

point near Fraser River, about thirteen miles south of Quesnelle, and again in a more conspicuous, and, indeed, a wonderful, instance on Hat Creek, an affluent of Buonaparte River close to the entrance of the Marble Cañon, I have noticed beaver-dams on a slant, abandoned dams, of course. A beaver-dam, I need not say, is a beautiful piece of engineering, constructed entirely of branches and earth, never known to give way, never built on a stream that runs dry in summer and, of course, as level as the surface of the water it is built to retain. On Hat Creek, at the point in question, there must have been a large colony, for the dams extend in various directions for an aggregate length of very many hundreds of yards.

I should think that any violent commotion would have greatly disturbed such dams; but these were all quite perfect, though on a slant probably of one in ten, there was no longer any water running, or any retained on the surface; though there were indications of water at no great depth. The old watercourse was quite visible. Many of the animals' favourite cotton-wood trees were growing there, perhaps thirty years old, but no sign of any living beaver. There were many old cotton-wood stumps, but they were very old, and a fire had been over the ground, so I could not decide whether these trees had been felled by beaver or otherwise.

From the similarity of soil, formation, &c., the theory might well be ventilated that all the country east of the Fraser, and a large tract on the west bank, has been at some distant geological period the bed of a vast lake or series of lakes considerably larger than that existing from Lake Superior to Lake Ontario; and that various ridges of hills and mountains have been, either together or separately, but at many distant periods of elevation, gradually protruded under and through this bed, laying it at last completely dry, and indeed at a very considerable elevation above the sea-level: upheaving a large mass of the continent, viz. at least from Fort George, near the 54th parallel to Snake River, 46° N., and from near Bentinck Arm, in 127° W., to Wild Horse Creek, in $115^{\circ} 30'$ W.; and laying bare vast valleys of denudation, such as are to be seen not only in the Fraser, Thomson, Columbia River, &c., valleys, but in the valleys of much smaller streams. Hat Creek, Alkali Creek, Canoe Creek, &c., now run at the bottom of very deep basins, vastly larger than can be apparently referred to the erosive power of the present insignificant streamlets, none of which are larger than the water of Leith, near Edinburgh; and many run in valleys, with walls of solid rock half filled with debris similar in material to the benches, and apparently water-worn on the surface universally. These