble & generous behaviour to the American Loyalists, it is impossible I can have a doubt, but that your benevolence will be extended at a proper time to Mr John Reeder of the Island of Jamaica; whose claim is superior in every respect to all & every of the American claims. The Americans had an Option, Reeder had none. Breaking a blood-vessel, he was advised to go to St Domingo, where he stayed about six months. When he came back again, he found all his Works levelled with the ground; his reverberatory furnaces demolished; some of the materials buried; such of the Stock as might be of use to the Enemy (who were then assembled in great force at Cumberland Harbour) carried on board his Majesty's Ships; and all the rest of his Works irrecoverably dismantled and destroyed, by the Order of the Governor, lest they should fall into the Enemy's hands.

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