

1826 a survey, with a view to the construction of a canal from the Long Sault to Cornwall, was made by Mr. Clewes, a very eminent man, who had devoted the greater portion of his life to the study of the rise and fall of the waters of the great lakes, and to the condition of the St. Lawrence. That gentleman published a great number of pamphlets in connection with the subject, and he attained so high a reputation that he was called upon to make this survey and report to the Parliament of Upper Canada. In 1830, four years after, Mr. Barrett, also an eminent engineer, and with whom I had many conversations on this subject in my younger days when he was employed on the Lachine Canal, also made a report, and it was confidently expected by everyone that when the construction of the canal was undertaken, although it was of larger dimensions than the canal on which Mr. Clewes was asked to report, and Mr. Barrett also, the plan suggested by Mr. Clewes would have been adopted. Unfortunately, the commissioners appointed by the Parliament of Upper Canada to construct the Cornwall Canal did not feel they could employ Mr. Clewes or act entirely upon his judgment, or on that of Mr. Barrett. Those engineers were Canadians, and the commissioners sent one of their number to the United States to employ American engineers, not that they had any desire to throw any doubt whatever on the scientific attainments of Mr. Clewes and Mr. Barrett, but because they believed American engineers would have had more practical experience in the construction of canals. The result was not at all what we could have wished, as I shall show by the records which I shall read presently. They obtained the services of Mr. Mills and of Judge Wright, who was at that time Chief Engineer of the Erie Canal. Those gentlemen, on their arrival in this country, entered upon an investigation of the works that were proposed. They felt, coming as they did from the United States, that it was necessary to their professional reputation to show that the Canadian gentlemen, who were employed to make the surveys and report upon them and locate the canal, did not possess skill and scientific attainments equal to their own and were not as capable of suggesting a canal route and a cheap and proper mode of construction, and as a consequence they reported a different plan. I quote from Mr. Mill's report. He says:

"It is well known to the members of the board that two separate and distinct surveys had been made over the same ground in general, and for the same object, upon a smaller scale—one by Mr. Clewes, in 1826, the other by Mr. Barrett, in 1830. As neither of these plans contemplated a canal of more than 8 feet depth of water, and only 60 feet width on the bottom, and locks of 40 feet in width and 132 feet in length; they