

tom of which is an irregular orifice, the head of the geyser "tube." The eruption begins with some preliminary splashes or spurts—from three to a dozen or more—which appear like abortive attempts at eruption. These grow more powerful for about four minutes when jets in rapid succession escape with a roar, and soon attain the maximum height. In a few seconds later the column subsides with occasional vigorous spurts. The water eruption is followed by steam which escapes gently and soon dies away, leaving the crater empty. The water is thrown to a maximum height of one hundred and fifty feet.

General Sherman thus describes "Old Faithful:" "We saw Old Faithful perform at intervals of sixty-two to eighty minutes. So regular are its periods of activity that we could foretell its movements within a few minutes. Sometimes we stood near enough to feel the hot spray, and at others, we sat at our camp, three hundred yards away. Each eruption was similar, preceded by about five minutes of sputtering, and then would arise a column of hot water, steaming and smoking, to the height of one hundred and twenty-five or one hundred and thirty feet, the steam going a hundred or more feet higher, according to the state of the wind. The whole performance lasts about five minutes, when the column of water gradually sinks, and the spring resumes its normal state of rest."—*Reports of Inspections*, 1877, p. 36.

The "Giantess" geyser, belonging also, to a group on the upper Firehole, has an inconspicuous crater, but is characterized by magnificent eruptions. Mr. N. P. Langford writes of it: "No water could be discovered, but we could distinctly hear it gurgling and boiling at a great distance below. Suddenly it began to rise, boiling and spluttering, and sending out huge masses of steam, causing a general stampede of our company. When within about forty feet of the surface, it became stationary, and we returned to look down upon it. It was foaming and surging at a terrible rate, occasionally emitting small jets of hot water nearly to the mouth of the orifice. All at once it seemed seized with a fearful spasm, and rose with incredible rapidity, hardly affording us time to flee