

The Celebrated Black Explorer Stephen Bishop and Mammoth Cave: Observations by an English Journalist in 1853

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The Mammoth Cave of Kentucky, an international Biosphere Reserve and World Heritage Site, is the longest surveyed cave in the world with over 412 miles accurately charted and has a rich history of exploration dating back for more than two centuries. The name of Stephen Bishop (1821-1857) is well known to modern cavers and forever linked to the story of Mammoth Cave. Many consider him to be one of the greatest cave explorers who ever lived. Born into slavery in Barren County, Stephen was acquired as a teen-ager by Franklin Gorin (1798-1877), a lawyer in Glasgow, Kentucky. When Gorin and Alexander A. Harvey purchased Mammoth Cave on April 17, 1838, for \$5000, Gorin brought Stephen there to learn the trails and lore of Mammoth Cave under the tutelage of cave manager Archibald Miller, Jr. and guide Joseph C. Shackelford. For his bold explorations, intimate knowledge of the cave, and charismatic personality, Stephen became the most celebrated of the guides. Today, we might well describe him as a self-taught cave scientist or speleologist.¹

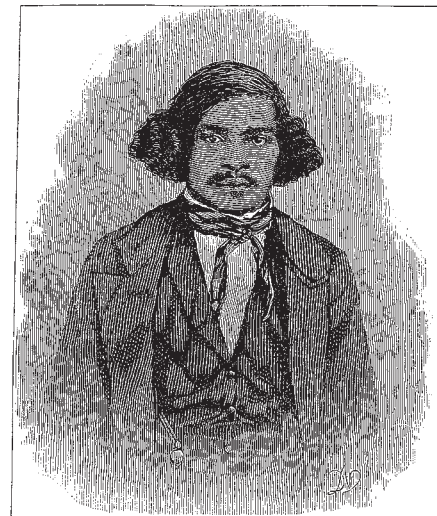
Soon after its discovery in the closing years of the eighteenth century, Mammoth Cave became an important source of saltpeter (potassium nitrate), the primary component used in the manufacture of gunpowder. During the period leading up to the War of 1812, speculators and war preparations stimulated a saltpeter boom. Kentucky was the most significant producer of nitrates, derived from caves and rock-shelters, shipped to eastern manufacturers and also supporting numerous small regional gunpowder mills. From 1798 to 1816 Mammoth Cave became one of the most productive and best known saltpeter caves in the nation.²

Following a number of ownership changes, the first description of the cave, "The Subterranean Voyage or the Mammoth Cave Partially Explored," appeared in east coast newspapers in early 1810. The size of the great cave and the beautiful sights within were considered breathtaking. The article described Mammoth as "the largest cave now known...seven miles." A few years later, the 1816 description by Nahum Ward, "The Wonders of Nature," was widely reprinted throughout the United States and abroad and propelled the cave into public awareness, helping to ensure that Mammoth Cave would soon become a popular tourist destination. Privately circulated sketch maps made of the cave and its internal saltpeter factory in 1811 indicated fourteen miles of

known passages. In 1835, Edmund Francis Lee, a civil engineer then living in Cincinnati, Ohio, determined the as-then known length of the cave using a surveyor's transit, rod and chain. The survey and map indicated about eight miles of passage. A few years later, on October 20, 1838, Mammoth Cave guide Stephen L. Bishop, Hiram C. Stevenson from Georgetown, Kentucky, and several other explorers traversed the Bottomless Pit, opening up many more miles of virgin cave to exploration.³

During the winter of 1841-1842, Stephen drafted a new map of Mammoth Cave incorporating the many recent discoveries, using the 1835 Edmund F. Lee map as a base. Bishop possessed a clear comprehension of the cave as a three-dimensional labyrinth, able to visualize the myriad inter-connecting passages and how they were related to other passages. Stephen was given full cartographic credit, with the published version labeled, "By Stephen Bishop, One of the Guides." For a slave to be given credit for an intellectual work was an extraordinary achievement in the antebellum South, but then Stephen Bishop was a most extraordinary man. It would appear that he had a good self-taught classical education, for he could quote from Greek and Latin classics with facility, and from most accounts used quotations in the appropriate context for the wonders being described and understood the meaning of the words. Bishop knew some geology and continued to build his knowledge through conversations with scientists and scholars on his guided trips through the cave.⁴

In 1839 the new owners, Gorin and Harvey, expanded their guide pool by leasing the teen-aged slaves Mat and Nick Bransford from Glasgow attorney Thomas Bransford for \$100 each per year. Both Mat Bransford and Stephen Bishop were very dynamic and outgoing, and liked to explore caves. They charmed the crowds and were much in demand as guides. On October 8 of that year, John Croghan, M.D., of Louisville, Kentucky, purchased Mammoth Cave and 1,610 surrounding acres from Franklin Gorin for \$10,000 and renovated and expanded the hotel facilities. Croghan ushered in the golden age of tourism in Mammoth Cave, and the cave remained part of his estate and managed by his heirs until the National Park Service bought the cave in 1941. Stephen Bishop was included in the Gorin-Croghan land transaction and stayed on as a cave guide; Croghan also continued to lease Mat

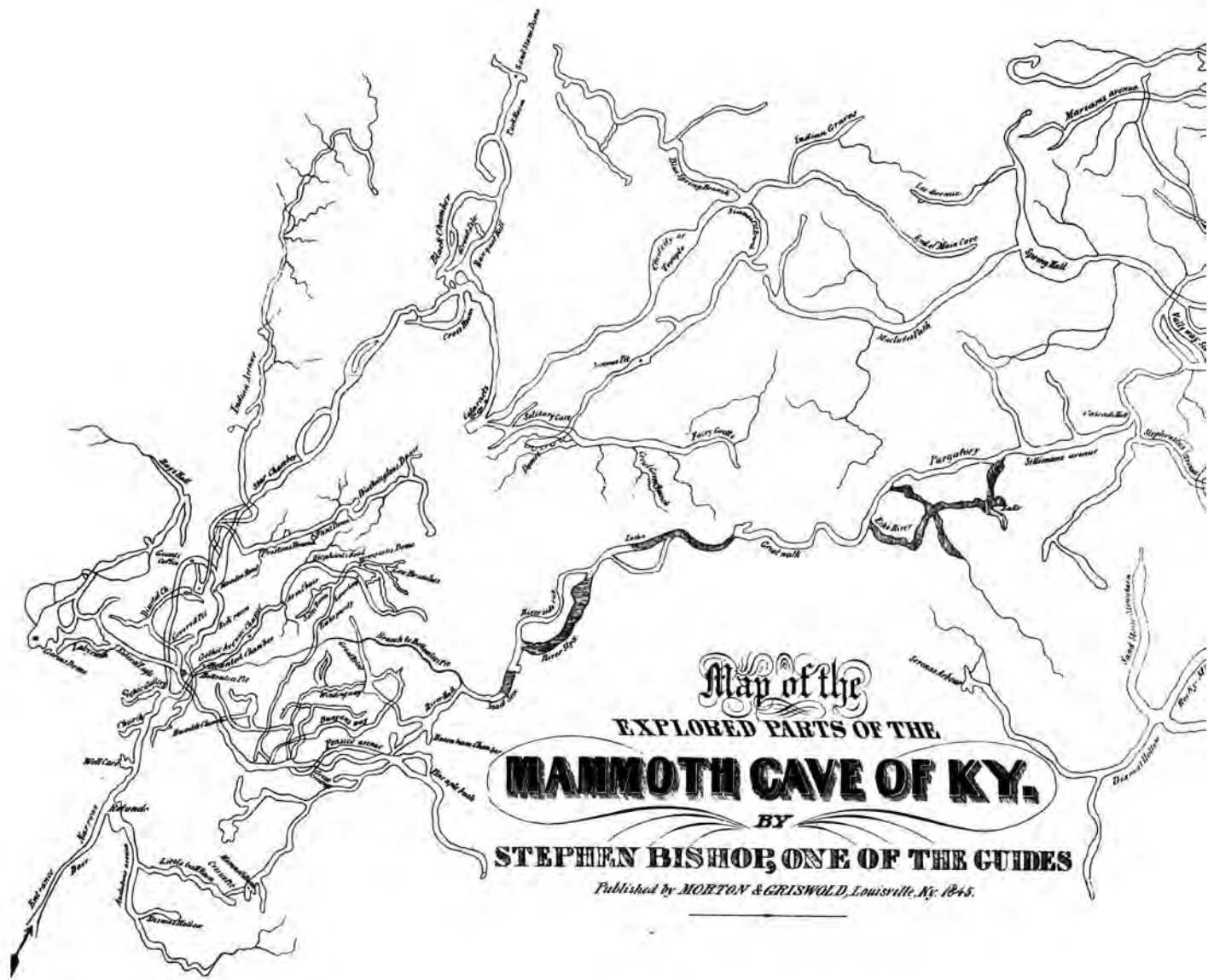


STEPHEN BISHOP, THE GUIDE.

Stephen Bishop, the Guide. Illustration by J. Barton for Horace C. Hovey, "One Hundred Miles in Mammoth Cave," *Scribner's Monthly* 20(October 1880), 922. A.I. George collection. There are no known likenesses of Bishop drawn from life. When the *Scribner's* article was published, Bishop had been dead for 23 years. The artist may have copied from a sketch or photograph, no longer in existence, in the Mammoth Cave office at the time of his visit, but this is purely conjectural. The noted landscape painter Joachim Ferdinand Richardt visited Mammoth Cave during May-June 1857, at the time of Stephen's death, and made a sketch of guide Nick Bransford now housed in Mammoth Cave archives. Richardt also created a dramatic oil painting of boating on Echo River in the cave, in which the black guides in the boats bear striking resemblances to Nick and Matt Bransford.

and Nick Bransford and added Alfred, his personal slave, to the guide pool.⁵

In the fall of 1853, Thomas Butler Gunn visited Mammoth Cave and wrote a detailed account of his experiences in his notebooks, an account that is as much about the African-American guides as it is about the cave. Gunn was born February 15, 1826, in Banbury, England, and came to New York in 1849. A freelance artist and journalist, he traveled about the United States and submitted his reports to the *New York Times*, which were published in the form of letters. On August 8, 1853, he received an appointment as a salaried correspondent for the *Times*, and set off on a tour of the Great Lakes region.⁶ On the evening of August 14, while aboard the steamboat *Sam Ward* touring Lake Superior, he engaged in a long conversation with another passenger, an elderly New Yorker named Greenwood, who planned to soon visit the famous Mammoth



Section of *Map of the Explored Parts of the Mammoth Cave of Ky.* By Stephen Bishop, one of the guides. Map used as an insert in Alexander Bullitt's (1845) *Rambles in the Mammoth Cave* (Louisville, 1845). A.I. George collection.

Cave of Kentucky. Upon hearing this, Gunn was similarly inspired, and noted in his diary, "where I'll go!" At Mackinac Island on September 17, he wrote, "I'm off tomorrow by the [steamboat] *Pacific*, and then for Kentucky and the Mammoth Cave."⁷

Gunn arrived at Louisville during the afternoon of September 28, checking into the Galt House hotel. He rose before dawn on the following morning to catch the stage, "dressed by lamp-light in the corner of a large room, four beds in't, each having its one or two occupants. And then after some half hours waiting at the portal of the hotel, looking out on the chill dark street, into the stage.... Over a hundred miles stage-riding is before us."⁸ Two long and wearisome days of jolting along bad roads brought Gunn to the hotel at Mammoth Cave, where he would spend the better part of a week enthusiastically exploring the passages of Mammoth and other caves in the vicinity.

Stephen Bishop led Gunn upon most of these rambles, and Gunn proved well up to the challenges posed by long days and long miles spent underground.

Upon returning to New York, Gunn continued his career in journalism, serving as a war correspondent for the *Evening Post* covering the fall of Fort Sumter, and in 1862, as correspondent for the *New York Daily Tribune*. Gunn returned to England in 1863, and died in Birmingham in 1903. His voluminous U.S. dairies, which contain not only daily entries but also many of his drawings and published articles, constitute 21 volumes covering the period from July 7, 1849 to April 7, 1863, and are housed in the archives of the Missouri History Museum in St. Louis.

Gunn recorded a rich assortment of Mammoth Cave place names evoking classical mythology, romanticism, and contemporary persons, as well as a variety of

geographic and geologic features and places. Over time many of these names changed with new ownership or management, as guides embellished their patter with more colorful descriptions to evoke images of an underworld steeped in mythology. Distances traveled and physical passage size descriptions were inflated, in part a consequence of having to walk and scramble over the rough internal terrain and view the cavern landscape by feeble lamplight, but also to impress visitors.

Gunn's visit to Mammoth Cave occurred at a time when the idea of landscape tourism was beginning to flower in America. Although well-to-do citizens in England had developed an enthusiasm for seeking out scenic landscapes during the last quarter of the eighteenth century, Americans of the period were too preoccupied with taming a vast wilderness, founding towns, and the struggle for independence from Britain to



Thomas Butler Gunn, self-portrait made in 1853 at about the time of his visit to Mammoth Cave. *Gunn Diaries*, Vol. 6, p 5.

have time or energy to spare for extended recreational pursuits. It was not until the 1820s and 1830s that circumstances in the new nation had evolved to foster a similar passion for tourism by Americans. By this time, the construction of turnpikes and improved stagecoach service, navigation of inland waterways by steamboats, building of canals, and, soon to come, construction of railroads, led to a revolution in transportation that made formerly remote locations accessible. As an enhanced transportation system came into being, taverns, inns and hostleries sprang up along the roadsides and around destinations that assured travelers of relative safety and comfort away from home.⁹

Improved transportation was insufficient in itself to spur American tourism without compelling destinations to draw visitors. Popular attractions are essentially cultural artifacts that have been created by the work of artists and writers through acts of painting them and describing them, and by the building of accommodations for visitors in their vicinity. During the antebellum era, the two most popular tourist attractions were Niagara Falls and Mammoth Cave, both made culturally prominent by the large body of images and descriptions that established them as important destinations on the tourist itinerary. From the first published description of Mammoth Cave in 1810, "The Subterranean Voyage," through

the remainder of the nineteenth century, hundreds of accounts of the cave were written by visitors and published in journals, newspapers, and often lavishly illustrated books, all of which served to stimulate public interest. Because Mammoth Cave was one of the more difficult popular attractions to reach, the number of annual visitors did not exceed 2,000 until about 1860. Today, Mammoth Cave National Park draws nearly two million visitors each year, of whom more than 500,000 tour the cave.¹⁰

Although Thomas Butler Gunn never published his account of Mammoth Cave, his diary entries concerning his visit are richly detailed and the product of a keen observer. The following extract is taken from Volume 6 of his diaries, covering the period September 30 to October 5, 1853, beginning with his departure from Bell's Tavern, a landmark hotel not far from Mammoth Cave that served as a gathering point for tourists bound for the cave.¹¹

[Transcript begins] 30. Friday. Uprising and breakfasting done, forthwith we enter the Stage for the Cave. Through nine miles of leafy loveliness, up steep hillsides, through green, wildly luxuriant valleys all tangled with wild-vine and creepers, by savage glade and over mountain we jolt onwards. But for the atrocious stones in the road the place might have been a dream of Fairy land; the autumnal leaf tints, the exquisite varying shades of yellow, red, purple and black and the fresh green around were indescribably beautiful. And ever present the red clusters of sumach berries, with its not less brilliant leaves. Nevertheless we were glad to descry and disembark at the Cave House.¹² It is a long plain building two stories in height, and a lengthy wing projecting angle-wise

from the extreme end. All around is beautiful woodland, forest trees and shrubbery, behind, a large garden.

The estate, a vast one, comprising 1700 acres, belonged to one Dr Croghan of Louisville,¹³ and by him was willed to certain trustees, by them to be managed for the behoof of spendthrift heirs, who would with due drab and bottle, have long ere this, have dispossessed themselves of it, but for want of power. Mr. Miller, the agent here resident,¹⁴ was about, a brother in law, Coates reigned in his stead.¹⁵ Quite a way out of the track of the world is the place, no town or hamlet for a score of miles, Kentucky wildwood, mountain and brake engirdling you. Southern folk crowd the place during the sultry summer months, but we're in the tail of the season and but a handful of visitors here. The long porticos were all uncrowded, the sunlight basked on the luxuriant lawn and fine trees, and a little knot of idlers had collected at the portial.

Two or three negro guides, or waiters, a wooly-headed, black velvety skinned boy with his large white eyes, and four or five dogs, little and big, were waiting the advent of any chance visitors. In an arm chair, with its back tilted against the wall, sat a good-looking young Southerner,¹⁶ idly cracking his whip, or criticising the horsemanship of an Irish retainer of the establishment, who was attempting to leap a horse over a fence, in the field in front. Inscribing our names on the hotel books, we borrowed from a colored waiter (yclept St Clair) flannel jackets, of a yellow hue & caps and were put under charge of Stephen for the descent in the Cave.¹⁷

Now this same guide is a notable fellow in his way, and has identified himself with the



CAVE HOUSE

The Cave House. Illustration by John W. Orr for Horace Martin, *Pictorial Guide to the Mammoth Cave, Kentucky*, (New York, 1851), frontispiece. A.I. George collection. The Cave House later became known as the Mammoth Cave Hotel.

place to such an extent that folk inquire for him in special, esteeming themselves happy in securing his services. He's a picturesque varlet, a bright yellowish, warm complexioned mulatto with jetty black curling hair under his low crowned, wide brimmed hat; bright eyes and sharp knowing glance. He sports a mustache, smokes eternally, and is altogether the sort of fellow Gavarin¹⁸ would like to sketch and Dumas to describe.¹⁹ Of his other peculiarities more anon. He, with his fellows were born thralls to Dr Croghan, are freed now, by his will, and in two years or so will have earned money to transport them to Liberia.²⁰ Stephen Bishop (that's his whole name), has been about the cave fifteen years, assisting to make most of the discoveries.

Off we start, for about the space of two hundred yards down a road, mulberry trees overhead and around by the sloping hillside, which being pursued straight onwards leads to Green River. But we, on the right turning sharply, are now gazing downwards at the Cave's mouth. A great, oval-shaped cavern at the bottom of a ravine, rude rock-steps winding downwards from the front, under the overarching rock strata. From the arches centre, issuing forth from pendant verdure and tree shrubbery, plashes down a spring of bright water into a long trough below, behind which, and partially closing the entrance is a rough log hut (This used for a larder during the summer's heat).²¹ All about & above, wild vines and creepers hang, their fresh sun-lit green standing out deliciously from the hell-black night within.

A chill blast of air from the Cavern's jaws welcomes us, as, our lamps having been procured from an adjacent, (formerly habited, but now disused) building, downwards we go, Stephen, cigar in mouth, leading the way. We now spy stones piled up on either side of the way, and long wood pipes, heretofore used in conveying water farther on into the cave to hoppers used by saltpeter makes. During the war of 1812 the profits of this manufacture set folks to extensive cave exploration; and the earth in the Mammoth Cave, instinct with nitre was used to good purpose, being purchased by government contractors, Gratz & Wilkins for that object.²² The war ending, prices fell, and for manufacturing ends the Cave was disused. Later, however, did miners, desirous of raising a dollar or so, have done a little lixivating the nitrous earth, but they were solitary cases.

Onwards we go, through a long low cavernous strait the Narrows,²³ passing to reach it through a doorway in a rough stone wall, stretching cross wise athwart the cave.²⁴ The cave breath is chill and strong, but slackens as we advance, until a temperately cold, tranquil atmosphere is around you,

varying not much the twelve months round. Winging our lamps, through the palpable obscure, and black and dark night we go, the cave arch expands and is lost in gloom, and we're in the Rotunda.²⁵ A monstrous subterranean Vestibule, a hundred feet in height, two hundred in length & one hundred and fifty in width, roofed in by one vast rock, sans chink or crevice, save where at its borders a jagged cornice work may be observed. Monstrous rock buttresses are around, and from this huge oval-shaped hall on either side two galleries diverge. But none of this could we descry through the murky air, had not Stephen, (who has heretofore sported one or two lines from Virgil which he has acquired parrot-fashion, un-knowing their meaning) lit a Bengal light.²⁶ Up it sparkles, fizzing and flaring; the yawning rock ribs and giant boulders start out into grim distinctness, the great chamber in all its height, depth and hugeness is at once though but for brief space seen.

We pass on, turning neither to the right nor the left. Great, black-walled Bat Room on the former (reflecting no ray of light from torch or lantern) lay unvisited; and equally so, on the latter, Audubon's Avenue, with its dimly seen roof, and wide space, its natural well and columnar stalagmites uprising to the roof, its mystic cloud like ceiling, and entire length of a quarter of a mile.²⁷ Little Bat Room, a branch of it, pit 200 feet deep, Bats in it in winter.²⁸ But down the Main cave²⁹ we speed, Kentucky cliffs (thus denominated from assumed semblance 'twixt them and rocks on that named river)³⁰ are passed and descending brief space we are in the Church.³¹ Another great hall, perchance a hundred feet across, and sixty in height and perched up on the left a rock pulpit; whereon sermons have been preached, whether prompted by theological coxcombry or amiable intent to justify and screen slumber thereby induced I know not. Methinks however, that if an audience of Troglodytes could be convened, some good might be effected by a Sermon in the Mammoth Cave.

Passing more banks of nitrous earth, tracks of oxen, prints of wheels, made thirty years ago; by more Hoppers, leaching vats, pipes, pump frames, and the like,³² we are in the Gothic Galleries. On either side here are caves, the one to the left, sand-choked is but penetrable for brief space, that to the right, entitled the Gothic Avenue, joins the former by a gallery, stretching sheer across the Main Cave.³³ We are now half a mile or so from the cave mouth. Reserving the wonders of Gothic Avenue for future exploration, we held on to the Ball Room, this named from its availability for subterranean terpsichorean³⁴ gymnastics. A rock orchestra, a gallery stretching back towards the level of the embankment



ENTRANCE TO THE CAVE
VIEW TAKEN FROM THE INSIDE

Entrance to the Cave, View Taken from the Inside. Illustration by John Andrew for Horace Martin, *Pictorial Guide to the Mammoth Cave, Kentucky*, (New York, 1851), facing p. 19. A.I. George collection. In reality, the Cave Hotel could not be viewed from inside the entrance.

by the Gothic Avenue; would afford facility either for lookers on or performers in the bobbing, hopping, jiggling, sliding, shuffling, dodging, oscillating business yclept dancing. Here follows a broad level road onwards. On the left is Willie's spring, a pretty fluted niche, water worn, and small basin.³⁵ This is so called from a clerical ass, who fiddle in hand, strolled through the country, under the plagiarised title of "Wandering Willie"; and in sentimental boobyism, chose to rest a night here. And just beyond are corn-cobs scattered, remnants left by the oxen employed by the miners, and also a steep niche, from cave ceiling to pit, perhaps thirty feet in depth, continual water plashings dripping downwards into a large but inaccessible room.

Well Cave and Rock Cave are left behind; and now looming out of the blackness on the right we see Giant's Coffin. A huge stone Sarcophagus shaped mass, so distinct that mouldings could be seen about its lid, fit burial spot for Polypheme [Polyphemus] after his love madness for Galatea.³⁶ The white limestone forming it stands out clear & sharp from the gloom of the over arching cave beyond, and a sort of pit twixt it & the mound of rough rocks in front aids the effect marvellously. Immediately above, on the white ceiling is a strangely shaped gypsum incrustation, like to an Ant-Eater on a bough. And now we quit the Main Cave, branching off it a narrow,

partly retrograding passage behind the Coffin. Turning to the right we press onwards for the Deserted Chambers, and enter a low, though spacious circular room, perhaps 100 feet in diameter. It is the Wooden Bowls, so called from that article being here found, at an early exploration.³⁷ To the right, down a ladder, and now the Steeps of Time, twenty feet in space, are passed.³⁸

We are now in the Deserted Chambers.³⁹ Mocassin tracks have been found here, as elsewhere.⁴⁰ Arriving at Richardsons spring, a little pool of clear water, Stephen here deposits our dinner basket, as we intend here to feed on returning - with unforeseen result, as will here after appear. Along the Cavernous Archway we speed, noticing a small branching passage to the left leading to Covered Pit. This ugly hole is some twelve or more feet across, lidded over by a thin rock strata, a rock mass resting in its centre, and down below we hear water plashing. But a

short space there; and back passing by Side Saddle pit, 65 feet deep, irregularly shaped, 20 feet long, but not over 8 wide. A brief walk farther and descent down a ladder from above, to the Labyrinth. Winding snake like onwards, one end of this conducts us to Gorin's Dome.⁴¹

Bidding as we go forwards till we come to an oval space, there to look, but by no means get through, Stephen starts off to the right. We gaze out, and above dimly descry an overarching dome, below a black and terrible abyss. Right across in front of us, in sharp clear cut grooves, suddenly abruptly ending a great screen of hanging limestone is seen. But a fizz is heard and bright glare of light rises from the boulders to the right of the pit, and in a minute the whole place is illumed. Up flaring in clear cold light it burns, dancing on the fluted rock screen, the jagged cliffs and boulders below, the fearful gulf sloping sheer, straight downwards from where

we gaze, all eye, awe, and admiration. From Shelby's dome, above, to the bottom abyss 'tis 160 feet.⁴² Quitting this, we ascend a ladder, and proceed towards the Bottomless Pit, which ends the range of Deserted Chambers, which are half a mile in length from their starting place.

Across this awful pit no human foot had ever sped, until a Georgian gentleman, and Stephen, by means of a ladder crossed the black chasm, twenty feet in width, and over two hundred in depth.⁴³ A bridge with stout handrail from an outstretching point now gives easier access, and although it creaks and vibrates is safe enough. Paper saturated with oil is ignited and dropped flickering down; and one's hair bristles with horror as lower, lower down it falls, till a faint sparkle in the murk midnight

brooding below shows where it had alit. Ugh! what a fall! To go crashing down there, out of Life and Hope and Love! Albeit styled Bottomless, it is 120 feet from the bridge level. The bridge being crossed, we speed along a devious passage for a space, and here, again two routes present themselves. Deciding we entered, crouching low, the Valley of Humility, past the Scotchman's Trap, (a huge slab as if placed for capturing, so called after Donaldson)⁴⁴ through a sand embankment, into the Winding Way, or Fat Man's Misery.

'Tis a low, serpentine passage through a winding cave perhaps a hundred feet long, and scarcely a foot and half wide. Heaven knows what pre-Adamite days witnessed the mining, eddying whirls of the black subterranean rivers which excavated all these awful caves. Here they must have rushed, roared and surged in the darkness! Emerging with no small satisfaction into Great Relief Hall, there to stand upright again, in its ample space we turn to the right, making for River Hall, at a hundred yards distance. Here anon we reach Bacon Chamber, the low spacious ceiling of which is all covered with strangely shaped rock pendants, like unto geologic bones, petrified, canvas-covered swines' flesh, in varying joints. It must have been water-worn in the rock, which may have offered more or less resistance, according to its hardness.

From the right here branches forth an avenue to the Mammoth Dome, the hugest one in this subterranean world.⁴⁵ A vast hall, black as Erebus⁴⁶ three hundred feet by a hundred in diameter, two hundred in height; standing high as the loosely piled rock floor you may feel the awful pall of darkness blanking out all light, life, and creation, even as though they has passed away for evermore. Black-brooding Night rests solemnly, intensely, terribly on you. A place where Time, and Space exist not, where the Majesty of Darkness is everything. A rapid, painful, burning brain-pulsation, a feeling of utter insignificance and awe are with you. Fit place for the Titan-born twins Otus and Ephialtes to hold the bateless god of blood captive, fit place for Ares to lie prone in brazen chains, threefold bound at their feet, as in Flaxman's⁴⁷ drawing.

But back speeding, we from River Hall approach the Dead Sea. Fast grip on the iron handrail now (very necessarily here placed), for the slippery rock, down-sloping, glides off into a murky pool thirty feet below, some two and twenty deep. But for aught you see it may be twenty fathom, and with sullen plunge and dismal splash go the stones we hurl over to its bottom. A steep ladder next, and turn holding to each round down we go; and so deviously for a few steps round a rock corner, an ugly bit, for the rock floor slopes

A. TISSANDIER. SIX MOIS AUX ÉTATS-UNIS. Planche III, p. 34.



LE GORIN'S DOME DANS MAMMOTH CAVE (KENTUCKY) (d'après nature).

Gorin's Dome. Illustration by French landscape artist and early aeronaut balloonist Albert Tissandier, in *Six Mois aux États-Unis*, (Paris, 1886), 54. A.I. George collection.

horribly, and you have the full consciousness of what is below, in mind. But 'tis done, and we near the rivers. To the right flows Styx,⁴⁸ unseen, though over it we pass (after threading a rough avenue), on the so-called Natural Bridge, a chaos of rocks fallen from above, and before us, on the left hand, approached by a muddy slope lies Lethe's sluggish pool.⁴⁹ Just beyond the bridge the rivers join, though not from any observation of my own could I have made the discovery.

These so-called rivers and Lakes are but deep pools, in the very lowest part of the cave; they rise and fall with the Green River, though how, or through what cranny and fissure communicating is not known. But their level varies not above two feet from that of Green River, ever.⁵⁰ A party were on ahead, exploring the wonders beyond the Rivers, and in I should have at once have proceeded, but that my companions could spare but limited time, and wished to return by the stage of this same afternoon. So I postponed Troglodyzing further, and turning back we sought the Deserted Chambers for lunch.

But reaching Richardson's Spring, and Stephen examining his basket, lo! the cold food therein deposited had vanished, and naught but fragmentary bread scraps remained. The rats were the thieves. I then imagined, either that the said food was a myth, or that Stephen had made cats paws of apochyrphal [sic] rats for the occasion; with injustice however, for on subsequent occasions I saw rats at this very place. Some laughter and drollery and a few niggerish imprecations followed, and then we rose to see further, for an hour or so yet remained ere stage departure.

Back to the Main Cave we sped, reaching it where heretofore we had branched off by the Giant's Coffin. An abrupt, acute angle of rock passed the road turning sharp to the left we, after duly noting gypsum incrustations in fancifully shaped Giant and Pigmy on the ceiling enter the Sick Room. Two roofless huts, stone-built, stand here. And here, and in some dozen others (frame built and now pulled down for hotel uses), fifteen years back did consumption-smitten mortals live, in hope to 'scape the King of Terrors, it being hoped and asserted that the Cave atmosphere might prove beneficial. From differing states they came, in various stages of disease, some abiding months here, one two years in dreary torchlight hope. But one died, the faith in darkness and cave atmosphere with him, and they all fled to live or die as might be in the sunlight and air above. Naught remains but the two roofless huts and the story.⁵¹

Now we enter on the Star Chamber - a long lofty hall, perhaps 60 feet high, the massy rock walls on either side of which

do not (you fancy) reach sheer up to the ceiling which, like a midnight firmament seen from the depths of a ravine, broods over you. But it is but that the ribbed rocks are of lighter hue than the gypsum covered roof where small and multitudinous bits having dropped off have besprinkled this subterranean sky with innumerable stars. A more marvellous and perfect illusion can not be conceived. In this describing it, I think of it as the reality of that which it is but the similitude - that solemn star-bespangled firmament may, for all the gazer knows (as his back against the rock wall he stares upwards), be at an immensity of distance overhead. Meantime, taking our lamps, Stephen crosses the hall, and disappears in an unseen cavity in the floor. Dimmer becomes the lamp glare, and as we gaze aloft, blackly passing athwart that solemn sky overhead goes a slow thunder cloud - Stephens' hand over the lamp! Anon blackness rushes down upon us, overwhelming and overpowering, a darkness that may be felt, and thus we stand till a lamp dawn afar behind from the other end of the crevice passage which the guide has passed through. This "Star Chamber business" is perchance the very finest thing in the Mammoth Cave.

On proceeding, over the rough loose stones, the Mackarel Ceiling and Floating Clouds overhead, we pass through the Banquet Hall (Branching off here, unvisited by us, lie the Black Chambers, wild savage scenery, forming an avenue a mile and a half in length, then abruptly terminating). And Solitary Cave, small but full of fine stalactytes is also undisturbed, and I know not what other places hereabouts. Salts, gypsum, quartz and ochre are here by found. But we approach the end of the Main Cave - 4-1/2 miles from its entrance. Passing a Cascade we are in the Chief City or Temple, a monstrous room, where standing on a great mountain of stones we may learn that 'tis 900 feet long, 300 wide, and 100 in height. And now we turn backwards, to the gladsome day, and a hearty meal at the Cave Hotel, at the expiration of which



Discovered by Stephen Bishop in November 1840, rising 192 feet Mammoth Dome is the largest and highest void in the cave. Source: Harper's Weekly, Supplement, October 28, 1876, p. 881

Dr Brodnax mounts the stage and is off. I fraternize with the only two folk left, one a Maine man, who leaves on the morrow, and a young Louisianan, the good looking Southerner heretofore spoken of (and of whom plenty anon) and talk by a wood fire till nigh midnight with the former, and then to bed, intending more Cave exploration on the morrow.

1st of October. Saturday. It had rained hard and fast all the night, and the leaves overhead were dank with moisture, and the sky overclouded as I Stephen alone accompanying again descended into the Cave Mouth. Whether the passage across the river would be practicable we knew not, but intended making trial. Not much time was devoted to the objects on our way, as heretofore. Stephen kept on, I following, and we came to Lake Lethe in due time. It had risen materially, and he at once doubted effecting the passage; nevertheless unto the wet, dirty, flat boat we entered, after much baling out of water had been done on Stephen's part. Both lamps were placed on the prow, and I standing erect, Stephen paddle in hand, guides the boat onwards. Sheer up on either side, sans beach or margin, rise the



THE RIVER STYX

The River Styx. Illustration by John Andrew for Horace Martin, *Pictorial Guide to the Mammoth Cave, Kentucky*, (New York, 1851), facing p. 61. A.I. George collection.

rocks out of the grisly pool over which we glide. Above, the ceiling can be dimly seen, and when either of us lift up our voices and sing, solemn sonorous echo reverberations roll through the caverns, even as if strange spirits brooded on the black ledges eternally, and were answering our invocations.⁵² The river winds, blackness closing on us behind, and 150 yards have been passed over. And now we ought to be at the Great Walk, disembarking here to pass to where another boat awaits us on Echo River. But it is all full of water. The river has risen indeed!

On we keep and now before us, blockading the way are two boats, one almost wholly submerged, one end being past under a low arch on the right. Through this arch we should have had to pass, but 'twas filled, covered by the risen water.⁵³ There was a little horror in the notion that there lay the passage intended, albeit had a boat been awaiting us on the other side of Purgatory, a rough rock passage which we ought to have reached by keeping on. The explora-

tion might still have been effected but the boats were visibly here, and we couldn't have got one across to Echo River. So my exploration had yet to be deferred. We freed the submerged boat with some difficulty, and then after some gettings out as mud banks in the Great Walk, returned, and disembarked. The day was yet young and therefore determined, if barred access to the subterranean world beyond these black pools to explore more fully on the other side.

So to the Bottomless Pit we sped, this time issuing at an opening into some distance below the former one. Here, sitting on a monstrous projecting rock chair, the black void below did we converse and smoke sociably, Stephen romancing not a little touching his discoveries, risks and adventures; how he had clambered, descended, and explored, being veritably the Columbus of the Cave. Anon we fell to routing and

rummaging at a hole in the rock floor, and telling me how there were fearful pits and hollars of unknown and unascertainable depths on every side of us, he with attentive, earnest look, pitched a stone downwards. "Listen!" said he, "did you hear how far it went?" "About five feet, I should say" quoth I. He attempted denial, and repeated the experiment again and again, but I was still stubborn in speaking my conviction. So with more routing the crevice was at length cleared of the loose stones which had blockaded it, and half-burying his body in the essay he managed to pitch a stone in. In the dead silence I listened intently, and heard it go knock! knock in its progress downwards, decreasing in sound at each leap, till it had passed out of hearing, nor yet reached the bottom of that awful fissure, which might have reached to the earth's centre for aught I knew. 'Twas a very successful bit of the horrible, knowing the whilst that you were over this pit, on certain rock masses which had, earthquake shaken, tumbled into their

present condition. There is also a winding tortuous avenue by which you can get to the bottom of the Bottomless Pit, the which I'm now sorry I didn't do.

Upwards of an hour thus spent we ascended to the Bridge, and crossing it, entered Penseco Avenue. Through Wild Hall (with the gypsum incrustated ceiling preceding it), Snow Ball Arch, some 10 feet wide, 8 high, with small ball like incrustations dependant from its roof, to the Great Crossings. Here two galleries intersect at right angles, and the stone strata connecting the upper galleries having fallen downwards, a Bengal light being fired all around looks drastically, savagely grand. (I'm wrong in stating they cross at right angles - in plan these galleries represent a figure 8). On proceeding we find a region of Stalagmites and Stalactites (the former having fallen on and uprisen from the floor, the latter still dependant). Pine Apple Bush and the Devil's Pulpit, the names of which explain their character are here. Some of the stalag and stalactites are so crystallized as to be almost pure alabaster, and lit up in the lamp glare held behind them, look beautiful. Angelica's Grottos end this Avenue, which is about a mile in length from the bridge over the Bottomless Pit.

Again we retrace our steps, for Gothic Avenue, branching off from the Main Cave at about half a mile from the entrance, is yet to be visited.⁵⁴ Up a flight of steps into a wide passageway, which pursued for a space brings us into the Haunted Chambers, so called from an incident here occurring during the Salt-petre making time. A young fellow getting lost, and here remaining for some time, got so horribly affrighted that on the appearance of his negro comrades with torches for his rescue, he incontinently imagined that he was already defunct and in hell, and fiends approaching to his torment. In this place Indian mummies have been found,⁵⁵ one with highly ornamented garm-ture,⁵⁶ skins, bark woven articles, snake skins, eagle's claws and I wot⁵⁷ now how much more Indian finery.

On-speeding, we pass stalactites, one if stricken sounding like to a bell's note (broken heretofore by a clamor-loving Pennsylvanian), and our footsteps re-echoing hollowly (for we tread on caverns!) we enter stalagmite and stalactite decorated Louisa's Bower. Post Oak Pillar is next, a rare stone-impregnated water petrification, up rising and down hanging, and then we enter the Register Rooms, Old and New. The whiteness of the ceilings of these avenues has been villainously smirched and befouled by nobodies names executed in lamp smoke, hence their appellation.

Gothic Chapel follows, an extensive and exquisite mimicry of architectural handiwork. 'Tis a large elliptically-shaped

room, at either end screened off by great stalagmite columns; others also, beautiful exceedingly rising from the floor to roughly ribbed and groined arches, variously hued. Asses twain (two legged ones) were wed here, once, thinking perchance they did a notable thing, as if any-body couldn't effect it. In one of the great stalagmite columns is a rough seat, dubbed Wilkin's or the Devil's Arm Chair, the former appellation it was from a past owner of the Cave.⁵⁸ Here (if you let him) Stephen will say Eliza Cook's trash about embalming a chair with tears and be-dewing it with sighs.⁵⁹ The fellow has a pleasant, mellowish voice, and uses it indifferently well. Vulcan's Forge, roughly shaped like one, Napoleon's Breastworks, or Scott, or Taylor's Breastworks, for they were indifferently called either. I prefer the latter twain, as I see no reason for giving the Scoundrel Corsican preference over honest men. A rock embankment, like to military work, of some length. the Elephant's Head, a stalactite mass, thus shaped, sans trunk, dependant from above, Hercules Pillars, and the Lover's Leap. The latter, a sharp pointed rock out-jutting into a black rotunda-pit is notable to look upon - of course no lover ever did jump from it, hence its name.

To the right, downwards we go through Elbow Crevice, a narrow pass, but 3 feet wide, though 50 high, winding *under* the avenue we have just left (But of this being the avenue I'm not certain - I think there's two here and it may be the one leading to the right). Bonaparte's Dome, and before it The Cooling Tub, a water filled basin, deep and long enow for a bath. The Cinder Banks, a massy cinder-like heap, dark colored, just below the Forge of Vulcan, above. Lake Purity ends this avenue. 'Tis a clear, fresh water pool, shallow, but 12 or 15 feet in length, and in its pure waters swims a solitary eyeless fish, here brought from the Echo River, the most solitary thing I fancy in this world, equalling the "Man who first discovered himself to be an Atheist."⁶⁰ This Avenue extends for about the space of a mile from the entrance from the Main Cave.

And now, retracing our steps to the Deserted Chambers and Richardson's Spring, we there took dinner, the basket containing which having, this time, been hung from a projecting rock ledge, was unapproachable by the rats, two or three of which we saw as we sat, eating. They ran about in side holes and winding crevices and though assailed by Stephen were uncaptured. Mutual cigars finished our meal, and lights approaching near intimated another party, under the convoy of guide Alfred. A clergyman and his wife, from the banks of the Hudson, another woman, and two or three men. They wished for Stephen's company, but he after some hundred yards and a latin quotation or so,

turned back towards daylight and the upper world, I keeping on with the party. Nothing new however was noted, excepting a low arched cave adjacent to (if I recollect rightly) Pensco Avenue, where crawling under for some space, we procured pieces of ochre.⁶¹

At the Cave Hotel by 4 in the afternoon, quite a party assembled around the well furnished supper table. Mr. Miller, the landlord, had returned, a true gentleman, quietly courteous in everything, and to an accurate knowledge of the Cave equalling that of any guide adding much and varied information far above their dubiously reliable traditions. There are four guides, all niggers. Three of them are still slaves, but will all by Croghan's will, sooner or later be transmitted to Liberia, whether Stephen will go in two years time. He is now earning the money for it. His former owner was his father. The constant newspaper glorification of Stephen together with the Latin scraps he'd picked up have made him a Cave lion, and therefore the other three good fellows are snubbed into comparative insignificance, all visitors being eager for Stephen's guidance; whereas the others troglodyze just as well, sans the display of vanities and self will and harmless braggadocio. Mat, says Mr Miller, is the only one whose word he can thoroughly depend on. Round a blazing wood fire, Mr. M, the good-looking young Southerner, hight Oliver Kellam, and I sat sociably smoking far into the night.

Nought worse than a sprained ankle has occurred in cave peregrinations. Folk have been lost for varying times, once for a drearily-passed forty-eight hours,⁶² but discovery has always ended the horror of it. Once owing to some fools conduct on the part of a girl a boat was sunken on Echo River. The party, a wedding one from Bowlinggreen (a little town hereabouts), were wetted by three feet of water, their lights extinguished, themselves horribly scared, but presently landed on a rock platform by the exertions of guide Nicholas. And then he contrived to raise the boat, bale it out and get the party back, though in the darkness, to be rescued by Stephen, sent in by Mr Miller, who found that Green River was rising, and was anxious about the safety of the visitors.⁶³ There's in reality little chance of danger in the Cave, excepting from an overcrowded boat and folly on the part of its occupants. Were one to sink in the deeper parts of Echo River, inevitable, unspeakably horrible death would result to all; the bravest swimmer might strike out in that ice-cold water and Cimmerian blackness, clutching at slimy rocks offering no grip or landing place, and all in vain. The streams wind and turn that even a guide would have but little chance. And these Rivers might rise, as during Winter and Spring they do, barring access to the

miles of caverns on the other side; but Green River being carefully watched, any persons there exploring might be warned in time. A very small rise fills up the low arches, but one of twelve feet would be required to close up the avenue of Purgatory. Were it thus closed at the commencement of rains or floods, luckless mortals on the other side must perforce tarry there, no other outlet being available.

October 2. Sunday. With Kellam and Stephen set off, as yesterday agreed upon, to explore White's Cave, a minor attraction, not generally visited, in the vicinity.⁶⁴ Like Knights Templars we bestrode our horse, Stephen walking beside us bearing the lamps. Less than a mile of forest road brought us to the place, where the cave mouth almost hidden by pendant vines and greenery, pierced a hill side, threes above and all around. Dismounting, downwards we crept, attired in cave costume, and swinging our lamps as usual. At this place I have no detail of nomenclature and varying peculiarity to give, for unique and singularly beautiful as it is, it's but one cavern, a thousand feet long from entrance to end partially divided in twain by a wondrous screen of stalactites and stalagmites; which petrified rock-drippings and adamantine icicles indeed are around on every side. From the whole roof they depend, hard but translucent, slender, long, massive, fantastically shaped, varying ever, strangely beautiful as a dream. Nor this alone, for the floor is all worn into winding, shell-like, continuous curves, the hard, sharp clear-cut



MAMMOTH CAVE—IN "THE DEVIL'S ARM-CHAIR"

Devil's Armchair. Illustration by W.L.S. for "Notes on Kentucky and Tennessee," *Scribner's Monthly* 9(December 1874), 131. A.I. George collection.



Unidentified black guide leading tourists in Mammoth Cave, illustrated by Hammatt Billings for "State of Kentucky," *Ballou's Pictorial Drawing-Room Companion*, 11(November 29, 1856), 337. A.I. George collection.

rock ridges serpentine hither and thither, up, down, in and out in the strangest fashion. The hollows between filled with bright clear ice-cold water, now deep enough to cover arm to elbow joint, now shallow enow to be bottomed by finger-point.

For unguessable centuries here hath Nature been silently at work at this strange witchery, and with what wonderous result! I never saw, imagined, dreamed of, ought like to it, and for many an hour, when thoughtful many thousands of miles away, will the remembrance haunt me, that there, amid wild Kentucky Hills, in darkness and with forests above lies the unspeakable beauty of White's Cave. Well now can I understand the inspiration which produced Bird's "Merry the Miner."⁶⁵ Hanging our lanterns behind the central screen, the effect was indescribable. On the rounded, spear-shaped, transparent rock icicles the light glistened on the great down-hanging stalactite masses which meeting in marriage-petrification with the stalagmites below form strange columnar shapes, on the pools and thin rock curves of the floor, on distant hollows where stalactites dimly seen beyond stalactites indicate inacceptably minute winding ways; wondrously

beautiful all. Towards the farther parts of the Cavern, these feature become fewer, rough cave above and below, and an ascent over loose rough rock-masses, rather steep has to be effected. Stalactites and stalagmites appear again, if I recollect at the end, though of no very extraordinary size or beauty.

Returning to the Hotel (where our clerical friend had been favouring the folks with a sermon in the big ball room above) we dined; and an hour so subsequently set off on horseback, under the guidance of Alfred to explore Long's Cave, at about five miles distance.⁶⁶ Stephen was sick, having complained of indisposition during the last day or two. Alfred, having admitted he had been in the Cave in question *once* before, consented, though a little unwillingly (indeed the good fellows do have enough of troglodyzing on week days) to accompany me. Kellam was persuaded to go though not intending exploring but only awaiting us. He, having seen the Mammoth Cave to his satisfaction, was tarrying the advent of two friends from Georgetown, Kentucky, then to proceed with them, and certain mares down south, by land, to his Louisiana home.⁶⁷ And we had not cantered above a mile and a half

ere we met them, so he turned back, accompanying his friends, I keeping on with Alfred.

It was a sunny, exhilarating afternoon, and pleasant riding through the forest road despite rocks and consequent joltings. Alfred drew up and tarried for half an hour at a farm house, where his wife was visiting; and when he again started, a negro woman bore him company for some space, she on horseback also.⁶⁸ Having parted from her, we at another house were joined by a boy and two young fellows, who proceeded with us to the Cave Entrance, which lies, as usual, on a rocky hill side, but quite out of the way of road or path, so you have to ride through the forest for some hundreds of yards to reach it. Dismounting, and preparing our lamps, one of the young fellows (more boy than man) was inclined to venture with us, but on his expressing a mild apprehension that we might be "lost," Alfred was so desperately ironical at the notion that he speedily convinced me he didn't know much of this place. It is scarcely ever visited, presenting no very great attractions in points of curiosity; there hadn't been an explorer for years two or three, so they told me. Boy deciding to go, down we clambered, descending a very steep and hazardous declivity, over loose rock, presenting every unpleasant variety of sharp angles upwards. I doubt if it could have been managed but for a stout and very long vine-stem which was fastened above to hold on by.

This Cave I shall not attempt to describe in detail, nor indeed could I. Three avenues branch off from the entrance hall, at some little distance from the mouth, each of which we severally explored. They are very wild, gloomy, and savage, huge chaotic rock piles have to be clambered over; long avenues monotonous and wearisome threaded to the sounds of the shrill gibber of myriads of bats which cluster, hanging head downwards in close bunches of about twenty or thirty, from the ceiling. Like thick black knots of moss they bespeck the roof for half a mile together, all the winter; and their querulous gibber was strange and solemn to listen to, as we sped on, disturbing them with our lamp-glare. Some stalactites there are, and queer, fantastically shaped, water worn niches, or figures, idol or monkey shaped; and some black, terrible pits. One of these, respecting which Bird tells a story⁶⁹ of two men getting here lost, their lights extinguished, themselves disputing as to which way lay the path outwards, and one crawling as being precipitated down an abyss and there perished by the fall, I wished to find. Alfred pointed out one pit as the place, but it was comparatively speaking shallow, and no-wise answered the description I had in mind about it, so though he took it in dudgeon I denied the identity. And on reaching the third

avenue, a short one, it was plain I (and the boy, also) were right.

Here a great pit stretched right across the cave, barring all access further, save by descent.⁷⁰ The approach to the edge slopes upwards, thence the horrible chasm sinks precipitously down, for sixty or fifty feet. Alfred descended by means of a pine tree, which with its branches lopped off form a rough ladder, for the recovery of the poor fellows body years ago. Mr Miller had mentioned it to me. You can go some hundred yards below, then the avenue ends. The margin above runs on to the left of the pit for little space, like a path, but ending suddenly. A sombre, gloomy place. Alfred found the body of an unfortunate racoon below, who had toppled over in the dark, breaking his nose and ending his life at one and the same time. He had not rotted, but looked mummified and his teeth grinned dismally. We left him, depriving him of part of his tail.

It was night when we got to the outer world (the Cave may be 4 or 5 miles in length) and we had a dark ride back to the Hotel, there to supper, a blazing fires and an evening with Kellam and his friends.⁷¹

3. Monday. As yesterday planned a party of four made up for the entire exploration of the Mammoth Cave. Others, the clergyman, his wife and two or three intended only to visit the regions this side of the rivers, under the guidance of Nicholas; Kellam & his friends and myself determined on crossing, did the rivers permit. No rains had occurred since Saturday, nevertheless had not Mr Miller accompanied us, Alfred, indeed any of the guides would have done all possible to have avoided crossing, as it would involve wet feet and wading disagreeables. As 'twas they made such objection, but it was quietly overruled, and leaving the other party behind, we four (Mr Miller accompanying us until we were safe on our way) were presently on Lethe. Winding along, the black void above, and by the overhanging cliffs, rock islets and promontories, we held our way. The first arch was now visible, but barely practicable, the Great Walk still half submerged, necessitating much jumping and even wading, and my boots were speedily filled with water.

Echo River being reached in safety, Mr Miller and another attache of the Hotel, who had accompanied us, turned back. We, embarking in another boat held on, and another landing place being reached, Alfred intimated he was about to go under the second arch; inquiring who wished to accompany him, and who would foot it through Purgatory. I preferred the watery way, as did Maurice Keene, one of Kellam's Kentuckian born friends. So, crawling low under the black arch we glide, our sable boat-

man propelling us onwards by the light of our three lamps placed on the fore-plank; now using his paddle, now with hands upon the low ceiling as motive power. Low curving the arch bent over our squatting forms, to meet the dismal pool on either side, in the liquid blackness of which our lantern glare was redly reflected. The waters were scarcely a finger's length from the gunwale of the boat, deep withal, no shore or projection visible. That was a solemnly passed five minutes, to crouch down with the pitiless rock pressing over you, the horrible waters below, solid blackness before and behind, and to think of green trees and birds and bright sunlight high up over you, as Schiller has it:

*"To think of light and air above
Of Human Voices and Human Love"*⁷²

Right glad was I to round to where the other twain awaited us, yet I would not willingly have missed that grisly ferry-path. Of the length of these subterranean rivers is difficult to judge, so prone are you to imagine them longer than they are. Lake Lethe (Mr Miller is my authority) is 150 yards at low water, when boats are kept at its entrance, and at the first Arch. In high water at the Second and Third (where Purgatory and Echo River join) crossing Echo River from the arch to the end you pass over 600 yards space. The eyeless fish are caught here, eyeless crawfish also. Some of the former I saw at the New York Crystal Palace;⁷³ they are white, about five inches in length, sans all wrinkle or intimation of sight, as may well be, a generation of fish succeeding generation in these rayless caverns. That there's unknown cavernous communication, larger than crevices and dripping places, with Green River is also made manifest by the fact that these eyeless fish have been caught in the river.

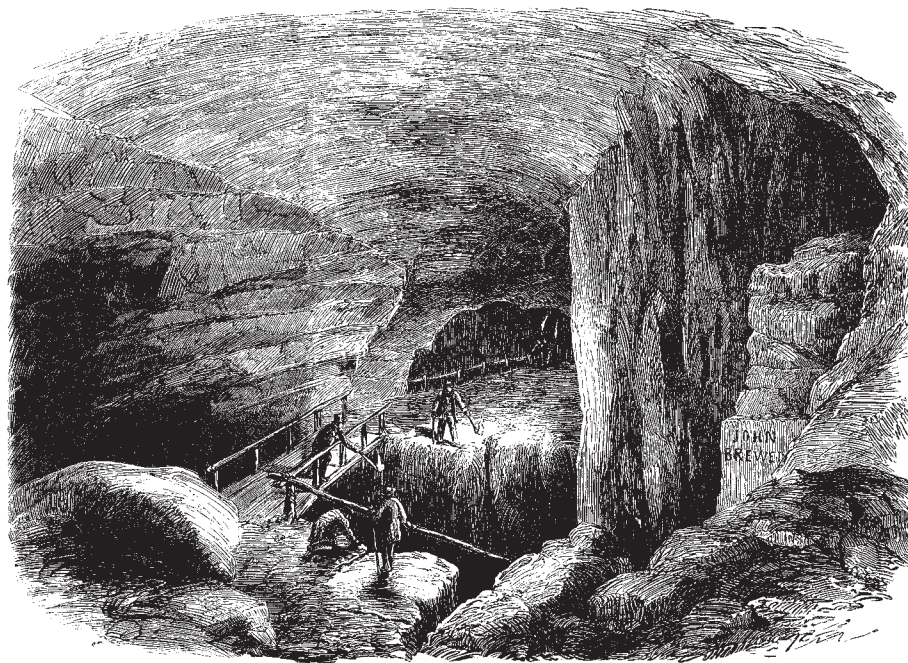
But to our journey. Landing at the other side of Echo River, we pass through a dark filthy region, rendered so by the recent rising of the waters. The rocks over which we progressed were all coated with dark mud; it covered the jagged side walls, the ledges, and holes, all seemed mud in intermediate progress toward becoming rock. Silliman's long Avenue, over a mile in length (and so called after the Professor of that name)⁷⁴ follows Clay's Cave, in which are the Rivers. 'Twas at first monotonous and filthy. A cascade dimly seen to the right, rushing down with angry roar indicated Cascade Hall, Wellington's Gallery and the Infernal Regions follow. And about here, on huge mud covered slabs of rock, chaotically piled on every side, we ate a hearty dinner, picking chicken-limbs with great content and demolishing cold lies.

With lightened spirits and heavier stomachs, onwards we then sped. Through, or by, Stephens Galleries; noticing the Valley way, a winding side cut turning off to the

right, and again joining the Gallery, to Ole Bull's Concert Hall, where that ingenious Norwegian did, it is said, once draw forth inspiring strains from his inspired cat-gut.⁷⁵ On the left we spy a great rock-mass fancifully shaped like to the stern of a vessel, the Great Western, as 'tis called.⁷⁶ Another, adjacent, though smaller, whimsically like a Sitting Rabbit. Hereabouts ends Sillimans Avenue, and the Pass of El Ghor commences. In part of this the path serpentine beside a wildly piles mass of titanic fragments of rock which have fallen from above, a Stonehenge thrown down about the ears of the Troglodytes. One place you stoop under with a shudder, a monstrous slab called The Hanging Rock, sustained only by two points. Anon an Ugly Hole is espied, named after the fatal one of Calcutta,⁷⁷ but 13 feet deep, though sombre enough in appearance to be 30. To the right too, is a rock imitation of a gigantic Kings crown, the rock mimicry of the ornaments of the golden rigol⁷⁸ being very curious. And now, we've been doing an hours walking, we reach Hebe's Spring, strongly, and to my thinking, nastily impregnated with sulphur.⁷⁹ Nevertheless being thirsty we drank of it, some copiously. I must not forget to mention that the snow white crystalized gypsum in the ceilings of some of these caverns give them a pretty fanciful appearance. Hebe's Spring, to all appearance finishes the Cavern.

But what of this steep ladder which we have just, with difficulty passed (for the way is here horribly narrow) in getting to the Spring? Why, up it, you have to go for 20 feet or so, to new subterranean worlds beyond. And up it, not without hard squeezing you mount, the jagged rocks pressing on you all around, till you scramble into Martha's Vineyard. Here the roof incrustations mimic clustering bundles of grapes, carbonate of lime and sulphur drippings being the materials of this geologic Bacchanal domain. Olindo [sic: Elindo] Avenue is next, including Washington's Hall, a spacious and beautiful cavern; its roof all gemmed with gypsum concretions, rosette shaped, laminated, or curled into flower bosses, and other curiously exquisite geologic prettinesses, which can be and are much damaged by the paws of curiosity gapers. The floor of this cavern is rough, and rock strewn, and as visitors generally dine here there are plenty of deposits of mildewed ham, bread and chicken bones. Also a foolish pile of stones with dampened fragments of papers and silly names of sillier nobodies writ upon them.

There is an avenue here, branching off to the right, leading to a grotto called Marian's cabinet, with pretty roof incrustations, and a side cut, hight The Lover's Retreat, leading to Paradise. This amorously named avenue is a tortuous winding one,



THE MAELSTROM, IN THE MAMMOTH CAVE, KENTUCKY

The Maelstrom. Illustration by John Brewer for "The Mammoth Cave of Kentucky," *The Illustrated London News*, 34(March 5, 1859), 221. A.I. George collection.

about three or four feet high, and people have to progress tripodically, lamp being carried in fore paw. This avenue is 1-1/2 miles in length. But pursuing the regular line of march, from Washington's Hall, through the Snow ball rooms, the whole low ceiling of which is covered by gypsum incrustations like to damaged snow balls. Mary's Bower and Virginia's Festoon follow, also a deep cross fissure in the nipple-studded Mammillary Ceiling. The last Rose of Summer is another sentimentally named prettiness. A short avenue turns off here to the right leading to the Grotto of Egeria. But we now enter Cleveland's Cabinet, which includes, I think, the two miles to the end of the cave. A wide avenue, not very high, its ceilings all curious with carbonate and sulphate of lime mimics; Acanthus leaves, roses, lilies, leaves, shrubs and I wot not what else. Diamond Grotto is studded with bright sparkling points, which wink and glisten in the lamp glare, rarely; Saint Cecilia's grotto with curious crystallizations, some containing Epsom Salts. Charlotte's Grotto (so named by Stephen in honor of his wife) is also beautifully fantastic.⁸⁰ All these names I may have not given in their proper order - 'tis difficult to do so, even for those who know the Cave thoroughly.

These grotto avenues past, you issue forth on a savage mass of loosely piled rocks, hight the Rocky Mountains. The bluish glare of a Bengal light shows a vast cavern, the remembrance of which might make a Nightmare more horrible. To the right and left, and straight before you, it stretches off into blackness, colossal, jagged and hideously

rent and distorted rocks around; a mount of sharp edged, angular, wickedly-shaped stones a hundred feet in height to be first ascended, then descended, for the Rock Mountains run sheer across the avenue. An ugly bit of travelling, where I got about my twentieth fall. Upwards from the Dismal Hollow we climbed, and pursued our way up the avenue straight ahead. Ten minutes or less brought us to where a very hazardous descent down dank rocks on our left conducted us to Serena's dome or arbour, a very well of place with beautiful stalactites and stalagmites, surround a little Spring, hight Medora's. Like unclarified ice, of a yellowish color, sometimes solid, sometimes hollow, they drip, depend and rise, stone impregnated water drops hanging from their solid icicle-like points. Their beauty is however much marred by the dank yellowish mud coating covering them. Standing in this pit like spot, shut in as it were, for the ascent is high and almost steep as a wall, and knowing 'tis the End of the Mammoth Cave is a sensation in its way, something to be remembered.

Back returning to Dismal Hollow we now go to the left avenue, Croghan's Hall,⁸¹ a huge one in dimensions, with more stalagmites and stalactites, a screen of them barring all progress further. There is a hideous pit here, to the right, perhaps the deepest throughout the whole range of caves, and into its black abysses a sooty cascade rushes roaring down unseen from the roof behind.⁸² Ugh! to listen there to its sullen continuous plunge downwards. Back we turned, leaving the right avenue

unexplored (it presents but a range of Rocky Mountains) and by 7 or so we saw the stars and heaven's vault again. Two and twenty miles cave walking, creeping, climbing and crawling had we done. I was wet to my knees, somewhat cut and bruised, my sturdy boots torn irrecoverably, not very tired, but satisfied with the Underground World.

4. Wednesday. Passed indoors, in my room, for the most part, writing. At evening by the cheery wood fire below, with Kellam and his friends. They, having made another Cave visit today, start for Louisiana on the morrow, and Kellam again renewing an invitation he had before made, that I should accompany them it was cordially seconded by the other two. [Transcript ends]

Thomas Butler Gunn and his new friends, Oliver Kellam, Keene Richards and Morris Keene, rode southwest after leaving Mammoth Cave on October 5, passing through Tennessee and Alabama during the next two weeks and crossing into the state of Mississippi on October 19. Gunn recorded long, hot, dusty miles on the road with but rough accommodations at day's end, usually putting up for the night in the ramshackle home of some rural dweller. They crossed the state in nine days, through vast cotton fields and swamps, and finally reached the east bank of the Mississippi River on the evening of October 28. Locating a boat and willing boatmen, the three young men and their horses were ferried across to the Louisiana side, debarking on the lands of Transylvania Plantation owned by Richard's grandfather.

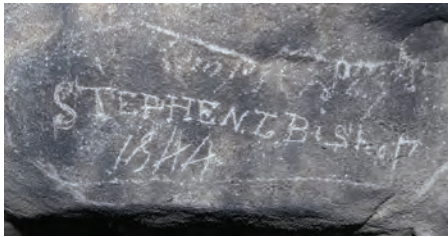
Gunn stayed at Transylvania for two weeks, exploring this and neighboring plantations in company with his friends, on October 31 recording that the "free and easy ways, and pleasant people will not easily pass from my memory." Yet here Gunn was confronted with the reality of slavery in the Deep South, and found it profoundly disturbing. As an English visitor whose American travels had, to this point, been confined mainly to the northern section, Gunn's views on the slavery issue, like many educated Englishmen and Northerners of his class, had largely been ambivalent. His perception of the inherent mental inferiority of blacks had tainted his view of the cave guide Stephen Bishop to the point where he had been unwilling to accept that Stephen possessed, not just intimate knowledge of the cave environment, but an education that allowed him to discourse knowledgeably upon the geology of the cave and to select quotations from Greek and Roman classics that were appropriate to the circumstances.⁸³

Gunn, after being confined to bed with a fever for a week's time, digesting all that he had seen of plantation life, finally departed up the Mississippi River by steamboat on November 12. In the years ahead,

his personal views on slavery, as expressed in a multitude of diary entries, hardened into revulsion against the institution. One would like to think that, perhaps, exposure to not only the unpleasant realities of slavery in Louisiana, but the time spent in the company of an obviously intelligent black man such as Stephen Bishop, may have been pivotal moments in this evolution.⁸⁴

Acknowledgment

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Stephen Bishop's signature in Pensacola Avenue, dated 1844

Notes

- 1 Ed Klausner, "President's Column," *CRF Newsletter* (Cave Research Foundation) 46(February 2018), 2; Harold Meloy, "Introduction to the Reprint Edition," [Alexander C. Bullitt], *Rambles in the Mammoth Cave During the Year 1844 by a Visitor*, (New York: Johnson Reprint, 1973 [1845]), xi; Angelo I. George, *Mammoth Cave Saltpeter Works* (Louisville: H.M.I. Press, 2005), 8.
- 2 Samuel W. Thomas, Eugene H. Conner, and Harold Meloy, "A History of Mammoth Cave, Emphasizing Tourist Development and Medical Experimentation Under Dr. John Croghan," *Register of the Kentucky Historical Society*, 68 (October, 1970), 323; Angelo I. George, *Mammoth Cave Saltpeter Works* (Louisville: H.M.I. Press, 2005), 1-105; Gary A. O'Dell, "Saltpeter Manufacturing and Marketing and its Relation to the Gunpowder Industry in Kentucky During the Nineteenth Century," In *Historical Archaeology in Kentucky*, ed. Kim A. McBride, W. Stephen McBride and David Pollack, 67-105 (Frankfort: Kentucky Heritage Council, 1996), 89-94; Gary A. O'Dell and Angelo I. George, "Rock Shelter Niter Mines of Eastern Kentucky," *Historical Archaeology* 48 (2, 2015): 91-121.
- 3 Anonymous, "The Subterranean Voyage or the Mammoth Cave Partially Explored," Richmond (VA) *Enquirer*, April 20, 1810; Nahum Ward, "Wonders of Nature," *Lexington Kentucky Gazette*, September 9, 1816; Frederick Ridgely, Unpublished letter and "Eye-Draught Map of Mammoth Cave" to Dr. Benjamin Rush, dated March 15, 1811. Library, American Philosophical Society; Burton Faust, *Saltpetre Mining in Mammoth Cave, Ky.* (Louisville: Filson Club, 1967), 34; Edmund F. Lee, *Notes on the Mammoth Cave, to Accompany a Map* (Cincinnati, 1835), 28; Harold Meloy, "Introduction to the Reprint Edition," [Alexander C. Bullitt], *Rambles in the Mammoth Cave During the Year 1844 by a Visitor*, (New York: Johnson Reprint, 1973 [1845]), xii; L. [Leo] T. [Tymann], 1838, "Mammoth Cave, Nov. 3d, 1838," *Frankfort (KY) Commonwealth*, November 21, 1838. Leo Tymann was an educator operating Leo Tymann's Public Seminary in Frankfort, Kentucky.
- 4 Meloy, "Introduction," xxii; Forwood, *Narrative of the Mammoth Cave*, 26; Maria Child, "Mammoth Cave," *Bentley's Miscellany*, 14: 419; Taylor, *At Home and Abroad*, 206; .
- 5 Meloy, "Introduction," xii; Joy M. Lyons, *Making Their Mark, the Signature of Slavery at Mammoth Cave*, (Fort Washington, PA: Eastern National, 2006), 44, 49; Harold Meloy, "Outline of Mammoth Cave History," *Journal of Spelean History*, 13 (January-June, 1979), 28; David Bieri, "Some of the Lesser-Known Guides of Mammoth Cave." MACA 27490, Mammoth Cave National Park.
- 6 Gunn *Diaries*, Vol. 6, 46. The diaries of Thomas Butler Gunn are archived at the Missouri History Museum in St. Louis, and are available online in their entirety through a link to LeHigh University (Bethlehem, PA) <https://pfaffs.web.lehigh.edu/node/60175>.
- 7 Gunn *Diaries*, Vol. 6, 60, 110. Gunn's accounts of the Great Lakes region, "Lake Superior Letters," was serialized in the *New York Times* on September 3, 14, and October 15, 1853.
- 8 Gunn *Diaries*, Vol. 6, 127. The Galt House was the premier lodging in Louisville, Kentucky. This was the first of four hotels by the same name. It was built about 1835 and destroyed by fire on January 11, 1865.
- 9 John F. Sears, *Sacred Places: American Tourist Attractions in the Nineteenth Century* (Amherst: University of Massachusetts Press, 1998), 3-11; Richard H. Gassan, *The Birth of American Tourism: New York, the Hudson Valley, and American Culture, 1790-1830* (Amherst: University of Massachusetts Press, 2008), 2-6.
- 10 Sears, *Sacred Places*, 72; Taylor, *At Home and Abroad*, 224; Horace C. Hovey, *Guide Book to the Mammoth Cave of Kentucky* (Cincinnati, 1884), 15; "Frequently Asked Questions," Mammoth Cave National Park website, <https://www.nps.gov/macafaqs.htm>, accessed July 28, 2016.
- 11 Gunn *Diaries*, Volume 6, 127-156. The text has been reformatted to include paragraph breaks to improve readability, and a minor amount of irrelevant material removed. Bell's Tavern was once a famous hotel landmark and important stage stop along the Natchez Trace between Louisville, Kentucky, and Nashville, Tennessee. William Bell operated the establishment from about 1820 until the summer of 1860 when a fire destroyed the structure. The hotel and stage stop "had no superior, and was universally known in America and Europe." The building was located immediately west of present-day Park City, and was situated about eight miles from Mammoth Cave. The hotel provided exceptional food and beverages, lodging, cave guides, and horses or a stage to the great cave. Franklin Gorin, *The Times of Long Ago, Barren County, Kentucky* (Louisville: John P. Morton, 1929), 63.
- 12 The Cave House was later called the Mammoth Cave Hotel.
- 13 John Croghan, M.D. (1790-1849) was a long-time resident of Louisville, Kentucky. Born into wealth, he made an additional fortune in the salt brine industry. His uncle was George Rogers Clark, founder of Louisville. He never married, and when he died in 1849, Mammoth Cave was willed to his nieces and nephews.
- 14 William Scott Miller, Sr. (1815-1899) was manager of the hotel and cave from 1850 to 1856, and then from 1875 to 1881. He was the grandson of Archibald Miller, Sr. (1785-1842), who was manager of the saltpeter works from 1811-1812.
- 15 In 1842, William Scott Miller married Elizabeth Taylor Coats (1825-1881), daughter of George Coats (1799-1867). Reference here is probably to Elizabeth's brother John, who lived with the Millers at about this time.
- 16 Oliver Kellam, heir to Pecan Grove Plantation in East Carroll Parish, Louisiana, of whom more is later said.
- 17 Part of the Mammoth Cave exploring experience was to dress for the occasion. Management provided a cave costume in the form of old clothing, large enough to slip over every day wear. The cave costume provided warmth in the cool cave environment and protection for the wearer's own garments. Visitors traversed many kinds of passages, from dusty trails with soot-covered rocks and walls, to passages that were muddy and wet. Women were issued bloomers.
- 18 French artist Paul Gavarni (1804-1866), known for sketches portraying the various classes of French society.
- 19 Alexandre Dumas (1802-1870), one of the most widely read French authors of the era whose novels include the *Count of Monte Cristo* and *The Three Musketeers*.
- 20 Gunn is in error here; Stephen and Alfred were not emancipated until 1856.
- 21 The two room log hut was located about 100 yards from the sinkhole or present-day "Historic Entrance" of Mammoth Cave on the hill overlooking the valley. The structure was built during the saltpeter mining era for the head overseer and agent Archibald Miller, Sr. and his family. Adjacent to the entrance was a one-story frame structure that was also referred to as the "Cave House." During the time of Gunn's visit, the structure was used to store lamps, fuel, and cave costumes. The abode was built by John Croghan for his cave manager Archibald Miller, Jr., (father of William Scott Miller) and his family and used as a residence 1842-1845. Cold air blowing out of

- the entrance provided natural air conditioning. The structure burnt to the ground sometime after Gunn's 1853 visit.
- 22 Fleming Gatewood, Sr. (1766-1838), a salt producer from Louisville, and the Lexington merchant and banker Charles Wilkins (1763-1827) purchased Mammoth Cave in 1810 to manufacture saltpeter. In 1812, Philadelphia merchant Hyman Gratz (1776-1857) bought out Gatewood's interest in the cave.
- 23 The Narrows once was lined with dry stone laid walls all the way to the Rotunda, the first large room in the cave. Rocks collected from the floor of the cave were used to construct these walls during the saltpeter mining era. After 1870 this place was called Houtchins' Narrows, named for a pioneer-era hunter who allegedly discovered the cave while chasing a wounded bear into the cave. The story was first told in 1870 by Franklin Gorin to W. Stump Forwood and appeared in his book on Mammoth Cave. Prior to this, there was no mention of the bear-discovery story, even during Gorin's ownership of the cave. Stephen Bishop most certainly would have enjoyed telling this exciting story; we can only conclude that it is a tall tale with no relevance with actual events. Forwood, *Narrative of the Mammoth Cave*, 24; Harold Meloy and William R. Halliday, "A New Concept of the Initial History of Mammoth Cave, 1798-1812," *Journal of Spelean History*, 1(October-December, 1968), 109.
- 24 From the saltpeter era down to the present, there has always been a passage door in the back of the cave entrance area. Installation of the cave door was prompted by one of the earliest environmental laws (1798) in Kentucky; see C. S. Morehead and Mason Brown, *A Digest of the Statute Laws of Kentucky* (Frankfort, 1834), 1414. The law required fencing of saltpeter processing operations to bar the entry of livestock, since waste products from saltpeter processing were toxic to animals if ingested, even if the site had long been abandoned. The door also served to restrain the population of slave workers in the cave, and today controls the flow of people in and out of the cave, primarily for security and bat conservation.
- 25 The Rotunda is the first large room in the cave and the site of the First Hoppers, although Gunn did not mention the saltpeter mining artifacts here in the account of his trip underground. Obviously it slipped his mind, because when he is shown the Second Hoppers further down Main Cave, he reports "more hoppers." The hoppers were giant wooden vats filled with cave dirt from which the valuable nitrates were leached with water. The liquid drippings from the vats containing dissolved nitrates were sent to the surface through a pipeline using hand pumps. The liquid was there boiled in iron kettles to concentrate the solution of calcium nitrate. The concentrate was then poured through a vat of wood ashes, during which operation a chemical reaction occurs that exchanges the calcium for potassium in the wood ashes, yielding potassium nitrate (also called saltpeter).
- 26 Here Gunn is expressing an unconscious bigotry, assuming that a black man could not possibly have knowledge of classical literature. A "Bengal light" is a pyrotechnic flare that burns with a bright, steady light, formerly used mainly for signaling and illumination. The flares were made from potassium nitrate and sulfur with various combinations of powdered aluminum or magnesium, iron or steel filings, and chemical additives such as antimony, barium or copper, the latter of which imparted a blue or green hue to the light. Statements elsewhere in Gunn's narrative indicate that the flares used at Mammoth produced a brilliant blue light. First used in 1818, by the time of the Civil War most Bengal lights were manufactured without the addition of coloring chemicals to produce a bright white light. Torches, known as "Bengal candles," were made by coating the end of a wire with the substance. The use of the term "Bengal" in the name comes from the Bengal region of India, which was a primary source for potassium nitrate.
- 27 Audubon's Avenue is named for the ornithologist, naturalist and painter John James Audubon (1785-1851).
- 28 The "200 foot" deep Crevice Pit in the Little Bat Room connects into the top of Mammoth Dome. Edmund F. Lee erroneously determined the depth to be 280 feet. Lee, *Notes on the Map of Mammoth Cave*, 17.
- 29 The Main Cave stretches from the Historic Entrance for 2-1/4 miles and ends in Symme's Pit.
- 30 The Kentucky Cliffs are named for a perceived resemblance to the picturesque Palisades along the Kentucky River south of Lexington.
- 31 The "Church" is generally referred to as the Methodist Church today.
- 32 The Second Hoppers are located beyond the Methodist Church and up a steep incline. Gunn's comment of "more hoppers" suggests that Stephen mentioned the saltpeter factory here rather than in the Rotunda. Today this room is called Booth's Amphitheatre and is named for the stage actor and orator Edwin Booth (brother of John Wilkes Booth, assassin of President Abraham Lincoln). In 1876, Edwin Booth gave a soliloquy from Hamlet from a prominence in Gothic Avenue overlooking the Second Hoppers.
- 33 Gothic Galleries is a sediment-filled passage. To the right is a wooden staircase into Gothic Avenue, an upper level passage whose continuance is high above the Second Hoppers.
- 34 Pertaining to dancing.
- 35 Willie's Spring is also called Wandering Willie's Spring. "Willie," whose true identity is unknown, walked from Cincinnati with his violin and spent the night in the cave by the spring during the autumn of 1838; see Robert Davidson, *An Excursion to the Mammoth Cave, and the Barrrens of Kentucky* (Louisville, 1840), 65; Bullitt, *Rambles in the Mammoth Cave*, 43-44. Son of a minister, he borrowed the name Wandering Willie, a blind fiddler featured in the 1824 Sir Walter Scott novel, *Redgauntlet*. Meloy thought his father could be the Reverend Robert Richardson of Cincinnati; Harold Meloy, "Riddles of Mammoth Cave," *Journal of Spelean History*, 4 (April-June, 1971), 31.
- 36 Giant's Coffin is a huge slab of fallen rock (breakdown) resembling a coffin. Gunn waxes poetically here, in observing that the rock reminds him of the coffin for Polyphemus, the cyclops of Greek mythology. The giant lived on the Island of the Cyclops (Sicily), and figures prominently in Homer's *Odyssey*. Galatea was the object of Polyphemus' affection in Ovid's *Metamorphosis*. Prior to the time of Stephen Bishop, this feature was called the Steamboat; Lee, *Notes on the Map of Mammoth Cave*, 20.
- 37 Wooden Bowls or the Wooden Bowl Room was named for a prehistoric native American wooden bowl found by a saltpeter miner; Bullitt, *Rambles in the Mammoth Cave*, 60.
- 38 Bullitt (*Rambles in the Mammoth Cave*, 60) was mystified as to what was meant by Steeps of Time. Forwood (*Narrative of the Mammoth Cave*, 66) clarified the name as Steps in Time, referring to a flight of stone steps.
- 39 Deserted Chambers earned its designation through an atmosphere of abandonment and gloomy character; Forwood, *Narrative of the Mammoth Cave*, 64.
- 40 Native American moccasin prints were found near a small rock basin known as Richardson's Spring.
- 41 Gorin's Dome is named for Franklin Gorin, one of the past owners of Mammoth Cave (1838-1839). The feature was discovered by Stephen Bishop in 1838 while searching for Charles F. Harvey (Gorin's nephew) who was lost in the cave for thirty-nine hours.
- 42 Shelby's Dome is located over the Bottomless Pit, and is named for the first governor of Kentucky, Isaac Shelby (1750-1826).
- 43 Use of ladders to surmount challenging obstacles was a common mountaineering practice in Bishop's era and remains so today. Gunn's reference to a "Georgian gentleman" is a misinterpretation; Bishop's companion in exploring beyond the Bottomless Pit was Hiram C. Stevenson of Georgetown, Kentucky.
- 44 Scotchman's Trap was named by George Donaldson, a native of Scotland then residing in Indiana, who visited Mammoth Cave in 1850. In his diary he noted, "When visiting the cave along with a slave called Stephen, as my guide, I christened this place the Scotchman's Trap, which it has ever since remained." Bessie L. Hufford, "George Donaldson, Whose Farm is Now an Indiana Park, was a Mysterious Man," *Indianapolis Sunday Star*, June 16, 1929.

- 45 Mammoth Dome is the largest and highest void in the cave. Bishop and an unidentified German visitor crawled through a hole to a drop-off ledge partway up the dome sometime in November 1840. The following month Stephen and Mat brought four or five tourists and a quantity of rope to the drop-off point, and Mat and Stephen were lowered to the floor of the dome. The ceiling was estimated to be 400 feet high; the actual height is about 192 feet. Meloy, "Introduction," xviii; Bullitt, *Rambles in the Mammoth Cave*, 74; Palmer, *Geological Guide to Mammoth Cave*, 161.
- 46 Erebus in Greek mythology is a place located between Earth and Hades and is the essence of darkness. This is the region of the underworld the recently dead must pass through in their afterlife.
- 47 Refers to the drawing "Otus and Ephialtis Holding Mars Captive" created by British artist and sculptor John Flaxman (1755-1826) and first published as one of the illustrations for *The Iliad of Homer Engraved by Thomas Piroli from the Compositions of John Flaxman, Sculptor* (Rome, 1793), which were subsequently republished in numerous editions and forms.
- 48 The River Styx in Mammoth is named for the river in Greek mythology that forms the boundary between Earth and the Underworld.
- 49 Lake Lethe derives its name from Lethe, in Greek mythology one of the five rivers that flow to Hades. The mythological river flowed through the Cave of Hypnos and through the Underworld, where all who drank from its waters experienced complete loss of memory.
- 50 Bishop's 1845 "Map of Mammoth Cave" indicates Echo River, a major underground stream of the cave, ends in a lake. No one at the time knew where the water went. They were, however, aware that Echo River would rise and fall with the level of Green River outside the cave. John Locke, a geologist from Cincinnati, conducted barometric measurements in Mammoth Cave and was able to determine that the level of Echo River was at the same elevation as Green River; see Benjamin B. Silliman, Jr., "On the Mammoth Cave of Kentucky," *American Journal of Science and Arts*, 2nd Series 11 (May 1851), 333-334.
- 51 Today the two remaining stone buildings are called the T. B. Huts. Since ancient times, the disease tuberculosis had been a scourge for which no known cure existed. During the period 1842-1843 the owner of Mammoth Cave, John Croghan, M. D., conducted an unsuccessful experiment trying to cure terminally ill patients by housing them inside the cave, believing that the cave environment would be beneficial. Croghan was himself infected with tuberculosis and died of the malady in 1849. A cure for the disease was not discovered until shortly after World War Two, but tuberculosis is today making a comeback due to antibiotic-resistant strains of the bacterium.
- 52 Stephen often sang spirituals and popular tunes while rowing visitors along Echo River. His voice was described by Carlton H. Rogers as "rich and musical." Rogers, *Incidents of Travel in the Southern States and Cuba* (New York, 1862), 306-307.
- 53 There are several places along the river passage where the ceiling level drops to within three feet of the water surface. Rainstorms and flooding of the Green River often raised the water level, closing the passage underwater. One did not want to be on the other side when this happened! Upon returning from the deeper regions of the cave, guides would encourage their charges to keep up the pace, stay together and hasten through Echo River, for it just might close off during an unexpected rainstorm, stranding everyone. Such an occurrence almost happened to a party of four on July 4, 1842 or 1843; K., "Correspondence. Mammoth Cave -- No. 2," *The Cincinnati Miscellany or Antiquities of the West*, vol. 2 (Cincinnati, 1846), 45.
- 54 Gothic Avenue is a high-level passage studied with speleothems, reminiscent of Gothic architecture in Europe. The passage was also called the Haunted Chambers, a designation dating back to the saltpeter mining era. Miners had to traverse this passage to reach a lower level that was rich in saltpeter deposits. The superstitious miners believed the Haunted Chambers harbored ghosts and demons, a feeling reinforced when two prehistoric native American Indian mummies from neighboring Short Cave were temporarily stored in this chamber at a place called the Mummy's Seat.
- 55 No Indian mummies were ever actually found in Gothic Avenue, a place completely covered by thick layers of flowstone, stalactites, stalagmites and columns. The reference is to a mummy later called Fawn Hoof, discovered by miners at nearby Short Cave in 1811. Interred in the floor with a large amount of grave goods, she wore an exotic feathered cape, and the whole body was wrapped in several layers of cloth, similar to burlap.
- 56 Garmenture: clothing, dress
- 57 Wot: to know (from "to wit")
- 58 Wilkins' or Devil's Armchair is formed by a stalactite and stalagmite joined as a column in such a way as to resemble a rather claustrophobic chair. It was named for Charles Wilkins, one of the early owners of the cave during the saltpeter era. In time, Wilkins' name was forgotten and the feature became known as the Devil's Armchair, perhaps a more suitable appellation in a place sometimes known as the Haunted Chambers. Much later the feature was renamed Jenny Lind's Armchair honoring the 1851 visit of the opera singer popularly known as the Swedish Nightingale. The formation is one of the iconic features in Gothic Avenue.
- 59 Gunn is here disparaging the sentimental poem, "The Old Arm-Chair," by the English poet Eliza Cook (1818-1889), first published in 1838 in her volume, *Melania and Other Poems* (London, 1838), 57. Cook also edited a publication which in 1849 contained an account of the cave referring to the feature as "his Satanic Majesty's Armchair": Anon., "The Great Mammoth Cave of Kentucky," *Eliza Cook's Journal* 32 (December 8, 1849), 88.
- 60 At the end of Gothic Avenue is a small drip water rock basin called Lake Purity. Cave guides would catch eyeless fish from Echo River and release them into this basin. After Stephen Bishop crossed the Bottomless Pit on October 20, 1838, a subsequent exploration found a deeply pooled stream initially called the River Jordan, renamed Echo River on the map of Mammoth Cave Bishop drew in 1841-1842. Eyeless albino fish, phantasmal in appearance, were discovered in the river (Davidson, *Excursion to the Mammoth Cave*, 54). In 1842 James E. DeKay provided the first scientific description of the blind fish, *Amblyopsis spelaea*, from Mammoth Cave, in his *Zoology of New York, Part IV, Fishes* (Albany, 1842), 187. The earliest reference to this stream was made by Tymann (1838), who reported that "all believe that there is more water in it than there is in Green River."
- 61 At the time, when the passage was first discovered, the profuse gypsum incrustations on the floor in Pensico Avenue had not yet been trampled down by visitation. Walking on the surface was similar to walking over a thin layer of ice-covered snow.
- 62 In 1838, Charles F. Harvey was lost for thirty-nine hours, not forty-eight.
- 63 There are several conflicting accounts about the boating accident on Green River, the differences most likely attributable to embellishments and errors of memory with the passage of time. Gunn's account contradicts reports made shortly after the incident. Based on contemporary accounts, in the spring of 1844 a wedding party of four entered the cave guided by Stephen Bishop, not by Nicholas. They were conducted into the lowest level of the cave where the River Jordan (later, Echo River) had to be traversed by boat. During their journey the boat capsized, throwing everybody overboard, where they had to try to remain afloat, up to their chins in the cold water of the stream. Stephen calmed the panicked tourists, and led them to dry ground, where they waited, shivering in the darkness. When they failed to return, a search party was sent out. Mat, the guide leading the rescue party, located the missing tourists when he heard Stephen "cheering them, and directing his movements while swimming, by the sound of their voices, which were raised, one and all, in prayer and supplication for deliverance." Everyone was returned safely. Anon., "An Awful Situation." *The Christian Citizen* (Worcester, MA), September 7, 1844; P. Er. Simmon [i.e., "Persimmon," a pseudonym] "The Mammoth Cave of Kentucky." *Boston Weekly Messenger*, September 18, 1844.
- 64 White's Cave is a small grotto on the Mammoth Cave estate, located less than half a mile from the Cave Hotel. The cave is heavily adorned with cave formations, and

self-guided and guided tours were offered. Travelogues report the cave was often visited during evening hours after supper.

- 65 See "The Legend of Merry the Miner" in *Peter the Pilgrim: A Rambler's Recollections*, vol. 1 (Philadelphia 1838), 22-71, by Robert M. Bird (1806-1854). This is a fanciful tale of Mammoth Cave.
- 66 Long Cave (a.k.a. Wright's Cave; Pit Cave; Cave of Death; Saltpetre Cave; Grand Avenue Cave; Long's Cave) is located about four miles south of Mammoth Cave. The cave features an upper-level dry paleotrunck passage reminiscent of a huge railroad tunnel, with gypsum formations and a highly fractured ceiling, but seldom visited according to Gunn. Mined for saltpetre prior to the War of 1812, the cave was visited in 1814 by Alexander Wright, a saltpetre speculator who died while exploring the cave. For a long time thereafter, the cave was called Wright's Cave or the Cave of Death.
- 67 Kellam's two Kentucky friends were Alexander Keene Richards, of Georgetown, and his cousin Morris Keene. Richards had just returned from a horse-buying expedition to the Syrian desert, where he purchased several Arabian horses he intended to breed to Thoroughbreds in an experiment to improve the endurance of race-horses. In later years, Richards would become one of the most prominent Thoroughbred breeders in the nation. Co-author O'Dell is currently engaged in researching and writing a book-length biography of Richards.
- 68 Alfred's wife was named Hannah.
- 69 The story appears in Bird, "The Mammoth Cave," *Peter the Pilgrim*, vol. 2 (Philadelphia, 1838), 95-100.
- 70 When the cave was developed as a commercial attraction called Grand Avenue Cave during the late nineteenth century, this passage was named Lee Avenue, after cave explorer Thomas E. Lee.
- 71 The actual length of Long Cave is about 3-1/2 miles.
- 72 From the poem, "The Diver," by Friedrich Schiller (1759-1805), written in 1797, whose theme is the danger in seeking too much knowledge.
- 73 Held in New York City during 1853, the Crystal Palace Exhibition of the Industry of All Nations was a great success. The nation's industrialists sent exhibits and representatives touting their achievements in the modern world. Mammoth Cave sent examples of blind cave fish and albino crayfish.
- 74 Benjamin Silliman, Jr., (1816-1885), a chemist and naturalist on the faculty of the University of Louisville from 1849-1854 and later at Yale University, who visited Mammoth Cave in October 1850.
- 75 Ole Bornemann Bull (1810-1880) was a

Norwegian violinist and composer, very popular in the United States, who gave an American concert tour in 1845 that included a performance at Mammoth Cave. While visiting the Echo River, Bull experienced a close call when, going through a tight crawlway in advance of his guide, his light was extinguished and, unknowingly, was perched on a ledge above a long drop until rescued by the guide. This event is recounted in Sara C. Bull, *Ole Bull: A Memoir* (Cambridge, 1882), 175-176.

- 76 The Great Western Passage was named for the S.S. Great Western steamship, recognized for its fast speed utilizing steam-driven side-wheel paddles augmented with sails. For a brief period (1838-1839), it was the largest and fastest passenger ship of its kind. It made the run between Bristol, England, and New York City in record time, the Concorde jet of its day.
- 77 Ugly Hole or the Black Hole of Calcutta is a small constricting crevice named for a notorious small dungeon at the British Fort William in Calcutta, India. When the fort was captured by Bengali troops on June 20, 1756, the dungeon was crammed far beyond capacity with British prisoners of war, few of whom survived the ordeal. The term "black hole" became slang for a military prison during the eighteenth century.
- 78 Rigol: a circle or diadem; crown.
- 79 Hebe's Spring in Mammoth Cave contained waters that smelled of sulfur. Named for Hēbē, the Greek goddess of youth, who was the daughter of Zeus and Hera and said to be capable of bestowing eternal youth. The spring is emblematic of the fountain of youth in mythology and the Spanish exploration of Florida.

- 80 Cleveland's Cabinet was discovered in July 1841 by Stephen Bishop and Brice Patton, educator at the Blind Asylum of Louisville, and John Craig of Philadelphia. The passage was named for the noted Bowdoin College (Brunswick, Maine) chemist and mineralogist Parker Cleaveland (1780-1858). Cleveland's Cabinet is a long trunk cave passage festooned with gypsum incrustations in multitudes of shapes and forms, worthy of any museum mineral collection. When first discovered, the place resembled a winter wonderland. Bullitt, *Rambles in Mammoth Cave*, 91-94; Horace C. Hovey, *Guide Book to the Mammoth Cave of Kentucky* (Cincinnati, 1884) 59, 65-66. Gypsum cave formations in the shape of curved flower petals were first described scientifically by John Locke in a letter dated October 26, 1841, after the discovery of Cleveland's Cabinet; see "Alabaster in the Mammoth Cave of Kentucky," *American Journal of Science and Arts* 42 (April 1842), 206-207. In a letter to the Philadelphia Academy of Natural Sciences dated January 23, 1843, Locke gave the name "oulophyllites" to these mineral deposits; see "Written Communications," *Proceedings of the Academy of Natural Sciences of Philadelphia* 1 (January and February, 1843), 244.
- 81 The name commemorated cave owner John Croghan.
- 82 The deep pit is called the Maelstrom, and was first descended by rope in late August, 1858, by William Courtland Prentice, son of George D. Prentice, editor of the *Louisville Journal* and later the *Courier-Journal*.
- 83 Gunn *Dairies*, Volume 6, 182-187.
- 84 *Ibid.*, 187-190.



Canyon passage leading to Echo River. Photo by Dave Bunnell in collaboration with his Photo Class at Mammoth Cave in 2013. Shown in the 2014 Photo Salon.