

Seventy-three years afterwards, or in 1751, a letter was published in the Gentleman's Magazine for that year by Kalm, the Swedish botanist, on the Falls of Niagara. His description is also illustrated by a plate, in which the proportional height and breadth of the Falls are given more correctly. The lesser Fall on the left bank of the river is omitted; but at the place where it had been represented in Father Hennepin's sketch, Kalm inserts the letter "a," referring to a note in which he says, "Here the water was formerly forced out of its direct course by a projecting rock, which when standing turned the water off obliquely across the other Fall."

This observation confirms the reality of Hennepin's oblique cascade, and shows that some waste had been going on in the intermediate seventy-three years, making a visible alteration in the scene, and leading us to infer that the rocks have been suffering continual dilapidation for more than the last century and a half.

In the absence of more ample historical data, we are fortunately not without geological evidence of the former existence of a channel of the Niagara at a much higher level, before the table-land was intersected by the great ravine. Long before my visit to the Niagara, I had been informed of the existence on Goat Island of beds of gravel and sand containing fluviatile shells, and some account had been given of these by Mr. Hall in his first report in 1839; I therefore proposed to him that we should examine these carefully, and see if we could trace any remnants of the same along the edges of the river-cliffs below the Falls. We began by collecting in Goat Island shells of the genera *Unio*, *Cyclas*, *Melania*, *Valvata*, *Limnea*, *Planorbis*, and