We are strongly impressed with the necessity of this mode of prosecuting the work, and, finding ourselves at issue with the engineer upon this point, we respectfully ask that the question be referred to competent and disinterested parties as umpires—since the whole responsibility of the successful completion of what has now proved a hazardous undertaking is sought to be placed upon us and our sureties. The new lock is completed, except the gates, and any contingencies of a narrow waterway can be met by widening where proposed by the specification. The river is now passed through a section with 87 feet width of water surface, and an average depth of 12½ feet, and as great a width and a greater depth can be given everywhere after the dam for second section is in, our new dam being higher and stronger than the present one, which has been standing two years and has not been overflowed by any rise of the river.

In making this reasonable request we take the liberty of calling attention to the fact that we have successfully constructed over a million dollars worth of work which will compare favorably with the many excellent works upon the Welland Canal; and in order to show that we are not responsible for the backward condition of the Aqueduct we beg leave to refer to the history of this work.

Our contract was signed in September, 1877, and we were expected to get in "the coffer-dam for the main parts of the first section" during the winter and spring following. We placed a dredge on the ground in the fall of 1877 with a view to prosecute the excavation as soon as permitted. In consequence of the lock for the Welland River not being wide enough to pass the derrick, we were obliged to construct a new one and put it in place on the bank of the river. This was done during the winter of 1878, and we were ready to commence dredging for the foundation for the Aqueduct about the first of March of the same year, but we were, nevertheless, not permitted, by the Engineer in charge, to commence this dredging until the end of May following.

The specification provided that the site for south abutment should be dredged, but before the dredge was near this point we were, in September, stopped by the Engineer for fear of the effect on canal bank.

Before commencing the coffer-dams we took the advice of the Chief Engineer as to the lengths of the pile and width of puddle, the only points on which the specification was silent, and followed the same.

The dam for first section was completed in October, 1878, and pumping then commenced. When the water had been lowered about seven feet, a break occurred in the west line of the dam, which was repaired by putting a new line of dam outside of the old one, further removed from the excavation, and the removal of the weight of puddle to a greater distance from the site of the pit, enabled us to unwater the latter in November, 1878.

Though troubled with occasional leaks at tie rods, requiring overhauling of the puddle, the dam stood firm and upright during the winter of 1878-79, and excavation was carried on over the dredged area to reach the bottom level as specified. The excavation showed a tendency in the bottom to rise, and more than once we were obliged to lift, lower, and relay the ramps or roadways out of the pit, which had been forced upwards by surrounding pressure. In the south-east corner of the pit no work was done, or permitted by the Engineer to be done, for fear of what actually occurred in the middle of April, 1879, when about two-thirds of the dredged area had been bottomed, namely, a movement of the canal bank, which caused the Engineer to order us to cut our dam and flood the pit. Piles were ordered to be driven near centre of canal bank from south-west wing wall of present Aqueduct parallel with the water line of canal. This made matters worse by splitting off the bank and forcing it downward to the Welland River, and was discontinued by the Chief Engineer.

The specification permitted us to include the oblique connecting wall between old and new Aqueducts within our coffer-dam for the first section, and this had been done after consultation with the Chief Engineer. It was now admitted that the attempt to include this connecting wall had proved impracticable, and it was