

MS 3147/3/459
CORNISH MINES & ENGINES
CORRESPONDENCE & PAPERS 1778—1793

INTRODUCTION

Letters and memoranda concerning various Cornish mines, from 1778 to 1793, arranged in chronological order. This is a miscellaneous bundle containing letters from mine adventurers such as John Edwards and William Harris, engineers such as Edward Bull and Thomas Dudley, and four letters from Zaccheus Walker at Soho to James Watt in Cornwall. It also contains various memoranda and papers relating to the performance of various engines, including an experiment carried out by William Murdock on a boiler at Chacewater mine.

1. Letter. Zaccheus Walker (Birmingham) to James Watt (care of Thomas Wilson, Chacewater). 10 Jun. 1778.
2. Letter. Zaccheus Walker (Birmingham) to James Watt (care of Thomas Wilson, Chacewater). 16 Jun. 1778.
On the same sheet:
Letter. John Hall (Soho) to James Watt. 16 Jun. 1778.
Docketed "Account of sending off screws."
3. Letter. Zaccheus Walker (Birmingham) to James Watt (care of Thomas Wilson, Chacewater). 25 Jun. 1778.
On the same sheet:
Letter. Matthew Boulton to James Watt.
4. Letter. Zaccheus Walker (Birmingham) to James Watt (Redruth). 1 Aug. 1778.
5. Memorandum. Coals consumed by 2 old engines in Wheal Chance in 1778. Mar. 1778—Feb. 1779.
In Thomas Wilson's hand.
6. Memorandum. Murdock's experiment on Chacewater boiler. 20 Nov. — [circa 1780?].
In William Murdock's hand.
7. Letter. William Harris (Rosewarne) to Matthew Boulton [Redruth]. 27 Sep. 1780.
Docketed as 12 Sep.
8. Letter. Samuel Glover (Abercarne Iron Works, near Newport) to Matthew Boulton (care of Thomas Ennys, Redruth). 12 Oct. 1780.
9. Letter. John Vivian (Truro) to Matthew Boulton [Redruth]. 19 Oct. 1780.
10. Memorandum. Cost at Wheal Chance mine. May 1779—Nov. 1780.
On the same sheet:
Memorandum. Expense of erecting the engine and forking the water at Wheal Chance mine in Camborne. Feb. 1779—Apr. 1780.
In Thomas Wilson's hand.
11. Letter. John Edwards (—) to Matthew Boulton [Plain-an-guarry]. 15 Nov. 1780.
Docketed "Mr. Edwards of Hayle, 16 Nov. 1780."

12. Letter. John Edwards (—) to Matthew Boulton [Plain-an-guarry]. 16 Nov. 1780.
13. Letter. John Edwards (—) to Matthew Boulton (Plain-an-guarry). 16 Nov. 1780.
On the same sheet.
Memorandum. Account of the Poldice engine.
- 14a. Memorandum. Capt. Martin Stephens on Wheal Chance. 1780.
Kept with (b)—(d) below.
 - b. Memorandum. About the comparison of Wheal Chance with the table of Poldice engines performance. 1780.
Docketed "Capt. M. Stephens."
 - c. Letter. Martin Stephens (Crane) to Matthew Boulton (Plain-an-guarry). 20 Nov. 1780.
Docketed "Recantation."
 - d. Wrapper for the above 3 items.
Marked "Capt. Stephens and Trevithick."
15. Memorandum. John Budge's account of Dolcoath pump. 25 Nov. 1780.
16. Memorandum. Dolcoath loads. Not dated [circa 1780?].
17. Letter. William Harris (Rosewarne) to Matthew Boulton (Redruth). 26 Nov. 1780.
18. Letter. William Harris (Rosewarne) to Matthew Boulton (Cosgarne). 3 Dec. 1780.
19. Memorandum (press copy). Mr. Fox's account of Polgooth mine. 1781.
20. Letter. John Vivian (Truro) to Matthew Boulton [Soho?]. 9 May 1785.
Docketed "Copper trade."
21. Letter. Thomas Dudley (Retallack Mine) to James Watt (Soho). 29 Mar. 1786.
Docketed "Retallack working barrels and Hallamanin engine."
22. Letter. George Chap[man?] George (Penryn) to Thomas Wilson (Chacewater). 1 Oct. 1786.
Docketed as 4 Oct. Docketed by James Watt.
Docketed "About Baldue mine."
23. Letter (printed circular). N. Donnithorne (Surrey St., Strand, London) to "The Gentlemen interested in carrying on the Tin Mines, and to the Associated Tanners of the County of Cornwall. 31 Mar. 1789.
24. Letter. Edward Bull (Consolidated Mines) to James Watt (Soho). 15 Apr. 1789.
Docketed "About alteration of Consolidated Mines engine."
25. Letter. Richard Michell (Carharrack) to James Watt [London]. 10 Jul. 1793.
26. Letter. John Edwards Jr. (Truro) to Thomas Wilson [London]. 13 Jul. 1793.
27. Sketch. Section of a boiler. Not dated.
Rough pencil sketch. Docketed "Boyley Scheme."

28. Tables. Performance of unnamed engines. Not dated.
Includes some data from the "Wheal Chance old engine." Tables calculating the size of a Watt engine.

MS 3147/3/460
CORNISH MINES & ENGINES
PAPERS SENT BY THOMAS WILSON, NOTES ON ENGINES BUILT & PREMIUMS
DUE, 1778—1799
CALCULATIONS FOR WHEAL CHANCE, POLDICE, DOLCOATH, 1778—1780

INTRODUCTION

The contents of this bundle fall into two distinct parts. The first part contains tables, memoranda and letters giving the history of Boulton & Watt engines in Cornwall, savings made, premiums given up by Boulton & Watt, premiums owing to Boulton & Watt, etc. The majority of these items were sent to Soho by Boulton & Watt's Cornish agent, Thomas Wilson. This first half of the bundle contains some significant items such as Wilson's history of all of Boulton & Watt's Cornish engines up to September 1794, and the statements of Wilson and the mine adventurer Richard Michell about the benefits of the Watt engine to Cornwall.

The second part of the bundle contains calculations and notes, mainly for engines for Wheal Chance, but also referring to the "Eastern" atmospheric engines at Poldice mine which were used by Boulton & Watt as a standard for calculating the coal consumption of engines, and whims built by the Cornish engineer John Budge at Dolcoath mine.

Papers sent by Thomas Wilson, Notes on Engines Built, Premiums Due etc.

1. Table. Mr. Boulton's Statements of the Performance of old engines in Cornwall. 1778.
In Matthew Boulton's hand.
Dimensions and details of performance of atmospheric engines.
2. Memorandum. Notes about Cornish engines. 1790s.
Notes on Boulton & Watt's and the mine adventurers' figures for the depths pumped and coals consumed by various engines.
3. Memorandum. Effects of Cornish Engines per bushel, calculated Apr. 1792.
By Thomas Wilson.
4. Table. Mr. Wilson's General Statement of Consumption, Savings of fuel and payments to Boulton & Watt for one year. 1792—1793.
Details for Poldice, Consolidated Mines, United Mines and North Downs.
5. Memorandum. Account of Boulton & Watt's engines built in Cornwall. 24 Sep. 1794. 2 sheets.
By Thomas Wilson – sent by him to James Watt Jr. On the second sheet:
List of engines built in Cornwall.
Premiums received for Boulton & Watt in Cornwall.
Premiums given up by Boulton & Watt.
Arrears to end of Aug. 1794.
Docketed "Wilson's account of engines and premiums."

6. Memorandum. Account of Disputed Premiums. 24 Sep. 1794. 2 sheets.
By Thomas Wilson. On the second sheet:
Letter. Thomas Wilson (Truro) to James Watt Jr. (Soho). 24 Sep. 1794.
7. Transcript of letter. Richard Michell to "A Friend." — Jul. 1795. 2 sheets.
Copy sent to Boulton & Watt by Thomas Wilson.
Docketed "Richard Michell's account of the introduction of Boulton & Watt's engine into Cornwall and opinion of their merits."
8. Memorandum. Thomas Wilson's statement of the benefits accruing to Cornwall from the introduction of Boulton & Watt's engine. 13 Jul. 1795. 3 sheets.
On the third sheet:
Letter. Thomas Wilson (Truro) to Boulton & Watt (Soho). 13 Jul. 1795.
9. Memorandum. Sums due from Mines in Cornwall to end of Jul. 1795.
In Thomas Wilson's hand.
Docketed "Abstract of sums due from Cornwall."
10. Memorandum. Premiums due to Boulton & Watt to 1 Aug. 1795.
11. Letter. Thomas Wilson (Truro) to Boulton & Watt (6 Green Lettice Lane). 29 Apr. 1795.
Docketed "Account of premiums due on engines."
12. Memorandum. List of engines now working. Sep. 1796.
Lists Hornblower's and Boulton & Watt's engines.
13. Memorandum. State of disputed premiums in Cornwall. 14 Sep. 1796. 2 sheets.
In James Watt's hand.
14. Letter. Thomas Wilson (Truro) to James Watt Jr. (13 London St.). 2 Feb. 1799.
On the same sheet:
List of Premiums of Engines due to Messrs. Boulton & Watt to the end of Dec. 1798.
Docketed "Statement of premiums due from recusant mines. Continuation of his history of the recusant engines. Meeting with Daniell and message sent by him. Payment of £186.9 from Wheal Unity. Letter from Treasure purser. Believes Maberley will not go on."
15. Letter. Thomas Wilson (Truro) to Boulton & Watt (13 London St.). 11 Feb. 1799.
On the same sheet:
List of Premiums received by Boulton & Watt in Cornwall to end 1798.
Docketed "Amount of monies received from Cornwall to the end of 1798. About attending the mine accounts. General silence about our affairs and anger of Grylls. Meeting with Mr. William Wilkinson."
- 16a. Letter. Thomas Wilson (Truro) to Boulton & Watt (13 London St.). 22 Feb. 1799.
Enclosing (b) below. On the same sheet:
List of Premiums given up by Boulton & Watt, 1779—1790.
Docketed "Statement of the annual savings in fuel by Boulton & Watt's engines from 1778 to 1790. Premiums given up by Boulton & Watt in the above years. Manner of making out the account of savings. History of Bull's engines. Secret meeting at United Mines."
- b. Table of fuel savings made by various engines, and money due to and received by Boulton & Watt. 1778—1790.

- 17a.** Letter. Thomas Wilson (Truro) to Boulton & Watt (13 London St.). 24 Feb. 1799.
Enclosing (b) below. On the same sheet:
List of Premiums given up by Boulton & Watt, 1791—1798.
Docketed “Continuation of statement of savings by Boulton & Watt’s engines, 1790 to 1798. Premiums given up by Boulton & Watt during the above period. Manner in which the above calculations were made out. Harris’ application to Capt. Jos. Vivian and Richard Trevithick. Particulars of Hornblower’s engines to be sent soon. Samples of ore from Surtees and Hall. United Mines likely to stop soon.”
- b.** Table of fuel savings made by various engines, and money due to and received by Boulton & Watt. 1791—1798.
- 18.** Memorandum. Memorandums respecting Boulton & Watt’s engines in Cornwall. 20 Apr. 1799.
In James Watt Jr.’s hand.
- 19.** Memorandum (press copy). Memorandums relative to Boulton & Watt’s engines in Cornwall. 20 Apr. 1799. 4 sheets.
Copy of a slightly different memorandum from the one above.
- 20.** Memorandum (press copy). Memorandums relative to Boulton & Watt’s engines in Cornwall. 20 Apr. 1799.
Single sheet memorandum, different to the above two.
- 21.** Memorandum. Ex parte Boulton & Watt – Arguments to be used if any further application to Parliament. [Circa 1799]. 3 sheets.
In James Watt’s hand.
Titled “Bill of Peace.”

Calculations for Wheal Chance, Poldice, Dolcoath.

- 22.** Memorandum. Coals consumed by Poldice Middle Engine. 7 Jun.—8 Nov. 1778.
- 23a.** Memorandum. Proposals to Mr. Stackhouse. Not dated.
Kept with (b) and (c) below. In Matthew Boulton’s hand.
About Wheal Chance. Marked “No. 1.”
- b.** Memorandum. Account of Wheal Chance engines delivered by Mr. Harris.
Not dated. Docketed “No. 2.”
- c.** Memorandum. Coals consumed at Rosewarne Engines from 1 Dec. 1777–26 Nov. 1778.
Docketed “Account of Wheal Chance coals. Delivered by Mr. Harris. No. 3.”
- d.** Wrapper for the above three items.
Marked “Mr. Harris.”
- 24.** Calculations. Rough calculations for the Wheal Chance engine. [Circa 1779?] 2 sheets.
In Matthew Boulton’s hand.
The second sheet has notes on the back for a meeting of Wheal Virgin and Poldice adventurers.
- 25.** Sketch. Wheal Chance shafts. [Circa 1779/1780?]
- 26.** Calculation. Scrap of calculations about the Wheal Chance engine [?]. [Circa 1779/1780?]
In Matthew Boulton’s hand.

27. Memorandum. Savings in Dolcoath on drawing work with Mr. Budge's patent whims. 1773—1780.
Taken from the Dolocath books by John Vivian.
Docketed "Account of Bouge's whims."
28. Memorandum. Capt. Dick Trevithick's calculation, Wheal Chance. 27 Sep. 1780.
29. Memorandum. The mode of calculating Poldice engines and making a table from them. 1780 [?].
30. Table. Calculation and table of the burning of a common engine whose cylinder is 77.1 inches diameter. [Circa 1780?]
Marked "From the two Eastern engines at Poldice."
31. Memorandum. Calculations and proposals for the Wheal Chance engine. 16 Sep. —.
In Matthew Boulton's hand.

MS 3147/3/461
CORNISH MINES & ENGINES
ACCOUNTS OF MINES, ENGINES, DEBTS ETC. SENT BY THOMAS WILSON
1779—1807

INTRODUCTION

The majority of the papers in this bundle were sent to Soho by Thomas Wilson, Boulton & Watt's Cornish agent. The papers – accounts, memoranda and letters – cover various aspects of Boulton & Watt's business in Cornwall and their dealings with Wilson. The bundle is divided as follows:

- Nos. 1-6. Shipping of copper, purchase of ore etc.
- Nos. 7-31. Boulton & Watt's debts in Cornwall, outstanding premiums, papers for court cases, etc.
- Nos. 32-42. Accounts of engines.
- Nos. 43-59. Accounts and statements of mines, experiments etc.
- Nos. 60-69. Accounts of sales of tin from Polgooth mine.
- Nos. 70-72. Thomas Wilson's brewery concern and commissions paid to him.
- No. 73. Cornish General Infirmary.

Nos. 32 to 42, the accounts of engines, mainly deal with the small rotative engines sold in 1785 to 1786 under the partnership of "Boulton Watt & Co. Cornwall", which consisted of Matthew Boulton, James Watt, Thomas Wilson and William Murdock.

Shipping of copper, purchase of ore etc.

1. Memorandum. Agreement between John Tilston, Master of the sloop *Betty* and Hugh Jones of Chester for Boulton & Watt and John Wilkinson. 7 Jun. 1781.
- 2a. Letter. Thomas Wilson (Chacewater) to Boulton & Watt (Soho). 14 Aug. 1788.
Enclosing (b) below. On the same sheet:
Invoice of 53 blocks of tin shipped for Boulton & Watt to be shipped to Achard Frères et Compagnie, Rouen.
Docketed "Invoice of tin shipment for Swansea for Rouen."

- b. Bill of lading of 53 blocks of tin shipped on the *Margaret* at Truro for Swansea for Boulton & Watt. 14 Aug. 1788.
- 3. Account. Pro Forma account of sales of 3 blocks of tin received from London and sold at Havre. 23 Aug. 1788.
- 4. Letter. Thomas Wilson (Chacewater) to Boulton & Watt (Soho). 4 Sep. 1788.
Passed to James Pearson at Soho. On the same sheet:
Invoice for 30 blocks of tin shipped to London.
Docketed "Invoice of 30 blocks of tin shipped for London on our account."
- 5a. Letter. Thomas Wilson (Chacewater) to Boulton & Watt [Soho]. 11 Sep. 1788.
Enclosing (b) and (c) below. On the same sheet:
Invoice of 30 blocks of tin shipped for Boulton & Watt.
Docketed "Invoice and bill of lading of 40 blocks of tin shipped for Swansea and Bristol."
- b. Invoice of 10 blocks of tin shipped for Boulton & Watt.
- c. Bills of lading for 30 blocks of tin and 10 blocks of tin, shipped on board the *Brothers* at Truro for Swansea for Boulton & Watt. 10 Sep. 1788.
Two printed bills on the same sheet.
- 6. Memorandum. Statement of the quantity of ores bought by the different companies from 6 Dec. 1798 to 14 Mar. 1799; and of the total quantity of fine copper purchased by each company in the last year, terminating 1 Jul. 1798.
In Thomas Wilson's hand.
Companies listed include Rose Copper Co., Birmingham Mining Co., Cornish Copper Co., Cheadle & Parys Mine, etc.

Boulton & Watt's debts in Cornwall, outstanding premiums, papers for court cases, etc.

- 7. Memorandum. List of debts in Cornwall. 31 Jul. 1781.
In Thomas Wilson's hand.
- 8. Memorandum. List of debts due to Messrs. Boulton & Watt in Cornwall. 1 Nov. 1781.
In Thomas Wilson's hand.
- 9. Account. Balances due to and from Messrs. Boulton & Watt in Cornwall. 31 Dec. 1781.
In Thomas Wilson's hand.
- 10. Account. Balances due to and from Messrs. Boulton & Watt in Cornwall. 20 Jul. 1785.
In Thomas Wilson's hand.
- 11. Account. Sums received by Boulton & Watt for premiums of their engines in Cornwall. 31 Dec. 1791.
In Thomas Wilson's hand.
- 12. Memorandum. Minutes made with Mr. Wilson respecting Cornish premiums. Soho, 1793.
In James Watt's hand. Concerning Poldice and Consolidated Mines.
- 13. Memorandum. Herland cost. 29 Aug. 1791—31 Jan. 1794.
In Thomas Wilson's hand.

14. Memorandum. Particulars of Bills of Cost sent to Messrs. Boulton & Watt in Sep. 1796.
Record of bills for legal expenses in cases against Bull, Hornblower and various "recusant" mines.
15. Account. Premiums of Engines due to Boulton & Watt to end of Aug. 1796.
In Thomas Wilson's hand.
16. Memorandum. Memorandums at St. Austle. 24 Sep. 1796.
In Thomas Wilson's hand. Concerning settlements with various mines.
17. Memorandum. Copy of memorandums left with Mr. Wilson. 25 Sep. 1796.
In Thomas Wilson's hand. Concerning settlements with various mines. Similar to the memorandum of 24 Sep. above.
18. Account. Premiums of Engines due to Boulton & Watt. 30 Sep. 1796.
In Thomas Wilson's hand. Docketed "Statement of contested premiums to 30 Sep. 1796."
19. Memorandum. Minutes of conversation at London St. 20 Dec. 1796.
The docket is on a separate wrapper. In M. R. Boulton's hand. Docketed "Minutes of resolutions respecting Cornish affairs."
20. Memorandum. Proposal of Capt. Andrew Vivian on behalf of Wheal Treasury adventurers. 31 Sep. 1797.
21. Wrapper.
Marked "Offer of Capt. Andrew Vivian on behalf of Wheal Treasury mine. 31 Sep. 1797." Contents now wanting.
- 22a-c. Memoranda. Hallamanin coals, debenture from Penzance and St. Ives. 1 Apr. 1799.
Three small memoranda kept together.
23. Account. Premiums of Engines due to Messrs. Boulton & Watt. 31 Dec. 1798—31 May 1799.
In Thomas Wilson's hand. On the same sheet:
Account. United Mines' account in case the agreement is disregarded.
24. Account. Sundries debtors to Boulton & Watt. 31 May 1799.
In Thomas Wilson's hand. Docketed "Account of arrears due from the paying mines in Cornwall up to 31 May 1799."
25. Memorandum. Calculations for offers. Circa May 1799.
In Thomas Wilson's hand. Calculations for various mines' settlement of their arrears with Boulton & Watt.
26. Memorandum. Account of the Mines in which Boulton & Watt have been concerned, with a statement of their profit and loss. 1799.
27. Memorandum. New & Old Wheal Treasury adventurers, with statement of accounts. 1799
[?].
Docketed "No. 3 & 4."
28. Memorandum. Goldolphin and Wheal Abraham mine, with statement of accounts. 1799
[?].
Docketed "Nos. 6 & 7."

29. Memorandum. Hallamanin Mine, Wheal Anne ditto, cases and statements of accounts. 1799 [?].
Docketed "Nos. 9, 10."
30. Memorandum. Balcoath Mine, Wheal Rose ditto, Carzize Wood ditto – Cases with statements of accounts. 1799 [?].
Docketed "Nos. 11, 12 & 13."
31. Memorandum. Particulars of Wheal Anne payments. 1799 [?].
In M. R. Boulton's hand.

Accounts of engines.

32. Account. Transcript from Thomas Wilson's Day Book. 17—29 Jan. 1785.
In Thomas Wilson's hand. Sent by Wilson to Boulton & Watt at Soho.
Docketed "Mr. Wilson's conclusion of Day Book Dec. 1784."
33. Account. Transcript from Thomas Wilson's Day Book. 29 Jun.—26 Jul. 1785.
In Thomas Wilson's hand. Sent by Wilson to Watt at Harper's Hill.
Docketed "General account."
34. Account. Savings of engines. Jul. 1785.
In Thomas Wilson's hand. On the same sheet:
Letter. George Vivian for Thomas Wilson (Chacewater) to Boulton & Watt (Soho). 5 Aug. 1785.
Docketed "Monthly account of engines, 5 Aug. 1785."
35. Account. Savings of engines. Oct. 1787.
On the same sheet:
Account. Transcript from Thomas Wilson's Day Book. Oct.—Nov. 1787.
Account. Balances due to Messrs. Boulton & Watt to end of Sep. 1787.
In Thomas Wilson's hand.
36. Memorandum. Prime cost of Wheal Towan engine. [1785?]
In Thomas Wilson's hand. Docketed "Sent Mr. Boulton for Mr. Morris."
37. Account. Crane, Wheal Maid, North Downs, Chacewater, Polgooth and Wheal Chance engines. 1785.
In Thomas Wilson's hand.
38. Account. Wheal Mount, Wheal Reeth and Prince George engines. 1786.
In Thomas Wilson's hand.
39. Account. Towan, Crane and Wheal Maid engines. Jan. 1786.
In Thomas Wilson's hand.
40. Accounts. Chacewater and Wheal Maid rotative engines. Jul. 1786.
In Thomas Wilson's hand. On the same sheet:
Memorandum. Resolutions made at a meeting of Poldice adventurers. Truro, 10 Aug. 1786.
41. Account. Prince George, Wheal Mount, Wheal Towan and Wheal Reeth engines. Aug. 1786.
In Thomas Wilson's hand.

42. Account. Small engines. Dec. 1786.
In Thomas Wilson's hand.
Accounts for Chacewater rotative, Wheel Maid, Wheel Towan, Wheel Reeth, Prince George and Wheel Mount engines.

Accounts and statements of mines, experiments etc.

43. Accounts. Statement of our account with Wheel Union and also Hallamanin adventurers as per Mr. Wilson's books. Dec. 1779.
In Thomas Wilson's hand.
44. Account. Chacewater mine account current. May 1780—May 1784.
45. Transcript of account. Valuation of the Materials on Chacewater Mine. 5 Jul. 1784.
Original signed on 13 Jul. 1784 by Thomas Gundry, Richard Trevithick Sr. and Tristram Powning.
46. Accounts. Consolidated and Poldice Mines. Dec. 1784.
In Thomas Wilson's hand.
47. Letter. Thomas Wilson (Chacewater) to James Watt (Harper's Hill). 23 May 1785.
On the same sheet:
Account of Chacewater mine, Sep. 1784—Apr. 1785.
Docketed "With account of Chacewater mine."
48. Account. Monthly Account of Poldice Mine. Nov. 1785.
Printed sheet detailing men, workers, costs etc.
49. Accounts. Polgooth, Poldice, Chacewater. May 1786.
Printed sheet listing the number of men, work done, expenses, surcharges etc.
Docketed "Account of mines."
50. Letter. Thomas Wilson (Chacewater) to James Watt (Harper's Hill). 27 May 1786.
Docketed "Profits in Chacewater and Polgooth."
51. Account. Profits of Chacewater mine. Sep. 1786.
52. Account. State of profits of Chacewater mine. Sep. 1786.
In Thomas Wilson's hand.
53. Accounts. Mr. Kevill and Mr. Reed's payments for part costs in Chacewater mine. 1784—1786.
In Thomas Wilson's hand. Docketed "The state of Reed & Kevil's cost of Chacewater Mine."
54. Accounts. Accounts of various mines' balances and ores sold. Jan.—Dec. 1785.
In Thomas Wilson's hand. Docketed "Produce sundry mines."
55. Accounts. Accounts of various mines' balances and ores sold. Jan.—Jun. 1786.
In Thomas Wilson's hand. Docketed "Balance – sundry mines."
56. Accounts. Accounts of various mines' balances and ores sold. Jul.—Dec. 1786.
In Thomas Wilson's hand. Docketed "Account of mines Dec. 1786."

57. Accounts. Accounts of various mines' balances and ores sold. Jan.—Jul. 1787.
In Thomas Wilson's hand. Docketed "Account of mines Midsummer 1787."
- 58a & b. Transcripts of letter. Boulton & Watt (Truro) to Thomas [?] Kevill (—). 20 Sep. 1792.
Two transcripts of the same letter.
(a) is docketed "A copy of B&W's letter to Mr. K^l on the Wheal Butson experiment and a comparison with Tin Croft and Poldice."
59. Memorandum. Account of the weight of copper ore, coals, timbers etc. used annually in the Gwennap Mines, from J. Williams. Oct. 1800.

Accounts of sales of tin from Polgooth mine.

60. Letter. Thomas Wilson (Chacewater) to James Watt (Harper's Hill). 24 Mar. 1785.
On the same sheets:
Accounts of tin sent from Polgooth mine, Misummer, Michaelmas and Christmas Quarters 1784.
Docketed "With account of Polgooth tin and state of some mines, and William Murdock and his agreeing to take ½ of small engine concern."
61. Letter. Thomas Wilson (Chacewater) to James Watt (Harper's Hill). 28 Apr. 1785.
On the same sheet:
Account of Polgooth tin sales, Lady Day Quarter.
Docketed "Account of Polgooth tin and of Prince George Mine."
62. Account. Sales of Polgooth tin. Jul.—Oct. 1785.
In Thomas Wilson's hand.
63. Account. Sales of Polgooth tin. Nov. 1785—Jan. 1786.
In Thomas Wilson's hand.
64. Account. Sales of Polgooth tin. 1 Feb.—5 Apr. 1786.
In Thomas Wilson's hand.
65. Account. Sales of Polgooth tin. 5 Apr.—8 Jul. 1786.
In Thomas Wilson's hand.
66. Account. Sales of Polgooth tin. Jul.—Oct. 1786.
On the same sheet:
Letter. Thomas Wilson (Chacewater) to Ann Watt (Harper's Hill). 11 Nov. 1786.
Note. Ann Watt to James Pearson [Soho]. "Thursday."
67. Account. Sales of Polgooth tin. Dec. 1786.
On the same sheet:
Account. Balances due to and from Messrs Boulton & Watt to end Dec. 1786.
In Thomas Wilson's hand. Docketed "With account of debts due to us in Cornwall."
68. Account. Sales of Polgooth tin. 22 Mar. 1787.
In Thomas Wilson's hand.
69. Account. Sales of Polgooth tin. Midsummer 1787.
In Thomas Wilson's hand.

Thomas Wilson's brewery concern and commission paid to him.

70. Memorandum. Statement of Wilson Thorn & Co.'s brewery. Mar. 1799.
71. Memorandum. Wilson's statement of Brewery Concern. 24 Mar. 1799. 2 sheets.
72. Memorandum. Statement of the Commission paid Thomas Wilson at sundry times by Boulton & Watt. 14 May 1807.
In James Watt Jr.'s hand. Covers commissions paid from 1780 to 1807.

Cornish General Infirmary.

73. Memorandum. Cornish General Infirmary – List of Subscribers. Not dated.

**MS 3147/3/462
CORNISH MINES & ENGINES
CORRESPONDENCE FROM THE FOX FAMILY
1785—1794**

INTRODUCTION

Letters from various members of the Fox family and their businesses. The subjects include mine shares and engines, engines for furnaces in Wales in which the Foxes had shares, etc. Further correspondence from the Foxes can be found elsewhere in the Cornish records and in the Incoming Correspondence. It is not clear why only these letters and not the entire Fox correspondence should have been kept in a separate bundle. Possibly this bundle was created much later, but it is mentioned in the list of contents of the Watt Room. Note that 18 of these letters were borrowed by G. C. Fox & Co. from Tangye's for an exhibition in 1902 – these were numbered in pencil at the time. The bundle is divided as follows:

- Nos. 1-17. Edward & Robert W. Fox, Wadebridge.
- Nos. 18-21. George C. Fox & Sons, Falmouth.
- Nos. 22-27. Robert W. Fox & Co./Robert W. Fox, Falmouth.
- No. 28. Thomas Fox, Wellington.
- Nos. 29-34. Fox Phillips & Fox, Perran Wharf.

Nos. 1-17. Edward and Robert W. Fox, Wadebridge.

1. Letter. Edward Fox (Wadebridge) to Boulton & Watt (Birmingham). 17 Feb. 1785.
On the same sheet:
List of adventurers in a new, unnamed mine.
Docketed "Offer of 1/20 in new sett adjoining Mulvra."
2. Letter. Edward Fox (Wadebridge) to James Watt [Birmingham]. 31 Mar. 1785.
3. Letter. Edward Fox (Wadebridge) to Boulton & Watt (Birmingham). 28 Feb. 1786.
4. Letter. Edward Fox (Wadebridge) to Boulton & Watt [Birmingham]. 7 Mar. 1786.

5. Letter. Edward Fox (Wadebridge) to Matthew Boulton (6 Green Lettice Lane, London). 22 Jun. 1786.
Re-directed to Soho.
Docketed "About engaging Mr. Rashleigh."
6. Letter. Edward & Robert W. Fox (Wadebridge) to Boulton & Watt (Birmingham). 22 Mar. 1791.
Docketed "Polgooth and Hewas."
7. Letter. Edward & Robert W. Fox (Wadebridge) to Boulton & Watt [Birmingham]. 22 Apr. 1791.
8. Letter. Edward & Robert W. Fox (Wadebridge) to Boulton & Watt (Birmingham). 25 Apr. 1791.
Docketed "Hewas and Polgooth."
- 9a. Letter. Edward & Robert W. Fox (Wadebridge) to Boulton & Watt (Birmingham). 15 Oct. 1791.
Kept with (b) below.
Docketed "With copy of answer."
- b. Transcript of letter. Boulton & Watt (Soho) to Edward and Robert W. Fox [Wadebridge]. 25 Oct. 1791.
10. Letter. Edward & Robert W. Fox (Wadebridge) to Boulton & Watt [Birmingham]. 27 Oct. 1791.
11. Letter. Edward & Robert W. Fox (Wadebridge) to Boulton & Watt (Birmingham). 5 Nov. 1791.
Docketed "With remittance for our share in Polgooth."
12. Letter. Edward & Robert W. Fox (Wadebridge) to Boulton & Watt (Birmingham). 18 Aug. 1792.
Docketed "Hewas engine."
13. Transcript of letter. Boulton & Watt (London) to Edward & Robert W. Fox [Wadebridge]. 23 Aug. 1792.
14. Letter. Edward Fox (Wadebridge) to Boulton & Watt [Truro]. 22 Sep. 1792.
Docketed "About engine for Hewas."
15. Transcript of letter. Boulton & Watt [Truro] to Edward Fox [Wadebridge]. 23 Sep. 1792.
In James Watt's hand.
16. Letter. Edward Fox (Wadebridge) to Boulton & Watt (Birmingham). 1 Jan. 1793.
This letter was passed to Matthew Boulton.
17. Letter. Edward Fox (Wadebridge) to Boulton & Watt (Birmingham). 4 Sep. 1794.
Docketed as 6 Sep.
Docketed "Offer of share in Neath Abbey."

Nos. 18-21. George C. Fox & Sons, Falmouth.

18. Letter. George C. Fox & Sons (Falmouth) to Boulton & Watt (Birmingham). 4 Apr. 1785.

- 19. Letter. George C. Fox & Sons (Falmouth) to Matthew Boulton [London]. 30 Jan. 1788.
- 20. Letter. George C. Fox & Sons (Falmouth) to Zaccheus Walker [Birmingham]. 10 Mar. 1788.
- 21. Letter. George C. Fox & Sons (Falmouth) to Matthew Boulton (Soho). 15 Oct. 1792.

Nos. 22-28. Robert W. Fox & Co./Robert W. Fox, Falmouth.

- 22. Letter. Robert W. Fox & Co. (Falmouth) to Boulton & Watt (Birmingham). 16 Jul. 1792.
The letter is not signed, but merely ends "We are truly, Your assured friends." Docketed as R. Fox & Co. The letter was passed to Matthew Boulton.
- 23. Draft of letter. Boulton & Watt [Soho] to Robert W. Fox & Co. [Falmouth]. 21 Jul. 1792.
In Matthew Boulton's hand. In reply to the above letter of 16 Jul.
- 24. Letter. Robert W. Fox (Falmouth) to Boulton & Watt (Birmingham). 1 Aug. 1792.
- 25. Letter. Robert W. Fox (Falmouth) to Boulton & Watt (Birmingham). 18 Aug. 1792.
Mis-signed as George C. Fox & Sons.
- 26. Letter. Robert W. Fox "for Partners & Self" (Falmouth) to Boulton & Watt (—). 17 Sep. 1792.
- 27. Memorandum. Messrs. Fox's blowing engine. Sep. 1792.
In James Watt's hand.
- 28. Letter. Robert W. Fox & Co. (Falmouth) to Boulton & Watt [Birmingham]. 26 Nov. 1792.
The letter is not signed, but merely ends "We remain sincerely, Your assured friends." Docketed as R. Fox & Co.

No. 29. Thomas Fox, Wellington.

- 28. Letter. Thomas Fox (Wellington) to Boulton & Watt (Birmingham). 20 Feb. 1794.
Docketed "Answered 2 Apr. About ponderous spar."

Nos. 30-35. Fox Phillips & Fox, Perran Wharf.

- 29. Letter. Fox Phillips & Fox (Perran Wharf) to Boulton & Watt (Birmingham). 21 May 1785.
Docketed "About share in Poldice."
- 30. Letter. Fox Phillips & Fox (Perran Wharf) to Boulton & Watt (Birmingham). 6 Jan. 1786.
- 31. Letter. Fox Phillips & Fox (Perran Wharf) to Boulton & Watt (Birmingham). 20 Jan. 1786.
- 32. Letter. Fox Phillips & Fox (Perran Wharf) to Boulton & Watt (Birmingham). 12 Apr. 1786.
Docketed "Hewas mine."

33. Letter. Fox Phillips & Fox (Perran Wharf) to Boulton & Watt (Birmingham). 25 Jan. 1788.
Docketed as G. Fox. On the same sheet:
Memorandum. Agreement between the Adventurers of Chacewater mines, and the Adventurers of North Downs Consolidated Mines. 15 Jan. 1788.
Docketed "Agreement concerning North Downs adit."
34. Letter. Fox Phillips & Fox (Perran Wharf) to Boulton & Watt (Birmingham). 24 Aug. 1789.
Docketed "About tin association."

MS 3147/3/463
CORNISH MINES & ENGINES
THE CORNISH METAL COMPANY
1785—1788, 1792

INTRODUCTION

Letters and papers about the establishment and dealings of the Cornish Metal Company, including the proposals made in November 1787 by Thomas Williams, the owner of the Parys Mountain copper mine on Anglesey, for dividing up the copper trade. The Cornish Metal Co. was formed at Truro on 1 September 1785, with a capital of £500,000. It included Boulton, various manufacturers, several Cornish mine adventurers and Thomas Williams. The aim of the company was to keep copper at a reasonable price, avoiding wild fluctuations in price for the manufacturers buying the copper, and avoiding excessively low prices for the mines producing it. The company was not a great success, as stocks accumulated rapidly and profitable market could not be found. It folded in 1792.

These documents were found among the Correspondence & Papers 1777—circa 1801 (the large bundle arranged alphabetically by mine), but they appear to have formed a separate bundle.

1. Memorandum. Resolutions of a meeting of the Lords and Adventurers in mines. Truro, 22 Jul. 1785.
In Thomas Wilson's hand.
2. Memorandum. Resolutions... entered into by the Lords and Adventurers interested in the Copper Mines in Cornwall for establishing and supporting a company... Truro, 22 Jul. 1785.
On the same sheet:
List of subscribers to the aforementioned resolutions.
Docketed "Resolutions of the Metal Co. at Truro."
3. Memorandum. List of the Miners' Committee of 24. 1 Sep. 1785.
In Thomas Wilson's hand. On the same sheet:
List of the Metal Committee chosen by the subscribers.
List of Subscribers to the Cornish Metal Company.
Minutes of the meeting at Truro, 1 Sep. 1785.
4. Memorandum. Abstract of agreement for establishing the Cornish Metal Company. 1 Sep. 1785. 5 pages.
5. Memorandum. Abstract of agreement between the Cornish Miners, and Metal Company. 1 Sep. 1785. 5 pages.

6. Letter. Thomas Wilson (Chacewater) to Boulton & Watt (Soho). 3 Mar. 1786.
On the same sheet:
Tables of performances of Briggan, Wheal Messa and Wheal Mount, Wheel Wreeth and Prince George engines.
Docketed "Tables Briggan, Wheal Messa, Wheal Wreeth, Prince George and Wheal Mount."
7. Memorandum. "Copy of my paper to Sir F. Bassett Sep. 1786 on copper trade."
Copy of paper by Matthew Boulton about the trading relations etc. of the Cornish Metal Co.
8. Letter. W. Yeatherd (Truro) to Boulton & Watt [Soho]. 26 Oct. 1786.
Docketed "Call of Cornish Company."
9. Memorandum. Draft of Case of the Cornish Metal Company. 1787. 4 sheets.
In James Watt's hand.
10. Letter. Thomas Wilson (Chacewater) to James Watt (Harper's Hill). 11 Aug. 1787.
On the same sheet:
Memorandum. List of all the Members of the Metal Co. as allowed to vote in 1786.
Docketed "List of voters and committee of Cornish Metal Co."
11. Memorandum. Resolutions of a meeting of a Special Committee of the Cornish Metal Co. Truro, 20 Sep. 1787.
12. Letter. John Provis (Truro) to Boulton & Watt (Soho). 21 Sep. 1787.
13. Memorandum. A Plan for the sale of all the Copper, which may be at present in the hands of the Cornish Metal Co. and the Parys Mine and the Mona Mine Cos. and of all the copper that may be raised in Cornwall and Anglesey for five years from 1 Sep. last past. London, 8 Nov. 1787. 2 sheets.
The memorandum is divided into two parts, both dated London, 8 Nov.
Docketed "Proposal from Mr. Williams to the Cornish Metal Company."
14. Press copy of the above memorandum. 6 sheets.
With wrapper marked "Conciliatory copper scheme, Nov. 1787."
The first part of the memorandum, titled "A Plan for the sale of all the Copper..." is identical to the above memorandum. However the second part, beginning "The several regulations..." appears to have been copied from another version.
15. Letter. Thomas Wilson (Chacewater) to Boulton & Watt (Soho). 16 Nov. 1787.
Docketed "About Cornish meeting on Mr. Williams' proposals."
16. Memorandum. Resolutions of a meeting of a Select Committee of the Cornish Metal Co. Truro, 28 Feb. 1788.
Signed by John Vivian.
- 17a. Letter. John Vivian (Truro) to Matthew Boulton [Soho]. 5 Oct. 1788.
Enclosing (b) below.
Docketed "With Cornish Metal Co. accounts."
- b. Account. General Account – Cornish Metal Co.'s affairs. 31 Aug. 1788.
18. Account. General Account – Cornish Metal Co.'s affairs. 31 Aug. 1788.

19. Printed circular. State of the Metal Company's affairs... 1 Mar. 1792.
Sent to Boulton & Watt by John Vivian.

MS 3147/3/464
CORNISH MINES & ENGINES
MEMORANDUM ON CORNISH ENGINES & TABLES
1780

INTRODUCTION

A long memorandum in press copy form, in James Watt's hand. The front cover is marked "Abridgement." The memorandum describes Boulton & Watt's system of charging for their engines, the calculations on which premiums are based etc. The last page is a table of the performance of the two Poldice Eastern engines upon which calculations for new engines were based.

Memorandum (press copy). On Cornish Engines & Tables. Redruth, 23 Oct. 1780. 7 pages.

MS 3147/3/465
CORNISH MINES & ENGINES
MISCELLANEOUS PAPERS AND MEMORANDA
1779—1805

INTRODUCTION

Miscellaneous items relating to Cornish mines and engines that were found scattered through the collection. Some of these items were found with the Cornish mines bundles in Box 9; others were found with the partners' correspondence in Parcel D. These latter items were probably removed from their original locations in the 1890s by Henry Hazleton, as they bear docketts in his hand.

1. Estimates and proposals. North Downs Mines. 1 Jun. & 19 Jul. 1776. 2 sheets.
In the following sections:
"An Estimate of the Expenses required to Erect a Fire Engine of a 70 Inch cylinder..." 1 Jun. 1776.
"An Estimate of the Expenses required to Set the Mines of North Downs, Wheal Messah, Wheal Fortune, Wheal Rose and Truan to work." 1 Jun. 1776.
"Proposals, London 19 Jul. 1776."
Docketed "Original copy of North Downs estimate, brought by Mr. Henderson."
2. Draft of proposals between Boulton & Watt and the Wheal Union adventurers. 12 Nov. 1778. Incomplete.
In Matthew Boulton's hand.
3. Draft of agreement with Poldice Mine. Not dated.
In Matthew Boulton's hand.
4. Memorandum (press copy). Report on trials on the engines at Hawkesbury Colliery, Bedworth. 15 Mar. 1779. 2 sheets.
Signed by Matthew Boulton, Logan Henderson, George Taylor and William Plant. Bedworth Colliery was near Coventry – this memorandum may have been used for comparison with early Cornish engines, as it was found among the Cornish mines material.

5. Memorandum. For Wheal Chance, in the paying clause. 1779.
In James Watt's hand. Docketed "Memorandum relating to Scorrier Engine."
6. Letter (press copy). James Watt (Cusgarne) to Stephen Carkeet (—). 26 Dec. 1781.
The docket, by Henry Hazleton, is on a separate wrapper. On the same sheet: Plan and sections of boiler for Hallamanin mine. Docketed "Press copy of Watt's letter to Capt. Stephen Carkeet, and a sketch of Hallamanin boiler."
7. Memorandum. General State of the Cornish Copper Mines. 1787.
In Thomas Wilson's hand. Docketed "Account of men employed and goods consumed in the Cornish mines in 1787."
8. Memorandum. Comparative view of Boulton & Watt's engines and old ones. 1792.
9. Memorandum. To the Gentlemen & Mine Adventurers in the County of Cornwall. Not dated [1793?]. 2 sheets.
In James Watt's hand. Draft of a letter defending Boulton & Watt's engine and their premium system.
10. Letter. Anonymous (Bristol) to Thomas Wilson (Truro). 20 Mar. 1793.
Claiming he has developed an improved steam engine. Docketed "Supposed to be Joseph Hately's performance."
11. Memorandum. Copy of Paragraph in Sherborne Paper. 1 Jul. 1793.
In Thomas Wilson's hand. Notice of the declaration of 26 Jun. in the Edward Bull case.
12. Calculations. Profits of Consolidated Mines? Not dated.
In Thomas Wilson's hand.
13. List of adventurers in an unidentified mine. Not dated.
14. List of shareholders in an unidentified mine. Not dated.
15. Printed form. Blank form for recording engine performance and calculating savings.
16. Note. Request to "Mr. Wilson" to keep an engine in good condition. Not dated.
Marked "Capt. Trestrail."
17. Notebook on the advantages of Boulton & Watt's engine. Not dated.
The text is by a Cornish engineer who had "sometimes one or two, and sometimes five [Watt engines] at a time under my care. Was also acquainted with Newcomen's or the old atmopsherrick engines long before B. & Watt's were brot. into Cornwall." Describes making a model of a Watt engine and showing it to the Adventurers of Poldice mine, the advantages of Watt's engine, Hornblower and Bull, trials on various engines, including Bull's engine at Balcoath, 7 Sep. 1792.
18. Note. "In case of a Mine giving up, the Materials are the property of the Adventurers, the houses in which they are contained are deemed fixtures only; -." Not dated.

- 19.** Printed leaflet. Particulars and Conditions of Sale of various manors in Cornwall. May 1805.
Includes Wheal Abraham, the Manor of Tresithney (including Wheal Virgin, Wheal Fortune, Wheal Friendship, Ale & Cakes and United Mines) and the Manors of Nansladron, Tregennow and Tregorreck (including Polgooth mine).