

the roof thereof gave way and the whole cliff, about sixty feet in height, slid gradually into the gap and was washed away to an extent of some sixty yards in breadth by nearly three hundred in length, altogether more than three hundred thousand cubic yards, which was carried into the Saguenay River, rendering its waters muddy and unfit to drink for a whole week or more after the occurrence.

This dam has now been rebuilt substantially on the lines reported at the time by the writer, that it should be, with an extension wall from its west end, reaching across the gap formed by the landslide. This wall will act as a core wall to the additional length of the dam, it being embanked on each side to form a water tight barrier with another, or guard or protection wall, at foot of the up stream slope or embankment to prevent any future washout in that direction.

As a final remark, for the benefit of those who have not read Sir Benjamin Baker's recital of how he mastered the difficulty at Assouan, of building a dam through a rapid where there were fifteen feet depth of water rushing past at a velocity of fifteen miles an hour, over the roughest rock and bouldered bottom: upon consultation with the contractors, he caused to be dumped into the river, below the site of dam, an immense quantity of the heaviest stones obtainable, many of which weighed from twenty to thirty tons or more. As some of these were moved by the rush of water, he caused to be dumped into the rapids, railway waggons with heavy irons and stones, tied and bolted to them, so as to obtain masses of fifty tons weight, which could resist the force of the stream, and then covered the whole with thousands upon thousands of sacks of sand. Having thus created over one-half of the river, at a time, a comparatively impervious barrier and raised the waters on the inside of it to the quiescent state of a lake, he could thus employ divers and lay out his foundations in a more leisurely manner, though even so, as quickly as possible, and under almost constant anxiety that some flood would occur in the interval and wash everything away.

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To bring this paper down to date in its conclusions, the writer would remark that the enterprising editors of the "Canadian Engineer" have published, in their February, 1903, issue, photo-