

being as close together as is desirable to protect the foundation from scour, it will be necessary to drive some more piles to cover the open joints.

To do this work satisfactorily, the aqueduct foundation pit must be free from water, and since the coffer dam was last unwatered there has been no reasonable prospect of its remaining dry for any given length of time. Since the breaking of the piles at the North West angle of the coffer-dam, and failure of the pumps, which I telegraphed you on the 23rd December, 1879, the coffer-dam has been failing daily, as my letters of December 25th, 1879, and January 6th, 16th and 26th, 1880, have informed you.

Mr. John Hunter's services have practically been lost to the work through sickness; Mr. Cleveland has had his hands full on section 35, which, under his able management is progressing most satisfactorily, and Capt. Murray has been occupied with matters of finance and general business matters of the firm, such, I understand, being the arrangement among the partners.

In Mr. John Hunter's absence the person representing the contractors is Mr. Hunter's son, an energetic young man, who, I believe, has the interest of the firm thoroughly at heart, but who has not the experience required by one in charge of such a piece of work as this.

Under those circumstances, I determined that the foundations of the oblique wall should not be exposed, until more favorable circumstances gave a better prospect of having the work done as was necessary.

At the present time a considerable length of the coffer-dam on the west side is nearly four feet below high water mark, and a night's rain might raise the river to such a height as to cause a rush of water into the foundation pit, and were the foundation of the oblique wall exposed by the removal of it the day before, the undermining of the wall and the destruction of the canal bank might follow.

On the second sheet of the letter, the writer says: "In putting in place the retaining wall which was considered necessary to prevent the slipping of the embankment, &c., &c."

This clause does not show an intimate knowledge of the work contracted to be done on section 27, or the manner of payment provided for.

The 10th clause on page 7 of the specifications reads: "The first section of the dam may be made to include the space for the oblique line of wall between the south-west abutment of the present structure and that of the new one, otherwise a separate dam may be put in." Showing that this wall was part of the original design, not an after thought, as implied.

As regards payment, item No. 36 in the form of tender is a bulk sum for the first section of the aqueduct coffer-dam, and item No. 38½ is a bulk sum for the coffer-dam for building the south oblique wall, should that mode of procedure be adopted.

The contractors elected to build the south oblique wall in the coffer-dam for the first section of the aqueduct, they failed in doing so, and it became necessary to build the coffer-dam (item No. 38½) for which I have returned the full amount in the contract.

The clause in the letter which refers to the progress made on other parts of the section, does not require comment, the facts being generally as stated, with the exception that I have no recollection of any detention due to the engineer in charge in prosecuting the excavation.

The next clause, which occupies the upper part of page 3, is based on a state of affairs which does not exist. I have no hesitation in saying that the bottom of the aqueduct foundation pit is not rising, as the levels which are being continually taken prove beyond all doubt.

I have made inquiry with a view to learning where the idea of the bottom rising originated, and the explanation is so simple as I fear to provoke a smile, which I have no desire to do when discussing a matter so serious (from any point of view) as the present condition of the Aqueduct coffer-dams. Before the collapse of the pump at the north-west angle of the coffer-dam, mentioned in my telegram of 23rd December, 1879, and letter of 25th December, 1879, the pump house and the frame carrying the pump occupied a certain relative position as regards level. When the piles of the