

cave. There are 8,000 square miles of cavernous limestone in Kentucky and 100,000 miles of open caverns.

During the war of 1812-1814 much saltpetre was required in the manufacture of gunpowder. As the Americans were forced to depend largely upon themselves for this product it led to their discovering that, in many of the caves, earth was found containing considerable nitrate of lime. This was known as "peter dirt." When water was passed through it, collected into vats, holding from 50 to 100 bushels of the earth, and the solution run through ashes, the result was nitrate of potash. So rich was the "peter dirt" that 3 to 5 lbs. of saltpetre could be prepared from a bushel of the earth. In 1814 the income from its manufacture in Mammoth Cave was \$20,000. At the close of the war, the trade rapidly declined, the working of the cave for that purpose was abandoned and in time it became merely a place of exhibition, until now it produces a good revenue derived from fees paid by the 3,000 to 5,000 tourists, who visit the place yearly.

Very few persons understand the nature of this famous cave. Most imagine that it is a cavern much on the same level and covering many acres. Such is not the case; it consists of a series of galleries (five), each being the deserted channel of a river. We enter on the second gallery, and, having gone in about three-quarters of a mile, ascend a stair to the first. Farther on, having returned again to the second, we pass down to the third, then the fourth and, finally, reach the fifth where the Echo River is now flowing. These galleries have been worked out of the sub-carboniferous limestone composing the rock, since the Niocene period in geology. The Green River, which flows through a valley 194 feet below the present mouth of the cave was likely once on a much higher level and into it the Cave river drained. As the Green river sank, the river inside lowered, wearing away its bed by the mechanical and chemical action of its waters. There is no indication that other forces have been factors in the removal of the vast amount of rock, which once made up a solid mass, where empty chambers, avenues etc. are seen to-day.

There are 223 avenues, of which 150 miles have been explored, 47 domes, one 300 feet high, 23 pits, one 175 feet, 8 cataracts, 3 rivers, 2 lakes, 1 sea, besides many halls, chambers and grottoes.