

During the present era of the world's history, the great cataract has but slightly modified its appearance; and though the eternal rush of the billows has been incessantly at work wearing away the rocky shelf over which they fall, the rate of retrocession was scarcely discernible in a lifetime. Of late, however, appearances have been observed which seem to indicate that, ere long, a sudden and entire change of the Canadian Falls may occur, and in such a manner as to diminish, if not entirely divert, the stream which now passes over the precipice on the American side of Goat Island. Within the past two years a peculiar motion of the rapids at a point about 800 yards above the curve in the Falls, over which the greatest volume of water descends, has attracted the attention of accurate observers, and led to a belief that the current has effected a breach in the soft shale stratum underlying the limestone ledge over which the main body of waters descends.

This shale stratum is visible under Table Rock, and in the banks of the river on either side below the Falls, while it ascends toward the south at a gradient that would reach the river-bed about 800 yards above the Canadian Falls.

The theory thus briefly described has recently [1868] become an undoubted fact. A marked and constant change in the motion of the rapids has been observed at the point indicated; and it is also said that symptoms are discernible of the outflow of a subterranean stream into the gulf below the Falls. The final result of this combined action must be to produce a sudden retrocession of the Falls, sooner or later, to the point where the limestone strata terminate, and, consequently, a total change in their appearance and character.

The *Kaaterskill Falls*, in the United States, form a very romantic and imposing spectacle. Their waters issue from two small lakes in the Catskill Mountains, on the west bank of the river Hudson. The upper fall descends 175 feet; the torrent then rushes along the level for some forty or fifty yards, to leap over a second precipice, 80 feet in height, and down into a deep, dark gorge, whose encircling rocks and woods tower aloft to an elevation of upwards of one thousand feet.

Several cataracts of singular beauty occur on the *Columbia River*. The current is strong and rapid; the bed of the river broken by immense crags and boulders; while the scenery on either bank is distinguished by all those features of savage grandeur which belong to the weird primeval forest.

In South America the *River Funza*, on escaping from the confined valley of Santa Fé de Bogota—a basin shut in on all sides by lofty mountains—sweeps over a precipice 574 feet in height and about 130 feet in breadth, throwing up a column of pearly vapour which is visible at Santa Fé, a distance of seventeen miles. At the summit and at the base of this precipice two different climates prevail; the character of the vegetation also is entirely different. Above, the traveller wanders in the pleasant shadow of leafy oaks and elms, or traverses a luxuriant tract of corn-fields; below, he makes his way through the palms and bananas of the tropical world. Above, the air is fresh and cool, and the breeze temperate; below, a sultry heat nourishes the luxuriance of bloom peculiar to a torrid clime.