T&S Canal Co Letters Reporting Activities in 1820

Weekly letters from Brimscombe Agent J R Denyer to Company Treasurer J S Salt in London reporting on current issues, including:

Shortage of supply raises coal prices in January, but trade flourishing again in February. Dry weather in April requires Thames Head pump to be used early.

Richard Miller in financial difficulties and asking his creditors to give him time.

Water levels low throughout the country. Thames barely navigable for boats with only 50 tons instead of 65 tons. Total stoppage on Wilts & Berks Canal.

Dry weather has allowed inspection of the galleries linked to the pump well at Thames Head. Miners deepening well to obtain more water.

Lower gates at Bowbridge Lock destroyed by being struck by a boat. Enlargement of the ponds at Daneway in progress

3 January 1820

The usual papers are enclosed. You will also receive a statement of the Churn millers' claim for water taken into the canal amounting to $\pounds 535.11.2d$, for the payment of the whole of which, together with other Christmas accounts, I am fearful I shall not be able to provide without assistance from you unless an immediate alteration in the weather takes place to produce receipts of tonnage. The millers have been usually paid only in the month of February, against which I shall be glad to receive the usual order.

PS. My stock of silver being nearly exhausted and continuing equally scarce, I shall be obliged by a fresh supply when a favourable opportunity for sending it presents itself, together with banking books.

I heard last week Mr Disney's eldest son died at school about 9 or 10 days since. Mr Disney is on the continent.

10 January 1820

By coach yesterday I received the silver presume intended for £50, but proved to be only £49 19s. I have credited you £50. I shall be glad to receive the banking book. The usual weekly papers accompany this, that of arrivals etc will fully show the state we are in, and without the most distant appearance of a change taking place, I fully see now I shall be obliged to draw upon you for part of the money to pay the Churn millers, having many Christmas accounts to pay which I expect to be daily called for.

On the other side are particulars of a bill drawn to pay for coal:

8 January 1820. To Hughes and Powell or order at 2 months £67 8s.

17 January 1820

The usual weekly papers are enclosed.

The present appearance of the weather is rather favourable, but I doubt its continuance. I cannot give you a better idea of the distressed state the country is in for coal than by informing you that I have this day received £70 for 40 tons of Forest coals at this place, being 35s per ton, the regular price for which is 16s. I hope however this will not continue long. On the other side you have particulars of a bill drawn:

15 January 1820. Richard Cox or order at 2 months £40.

24 January 1820

The usual weekly papers accompany this.

I hope the present weather will set the vessels at liberty in a few days. I am informed the late flood has destroyed part of the banks of the Stroud and Gloucester & Berkeley Canals near Framilode and that the lower level of the former is not navigable in consequence, but whether any serious detention will be caused thereby I do not know. I hope not, as the country is in a deplorable state for want of coals. Should the weather continue open, I think I shall be enabled to meet the payment to the Churn Millers as well as other demands without drawing upon you out of the usual course. The banking book is returned.

In the card of meetings, I perceive the Annual Meeting is stated to be held at Freemasons Tavern as heretofore. I have taken the liberty of noticing it, as it was determined (unless subsequently altered) to hold it at Anderson's Coffee House, Fleet Street.

Bill drawn to pay for coals:

18 January 1820. To Parkend Coal Co or order at 2 months £238.13.3d.

31 January 1820

The usual weekly papers accompany this. I have drawn upon you as under to pay for coals. The canal is again free from obstruction both as regards ice and the failure of the Gloucester & Berkley Canal banks mentioned in a former letter.

26 January 1820. To John George or order at 2 months £56.

7 February 1820

The usual weekly papers accompany this. I pay the Churn Millers tomorrow.

21 February 1820

The usual weekly papers accompany this.

The repairs of the tunnel last autumn cost as near as maybe £200. I shall be glad to receive instructions whether such expenditure is to be considered as part of the current expenses of the year or as an extraordinary charge to which the sinking fund is applicable, for my government in arranging the accounts of receipts and payments.

I shall be much obliged by your paying ± 14 5s to the Sun Life Assurance office on the 23rd inst being the amount of my premium policy No 380.

28 February 1820

The usual weekly papers accompany this.

The coal trade along the line of canal and down the river Thames there is every reason to believe will be very considerable during the spring and summer in consequence of every wharf being quite out in the winter. The importations at present are not adequate to the demand.

13 March 1820

The usual weekly papers are enclosed.

I have drawn upon you as per the other side to pay for coal etc.

The opening of the Gloucester & Berkeley Canal to the Stroudwater Canal (which was affected the week before last) will tend materially to facilitate the delivery of goods up and down the Severn at and above Gloucester, and an increase may naturally be expected to be the result.

6 March 1820. Thomas Ball or order at months $\pounds 100$.

8 March 1820. Thomas Ball or order at months £40.

9 March 1820. William Lidiatt or order at months £30.

11 March 1820. Powell & Williams or order at months £35.

27 March 1820

The usual weekly papers accompany this.

I am going to settle the wharf accounts this week and hope on my return to be enabled to make a considerable remittance. Mr Lane has written me respecting charging the late repairs of the tunnel to the general account which shall be duly attended to.

3 April 1820

The corresponding parts of cash notes remitted this day per post are now enclosed, amounting to ± 100 , the receipt be pleased to acknowledge. I have desired Pitt & Co to transfer ± 150 to you out of the balance in their hands. The usual weekly papers accompany this. I shall be glad to receive the banking book when convenient.

The continued dry weather begins to shorten the supply of water in the canal, and I purpose setting the engine to work this week and am afraid I must also commence purchasing from the River Churn.

3 April 1820

Enclosed you have the halves of six $\pounds 10$ and eight $\pounds 5$ cash notes, the remaining parts per coach this day.

17 April 1820

Herewith you will receive the banker's book, two cash accounts, two weekly returns, half yearly statement of receipts and payments, balance sheet of ledger etc, general statement of the Company's affairs.

The half yearly balance (although by no means what could be wished) is fully equal to my expectations, and the year's account is £1848.10.6d dividable thus: 1150 shares 30s £1725, 1300 shares 1s 10d £119.3.4d and surplus £4.7.2d. The deficiency is mostly attributable to the injudicious stoppage on the Stroud Canal during part of the months of September, October, November last, a period of the year when every exertion is made use of to get

supplies of coals to meet the sales of the succeeding winter. To this must be added the unusual length of time before an increase of water took place. In fact I may say four-fifths of the receipts have arisen within the last two months, or since the frost.

I have directed Pitt & Co to pay you £100 out of the balance in their hands, and I shall continue remitting as fast as I can convert the notes etc of which my balance is composed into proper money for that purpose.

I have drawn on you as per the other side to pay for coals, importation of which I shall begin to narrow as fast as circumstances will admit.

4 April 1820. To Thomas Ball or order 2 months £40.

8 April 1820. To Thomas Ball or order 2 months £86.13. 3d.

10 April 1820. To Powell & Co or order 2 months £70.12s.

8 May 1820

The usual weekly papers accompany this.

I have directed Pitt Croome & Co to pay you £100, part of the balance in their hands in the course of the present week. The undermentioned draft has been drawn for coal:

21 April 1820. Parkend Coal Co or order 2 months £217 3 5d. This is the draft mentioned by Mr Harford when he was in London.

8 May 1820

I am happy to be enabled to say (as I am persuaded you will be to learn) that Mr Miller did not refuse the payment of his notes from the unprincipled idea that he was not compelled to pay them, but from his total inability to meet them. Having paid those presented to the last pound note he was possessed of, he speaks very confidently of being enabled to pay them as well as his other debts if indulged with a little time. He is now making out a statement of his affairs for the purpose of submitting to his creditors, which I hope may prove so far satisfactory as to enable them to grant it. The amount he owes the Company I cannot correctly state until I have ascertained the amount of his notes in the possession of their labourers and workmen to whom they were paid by C Jones and myself for wages etc. I have by me (and which forms a part of the balance of the cash account) 65 Guinea notes £68 5s, returned as cash to make up the half yearly account although not received £62 18 5d, Total £131 3 5d. The total amount of his debt to the Company will I fear be something more than £400, some considerable increase having occurred in the week previous to his stopping payment. I shall of course prevent any further accumulation and will write you should I perceive any circumstance arise that may require communication.

15 May 1820

The usual weekly papers accompany this.

I wrote to Mr Lane last week respecting the proceedings of the Kennet & Avon Canal Co in the House of Commons, as I understood a deputation from the Wilts & Berks and North Wilts Companies were sitting in London upon the same subject, who no doubt would willingly furnish him with every particular, as it must be a measure in which all parties are equally concerned, and as far as I can learn will prove very injurious.

I have drawn upon you as on the other side to pay for coal:

11 May 1820. To Powell & Williams or order 2 months £35.6s.

22 May 1820

The usual weekly papers accompany this.

The undermentioned draft has been drawn upon you to pay for coals since my last. I shall be obliged by receiving a few 2s 6d, 3s 6d, 4s 6d bill stamps when convenient. 16 May 1820. To Thomas Ball or order 2 months $\pounds 30$.

I have written Mr Lane respecting the share late A Brian

Since writing the annexed, I have received a letter from Mr Miller's attorney respecting his affairs of which you have a copy:

Letter from John Stone 18 May 1820. Mr Richard Miller of Brimscombe has directed me to apprise you that in consequence of various losses and a very unexpected pressure for money, he is unable to effect the immediate settlement of his accounts and to request that you will give him time for the payment of your demand. Upon a statement of his affairs which he has handed to me, it appears that he will have a surplus of upwards of £5,000 after paying every creditor the full amount of their demands. He therefore trusts you will not hesitate to accept his promissory note for the amount of yours payable by three instalments, one third at 7 months, one third at 12 months and the remainder at 18 months from the 1st day of June next. Your answer by the return of the post in which you will be pleased to state the amount of your demand will oblige.

29 May 1820

The usual weekly papers accompany this.

The directions of the Committee conveyed in a letter from Mr Lane shall be duly attended to. Both subjects were in a state of progress prior to the receipt thereof and which I intended perfecting in time for the meeting to be held here. I have now appointed Wednesday next to take the levels from the canal to Bibury to ascertain the practicability as to the fall. Mr Lane does not say anything respecting the share late A Brian. I shall be glad to receive the stamps when convenient.

5 June 1820

Herewith you will receive the usual weekly papers and enclosed cash notes value £40 5s to the credit of the T&S Canal Co, receipt be pleased to acknowledge.

I have likewise enclosed a report upon the subject of the Bibury stream ordered at the last Committee, and although I feel confident as to the correctness of what I have stated therein, I should feel more satisfied, as probably the Committee might also, if a regular surveyor was employed to ascertain the levels prior to any final determination being come to. It has occurred to me as not improbable that some members of the Committee might wish to see the springs at Bibury and that such view would not occasion much extra travelling when coming to the annual meeting in the country, in which case I would meet them on the spot upon being informed the time.

5 June 1820. Letter from JRD to the Committee of the Thames & Severn Canal Company. In compliance with your directions (communicated to me by Mr Lane) to ascertain the practicability of procuring a supply of water by means of a feeder from the Bibury river into the T&S Canal summit pound and to report thereon, I proceeded on Wednesday the 31 ult, accompanied by C Jones, your Clerk of the Works, to take the levels between those two places. I am sorry to say the result proves what I always expected and expressed, namely that from the top water level, 5 ft 6 in, of the canal at Siddington to the level of the stream at Bibury Bridge (which was understood to be at about its regular height), there is a fall of 24 feet. We afterwards examined the source of the river with a view to staunching it up to raise a head, but which does not appear practical beyond four or five feet. There is a mill on the opposite side of the valley, which is very narrow, having a form of about 8 feet, which although very well supplied with water, does not benefit by the principal springs to which our attention was more particularly directed. Having thus proved (I feel no hesitation in observing I have every reason to believe most accurately) the impossibility of the required supply of water being obtained from that source (without the aid of machinery), we did not conceive it necessary, as well as from the advanced state of the corn and grass, to examine a line for a feeder which had lately been gone over by C Jones, together with his father (a practical undertaker of canals), and which appeared to them not only the best but only one, although presenting considerable obstacles. The only source now remaining for obtaining an additional supply of water to the summit level of the T&S Canal appears to be the Ewen Springs, by means of a steam engine upon which subject the Committee are already in possession of every information from the reports of the late Mr Black and others.

8 June 1820

Your letter accompanying silver £50 came duly to hand.

I have written Mr Hipsley desiring him to collect as much of his outstanding debts as possible and remit you immediately. I am fearful I shall be unable to render much assistance from this place owing to very considerable sums being due for drawbacks and liable to be called for hourly, and as the tonnage was received in cash at the time, of course the drawback must be returned in the same manner. The canal is now likewise stopped in several places for repairs and will take a large sum to pay the workmen. To this must be observed that although the balance of cash at this place appears high, it is not so in fact when Mr Miller's notes and some other sums (which although entered in the cash accounts are not received) are deducted, being together about 100 pounds. In the course of a fortnight the quarterly payments likewise become due, and I have every reason to suppose the receipts at the wharfs will not cover them. As therefore a remittance from the present balance could only be of a temporary nature, I presume it would be useless. You may rely upon receiving such occasional remittances as I consider the business will admit of. I am afraid the sparing of the sinking fund capital is only averting the evil day as it must ultimately make good the sums with which it is (and I always understood was to be) chargeable. The longer it is delayed the greater will be the sum required in the end. Upon which subject I hope I shall have the pleasure of an explanation with you at this place very soon.

PS. The repairs going on are at Chalford, Siddington, Cerney and on the summit. They began on Monday last and I hope to have the canal navigable again in a fortnight from that time if the weather proves favourable. The navigation from this place to the Severn continues open.

12 June 1820

The usual weekly papers accompany this. I shall be obliged by knowing what day is finally determined upon for the Committee to meet at Lechlade for my government. I have not yet heard anything of Mr McIntosh.

19 June 1820

The usual weekly papers accompany this.

Mr McIntosh arrived at Cirencester on Wednesday and has been over the line of canal from that place to Wallbridge as well as to Bibury, Ewen Springs etc. I purposed accompanying him this day along the canal to Lechlade, but he is obliged to go to Plymouth, for which place he left yesterday, intending to be at Cirencester again on Sunday next if possible. I shall be glad of the earliest information upon the subject of the Committee Meeting at this place.

26 June 1820

With this you will receive the usual weekly papers.

I have not heard of Mr McIntosh's return to Cirencester from Plymouth. I shall forward the Committee boat so as to be at Lechlade on the evening of the 29 inst.

3 July 1820

The usual weekly papers accompany this.

Mr McIntosh returned to Dartmoor on Thursday last, leaving a Mr Clarke to take some levels etc, from whom I learned the Bibury stream cannot be brought into the canal 4 locks below the summit under a distance of upwards of 19 miles.

I am yet without the necessary document from Mr Lane to enable me to transfer Ann Brian's share to you.

10 July 1820

The usual weekly papers accompany this. In the event of no particular calls being made during the present week, I shall transfer part of the balance of cash at this place to you in next cash account.

I shall be obliged by knowing if any arrangement has been made for a meeting of the Committee to be held at this place during the summer for my government as to doing some further repairs to the lock gates etc, as it may probably happen the canal may be stopped in a manner to prevent the possibility of their boat passing at the period required.

I have drawn upon you as per the other side to pay for timber etc on account of the new engine boiler.

3 July 1820. To J T Fereday or order 2 months £120.

5 July 1820. To John Dimock or order 2 months £55 12s.

17 July 1820

Herewith you will receive the usual weekly returns. I have directed Pitt & Co to pay you $\pounds 100$ this week and will give them further instructions as circumstances will allow. Your letter with certificate came duly to hand. Thomas & Co bill is for a tonnage book ordered when I was in London. I referred them to you when I gave the order and intended mentioning the circumstance. If I did not do so, I shall be obliged by its being paid.

24 July 1820

The usual weekly papers accompany this.

The Stroud Canal was stopped on Wednesday last for repairs, and I have embraced the opportunity for planking etc some of the lock gates at Chalford which I purpose having finished this week in readiness to meet the opening of that canal.

I have directed Pitt & Co to pay you £100 during the present week, and I have drawn upon you to pay for coals as per the following side. I shall not have occasion to draw further for any considerable amount before next quarter day.

17 July 1820. To David Mushet or order 2 months £19 6 3d.

20 July 1820. To Parkend Coal Co or order 2 months £173 1 10d.

31 July 1820

The usual weekly accounts accompany this. Enclosed you have 2 drafts together £40 to the credit of T & S Canal Co, the receipt be pleased to acknowledge per return. The Stroud Canal will not be navigable again before next Sunday.

21 August 1820

The weekly accounts which were not sent before in consequence of the death of a relation obliging me to be in town for a few days are now enclosed.

I saw Mr McIntosh when in London and ascertained from him his intended mode of proceeding in order to give the traders every advantage by early information etc, but it does not appear to be his intention to cause any serious stoppage at present. The water is most unprecedently low throughout this country. The Stroud Canal, although situated so much lower than this, is literally in a much worse condition, barges being unable to proceed sometimes for two or three days together. The quantity of water in the River Churn is very trifling indeed, the engine has not more than half a supply. The rain that has fallen in this part of the country is much less than in most places and barely sufficient to assist vegetation. I hope as soon as the harvest is concluded, there will be a considerable quantity. The upper part of the River Thames is barely navigable for boats with only 50 tons instead of 65 tons twice a week, even with their penning up to make a flash.

11 September 1820

With this you will receive the usual weekly papers. I have directed Pitt & Co to pay you £100 out of the balance in their hands, and I have drawn upon you as per the other side to pay for coal.

The unprecedented short state of the springs having allowed of an inspection of the galleries or small tunnels that supply the engine pit, Mr Jones has been down to them for that purpose. He reports that it is very desirable one of them should be driven further, as originally intended, there being every prospect of a very considerable increase of water being obtained by so doing. This in point of fact is only renewing a work which the springs have prevented being continued since the year 1795 as I have met, not only with the agreement but with the man by whom it was undertaken and who states (as does also the agreement) that the work was to be continued whenever the springs were sufficiently low to allow of it being done, a circumstance that has not happened since the period above stated. I am perfectly aware of the expected result of the repairs to be done by Mr McIntosh viz that either the supply derived from the Churn or the engine may be dispensed with, and consequently felt at a loss how to act, but feeling that in the event of working the engine another season only, the major part of the expense would be saved. Knowing that a few days delay might prevent so desirable an object being effected for a similar number of years, I have set the miners to work and hope such determination will meet the approbation of the Committee. The circumstance was unknown to me when in London.

PS. I do not expect more will be done than will amount to from £50 to £70, as the moment the springs increase, the miners will be unable to proceed. Of course much depends upon the period when rain comes, but they can be stopped whenever the Committee please to direct, should they think the engine may ultimately be discontinued.

7 September 1820. To Powell & Williams or order 2 months £70 12s.

18 September 1820

Herewith you will receive Note R Underwood £25, one £10 cash note, three £5 cash notes, total £50 to the credit of the T & S Canal Co, the receipt be pleased to acknowledge per return. The usual weekly papers are also enclosed.

From a letter Mr Miller has received, it appears a total stoppage has taken place upon the Wilts & Berks Canal in consequence of the shortness of water and that it will so continue until a supply arrives from the heavens. The scarcity is also seriously felt upon the Thames.

25 September 1820

The usual weekly papers accompany this.

I beg leave most particularly to refer you to my letter of 11 inst respecting the engine at Thames Head in order that I may receive instructions from the Committee upon the subject of continuing or otherwise the work commenced there. I last week examined the small tunnels myself, and beg to remark that should the Committee be of opinion it will be necessary to continue using the engine after the contemplated repairs to the summit are effected, I should most certainly recommend every possible exertion being made use of, not only to extend but also to widen the present tunnels very considerably so as to form a reservoir equal to the full supply of the engine. There is not the least doubt as to the strata above being of a nature to allow of such widening. In fact neither exertion or expense should be spared (provided the Committee consider the engine will always be a necessary appendage to the canal) as it may be a similar number of years before another opportunity offers itself. Of course if the Committee are of opinion the engine will not be required after Mr McIntosh has completed the repairs he proposes, it will be throwing away money to continue the work beyond and expenditure of about £50 as stated in my letter on the 11th.

2 October 1820

The usual weekly papers accompany this. Enclosed you have Bank of England note for $\pounds 10$ which has been paid me to take up John Evans note due 5 inst which you will be pleased to return when you send the bankers book.

9 October 1820

Herewith you will receive the halves of sundry notes value £60, the corresponding halves of which will be sent per coach this afternoon.

9 October 1820

The corresponding parts of cash notes sent per post this day are now enclosed, to the credit of the T&SC Co £60, the receipt be pleased to acknowledge.

The weekly return of boats etc is also enclosed, but I am obliged to delay closing the cash account of last week owing to some irregularities on the part of some of the traders in not clearing their vessels, the arrivals of which took place prior to 2 October, the day on which the accounts are made up to for the past half year. The Banking book is duly received. I will thank you to send the enclosed pattern of a book to Thomas & Co with the directions to make one and forward to me immediately.

16 October 1820

The cash accounts not sent last week, together with the usual weekly papers, are enclosed. In order that the accounts for the past half-year might be proceeded with, I have been under the necessity of entering very considerable sums in the cash account which as yet remain unpaid. I am however promised a part if not the whole during the present week. I mention the circumstance as an explanation to the apparent large balance of cash at this place. PS. I almost begin to apprehend another scarcity of coal along the line of the canal above this place unless speedily relieved by an increase of water, of which however there does not at

present appear the least indication. The total want of coal upon the Wilts & Berks naturally produces an increased sale upon this canal, which being at a period when the boats cannot carry more than one third of a lading, must soon exhaust the different stocks. The boats employed by the Company etc which ought to be carrying coals to Lechlade, I am compelled to retain in the service of the Fire Engine which (from the number of hours necessary to work it to keep the miners employed) consumes about 3 tons per day.

I hope to be able to forward the half-yearly accounts in a few days.

Bills drawn on account of the T&S Co:

9 October 1820. To C George & Co at 2 months £43.

10 October 1820. To D Mushet or order 2 months £51.3.8d

11 October 1820. To Parkend Coal Co or order 2 months £84.17.10d.

13 October 1820. To George Rogers or order 1 month £6.17.2d.

20 October 1820

Herewith you will receive the half yearly statement of receipts and payments, balance sheet of the ledger and banker's book. I fully expected to have made you a remittance with them, but up to the present time the promises I stated in my last letter remain as such. I am glad to be enabled to observe the balance of the past half year is as good, if not better, than might have been expected, considering the long series of dry weather to an almost unprecedented degree. The recent and present rains will I trust afford some little relief by improving the water in the rivers, although it will not affect the canal by opening the springs. The trade for the ensuing winter appears very promising, and I hope it will not be long ere it can be carried on with vigour, so as to meet a probable frost. Mr McIntosh has sent some wheelbarrows and planks in readiness to commence operation, but I have not heard from him anything further on the subject since I saw his son at the meeting on 31 August last. I beg leave to observe I really think something in the character of an agreement, or specific terms, ought to be entered into prior to his commencing the work to prevent any altercation hereafter.

I have enclosed two bills from Mr Bevir solicitor and request instructions as to their being discharged. With respect to them, I can only say I found it necessary to consult him upon the subjects mentioned in one and the other, relating to calling out the Commissioners, I must leave to the Committee as to their being liable to all the charges therein stated.

The Gloucester & Berkeley Canal is again at a stand, the contractor for building the lock and making the entrance at Sharpness Point has failed and is now in gaol, and I believe many that were connected with him are in a similar way. This I have always anticipated from having some trifling knowledge of the connection.

23 October 1820

The corresponding halves of cash notes sent per post this day are now enclosed amounting to £35 to the credit of the Proprietors of T&S Canal, receipt be pleased to acknowledge per return. The non receipt of the promised payments mentioned in my late letters prevents a greater remittance being made. I am however in hopes of being able to considerably reduce the balance at this place very shortly. The half yearly accounts were sent on Friday last. When convenient, I shall be obliged by receiving a little silver.

23 October 1820

Enclosed you have the halves of 7 £5 cash notes, the remaining halves per coach this day

30 October 1820

Herewith I return as desired Messrs Perry's letter and plan of engine pit at Thames Head. I wrote to those gentlemen on the day I received your letter explaining what work had been executed and remarking upon the contents of the letter above alluded to. There cannot I think be two opinions upon the subject of sinking the engine pit down to the Blue clay being the

means of bringing all the water that is contained in the rock above to the engine pump, and as I before stated in my letter of 25 September, I think neither exertion or expense should be spared to render that machine as effectual as possible, provided it will always be required to assist in supplying the canal with water. For my own part, I certainly am not so sanguine as to suppose it can wholly be dispensed with after Mr McIntosh has completed the proposed repairs, particularly after an average I have had taken of the supply afforded from the Churn river for the last three months viz August 4 h 35 min, September 4 h 43 min October to 17 3 h 19 min per day of 24 hours. It is to be observed the canal has taken, with very trifling exceptions, the whole of the water flowing down that river. In consequence of Mr J Lane's letter, the work I proposed doing has been carried on in a common ordinary manner, no particular exertion being used, and the small tunnel lengthened 14 yards at an expense of £25 4s. The miner is still at work, although from the almost daily decrease of the springs it is impossible to ascertain whether the water produced is an additional supply or a part of what would have gone to the engine by means of the other tunnel. The work has had the effect of finding the engine much more employ by having enlarged the underground reservoir which must be advantageous under any circumstances of future alterations.

I have directed Pitt & Co to pay you ± 100 and I hope to be enabled to still further reduce the balance as explained in a former letter.

I shall be obliged by your paying Thomas & Co for the book sent.

21 October 1820. Letter from Thomas & James Perry, Wolverhampton (with plan). Since closing our letter to you vesterday, we have received your favour of the 19 inst and are sorry to find that it did not contain directions for Mr Jones to view the Thames Head engine and pit. I expect him to leave home every day for Monmouthshire. We really know no one in this part of the country so capable to give an opinion upon the subject as himself. He is well known to our mutual friend Mr L Petely who we have no doubt will confirm our sentiments of him and perhaps may give you his sentiments upon this subject, provided Mr Jones should view the engine and pit and he can report his opinion as to its capability of yielding a larger supply of water, and which report can be laid before the Committee and Mr McIntosh for their approbation. We propose going no further. To enable you more clearly to understand Mr Jones's and our own ideas upon this subject, we enclose you a sketch from which you will perceive that by sinking the engine pit five feet two inches lower, you will come to the thick stratum of clay which will enable you to get at all the water that is contained in the rock above it. By sinking a sufficient depth into the blue clay for the sump of the pump with some head ways cut therefrom under the rock to conduct the water to the engine pit, will in all human probability, yield a much larger supply of water than at present. But provided a sufficient supply cannot be obtained by these means, Mr Jones thinks a headway or tunnel had better be driven through that part of the blue clay that crops out, as in all probability it will lead into a fresh field of water. This opinion seems in some measure confirmed by Mr Lowards information that the springs beyond where the clay crops out seemed never to be affected by the working of the engine. Indeed we do not see how well this could be the case, as the thick body of clay would prevent any communication. You must be well aware how much easier it is to drive headways through clay than through hard stone. From Pritchard's account, we conceive there can be no further need or use in driving up the little tunnel any further, as all the water found lay within one foot of the bottom of the tunnel. So that if more water is to be obtained, it must be by going deeper and beyond a certain depth in the clay. It is of no use going lower, it being clear clay, yields no water out of it. In respect to Mr Lane Junior's observations, we have to notice that when the canal is made watertight, and to ensure it's being kept in that state, it should be kept full of water, and to enable you to do so, you must be provided with an adequate supply of water. For provided the canal is not kept full, we fear the drying winds and sun acting upon the lining will soon occasion fresh leakages. Until Mr Jones has viewed the engine and ascertained its power, he cannot say whether by

putting down another set of pipes it may not be able to afford near as much more water as it now does and at no very great additional expense. We have lately given ourselves much trouble and incurred some expense in endeavouring to bring forward these matters, and supplying the Committee with information, but if we find our communications so little attended to, we shall desist giving ourselves any more trouble relating to these matters till a more favourable opportunity offers.

6 November 1820

Enclosed you have as under to the credit of the Proprietors of T&S Canal, the receipt be pleased to acknowledge per return: R Bowerman note £39 19s, J George on Williams $\pounds 12.7.6d$, three $\pounds 5$ cash notes $\pounds 15$, total $\pounds 67.6.6d$.

I was in hopes the water would have continued improving in the summit level in consequence of the late rains. That however does not appear to be the case, the River Churn affording but a scanty supply compared with what it would had the springs being effected. The springs at Chalford etc do not show the least appearance of improvement, although I found when at the engine on Thursday last, the water had increased nearly 7 feet in height in the pit. I trust an ample supply for the canal is not far distant, as the business in prospect for the winter is very considerable indeed.

20 November 1820

Presuming you have seen Mr McIntosh, I need not state the reason for you not receiving the last week's papers. Enclosed you have two £10, three £5 cash notes, together £35 to the credit of the Proprietors of the T&S Canal, the receipt be pleased to acknowledge per return. I am sorry to say a most serious accident occurred last week at Bowbridge (Lock No 3 on plan) supposed to originate by the striking of a boat against the lower gate which gave way. The force of water (the lock not being full at the time) has totally destroyed the gates. A stoppage of course must be the consequence until a new pair are made and erected. This I am effecting with all the expedition in my power by employing men night and day in making them and I hope to have a passage again for the vessels in about a fortnight. There is fortunately a tolerable stock of coals at this place which will employ such of the vessels as are of a proper width in getting them further along the canal.

9 November 1820. To Powell & Williams or order 2 months £35.6s.

27 November 1820

The usual weekly papers enclosed.

I am glad to be enabled to state the new gates for lock No 3 are completely made and this morning forwarded for the purpose of being erected. I do not despair having the canal passable again by Saturday next, which will be in sufficient time to admit vessels the ensuing spring tides, a circumstance of considerable importance at this season of the year. No blame is imputable to Mr Jones for not mentioning the circumstance in his letter of 19th as I am not certain he was aware of the accident being more than an ordinary occurrence and replaced in a few hours, nor does he take charge of the repairs of the canal from Wallbridge to the tunnel, that being undertaken by myself in order to allow of sufficient attention being paid to the summit level and Eastern end of the canal. The late rains have considerably improved the water in the canal, but the springs are far from being completely broken, and until they are, we shall be obliged to continue purchasing water from the Churn.

11 December 1820

The necessary attention required at the late repairs at Bowbridge prevented the usual papers being forwarded last week. The whole are now enclosed. Notwithstanding every exertion was used, the water could not be let into the length under repair till Wednesday night. This however did not cause any additional delay to the vessels as they could not arrive from the Severn till that time, and the weekly return will show they have not been inactive since a passage for them was effected.

Mr McIntosh left here on Friday last. He has given me his prices for executing the proposed repairs, which, as soon as I have given them a further consideration, I shall forward to Mr Lane as the foundation of agreement. At present they have the appearance of not being too high provided the work is executed accordingly. The enlargement of the ponds at Daneway is proceeding with, and I much regret the fear of incurring too great an expense might operate as a barrier to their being made as effective as they otherwise might be, notwithstanding which they certainly will prove very beneficial.

I have drawn on you as on the other side to pay for coals.

Since writing the above, I have received a letter from Mr Bevir respecting the payment of his bills, a former letter received from him upon the same subject I sent to Mr Lane and requested directions thereon after being laid before the Committee.

I beg you will accept my best thanks for oysters received.

Bills drawn to pay for coals:

25 November 1820. To Thomas Ball or order 2 months £47.

9 December 1820. To Powell & Williams or order 2 months £30 19 8d.

13 December 1820

I have taken the liberty of enclosing a draft for £45 0 8d which I shall feel much obliged by your presenting for payment in the usual way, and when received placing the amount to the credit of the T&S Co and forwarding me a receipt for the same to enable me to take the money at this place, it being on my own private account.

I hope to see the canal full of water in a very few days and continue so for a length of time without expense.

18 December 1820

The usual weekly papers accompany this.

I last week waited upon the different Proprietors of land whom it was considered proper to appraise of the alteration and repairs proposed to be done by the Company and received their assent very readily to take such land as may be required.

I have enclosed for Mr Lane a copy of Mr McIntosh's proposals together with some remarks in order that he may prepare an agreement.

25 December 1820

Herewith you will receive the usual weekly papers. The importation of coals last week was very considerable. I have drawn upon you as under to pay for Bilston Coals. 23 December 1820. To Thomas Ball or order 2 months £40.