

INDUSTRIAL REVOLUTION: A DOCUMENTARY HISTORY
Series One: The Boulton and Watt Archive and the Matthew Boulton Papers
from Birmingham Central Library
Part 13: Boulton & Watt Correspondence and Papers (MS 3147/3/286-404)

DETAILED LISTING

REEL 238

3/371 General Correspondence, B (63 items)

1. Letter. John Baddeley (Hanley) to James Watt [?]. 8 Sep. 1783.
His prices for ironwork, woodwork and movements for a lathe.
2. Letter. George Bailey (London) to Matthew Boulton (Soho). 30 Jan. 1782.
Details of his new flour mill. What size of engine will he need, what quantity of coal will it burn and how much will it cost.
3. Letter. R. Bakewell (Gresley Hall, near Burton-on Trent) to Boulton & Watt [Soho].
26 Aug. 1779.
Hopes the engine Boulton & Watt mentioned will be sufficient. Has sent for a man from Nottingham who he will send on to Soho for Boulton & Watt to instruct.
4. Letter. R. Bakewell (Gresley Hall, near Burton-on Trent) to James Watt [Birmingham].
3 Sep. 1779.
Details of his plans for the engine for Newhall Colliery.
5. Letter. R. Bakewell (Gresley Hall, near Burton-on Trent) to James Watt [Birmingham].
7 Sep. 1779.
Did not manage to send a letter to Logan Henderson and did not see Mr. Smith the engineer. Is now determined to proceed no further with the business until he has "recovered [himself] a little".
6. Letter. John Baldwyn (Chepstow) to Boulton & Watt (Birmingham). 28 Aug. 1779.
His goods have not yet arrived. Has heard from Mr. Wilkinson that the Mary is on her way from Chester. Can Boulton & Watt arrange for the goods to be forwarded.
7. Letter. John Baldwyn (Chepstow) to Boulton & Watt [Birmingham]. 31 Aug. 1779.
Has received the passport for Capt. John Williams of the Mary. Still has not received the goods mentioned by Boulton & Watt, nor the boiler plates from R. Dearman. The Mary has not yet arrived.
8. Letter. John Baldwyn (Chepstow) to Boulton & Watt (Birmingham). 8 Sep. 1779.
The goods have arrived. The Mary has not. Sells deal as cheap as in Bristol.
9. Letter. John Baldwyn (Chepstow) to Boulton & Watt (Birmingham). 20 Oct. 1780.
*Docketed "Concerning the Mary and Jary's goods."
The Mary has been to Dublin with a cargo of elm. Expects her return soon.*
10. Letter. John Baldwyn (Chepstow) to Boulton & Watt [Birmingham]. 29 Nov. 1780.
The Mary has arrived. Capt. Williams loaded the goods for the Nanty engine and 103 tons of pig iron, which Customs Officers will not allow to be shipped as it is not mentioned in the passes. It needs a separate order of Council for exportation. He has advised Mr. Wilkinson of the circumstances.
11. Letter. John Baldwyn (Chepstow) to Boulton & Watt (Birmingham). 4 Feb. 1781.
*Docketed "About timber."
Does not have any square timber that suits Boulton & Watt's purpose. Details of what he has got in stock.*

- 12.** Letter. John Baldwyn (Chepstow) to Boulton & Watt (Birmingham). 6 Mar. 1781.
Has received a letter from a timber dealer offering some converted Navy timber which would suit for beams. Details of what he is offering.
- 13.** Letter. John Baldwyn (Chepstow) to Boulton & Watt [Soho]. 7 May 1784.
Problems of shipping the piston rod intended for Poldice Mine.
- 14.** Letter. William John Banner (Birmingham) to Boulton & Watt [Soho]. 7 Sep. 1782.
- 15.** Letter. R. Barclay (London) to Matthew Boulton (6 Green Lettice Lane). 24 Aug. 1782.
Can Matthew Boulton visit him to advise him about an engine for a mill.
- 16.** Letter. Jonah Barff (Oswestry) to Boulton & Watt [Soho]. 24 Aug. 1784.
Sir Watkin Williams Wynn has been advised to buy a Boulton & Watt engine to drain his colliery near Oswestry. Details of the mine. Can Boulton & Watt send details and costs of an engine.
- 17.** Letter. John & Francis Baring (London) to Boulton & Watt (Soho). 11 Nov. 1784.
Can Boulton & Watt give them the price of an engine with a 30 inch cylinder for a client on the island of Domingo.
- 18.** Letter. George Hollington Barker (Birmingham) to James Watt (Harper's Hill).
12 May 1784.
Docketed "With account." Enclosing a bill for Matthew Boulton. Can Matthew Boulton pay it at the beginning of next week.
- 19.** Letter. James Barrow (Liverpool) to John Hodgson (Birmingham). 11 Dec. 1781.
Encloses a bill. Delivery of Hodgson's goods. Can Mr. Scholes send them the cost of an engine to work a corn mill.
- 20.** Letter. James Bateman (Manchester) to Matthew Boulton (Soho). 5 Jun. 1782.
*Has not yet got the drawings of the cotton machinery. Sends a rough plan of his Foundry so Matthew Boulton can judge if he has room for a steam engine. Now thinks a more powerful engine might be better than the size they discussed – can Matthew Boulton send the terms for various sizes of engine. Would the smoke from the engine cause a nuisance?
[The enclosures are now missing.]*
- 21.** Letter. James Bateman (Manchester) to Matthew Boulton (Soho). 11 Jun. 1782.
Sending a sketch of the cotton machinery. The most populous manufacturing parts of his neighbourhood are near to coal supplies, therefore Boulton & Watt's engines could successfully be introduced. If Matthew Boulton will send him a model, he will show it to various people, and if he had a small engine, this would help more. Bateman's man has promised he will draw a regular plan of a cotton manufactory if Matthew Boulton wants one, but he is not dependable. Has tried to find out the price of Arkwright's large new building.
- 22.** Letter. Baumgartner & Hooffstetter (London) to Matthew Boulton (Soho). 16 Jul. 1782.
Introducing Richard Walker of the house of Thomas & Richard Walker of Manchester. They have large concerns abroad, particularly in velvet, and they wish to open correspondence with a house in Birmingham.
- 23.** Letter. Alexander Maby Bailey (23 Villiers St., London) to Boulton & Watt [Soho].
6 May 1781.
*Sorry he could not show his drawings to Matthew Boulton. Sends some specimens. Would be happy to work for Boulton & Watt.
[The enclosures are now missing.]*

- 24.** Letter. N. Bayly (Whitehall, London) to Matthew Boulton [?] [Soho]. 7 Nov. 1777.
Has received the account of the engine, but wishes they had sent him details of the cost of erection in the West Indies, and where he could see an engine in London. He may go to his estates in Jamaica soon.
- 25.** Letter. Thomas Beckett (Liverpool) to Boulton & Watt (Soho). 6 Apr. 1779.
Mr. Poole has been dead six months and he has taken over the business. The piston rod has arrived but he has received no instructions from John Wilkinson or Mr. Turner about forwarding it. A piston rod marked Wheal Chance has arrived from Seaton works.
- 26.** Letter. Thomas Beckett (Liverpool) to Boulton & Watt (Soho). 29 Nov. 1779.
Has forwarded the Penryndee piston rod to Hugh Jones. Expects a vessel sailing to Bristol soon.
- 27.** Letter. Thomas Beckett (Liverpool) to Boulton & Watt (Soho). 28 Jan. 1780.
Has only just had an opportunity of sending the case from Cumberland to Bristol.
- 28.** Letter. Thomas Beckett (Liverpool) to Boulton & Watt (Soho). 17 Feb. 1780.
The case marked 'Gregory' has arrived from Seaton Works. Where should he send it.
- 29.** Letter. Thomas Beckett (Liverpool) to Boulton & Watt (Soho). 24 May 1782.
Details of vessels sailing to Waterford.
- 30.** Letter. Thomas Beckett (Liverpool) to Boulton & Watt (Soho). 6 Jul. 1782.
The goods have not arrived from Chester. Will ship them to Waterford when they do.
- 31a.** Letter. Thomas Beckett (Liverpool) to Boulton & Watt (Soho). 19 Jul. 1782.
*Enclosing (b) below. Docketed "Inclosing bill of lading for Doonane goods."
Encloses the bill of lading for goods going to Waterford. Has written to John Motteux & Co. to insure the goods. Has also written to P. & A. Colclough and Samuel & William Primrose.
Does not yet have a vessel for St. Ives.
Docketed that the goods are for Doonane.*
- b.** Bill of lading. 19 Jul. 1782.
For goods shipped on the Providence to Samuel and William Primrose, Waterford
- 32.** Letter. Thomas Beckett (Liverpool) to Boulton & Watt (Soho). 14 Mar. 1783.
Has received piston rods marked 'Poldice Mine' and 'IC Lancashire' from Seaton Works. Can Boulton & Watt send further instructions.
- 33.** Letter. Thomas Beckett (Liverpool) to Boulton & Watt (Soho). 1 Oct. 1783.
Has forwarded the Whitegritt mine piston rod to Joshua Blakeway in Shrewsbury. Awaits instructions about the Tresavean and Polgooth rods. Has not yet shipped the Poldice rod.
- 34.** Letter. Thomas Beckett (Liverpool) to Boulton & Watt (Soho). 6 Oct. 1783.
*Docketed "Receipt of Minera and Fenton's rods – sending off Whitegritt." [This docket covers both this letter and that of 1 Oct.]
The Ann has arrived from Worthington with piston rods for Minera and "TF Leeds".*
- 35.** Letter. Thomas Beckett (Liverpool) to Boulton & Watt (Soho). 31 Oct. 1783.
*Docketed "Whitegritt rod."
Wrote on the 21st explaining what he had done to get the piston rod forwarded. Has sent his man to trace the rod.*
- 36.** Letter. Thomas Beckett (Liverpool) to Boulton & Watt (Soho). 13 Nov. 1783.
*Docketed "Poldory Black Fryars and Poldice No. 3 rods."
Has shipped Thomas Fenton's rod according to John Turner's orders. Has rods for Tresavean and Polgooth mines in his warehouse and rods marked Poldory, Blackfriars and Poldice No. 3 have arrived aboard the Ann. Awaits instructions about all these.*

- 37.** Letter. Thomas Beckett (Liverpool) to Boulton & Watt (Soho). 7 Dec. 1783.
Has shipped the Poldory and Poldice No. 3 rods and written to Hugh Jones.
- 38.** Letter. Thomas Beckett (Liverpool) to Boulton & Watt (Soho). 13 Apr. 1784.
One of Mr. Thwaites' partners has called for the two cases of piston rods. Beckett had placed these cases with a friend as they would be safer with him than in Beckett's warehouse. Many of his friends have agreed to continue their commissions to him.
- 39.** Letter. Thomas Beckett (Liverpool) to Boulton & Watt (Birmingham). 24 May 1784.
*Docketed "Concerning Mr. Fenton's rod."
His efforts to trace Thomas Fenton's piston rod. His attorney says it is too soon to present his certificate to the Chancellor.*
- 40.** Letter. Thomas Beckett (Liverpool) to Boulton & Watt (Soho). 18 Jun. 1784.
*Docketed "Mr. Fenton's rod."
Has not heard from Thomas Fenton about the missing piston rod. The Duke of Bridgewater's agent William Woolley has written saying that they have the case and that he showed it to Fenton's carters.*
- 41.** Letter. Thomas Beckett (Liverpool) to Boulton & Watt (Soho). 19 Jul. 1784.
*Docketed "Ketley, Donnington, Ocker Hill rods and the coal lathe."
Has forwarded the lathe wheel to Gilbert Hamilton at Glasgow. Has received rods for Donnington mill, Ocker Hill and Ketley from Seaton Works.*
- 42.** Letter. Thomas Beckett (Liverpool) to Boulton & Watt (Birmingham). 16 Aug. 1784.
Has forwarded the Donnington, Ketley and Ocker Hill rods. William Fawcett made a case for the Ketley rod which was to go by land. Beckett will have to pay for this case.
- 43.** Letter. Thomas Beckett (Liverpool) to Boulton & Watt (Soho). 29 May 1786.
*Docketed "Shipping of remainder of Drumglass goods and Isaac Perrins."
The four boxes and Boulton & Watt's two men have sailed for Newry.*
- 44.** Letter. William Bedford Jr. (Birmingham) to Matthew Boulton [Soho]. 10 Sep. 1781.
Has urged Mr. Wilkes to advance the £1200 to John Fothergill, but he will only advance £600. Matthew Boulton's persuasion might carry weight. Will Matthew Boulton call on him when he is next in town, as Bedford is currently lame.
- 45.** Letter. James Benton (Great Charles St.) to James Watt (—). 23 Sep. 1782.
Hopes to visit Soho to see the model engine. Queries about the location, water and coal consumption, cost and premium of his projected engine. Asks about the costs of engines of 4-6 and 12 horses.
- 46.** Letter (in French). Le Marquis de Biencourt (London) to James Watt (Birmingham). 16 Aug. 1783.
Recalls his meeting with James Watt. Hopes to return to England and see him again. Hopes he might see James Watt in France. Introducing Colonel du Crét.
- 47.** Letter. John Bingham (Birmingham) to Matthew Boulton (Soho). 5 Apr. 1782.
When can Matthew Boulton give him an answer about the water works at Worcester.
- 48a.** Letter. S. Bull (—) to the Birmingham Canal Co. [?]. 9 Sep. 1776.
*Docketed "Birmingham Canal 1st Lock Engine."
With (b)—(e) below attached, and kept with (f) below.*
- b.** An estimate to complete every part of the Work, to raise the Water from the Canal at Spon Lane. S. Bull, 2 Sep. 1776.
- c.** Coloured sketch. Section of a tunnel, feeder and engine... at Spon Lane.

- d.** An estimate to complete every part of the Work, to raise the Water from the Canal at the First Lock. S. Bull, 2 Sep. 1776.
- e.** Coloured sketch. Section of a tunnel, feeder and engine... at the First Lock.
- f.** Letter. S. Bull (Smethwick) to Matthew Boulton [Soho]. 2 Sep. 1776.
- 49.** Letter. S. Bull ("2 engine") to James Watt [Soho]. 23 Apr. 1779.
Docketed "Birmingham Navigation." Asking for advice on the pump trees.
- 50.** Letter. S. Bull (Smethwick) to William Playfair (Soho). 31 Aug. 1779.
Cannot consult with Matthew Boulton about the account without leave of the committee.
- 51.** Memorandum. Birmingham Navigation Memorandums. 31 Aug. 1779.
Referring to problems over the charges for erecting the engine. Ale and dining expenses of Samuel Bouge, S. Bull and Edward Bate. James Law's recollection of work done by Mr. Greg the smith. Work done by labourers for Mr. Bouge and Mr. Bull. Time spent by James Law on the engine.
- 52.** Letter. John Houghton (Birmingham) to Boulton & Watt (Soho). 12 Nov. 1781.
*Docketed "Navigation Company."
The committee wishes to get Boulton & Watt's opinion on the past management and present state of their engines.*
- 53.** Letter. John Houghton (Birmingham) to James Watt (Harper's Hill). 20 Dec. 1783.
*Docketed "Birmingham Navigation Company. Agreeing to terms of Ocker Hill engine."
The committee wishes to proceed with the Ocker Hill engine as Watt proposes. They intend the engine house to be large enough to house two engines. They agree to the terms for the premium.*
- 54.** Letter. George & James Bishop, Malt Distillers (Maidstone) to Boulton & Watt (Birmingham). 8 Jun. 1781.
*On the same sheet:
Notes about the cost of grinding malt in Glasgow, from James Watt's information.
Requesting details of an engine to grind corn and work a wort pump.*
- 55.** Letter. C. Blagden, Secretary of the Royal Society (London) to James Watt (Birmingham). 3 Jul. 1784.
Printed form letter telling James Watt that his paper on a new test liquor for acids and alkalis will be published.
- 56.** Letter. C. Blagden (2 King's Road, London) to James Watt (Birmingham). 9 Aug. 1784.
Watt's paper will be printed. The first sheet of William Withering's paper is being printed today. James Watt should let Blagden know if he wishes to see the proofs.
- 57.** Letter. J. Blanch (Bristol) to James Watt (Soho). 27 May 1783.
Has been advised to offer Boulton & Watt a share in his patent pump design.
- 58.** Invoice. George Blewett & Co. (Marazion) to John Fothergill (Soho). 17 Dec. 1779.
*Invoice for 20 blocks of tin, and carriage, for the Wheal Union engine.
Marked "Entd. 42 Z[accheus] W[alker]" and "Entd. J[ames] P[earson]". [Probably sent to Fothergill in error, as it concerns the account for the Wheal Union engine, Cornwall.]*

59. Letter. Bockett & Janson (London) to Boulton & Fothergill [Soho]. 1 Mar. 1777.
They have seen the Boulton & Watt engine at Cook, Adams, Wilbie's and Sayer's distillery. Feel that a similar one would suit them, but less powerful. Samuel Galton has told them that Boulton & Watt construct engines of various sizes. Details of their distilling operations.
On the same sheet:

Letter. Samuel Galton & Sons (London) to Boulton & Fothergill (Soho). 28 Feb. 1777.
They have recommended a Boulton & Watt engine to Bockett & Janson for their new distillery.

60. Letter. George Bogle (Glasgow) to James Watt (Birmingham). 24 Mar. 1778.
Docketed "Recommending a young man for an apprentice (refused)."
Recommending William Stewart as a "servant", as he wishes to learn about millwrighting and machinery to go to the West Indies.
The docket is marked "refused".

61. Letter. H. Candide Boyer (London) to Boulton & Fothergill (Birmingham). 30 Oct. 1781.
Introducing James Carretto, a hydraulic engineer. Matthew Boulton had promised Boyer he would show Carretto any "such curiosities in [hydraulics]" around Birmingham.

62. Letter. Thomas Ferris for Messrs. Mark Harford Brass & Wire Co. (Bristol) to James Watt (Cusgarne). 16 Jan. 1783.
Docketed "Brass Wire Co."
Sending a bill for copper. The bill is now wanting. The letter was re-directed to Soho.

63. Letter. Brown & Bayla (Hull) to Boulton & Watt (Birmingham). 11 May 1784.
The 14 horse engine Boulton & Watt suggest will not be suitable, as their rivals can undersell them by using windmills, which are cheaper. A five horse engine should be powerful enough for the mill but it will have to be cheaper than windmills.

3/372 General Correspondence, C (53 items)

1. Letter. Campbell & Kingston (Coleman St., London) to Boulton & Fothergill (6 Green Lettice Lane, London). 19 Apr. 1783.
Circular letter giving details of their newly-established Philadelphia office.

2. Letter. Peter Capper (St. Petersburg) to Matthew Boulton (Soho). 5 Apr. 1782.
Asked Samuel Garbett to inform Matthew Boulton that he wanted to obtain an exclusive privilege for Boulton & Watt engines in Russia. Asks for details of the size and cost of 2 and 3 horse engines for an oil mill. When he met Matthew Boulton in England, Matthew Boulton told him that the Empress' envoy Mr. Poushkin had asked about buying an engine, and that Matthew Boulton refused as nothing was mentioned about an exclusive privilege. If Matthew Boulton grants him [i.e. Capper] the privilege he will agree to Matthew Boulton's terms. Problems of climate making it hard to ship parts into Russia. Therefore can Matthew Boulton tell him how soon the engines can be sent in the form of models.

3. Letter. Stephen Carkeet (Redruth) to James Watt (Soho). 10 Nov. 1777.
Would rather his fire bricks were delivered to Truro rather than Hayle to avoid land carriage. Can James Watt inform John Turner, the Wharfinger in Chester.

4. Bill. Michael Chambers (Birmingham) to Matthew Boulton (Soho). 11 Sep. 1781.
Bill of Matthew Boulton's debts to Chambers for work done by his partner, the late William Dadley, including drawing up of an agreement between Matthew Boulton and James Watt. Can Matthew Boulton make the payment to William Villers.

5. Letter. Dudley Clark (Toryburn) to Boulton & Watt (Soho). 22 Dec. 1784.
Sent information about the engine at Toryburn to Mr. Dick in Edinburgh. Wishes to do more engine work; therefore he will be glad to assist Boulton & Watt with engines in his area.

- 6.** Letter. Henry Coates (Hull) to James Watt [Birmingham]. 1 Dec. 1783.
Docketed "With drawings of mill."
Sends a plan of his mill drawn by Richard Savage [now in Portfolio 5/1]. The estimate is rather expensive, but the main obstacle is the annual premium – can James Watt charge them the same as their neighbour? Will Boulton & Watt's engine erector stay to teach Coates' men about the engine? Can they buy off the annuity? They will probably need 6 horse power.
- 7.** Letter. Henry Coates & Co. (Hull) to James Watt (Birmingham). 10 Jan. 1784.
Details of the horse power required to turn their milling machinery.
- 8.** Letter. Henry Coates & Co. (Hull) to James Watt (Birmingham). 6 Feb. 1784.
Details of the engine, water wheel and milling machinery at Mr. Wright's mill. Their works are about double the size of Mr. Wright's. Details of the amount of seed they crush. Unsure if the engine they saw is equivalent to Mr. Wright's. Would James Watt recommend an engine with a water wheel or rotative motion? Mr. Wright's mill has been sold and he has left Hull. William Asbourne has bought it.
- 9.** Letter. Henry Coates & Co. (Hull) to Boulton & Watt (Birmingham). 2 Apr. 1784.
Have not had a reply to their letter of 6 Feb. or Richard Savage's letter of 12 Mar. Spring is when they have the least work, so they are keen to resolve the details of the engine. If they cannot get it by the middle of Jul. they will have to leave it for this year.
- 10.** Letter. Henry Coates & Co. (Hull) to James Watt [Birmingham]. 15 Apr. 1784.
Ordering the large engine that James Watt suggested. Henry Coates will call on James Watt in three weeks. Can they have duplicates of any parts that might have to be renewed. Henry Coates and Richard Savage think the shaft ["axis"] should be longer. Can James Watt send instructions about getting the boiler made. Can Boulton & Watt send an erector. Details of the shaft and fly wheel.
- 11.** Letter. Henry Coates & Co. (Hull) to James Watt (Birmingham). 6 Jun. 1784.
Docketed "Fixing the position of their engine."
Agree with Richard Savage's opinion. Know of Messrs. Brown and Bayler only by name, but will make enquiries if James Watt wants them to.
On the same sheet:
Letter. Richard Savage (Hull) to James Watt (Birmingham). 6 Jun. 1784.
Has received the drawings of the three possible methods of connecting the engine to the mill. His observations on the suggestions. Thinks the third plan is most suitable.
- 12.** Letter. Henry Coates & Co. (Hull) to James Watt (Birmingham). 22 Jun. 1784.
Richard Savage will leave the length of the shaft to James Watt's judgement. Water supply is not a problem. They have ordered fire bricks.
- 13.** Letter. Henry Coates (Hull) to James Watt [Birmingham]. 20 Jul. 1784.
Have received the drawing of the engine. Richard Savage made a mistake about the thickness of the wall. Expect to hear soon that the engine has been sent. Progress with the well. The bricks etc. are ready on the spot.
- 14.** Letter. Henry Coates & Co. (Hull) to James Watt [Birmingham]. 20 Aug. 1784.
Sorry to hear about the delays to the engine. Can Boulton & Watt send it as soon as possible.
- 15.** Letter. Henry Coates & Co. (Hull) to James Watt [Birmingham]. 8 Oct. 1784.
When will the engine be sent. Have had to buy expensive provender to feed their horses.
- 16.** Letter. Henry Coates & Co. (Hull) to James Watt [Birmingham]. 16 Nov. 1784.
Have received Boulton & Watt's letter saying the engine is sent off. Will now need to construct a reservoir for it.

- 17.** Letter. Henry Coates & Co. (Hull) to James Watt (Birmingham). 21 Nov. 1784.
Further thoughts on the well and reservoir.
On the same sheet:
Letter. Richard Savage (Hull) to James Watt (Birmingham). 21 Nov. 1784.
Thinks the well is too small, but it can be enlarged quite easily. A reservoir could also be constructed on the premises.
- 18.** Letter. Henry Coates & Co. (Hull) to James Watt [Birmingham]. 2 Dec. 1784.
They do not dare stop the mill to erect the engine as they have so much business. When they can spare the time or get their work done at another mill, can Boulton & Watt let them have two men as discussed. Payment will not be delayed, but it may be two months before they can erect the engine. The well is almost certainly too small. 66 pieces of the engine have arrived.
- 19.** Letter. John Collet (London) to Matthew Boulton (Soho). 2 Sep. 1775.
Marked "Answered Oct. 18th."
Having visited Soho, asks for details of a two horse engine for his glassworks to power cutting and polishing machines.
On the same sheet:
Calculations by Matthew Boulton.
Letter (draft). Matthew Boulton [Soho] to John Collet (London). 18 Oct. 1775.
Can only answer in general terms, but if Collet can wait two months, he will be able to give a precise answer and show him a steam wheel applied to laps and grinding stones for steel polishing. Details of the steam wheel. James Watt will come to London soon and he will be able to advise Collet. James Watt has been in Scotland settling his affairs but will return soon.
- 20.** Letter. Daniel Constable (Ocker Hill) to T.F. Banner (Birmingham). 25 Mar. 1778.
Is very satisfied with the engine. Has given Banner's letter to Mr. Harrison.
- 21.** Letter. Charles Cooke (Prescott) to "Thomas Bolton" (Soho). 18 Jun. 1776.
P. Mackay has recommended that he contact Matthew Boulton about the power and cost of an engine. Needs an engine to pump 15,000 gallons per hour from a 40-60 yard shaft. [Matthew Boulton has used the bottom of the letter for calculations.]
- 22.** Letter. Charles Cooke (Rainford) to Boulton & Fothergill (Birmingham). 28 Jun. 1776.
Again asks for details of the engine. Understands that the difference between Boulton & Watt's engine and the "common fire engine" is in the boiler. An engine with a 32 inch cylinder and 10 inch pumps will be large enough.
- 23.** Letter. James Cooper (Poplar) to Boulton & Watt (Soho). 14 Dec. 1784.
Queries about the construction of Messrs. Stonard and Curtis' engine. Another of his customers might buy a three horse engine if it will make him a saving.
- 24.** Letter. John Cooper (Portpool Lane) to James Watt (—). 19 Apr. 1785.
The engine has arrived and is ready for an erector. Mr. Whitbread is keen to get on with it. Can the fly wheel be cast. No plumber blocks have arrived.
- 25.** Letter. Henry Cort (Gosport) to Matthew Boulton (care of Thomas Wilson, Chacewater). 27 Nov. 1779.
Giving the answers to various questions about his mills that Logan Henderson had asked him to send to Matthew Boulton.
- 26.** Letter. Henry Cort (Fareham) to James Watt (Soho). 27 May 1783.
Visited Soho and told James Watt about his patent method of manufacturing iron. Can James Watt forward a letter to John Wilkinson about it. Asks for details of a steam-powered forge.

- 27.** Letter. William Summerland [Rotherhithe] to Boulton & Watt (Soho). 23 Jan. 1777.
Docketed "For Jukes Coulson & Co."
Bill for two piston rods bought by Boulton & Watt. Reasons for the high price of turning. [The docket notes that these rods were for Mr. Coleville and Ketley.]
On the same sheet:
 Bill for two piston rods.
- 28.** Letter. Jukes Coulson per William Summerland (Rotherhithe) to Boulton & Fothergill (Soho). 25 Feb. 1777.
Forwarded to Matthew Boulton and marked "Suppose this belongs to the Engine business." Have sent off the 4½ rod, but Mr. Coleville has not sent for the 3 inch one. They will endeavour to lower the price of turning but cannot lower the price per hundredweight.
- 29.** Letter. William Summerland (Rotherhithe) to Boulton & Watt (Soho). 1 May 1777.
Docketed "Jukes Coulson."
Bill for a piston rod bought by Boulton & Watt. [The docket notes this was for Tingtang mine.]
On the same sheet:
 Bill for the piston rod.
- 30.** Letter. Jukes Coulson & Co. (London) to James Watt (Birmingham). 11 Apr. 1778.
Sending a bill for four piston rods. They left word with William Matthews that the rods were ready, but there was no ship. They will try again.
On the same sheet:
 Bill for four piston rods.
Marked "Entd. 70 J[ames] P[earson]", "Charged to Chacewater... £30 – 5 – 4" and "Entd. 38 J[ames] P[earson]"
[The docket notes that the rods were for engines at Chacewater mine, Byker colliery, Chelsea water works and Shadwell water works.]
- 31.** Letter. Jukes Coulson & Co. per William Summerland (Rotherhithe) to Boulton & Watt [Soho]. 17 Nov. 1778.
Awaiting Boulton & Watt's instructions over the size of a piston rod.
- 32.** Letter. Jukes Coulson & Co. per William Summerland (London) to James Watt (Soho). 16 Mar. 1779.
They will send the 4¾ inch rod for Poldice mine to Thomas Wilson. John Coulson left the bill for it at Soho when he was there.
- 33.** Letter. Jukes Coulson & Co. per William Summerland (London) to James Watt (Soho). 30 Mar. 1779.
Details of the shipping of the Poldice mine piston rod. Their lathe is currently free so they can work on any other rods Boulton & Watt might want.
- 34.** Letter. James Cross & Co. (Bristol) to Matthew Boulton (Soho). 29 Jun. 1776.
Marked "Answered 3 July."
Enquiring about the details, costs and coal consumption of an engine to work to 8 inch pumps drawing the water up 20 yards.
On the same sheet:
 Letter. Peter Capper (Redland) to Matthew Boulton (Soho). 30 Jun. 1776.
Details of James Cross' distillery, the horses they use and the amount of water they need to pump. If Matthew Boulton's friend [James Watt?] could see the premises he would be better able to judge if they need an engine.
- 35.** Draft of letter. Matthew Boulton (—) to James Cross & Co. [Bristol]. 3 Jul. 1776.
Can they correct Peter Capper in his error about the savings in coal that a Boulton & Watt engine makes. Cannot say about the expense of an engine until he knows how much water they need to raise. Details of general terms and the premium. Details of an engine Boulton & Watt have sold to Messrs. Cook & Co., distillers, Stratford Le Bow. They can have an engine ready in 3 to 4 months

- 36.** Letter. James Cross & Co. (Bristol) to Matthew Boulton (Soho). 16 Jul. 1776.
Marked "Answered in part July 30th."
Answering Matthew Boulton's queries about the amount of water they need to pump, and about the details of the pump barrels. What will the cost of an engine and erection be.
- 37.** Letter. James Cross (Bristol) to James Watt [Birmingham]. 24 Aug. 1776.
Approves of James Watt's plan but thinks the premium is excessive, especially as there are three months every year when they have little work. Can James Watt take this into account. Can James Watt visit the distillery. They will introduce him to two other distillers who are waiting on Cross' decision about an engine.
- 38.** Transcript of letter. James Watt [Birmingham] to James Cross (Bristol). 26 Aug. 1776.
Not in Watt's hand.
Proposes an engine with an 18 inch cylinder. Details of its coal consumption compared to a "common" engine. Cost of the premium and rough estimate of the costs of materials and erection.
- 39a.** Transcript of letter. James Watt [Birmingham] to James Cross & Co. (Bristol). Oct. 1776.
Docketed "Scroll letter & calculations to Messrs. Cross and Company."
Kept with (b) below.
Terms and details of construction of the engine and engine house and the premium.
- b.** Calculations.
Sheet of rough calculations by James Watt.
- 40.** Letter. James Cross (Bristol) to Matthew Boulton (Soho). 11 Jan. 1777.
A letter from James Watt never reached him, so he did not know details of the expense. He told Peter Capper that an answer was a long time coming from Boulton & Watt so that it was too late to get an engine for that season's working, and the expense seemed high for the size of the engine. They have not yet decided what to do.
- 41.** Letter. John Cross (West Hallam) to Joseph Harrison (Soho). 14 Jan. 1781.
Docketed "Account of Rotherham engine."
Hopes Harrison's engine work is brisk, as his is slack. He prefers to be constantly employed on either engine or smith work. He has two or three boys ready to enter business – could one or two them come to the Manufactory? Details of the last engine he erected, at Mr. Walker's foundry in Rotherham.
- 42.** Letter. Joseph Crouchley (Leigh) to James Watt (Birmingham). 22 Mar. 1783.
The bearer is Robert Melling who has come for instructions about the engine.
- 43.** Receipt. Robert Melling. 25 Mar. 1783.
Receipt for "a book of drawings proper for the erection of an engine for Mr. Joseph Crouchley, with a book of directions which are to be returned to Messrs. Boulton & Watt when the engine is completed."
- 44.** Letter. Joseph Crouchley (Leigh) to James Watt (Birmingham). 20 Jun. 1783.
Has not progressed as fast as he hoped, but hopes to be ready for the erector at the start of August. John Wilkinson has most of the materials ready. If Boulton & Watt's materials are ready can they send them by Mr. Henshall & Co.
- 45.** Letter. Joseph Crouchley (Leigh) to James Watt [Birmingham]. 6 Apr. 1783.
Can Boulton & Watt order the working gear for him as he is "not so well fix'd" with smiths.
- 46.** Letter. Joseph Crouchley (Leigh) to James Watt (Birmingham). 28 Jun. 1783.
Will write when he is ready for the erector. The items from Bersham are on the way.

47. Letter. Joseph Crouchley (Leigh) to James Watt [Birmingham]. 12 Aug. 1783.
The remainder of the articles are being sent from Bersham. The engine house is up and they are working on the boiler, but cannot tell where the manhole should be. Expect to be ready for the erector in three weeks.

48. Letter. Joseph Crouchley (Leigh) to Boulton & Watt (Birmingham). 4 Sep. 1784.
John Duncust owns a public house, and has a share in a colliery, but it does little business. Plans to mine coal on his neighbour's estate, which is why he is interested in an engine. However they know nothing about engines. Mr. Orrel of Black Brook may enquire about an engine – he is dependable. Crouchley's own engine answers well. Boulton & Watt's premium system is not suitable for the Leigh area.

49. Calculations. Measurement of Surface of Crouchley's Education Pipe.
In James Watt's hand.

50. Letter. Alexander Cumming (London) to Matthew Boulton (Soho). 27 Jan. 1777.
Has entered a "Caveat against all mad schemers but yourselves" at the Attorney and Solicitor General's offices. Cannot understand why Mr. Steele should think that Boulton & Watt would accept his proposals after the offer that Boulton & Watt made to Humphrey Gainsborough. Will try to meet them if Boulton & Watt so desire, but does not want to make them feel "more formidable" than they really are. Has not yet found Mr. Jones' patent. Glad that they have begun to convert old Cornish engines to their design, as this will be more effective in convincing people of its effectiveness than building new ones. Is glad that engine business has "swallowed up" clock business – it will be of far more consequence. Thanks them for their offer but feels the patent would be of no value in his hands. Offers them a case of claret. His own patent was "shite on by the Publick". Have they found a warehouse yet? Details of the King's Arms Tavern which is for let. Hopes they do not intend a "General Caveat against all improvements that do not originate at Soho".

51. Letter. Thomas Curtis per F. Dell (London) to Boulton & Watt (Soho). 10 Mar. 1778.
*Docketed "Curtis in Fleet Street, London. Pasteboard."
Mr. Stuart called to order the mill boards. Will the dimensions match those of the samples. Will any more be required.*

52. Letter. Thomas Curtis per W. Phillipson (London) to Boulton & Watt (Soho). 24 Mar. 1781.
*Will have boards in a few days but cannot sell them for less than 20 shillings per hundredweight.
[James Watt has used this letter for various calculations.]*

53. Letter. Thomas Curtis per W. Phillipson for Thomas Curtis (London) to Boulton & Watt (Soho). 7 Jan. 1782.
Acknowledging receipt of Boulton & Watt's draft for £5.

3/373 General Correspondence, D, E (29 items)

1. Letter. Martin Davis (Penryn) to James Watt [Birmingham]. 24 Dec 1778.
Was unable to send the counterpart of the articles for Wheal Union to Redruth, so he is sending it by the bearer. One part of the Tintang articles has been engrossed and the other part is nearly finished. His son will bring them to Mr. Beauchamp's.

2. Letter. Martin Davis (Penryn) to James Watt [Birmingham]. 26 Dec. 1778.
Has received the printed copy of the indenture for two engines at United Mines. Mr. Tremayne has bought Mr. Richards' 1/16th of that concern. Hopes to bring a fair copy to Matthew Boulton's. Omission of the words "executors, administrators or assigns" does not affect payment.

3. Letter. Samuel Davis (Waterford) to Boulton & Watt (Soho). 8 Aug. 1782.
The sloop Providence has arrived with the goods for A. & P. Colclough.

- 4.** Letter. Richard Dearman (Birmingham) to James Watt (Cosgarne). 15 Aug. 1781.
The Wheel Crenver steam case is in hand. Surprised at Spedding Fisher & Co.'s poor workmanship. They have probably used unsuitable iron from Russia. Has written to them saying the work will be returned, and he has written to Spedding Hicks & Co. saying that they should send only what they can vouch for. His mother's illness and her stay at Harper's Hill. [James Watt has used the sheet for calculations on an engine.]
- 5.** Letter. Richard Dearman (Birmingham) to Matthew Boulton (Green Lettice Lane). 10 Oct. 1781.
Has received an answer from Mr. Spedding. Spedding says that Mr. Fisher can have no objections to Boulton & Watt converting part of the iron work sent to Cornwall. Details of Spedding's underground steam engine.
- 6.** Letter. Richard Dearman (Birmingham) to Boulton & Watt (Soho). 28 Feb. 1783.
*Docketed "Poldice and Crouchley's rods."
Thanks them for the information concerning S.H. [Spedding Hicks?] Encloses an invoice for two piston rods sent from Seaton works to Liverpool.*
- 7.** Letter. Edward Brown (Denton Colliery) to James Watt (Soho). 4 Sep. 1779.
*Docketed "Denton."
Thanks James Watt for his hospitality. Has finished a boiler on James Watt's plan – can James Watt send instructions about the seating. Progress with the mine – it is only making a small profit.*
- 8.** Letter. John Derbyshire (Bradley Foundry) to James Watt (Soho). 29 Apr. 1778.
Has not been able to send the engine. Will not show it to anyone until [John] Wilkinson arrives. Has given the key to Mr. Johnson.
- 9.** Letter. Johnson Dixon (Lynn) to Boulton & Watt (Soho). 8 Dec. 1779.
Did not realise that Boulton & Watt's "invention for raising water" was the improved steam engine. Thinks the cost will be too much to buy one for his and his father's water mill. Can Boulton & Watt send him an estimate anyway. Have any engines been applied to land drainage. What is the maximum quantity of water they can pump. Can peat or turf be used for fuel instead of coal.
- 10.** Letter. Alexander Donald (London) to James Watt (Soho). 30 Mar. 1784.
Sorry James Watt could not call on him. May have to go to Virginia for one or two years. If so he would like to buy a copying machine. He has spoken to Mr. Woodmason about it but will order from James Watt, as James Watt will charge as low as Woodmason and send him "one of the very best".
- 11.** Letter. Alexander Donald (London) to James Watt (Soho). 5 Apr. 1784.
His friend Mr. Gammell will probably call on James Watt. Orders a copying machine, paper and drying books.
- 12.** Letter. James Dormer (Longford) to Boulton & Watt (Birmingham). 8 Nov. 1779.
*Marked "Answered the 12th N."
As instructed by Earl Gower & Co., encloses a promisory note of Messrs. Marshall & Gibbons for £1300.9.0. Has heard no complaints about the engine, and William Murdock has left a good impression. Apologises to Matthew Boulton for not answering his last two letters, but hopes that John Gilbert made proper excuses for him.*
- 13.** Letter. James Dormer (Longford) to "Bolton & Co." (Soho). 6 Apr. 1782.
*Boulton & Watt's engineer Henry Williams has visited Lord Gower's colliery and assisted their engine man, Charles Bradhorn. How should they pay Williams.
[A note of Williams' expenses has been added to this letter.]*

14. Letter. Sir James Douglas (Springwoodpark) to Boulton & Watt [?] [Soho]. Jul. 1784. *Andrew Anderson has told him of Boulton & Watt's application of the engine to tin and coal mines. Could it be applied to sugar cane grinding in the West Indies. Wind and mule power is expensive. Cane trash could be used as fuel. Has an estate in Antigua and he should be erecting a mill soon. "Mr. Wardlow" [William Winlaw], an engine maker in London, could make a model mill.*

15. Letter. Joseph Duke (Chester) to Messrs. Taylor Lloyd & Co. (—). 3 Mar. 1783. *His friends are partners in a lead mine at Minera. Has recommended that they buy a steam engine for drainage, and that they contact Matthew Boulton. Can Taylor Lloyd & Co. pass his letter on to Matthew Boulton and can Matthew Boulton send him the details, costs and coal consumption of engines of various cylinder diameters, between 35 and 50 inches.*

16a. Letter. J. P. du Roveray (London) to James Watt & Co. (Soho). 23 May 1783. *Kept with (b) and (c) below. Was promised a 5% discount by Matthew Boulton. Had "a deal of trouble and vexation relative to your undertaking". Can they send the brass copying machine immediately. Nothing that accompanies it is to have their name on. Can they send copying ink in a separate box. The book of directions should be tied to the outside of the box containing the machine. Can they send a letter book if possible. Will order everything from them but hopes they will be as cheap or cheaper than Mr. Woodmason. Can they send the price of the portable copying machine.*

b. Memorandum. Accounts with James Watt & Co. Circa May 1783. *Note on the accounts of J. P. du Roveray and Mr. Magellan, and £9 of paper delivered to Messrs. Barker by Mr. Woodmason and a machine delivered to Mr. St. Paul.*

c. Account. J. P. du Roveray in account with James Watt & Co. 9 Jun.—2 Jul. 1783.

17. Letter. John Duncust (Oldham) to Boulton & Watt (Birmingham). 27 Aug. 1784. *Can Boulton & Watt send him the terms of an engine about the same size as Joseph Crouchley's.*

18a. Letter. Richard Lovell Edgeworth (Northchurch) to Matthew Boulton (Soho). 14 Sep. 1777. *Enclosing (b) below. Has been to Bedworth Colliery and seen both Boulton & Watt's engine and the old one, which is having its pumps bored in preparation for the trial. His favourable impressions of Boulton & Watt's engine. Mr. — is jealous of people coming to the works and asked him if he had connections with Soho or if he was an engineer. Edgeworth thinks the man attending the engine is cunning and not be depended on, and he may be pretending partiality to Boulton & Watt. They should be on their guard. Encloses a letter from the Marquis de la Poype concerning the amount of bats' dung removed from the grotto at Dauphine.*

b. Letter (in French). Le Marquis de la Poype (Brest?) to Richard Lovell Edgeworth [Northchurch]. 24 May 1777. *The amount of bat's dung removed from the cave. His exploration of the cave and discoveries he has made in it. Asks for Edgeworth's advice on a paper by an engineer. Wishes to correspond with Edgeworth on scientific matters.*

19. Letter. William Edwards (Hunslett) to Mr. Perin (Wood & Wegburry). 9 Apr. 1776. *Has read an account in the Leeds Mercury of Watt's engine at Bloomfield colliery. Can Perin give him an account of the engine, and an answer to Francis Ward's letter. Edwards is thinking of getting an engine similar to Perin's.*

- 20.** Letter. Edward Elton (Gloucester) to Boulton & Watt (Soho). 13 July 1785.
Mr. Weston told him that Boulton & Watt would write concerning their Chancery bill against Elton's brother-in-law Benjamin Burroughs. His proposals to pay Boulton & Watt what they are owed so that they can stop the case, as Burroughs cannot afford law expenses – the mine has reduced his circumstances. The engine should work now but it has been mismanaged in the past.
- 21.** Letter. Edward Elton (Gloucester) to Boulton & Watt (Birmingham). 28 March 1786.
Has not heard from Mr. Williams. He intends to start the mine working so that his brother-in-law Benjamin Burroughs might recover some of his money. Intends putting it under Mr. Weston's management. Can Boulton & Watt send someone to repair the engine.
- 22.** Letter. Edward Elton (Gloucester) to Boulton & Watt (Birmingham). 20 May 1786.
Sorry the business has been so inconvenient to Boulton & Watt. Did not reply to James Watt's letter as he was waiting to see Mr. Weston. Mr. Weston said he would answer it and settle the business. Mr. Weston should be at the mine next week. Mr. Mair is there alone. Mr. Weston will have complete management of the mine when he arrives.
- 23.** Letter. Thomas Ennis (Redruth) to Matthew Boulton (Soho). 6 Jul. 1776.
One of his companions [Richard Trevithick] got a drawing of Boulton & Watt's engine from a Mr. Richardson during their visit to Soho. He will endeavour to get it returned. Hopes Boulton & Watt's engine will be a success and is sorry that people in Cornwall are so bigoted. Had thought that Boulton & Watt would be pleased if people from mining areas visited them.
- 24. Letter.** Thomas Ennis (Redruth) to Matthew Boulton (Soho). 11 Jul. 1776.
Returning the drawing. Richard Trevithick took it thinking it was for him.
- 25.** Letter. John Enslie (Rotterdam) to James Watt (Glasgow). 11 May 1775.
Enclosing a letter from a friend in Rotterdam who wants information about steam engines.
- 26.** Letter. Samuel Ewer Jr. (London) to Matthew Boulton [Soho]. 4 Jul. 1781.
Did not want to write himself but does not have any acquaintances in common with Matthew Boulton, except Mr. Mare of the Adelphi, who he does not know sufficiently well. Has developed a steam engine that can raise a sixth more water in the same time and with the same quantity a fuel as Boulton & Watt's engines around London.
- 27.** Letter. Samuel Ewer Jr. (London) to James Watt (care of Thomas Wilson, Chacewater). 31 Aug. 1781.
On the same sheet:
Four sketches by Ewer of his various designs.
Has met Matthew Boulton and showed him his plans for engines. Matthew Boulton did not think there was any advantage in them but said he should seek James Watt's opinion. His thoughts on the inertia and friction of engines. Details of his engines and Matthew Boulton's objections. Matthew Boulton hinted at improving the engine by using an equalizing beam, which seems to be similar to a three year-old design of his.
- 28.** Letter Samuel Ewer Jr. (London) to James Watt [Chacewater]. 29 Sep. 1781.
On the same sheet:
Transcript of Ewer Jr.'s letter and sketches of 31 Aug. 1781, with a postscript.
Has not had an answer to his letter of 31 Aug.
- 29.** Letter. Samuel Ewer Jr. (London) to James Watt (care of Thomas Wilson, Chacewater). 27 Nov. 1781.
Agrees with some of James Watt's comments on his designs, but differs on others. Has now made a major improvement which will not infringe James Watt's patent. His design will theoretically raise four times more water. Would James Watt and Matthew Boulton enter a partnership him.

30. Letter. Samuel Ewer Jr. (London) to James Watt [Chacewater]. 1 Dec. 1781.
Has revised his expectations of his engine. It would work in theory but its complex construction and therefore frequent repairs would make it impractical.

3/374 General Correspondence, F

(37 items)

1. Letter. William Fawcett for “my uncle” Joseph Rathbone & Co. (Liverpool) to James Watt (Birmingham). 31 July 1784.

He and Thomas Beckett do not know which of the Ketley piston rods is to go by land.

2. Letter. William Fawcett for Joseph Rathbone & Co. (Liverpool) to James Watt (Birmingham). 5 Aug. 1784.

Will send all the Ketley piston rods by land. He made a case for sending just one. The Donnington rod will be sent by water.

3. Letter. Fenton & Co. per Thomas Wilson (Chacewater) to Boulton & Watt (Soho). 12 Aug. 1780.

On the same sheet:

Invoice. 20 blocks of tin for Fenton & Co. on account of Boulton & Watt, consigned to Messrs. Prichard & Barlow, Bristol [Marked “Entd. 101 J(ames) P(earson)” and “Entd. 708 J(ames) P(earson)”].

Docketed “Invoice of 20 Blocks Tin from Fenton and Company with a letter from Thomas Wilson.”

Arrangements for shipping tin to Fenton & Co – annexes the invoice. Wheal Union has closed, Wilson is unsure whether it is due to Boulton & Watt’s premium or poverty.

4. Transcript of letter. Thomas Fenton (Rothwell Haigh) to Matthew Boulton [Soho].

4 Apr. 1782.

It is not worth his while entering into an agreement with Boulton & Watt. He has given up his intention of buying an engine.

5. Letter. Thomas Fenton (Rothwell Haigh) to Thomas Wilson (Chacewater). 28 Nov. 1782.

On the same sheet:

“To enquire how the water is proportioned to each other” – calculations by Matthew Boulton.

Has had a letter from John Dapps. Does not find that Mr. Buckley will be able to “make a company,” whatever John Magor does. Can Matthew Boulton tell him whether James Watt’s plan will suit a new engine house he plans to be the same size as Ale & Cakes mine. Details of the coal mine the engine is to work. Details of his last engine which had a 44 inch cylinder.

6. Letter. Thomas Fenton (Rothwell Haigh) to Matthew Boulton (Soho). 3 Mar. 1783.

On the same sheet:

Calculations and part of draft of reply by James Watt.

Also wants a second small engine for the first “feeder” of water. Further details of the mine and the work the two engines have to do. Expects not to be charged more than £60 annually as he has very small coal costs. Hopes these engines will prove as advantageous to Boulton & Watt as the Chacewater engine.

7a. Letter. Thomas Fenton (Rothwell Haigh) to Matthew Boulton (Soho). 22 Mar. 1783.

Hoped to have received directions for the engine house as the weather is now good. Kept with (b) below.

b. Letter (press copy). Matthew Boulton (Soho) to Thomas Fenton [Rothwell Haigh].

5 Apr. 1783.

Replying to Fenton’s letters of 3 and 22 Mar. An engine with a 58 inch cylinder will do the work of the two engines that Fenton proposes – he will find this cheaper and more efficient. Large pumps such as Matthew Boulton proposes have probably not been used in Yorkshire, but they have been successful in Cornwall.

- 8.** Letter. Thomas Fenton (Rothwell Haigh) to Matthew Boulton (Soho). 5 Apr. 1783.
Hoped to have received directions for the engine house as the weather is good and he has little time before the old colliery is worked out. Thomas Wilson wrote from Soho saying that Matthew Boulton was going to write.
- 9.** Letter. Thomas Fenton (Rothwell Haigh) to Boulton & Watt (Soho). 12 Apr. 1783.
Wishes to have two engines – his reasons for this.
- 10.** Letter. Thomas Fenton (Rothwell Haigh) to Boulton & Watt [Soho]. 13 May 1783.
Progress with the engine house. Supposes that Boulton & Watt will order the cylinder and other heavy castings from Mr. Walker. Surprised that the smaller engine needs a 32 inch cylinder.
- 11.** Letter. Thomas Fenton (Rothwell Haigh) to Boulton & Watt (Soho). 24 May 1783.
*Docketed "Ordering 32 inch cylinder."
Does approve of having a 32 inch cylinder. Plans for the boiler. If the heavy castings are being made by John Wilkinson, how will they come to him.*
- 12.** Letter. Thomas Fenton (Rothwell Haigh) to Boulton & Watt (Soho). 26 May 1783.
*Docketed "Changing his former order to a 52 inch cylinder."
He has found that the place he intended to pump the water up is not suitable. The new shaft will be deeper – can Boulton & Watt alter the order and send new instructions.*
- 13.** Letter. Thomas Fenton (Rothwell Haigh) to James Watt (Soho). 1 Jul. 1783.
Progress with the engine house.
- 14.** Letter. Thomas Fenton (Rothwell Haigh) to Boulton & Watt (Soho). 11 Jul. 1783.
*Docketed "By Mr. Lister."
Has sent his servant [John Lister] with further information on the engine house. Can Boulton & Watt give the servant instructions. Progress with the engine house. They are not used to this sort of construction in their area.*
- 15.** Letter. Thomas Fenton (Rothwell Haigh) to Boulton & Watt (Soho). 25 Aug. 1783.
Progress with the engine house. John Lister says Boulton & Watt ordered the condenser cistern to be made from 7 inch plank. Why have they altered this from 3 inch as stated in the book of directions sent by Thomas Wilson. Is afraid he will have to wait for the cylinder as it is not being made at Rotherham.
- 16.** Letter. Thomas Fenton (Rothwell Haigh) to Boulton & Watt (Soho). 9 Sep. 1783.
Will order the cistern according to Boulton & Watt's directions. Arrangements for the delivery of the cylinder from the Coalbrookdale Co. Can they prepare estimates for two engines that might be wanted in Cornwall.
- 17.** Letter. Thomas Fenton (Rothwell Haigh) to Boulton & Watt (Soho). 21 Sep. 1783.
The beam is almost ready for the iron work. Hopes the materials will be forwarded as soon as possible. Will call at Soho on his way to Wales to discuss the engines for Cornwall.
- 18.** Letter. Thomas Fenton (Rothwell Haigh) to James Watt (Soho). 4 Oct. 1783.
*Docketed "About sending his goods by Gainsborough."
Will send James Watt's drawing to Mr. Walker. John Wilkinson must arrange whether to send the cylinder via Manchester or Gainsborough.*
- 19.** Letter. Thomas Fenton (Birmingham) to "Boulton & Boulton" (Soho). 5 Nov. 1783.
*Is on his way to Swansea to see Thomas Wilson and will call at Soho on his return.
Directions for forwarding the goods.*

- 20.** Letter. Thomas Fenton (Rothwell Haigh) to James Watt (Soho). 1 Jan. 1784.
Most of the parts have been delivered. They are not yet ready for the engine erector. They have not yet begun the boiler, but he proposes to make it on James Watt's first plan. Thomas Wilson reports all is well at the mine. Are Boulton & Watt to become adventurers in Chacewater mine.
- 21.** Letter. Thomas Fenton (Rothwell Haigh) to James Watt (—). 25 Apr. 1784.
Details for the agreement. Progress with the engine. They are ready for the engine erector. John Lister said Matthew Boulton had said he would send drawings of the pit work. Fears Chacewater mine is about to close.
- 22.** Letter. Thomas Fenton (Rothwell Haigh) to James Watt [?] [Soho]. 15 May 1784.
Malcolm Logan has arrived. The piston rod has not. His concerns about the alterations to the outer cylinder and the expense. Chacewater mine is being given up.
- 23.** Letter. Fenton & Co. per Stephen Ludlow (Tower Royal) to Boulton & Watt [Soho]. 25 May 1784.
Has passed the order for the round bottom plate to the Knoll Co.
- 24.** Letter. John Florry (—) to James Watt [Birmingham]. 2 Dec. 1780.
*Docketed "About a small fire engine."
Requesting the costs of an engine for his small colliery near Bewdley.*
- 25.** Letter. Henry Flower (Great Chelsea) to James Watt (Bloomfield Colliery). 20 May 1776.
Has read the account of the engine in the Morning Post & Daily Advertiser. Has recently bought Bedlington colliery and would like costs of an engine similar to that at Bloomfield. What advantage does it have beyond the savings on coal.
- 26.** Letter. William Forbes (Primrose St., without Bishopsgate, London) to Matthew Boulton (Soho). 21 Nov. 1776.
Offering his services as a coppersmith to make engine boilers. Details of his work.
- 27.** Letter. John Freeman & Co. per William Dighton (Bristol) to Boulton & Watt (Birmingham). 3 Mar. 1781.
Will forward the copper plates that Boulton & Watt ordered for education pipes to Messrs. Gore & Shears, coppersmiths, London. They have informed William Phillips of Redruth about the order.
- 28.** Letter. John Freeman & Co. per Thomas Sims (Bristol) to Boulton & Watt (Birmingham). 17 Mar. 1781.
Have completed the order for plates. Enclosing the invoice [now missing].
- 29.** Letter. Joseph Fry (Bristol) to James Watt (Birmingham). 26 Nov. 1780.
*Details of his soap-making process. Told Samuel Galton that he would be glad to see Matthew Boulton or James Watt in Bristol. Some local colliery owners are keen to buy Boulton & Watt engines as their "common" engine is not powerful enough. Declines becoming involved as a shareholder in Wheal Virign and Poldice mines as this would not be profitable for his candle business, as Cornish suppliers sell poorer but cheaper candles. His current soap, candle and "little chocolate" business is sufficient.
Problems of duty on salt. Discussion of mixing various substances such as coal soot, copperas etc. with salt for [an unknown manufacturing process – possibly connected with the extraction of chlorine from salt]. Asks Watt if he can devise a new mixture.*

30. Letter. Joseph Fry (Bristol) to James Watt ("near St. Paul's Chapel, Birmingham").
2 Oct. 1782.

Was unable to visit Radstock. Has met an engineer who said that the "three brothers" [the Hornblowers] had attached a heavy balance bob to lift the engine rods, so the proprietors are convinced the engine is not performing well. The engineer showed him a certificate signed by five colliery proprietors praising John Blanch's pump work, which Fry feels must be wounding to the Hornblowers. Can James Watt send him some China clay. Fry told Matthew Boulton that the clothier John Anstie of Devizes has an engineer, Benjamin Fryer, from Manchester who has developed spindles for spinning Spanish wool. They cannot set up a mill "in the country for fear of the mob" so wish to erect one in Bristol. They can probably be induced to buy an engine. Has sent 14 pounds of Scotch kelp.

31. Letter. Joseph Fry (Bristol) to James Watt (Birmingham). 14 Dec. 1782.

On the same sheet:

Details of the engine and mills of John Jones & Co.

Details of the engine and the boring and corn mill of John Jones & Co., Bristol, which William Jones has given to Fry. John Stead of Birmingham is putting up the Lewins Mead mill. Has written to John Hill of Paulton but has had no answer. Heard that John Lury Cutler of Bristol once "acted unfairly" by Boulton & Fothergill respecting ivory. Can James Watt ask [Zaccheus] Walker about it and write to him as he wishes him to be exposed.

32. Letter. Joseph Fry (Bristol) to James Watt (Birmingham). 12 Apr. 1783.

Hopes to send this letter by Richard Phillips of Redruth. Fry's wife dealt with his order for chocolate and candles. Thanks James Watt for his caution about "the fossil alkali maker". Joseph Priestley's experiments on converting water into air will necessitate the use of air pumps with closed cylinders. If James Watt does not let Mr. Horner [Jonathan Hornblower] have one he will not be able to work Radstock mine. William Jones spoke to Mr. Bond, foreman of John Jones and John Winwood's iron foundry, about Radstock. Hornblower has persuaded John Winwood to pay for improvements to the engine. Further problems with the engine. The pirates' credit as engineers is very much diminished now. William Jones and Mr. Bond will go to Radstock on Easter Monday.

33. Letter. Joseph Fry (Bristol) to James Watt (Birmingham). 29 Apr. 1783.

Cannot estimate the price of a knob of kelp. William Jones has visited the Radstock engine but is afraid of speaking out – therefore James Watt must be careful with his information. Jones has talked with Mr. Bond and Mr. Parker, an engineer of Kingswood whose son works the Radstock engine.

The engine is now working with two cylinders and one air pump. Details of the engine and its coal consumption. The engine is in poor condition and does not work well – "Doctor Horner [Jonathan Hornblower] has done very little to cure his patient..." Details of the amount of water the engine pumps.

William Jones met a collier at Paulton who wants an engine but will not employ Jonathan Hornblower. However James Watt must pretend to have heard nothing from Jones. He should send a man to make the acquaintance of Mr. Palmer, the engine man and to apply to the colliery company.

34. Letter. Joseph Fry (Bristol) to James Watt (Newhall, Birmingham). 18 Sep. 1783.

Letter continued on 19 Sep.

Has received James Watt's letters and his bill for soap and chocolate. Feels "exceedingly for my afflicted friend Mr. Boulton..." Hopes to see William Jones. Is pleased by James Watt's account of his grist mill and would like to know where their mill is in London [the site for Albion mill]. Believes the Hornblowers will sink into contempt. Has sent the 6lbs. of chocolate.

Hopes Wheel Virgin will profit James Watt as an adventurer.

Has seen William Jones and paid his expenses for going to Radstock. The engine does not work well and he thinks it uses a lot of coal. Fry has paid him to visit again and find out for sure. Jones will also look into the air pump. The main beam of the engine broke. Is about to go to London. Has also sent 6lbs. of chocolate for Charles Lloyd.

35. Letter. Joseph Fry (Bristol) to James Watt (Birmingham). 31 Jan. 1784.

Docketed "Description of Battersea premises."

Has heard that the land Boulton & Watt have bought at Blackfriars for their mill [the intended Albion mill] and warehouses will be too small for their plans. He and William Jones have had a dispute with their partner John Collinson and their alkali and marine acid business at Battersea has stopped. Details of the Battersea premises, buildings, etc. which might suit Boulton & Watt.

36. Letter. Joseph Fry (Bristol) to James Watt (Newhall, Birmingham). 26 Feb. 1784.

Docketed "Plan of works at Battersea."

On the same sheet:

Coloured plan of Fry's site at Battersea.

Has sent 6lbs. of chocolate. Hopes the West Indies fleet will bring coconuts. A person in London suggested that Fry write to James Watt about the Battersea premises – this person thinks the Blackfriars site [the intended Albion mill] is too confined. Further details of the Battersea land. When Matthew Boulton goes to London he should see it – Daniel Alexander will show him around.

37. Letter. Joseph Fry (Bristol) to James Watt (Birmingham). 8 May 1784.

Docketed "About Stourbridge bricks." There are still many items to be disposed of at Battersea including Stourbridge bricks and clay. Daniel Alexander of Bolingbroke House can give details – does James Watt wish to buy them. Has heard nothing of Hornblower except that John Winwood has "turned him off, never to hear his name again."