

tainly indicate four separate and distinct occupations of the rock shelter, each occupying a greater or less length of time, and when we recollect that the Indian always contents himself with the smallest possible amount of fire, and take into consideration the thickness of the layers of ashes, it is fair to conclude that each occupation of the cave must have continued some considerable period of time. The layers of sand are easily accounted for, as resulting from the disintegration of the soft rock above the cave, as it fell down from the edge of the cliff which would naturally drift into the cavern or shelter, and, more or less, rapidly, make the layers mentioned; and although the rock of the sides and roof of the cave are quite soft, the disintegration has been exceedingly slow, as there has been no percolation of water, and especially since the closure of the opening, the frost has not acted upon the walls, so that the change since that time at least has been very slight indeed, and accounts for the well preserved condition of the pictures.

It is, perhaps, impossible to say during which of these occupations of the shelter the drawings were made; but taking into consideration the height of the zone of pictures above the first and second occupations, they could hardly be referred to either of these, and therefore must have been made during the third or fourth occupation, and from the proof positive of the closure of the cave for a period of at least one hundred and fifty years, a considerable antiquity must be allowed.

I have an interesting facsimile of an attempt at history-writing by the Sioux, with its interpretation. It is a rough representation of some one event in each year, occurring during the period from 1800 to 1870; and very much resembles some of the sketches in this cave. After a careful comparison of these and similar Indian drawings I have, I am forced to the conclusion that these representations in the La Crosse Valley pictured cave are also of Indian origin. Everything about them indicates this; especially the drawing of the human figure with eight plumes on his head can be regarded in no other light than as an Indian of some note, who displayed his eight feathers as indicating the taking of so many scalps, and would be so interpreted by any Sioux