to compact and very fine grained. There is but little valley on its upper waters, and that of no value, as the soil consists almost entirely of the detritus of these rocks. As might be supposed from its draining the southern, and eastern slopes of Mt St Helens, the river bears evidence of its great volume during the melting of the snows. On the north bank of the Cathlapootle, and about four miles below the mouth of the Koomspt-na-mie, we crossed a field of lava apparently formed by a stream from St Helens. Its surface was everywhere broken into mounds or gigantic bubbles, produced apparently by the expansion of contained gases, or perhaps the moisture of the soil over which it flowed. These mounds which were generally of an oval shape, varied in size from six or eight feet, to an hundred feet in length, and in some cases rose to twenty and thirty feet in height. Their tops were broken into fissures, the principal corresponding with the longer axis. The direction of this was not uniform, but in the larger seemed to agree with what is supposed to have been the course of the current.

The edges of the fissures were perfectly sharp, indicating that the lava had at least partially cooled before fracture, but on the other hand gigantic of loose cinders lay upon the sides of the mounds, and small waves produced by the progression of the lava were visible, which seemed

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