The Journal of SpeleanHistory

OFFICIAL PUBLICATION OF THE AMERICAN SPELEAN HISTORY ASSOCIATION



THE JOURNAL OF SPELEAN HISTORY

Volume 32, No. 3

July - September 1998

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Front Cover

A group preparing to enter the historic entrance of Mammoth Cave.

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Kraus Reprint Company Route 100 Millwood, New York 10546

Official Quarterly Publication **AMERICAN SPELEAN HISTORY ASSOCIATION**

History Section National Speleological Society

Production

Editor:

Carolyn E. Cronk 1595 Blueberry Hills Rd Monument, CO 80132

Proofreading:

Robert N. Cronk

Printing:

D. C. Grotto Potomac Speleological Club Press

Music in the Mammoth Cave:

An Important Aspect of 19th Century Cave Tourism

by Joseph C. Douglas

In 1810, a Philadelphian, boasting about his nation's affinity for music, stated that "[i]n no country in the world is music more universally extended." While it is difficult to say if he was totally correct, it is certainly true that 19th Century Americans were a musical people. And while cavers today seldom think of music as a regular part of a caving trip, music was an important aspect of the cave experience for 19th Century tourists. Nowhere can this be seen more clearly than in the Mammoth Cave of Kentucky. An examination of travelers' accounts of the Mammoth Cave reveals that music, in many forms, was a component of many, if not most, trips into the cave. This music was sometimes sacred and sometimes popular and profane. It was sometimes spontaneous and informal, while at other times it was planned and formal. Music was made by typical visitors, by the guides, and by professional musicians. For many visitors, music also provided the vocabulary and frame of reference for their perceptions and interpretations of the cave environment. This paper will examine a few aspects of this feature of the 19th Century history of the Mammoth Cave.

Many sounds in the Mammoth Cave, both natural and man-made, were perceived and described as musical by visitors. The unusual reverberations and echoes in the cave were known by 1810, when a gentleman from Bowling Green, Kentucky noted the strange effects of sound in the Haunted Room.² Hyman Gratz's 1814 account of the cave included a reference to a formation called the Bell. The Bell was a stalactite about four feet long, and "a sound is occasioned by striking it with a stone, similar to that produced by striking a cannon of pretty large calibre with a piece of wood."³ The Bell became a standard feature for visitors to the cave in the ensuing years. William Newnham Blane called it the Great Bell in the early 1820s, and he stated that "it gives a hollow reverberating sound, just like the tolling of the large bell of a church."⁴ Robert Montgomery Bird noted it in his mid-1830s account and pointed out that it was one of several bells in the cave. For Bird it resembled the "deep bell of a cathedral, or the gong of a theatre." In 1844 Ebenezer Marriam mentioned the Bell in his account of Mammoth Cave, but in the same year Lydia Maria Child, paraphrasing a friend just returned from Kentucky, pointed out that "[a] pendant mass, called the Bell, has been unfortunately broken, by being struck too powerfully."6

Besides the Bell, other speleothems were perceived in musical terms. In the 1860s, an anonymous author wrote highly of the organ, in the room known as the Church. The organ was "formed of stalagmitic layers of stone curving over, one upon another, to the number of nine or ten. Each is hollow, and has the appearance of an organ-pipe, and each yields a separate tone when struck with the fist or mallet, the tone varying in character with the length and size of the pipe. The series C, D, D sharp, E, F, G, G sharp, comes in successive layers; and by remembering the sounds of the other pipes, which are irregular, one can easily beat out a simple tune."⁷

Elizabeth Fries Ellet, in 1853, wrote of "an immense stalactite, which, when struck, gave a sound like the tolling of a bell, till injured by a sacrilegious visitor, who broke off a piece." This formation was in a small chamber called the Holy Sepulchre. Harry T. Gause, in 1871, wrote of a depending rock near Stella's Dome, called the Chimes, "which,

when struck, emit a very musical sound. We had a little concert here; altogether impromptu, but causing a good deal of merriment."9

In his classic 1879 book *The Sucker's Visit to the Mammoth Cave*, Ralph Seymour Thompson mentioned a formation near Minerva's Dome which resembled "in shape a human ear. When struck it emits a low musical tone. It is called the Sounding Rock." An anonymous author wrote in 1855 of a stone floor near the Register Room called First Echo, "a spot where a stamp of the foot on the floor sounds beneath us like a stroke on a huge bass drum." 11

In addition to the noises from speleothems and rocks, visitors to Mammoth often perceive the sound of water as music. This occurred most frequently in Echo River, which I'll discuss in more detail shortly, but other waters were also described in a similar manner. Bird mentions a waterfall near the Black Chamber in musical terms, saying that "presently we hear the far-off murmur of a waterfall, whose wild pattering sound, like that of a heavy rain, but modified almost to music by the ringing echoes of the cave, grows louder as we approach, and guides us to the end of the Grand Gallery." Richard Ellsworth Call, in an 1887 collaboration with Horace Hovey, described a small stream named Shaler's Brook. He suggested the uniqueness of the particular area by stating that "[t]he incessant song of the little brook makes a music here which is to be heard nowhere else in the cavern." 13

Numerous visitors noted the musical quality of resonating echoes in the cave. Nature writer John Burroughs, writing about his 1886 trip to the Mammoth Cave, stated that "we paused at a certain spot, and the guide asked me to shout or call in a loud voice. I did so without any unusual effect following. Then he spoke in a very deep bass, and instantly the rocks all about and beneath us became like the strings of an Aeolian harp. They became transformed as if by enchantment . . . I tried again . . . then I struck a deeper bass, the chord was hit, and the solid walls seemed to become as thin and frail as a drum-head or as the frame of a violin . . . Such wild, sweet music I had never before heard rocks discourse." 14

Perhaps the most common place in the cave for music was on the rivers. In addition to instrumental and vocal music, many tourists were enthralled by the echoes of rocking boats and splashing paddles. An anonymous author, writing in 1855 about his journey into the cave with the black bondsman and guide Mat Bransford, noted that, while upon the Echo River, "the guide, by a blow upon the boat from his paddle awakes the slumbering echo. It rolls around us, reverberating along the vaults, and dies away in the gloom, like a peal of music uttered in thunder, sinking by soft cadence into primeval silence. Then the paddle is timed to a Negro melody, with an abrupt halt at the end of each verse. Hark! The echo expires with such a perfect resemblance to a bass note from a strong piano, that we may exclaim, surely there is some other instrument than rock and water here." 15

On a trip to the cave in 1866, an English visitor named Walker was unimpressed with the shouting and singing on the Echo River, but he was moved by "a faint, plaintive sound, like the wail of some imprisoned spirit . . . A single drop of water, falling at intervals from the vaulted roof of the cavern into the pool below, is the instrument which elicits this soul-subduing music, which really haunted me for hours afterward." ¹⁶

An 1859 account by the Frenchman Poussielgue said that "[w]e were struck by the sonorousness caused by the successive vibration of a thousand echoes which were produced in the center of the lake." The Reverend Horace Hovey, America's premier speleologist of the late 19th Century, wrote that "the most extraordinary effects are produced when the Echo River is allowed to speak for itself . . . The method is simply by

the guide's agitating the water by rocking the boat and striking the water vigorously with his paddle. The first sound to break the intense stillness is like the tinkling of myriads of tiny silver bells. Then larger and heavier bells take up the harmony as the waves seek out the cavities in the rock wall. Then it is as if all chimes of all cathedrals had conspired to raise a tempest of sweet sounds. These die away to a whisper, followed by mutterings and a noise as if of an angry multitude, mingled with unearthly shrieks." 18

Of course, some visitors found music in even more unusual noises on the rivers. In the 19th century it was customary for tourists, and even guides, to fire pistols while boating on the Echo River. Carlton Rogers, writing about his May 1856 trip into the cave, in which he was guided by the recently freed Stephen Bishop, noted that "our guide fired a pistol, the report of which was deafening. The sound reverberated and echoed from arch to arch, and dome to dome, like continuous thunder. The echo is truly wonderful . . . At first it is remarkably clear and distinct, but changes to a soft and musical cadence as it dies away in the distance." ¹⁹ I'll return to Echo River shortly, as it was a prominent spot for both instrumental and vocal music.

Tourists, guides, and members of the Mammoth Cave hotel band brought a variety of instruments into the cave in order to make music. The acoustic properties of the cave were well-known, and many visitors brought their instruments to play in the unique setting. Guides and hotel band members brought their instruments to entertain the tourists, often for pay. These musicians, whether amateur or world renowned, were an often overlooked part of tours into the Mammoth Cave.

The musicians used many different types of instruments in the cave, some obvious and others dubious. There is even the suggestion by one visitor, Henry Howe, that by 1852 an Aeolian harp was fixed above the wooden door inside the cave. Howe noted that as the air current passed over the harp, it "gives forth wild, mournful notes, in keeping with the solemn grandeur of the cave." Few, if any, other travelers noted this feature of the cave, and perhaps Howe was merely embellishing his tale, based on some comments in Robert Montgomery Bird's account of the cave years earlier. But perhaps there was, briefly, a wind-harp near the entrance, for Howe obviously had actually visited the cave, taken both the long and short tours, and he also mentioned the feature when describing his five person party's exit. 22

Other descriptions of instrumental music in the Mammoth Cave are less problematic. In Mrs. J. T. H. Cross's 1852 account of her visit to the cave, she said that, while crossing Lake Lethe, one of the gentlemen in the party was "making sweet music on his accordion." When the group passed over Echo River, "Stephen [Bishop] sings 'I'm sitting on the stile, Mary,' and again, and again, and again the sweet lament is murmured back from the distant walls and chambers. Then the accordion fills the cave with joyful notes, and happy spirits seem to respond." Then the party tipped the boat and seven of their lamps went overboard, three of which were not recovered. I'll say more about the guide's singing in a moment.

In an undated account of a circa 1870 trip to the Mammoth Cave, an author known only as T. J. M. mentioned another instrument being played on the Echo River. The author related that, "[w]hen they were about half through the journey [across Echo River], one of the young men who had joined the party that morning unboxed an instrument called a zither, and played a few tunes. The sound came back in soft refrains from the rocks, and echoed from the distance, producing a wonderfully pleasing effect."²⁵ No doubt this effect soon vanished, as a member of the party "brought out his pistol and fired it."²⁶

This music was not, perhaps, as singular as it seems, for in *The Sucker's Visit to Mammoth Cave*, Ralph Seymour Thompson described another zither being played on the river. Thompson said "one of the young collegians took from its case a zither and played a few tunes. Music is always sweetest on the water, but here the roof and walls repeated the strain, till it seemed we were surrounded with music."²⁷

People played other instruments in the cave as well. In 1867 an anonymous American visitor related how, when his party was crossing the Echo River, "[a]t a certain point the guide drew from belt a bugle and gave a blast upon it; the effect was beyond that of anything I have ever heard . . . I counted sixteen distinct returns of the full strain of the bugle, and half as many more partial renderings . . . After experimenting on the echoes for some time, we all joined in singing simple tunes, as 'The Canadian Boat Song,' 'Adeste Fideles,' and others." Reverend Horace Hovey also described instrumental music on the Echo River, stating that "[f]lute music awoke delicious reverberations, and the cornet brought out corresponding effects. The tones of a full-chord struck in quick succession brought back a sweeping arpeggio." Of course, the echo was so entrancing that one Kentuckian gave a rebel yell, and "someone fired off a revolver," Hovey also noted that a quiet lady in a black velvet cave costume sang "Sweet Bye and Bye," which was quite pleasing. 1

But the most common non-vocal instrument played in the Mammoth Cave in the 19th Century was not the zither, accordion, flute, or cornet, but the violin, or fiddle. This is not surprising, given the instrument's portability, and its popularity at the time. The violin was a notable part of the cave's folklore and history.

Wandering Willie's Spring, a feature near the water-clock which many tourists visited, was supposedly named for an Ohio man who, according to Thompson, "walked from Cincinnati with his violin to see the cave. He was much pleased with this spot, and asked leave to remain by the spring with his violin all night...he was provided with blankets and left to enjoy himself with his violin in the solitude."³²

An anonymous 1861 article, originally from *Dwight's Journal of Music*, which praised the effect of music in the Mammoth Cave, told of a journey across Echo River in which the author heard enchanting music on the water. "Far off a delicate shade of music . . . becomes clear and defined. Rich harmony, trembling with strange sensuous wildness . . . Now appears to come from one direction, now from another. Never did Syren sing more magic songs to listening traveler . . . Suddenly a turn of the boat brings you opposite a break in the perpendicular rocky shore, and, perched upon a mass of broken rock, you see a party of four Negroes playing upon violins and a cornet."³³ These musicians were, in fact, the barber, bootblack and waiters from the cave hotel.³⁴

The most famous violin performance in the Mammoth Cave was undoubtedly that of Ole Bull (1810 - 1880) in June of 1845, in a large hall later called Ole Bull's Concert Hall. Bull, a world renowned European violinist, gave impromptu performances while touring the cave, heard only by Louisville editor George D. Prentice, his wife, guide Stephen Bishop and perhaps a few others. Prentice wrote, "Ole Bull took his violin into the cave and gave us some of his noblest performances, at the points most remarkable for their wonderful echoes. The music was like no earthly music. It seemed, indeed, superhuman. The whole company were as mute and motionless as statues, and tears, copious and gushing tears, streamed from every eye." Stephen Bishop related his own graphic account of the performance to N. Parker Willis in 1852, and Willis included it in his subsequent travel book. "Ole Bull seemed very excited, and gave Stephen new ideas of the

agility of music."³⁵ And "[t]hose applauded who had the wherewithal. The reverberations were fine."³⁶

The Mammoth Cave Hotel band played in the cave occasionally, in areas like the Church, the Ball-Room, and on the Echo River. When Englishman John Palliser visited Mammoth Cave in the late 1840s or early 1850s, he noted that since it was too hot to dance above-ground during the Kentucky summer, several young ladies "had given a subterranean ball; choosing a very fine cavern, spacious enough, but not too large to admit of its being properly lighted, and having a boarded floor laid down for the occasion." Presumably the music for these balls, which became a regular affair, was provided by the hotel band. Alohn Hayward's 1853 Gazetteer of the U. S. A., when describing the room called the Church, stated simply that [c]oncerts of music have been held here, which have been said to produce singularly fine effects."

One feature of the tourist trip at the Mammoth Cave which may strike late 20th Century cavers as unusual was the practice of hiring musicians, usually from the hotel band, to accompany visitors on their tours of the cave. An anonymous 1861 article, which first appeared in the *Dublin University Magazine*, pointed out that "[l]ate in the summer, when visitors are numerous, and enter the cave in parties of forty and fifty, a band of music occasionally performs on the [Echo R]iver."⁴⁰ The author did not see this himself, and his party had to be content to sing "in chorus, with hearty emphasis, some of our finest melodies."⁴¹

When the German Theodor Kirchhoff visited the cave in 1870, he noted that among his party were "four German musicians with their instruments, who were to play for us in the cave." These were presumably members of the hotel band. The musicians accompanied the party to the edge of Echo River. They then "stayed behind [where we got into the boat], [and] played a soft accord - like a farewell from the beautiful upper world." 43

When Harry T. Gause toured the cave, around the same period, his party stopped, at a word from the guide, and heard "the chorus of many voices swelled up to the ear and blended in exquisite harmony with the instrumental music . . . The music sounded doubly enchanting amid those gloom-enshrouded, everlasting rocks. It was the other party crossing Echo River and singing upon the water. They had taken the Cave Hotel band with them."⁴⁴

As one can discern from some of the quotations given above, the most common form of music in the Mammoth Cave in the 19th Century was vocal, whether by visitors or guides. I examined more than forty references to singing in the cave. Ironically, the most famous legend concerning singing in the cave is fictitious, while the most frequent real singers are known for other reasons, not their vocal prowess. Here I must at least touch upon the legend of Jenny Lind, the singing of the average visitors, and the singing abilities of the guides, noting one in particular.

Jenny Lind, the famous Swedish Nightingale, certainly did tour the Mammoth Cave in early April of 1851, making a special trip there with six companions following a concert in Nashville and prior to her engagement in Louisville. Guided by Stephen Bishop, she was enthralled by the cave and its various sights. Based on this actual visit, legend then has it that she sang on the Echo River, sang while seated in the Armchair, previously known as Wilkin's or the Devil's Armchair but then renamed Jenny Lind's Armchair, and that she stood on a flat rock near Cleaveland's Cabinet and "gave the world a serenade." Of course, none of this is true.

There are two first hand accounts of Jenny Lind's visit to the cave, one of them by a member of her party. She never sang on the Echo River or in Cleaveland's Cabinet, and, in fact, she never even saw those places, as the rivers in the cave were too high to cross. She had to be content to see the "old" attractions, like the Star Chamber. Her friend and traveling companion, Monsieur Benedict, gives many details of her trip, but does not mention her singing at all, though he does note that the party made music. But it was their companion, a Mr. Burke, who made it, startling the party by unexpectedly playing the prayer from Der Freyschutz on his violin while in the Star Chamber. Lind was, in fact, reluctant to sing while touring the cave. This severely disappointed other parties in the cave, which hoped to hear her when they met "by chance." As one observer noted, "[p]resuming that she might be disposed to try her vocal power in this new arena so magnificently fitted up by nature, one of the companies, on meeting her during the exploration, very modestly and flatteringly expressed a desire . . . to be permitted to witness the experiment . . . she replied that it was not her intention to sing." 47

Other professional singers visited the Mammoth Cave and exhibited no reluctance to try their vocal prowess there. For example, the Scottish vocalist John Wilson toured the cave in 1849 and sang in several areas. In the Church he sang "Luther's Hymn", "while those around me stood like statues." His party later "had some songs after dinner." On his second day's trip into the cave he sang "My Boyhood's Home" in the Banquet Hall and Moore's "Oft in the Stilly Night" in Chief City. The latter impressed his guide, Stephen Bishop, who said it made him cry. On their third day's venture, Wilson and his party made music on Echo River, where he sounded the four notes of a chord, which "continued to sound altogether for a very long time." Unfortunately, Wilson lacked a publicist like Lind's (P. T. Barnum) and he died a short time later on his American tour.

Choirs and vocal groups also performed in the cave. Richard Ellsworth Call related one of the few first hand accounts of sacred music during a religious service in the cave. He wrote that "[t]he author was present on one such occasion, when the senior author [Reverend Horace Hovey] conducted such an office. The sounds of sacred song, swelled to a great volume by the ten thousand echoes and reverberations from the cliffs and grottoes surrounding, were indescribably sweet, and all tonic errors were corrected by the greater symphony of the large resonator hall."⁵¹ John Proctor, at one time the State Geologist of Kentucky, wrote in 1898 that "[y]ears ago it was my good fortune to hear a celebrated German musical society sing in this Rotunda. I went far away in one of the great avenues leading from here, and sat alone in the darkness, and listened while the grand anthems rolled and reverberated through the lofty corridors in majestic waves of melody."⁵²

However, most trips into the Mammoth Cave in the 19th Century did not feature famous vocalists, professional singing groups, or sacred music performed by a religious congregation. Rather, the most common music in the cave was that of the typical 19th Century tourist and the cave guides. Accounts of one or, frequently, several, ordinary visitors singing in the cave are numerous. I'll just give a few quick examples, but I think you'll be able to discern that this music had a strong social element. Members of tour parties sang to explore the strange acoustics of the cave, but also to reinforce the identity and coherence of the group.

When Reverend Robert Davidson visited the cave in fall of 1839, several members of his party sang in the Temple; "[s]eated beneath this magnificent vault, the tuneful part of our company waked its echoes with a fine old chant." America's leading man of letters, Ralph Waldo Emerson, wrote that while in the Star Chamber on his June 1850 visit, he "lay here on my back on the ground for a quarter of an hour or more whilst our choir [the tour party] sung 'The stars are in the quiet sky." When they traveled across Echo River,

Emerson noted that "as each party disappeared under the winding vaults which arched the river, our ladies, three of whom were excellent singers and two gentlemen sung well - made a music quite preternaturally good." 55

When Lady Emmeline Stuart Wortley wrote in 1851 of her visit to Echo River, she stated that one American gentleman of questionable reputation accompanied her tour group. "However, [he] did the honors of the cave most admirable. He knew every nook of it, brought out the echoes splendidly, with 'The Arkansas Hunter,' 'Uncle Ned,' 'O! Susanna,' and other far-famed works of the great-masters, finishing with 'Yankee-doodle.'" 56 When a group of Nashvillians toured the cave in August 1874, "[t]he ladies were carried in canoes over 'Echo River.' and when at the bank sung . . . 'Nearer My God to Thee,' in a most plaintive and sweet manner." 57

When Harry Gause saw another party cross Echo River, he wrote that "[t]o highten [sic] the effect of the scene, there suddenly burst from the entire party a grand anthem that rung through the lofty cavern . . . as they floated around a bend in the stream . . . we heard the soft, sweet tones of a lady's voice that came trembling back to us like flute-notes. The climax was reached when, having finished the verse, there swelled up a full chorus that sounded like the distant strain of a muffled spirit choir." ⁵⁸

Singing was an everyday part of life as a cave guide at the Mammoth Cave. Speaking of the rivers, Lydia Maria Child put it simply, "[t]he guide usually sings while crossing... and his voice is reverberated by a choir of sweet echoes." 59 Numerous sources mention the guides singing, even if some of these never specify who the guide was.

In 1880, the German Ernst von Hesse-Hartwegg published an account of his visit to the Mammoth Cave. In that account he wrote that "[o]ur guide took us down in little boats, so skillfully taking us past rock outcroppings so near the water. All the time he kept our attention with a song that echoed through the chambers."

Thomas Kite visited the Mammoth Cave in 1847 and kept a journal of his trip. Speaking about his crossing of Echo River, he wrote "[w]e could hear the singing of the guides some time before we saw them . . . Stephen and Alfred were both with us and to show the appropriateness of its name, they sang in concert, making the most beautiful echo we had ever heard."⁶¹ An 1857 account by Alice Cary in *The National Magazine* noted that "[t]he guide sometimes sings a song as he rows [across Echo River], and the effect of the mournfully recurring echoes is alike curious and beautiful."⁶²

The guides sang several different types of songs, including spiritual and popular. One 1870s account of the cave stated that "[w]e wandered on for several hours, the cheery guide singing psalms in a round musical voice, and turning from time to time to caution us against unexplored by-ways where pitfalls were numerous." Other sources referred to some of the tunes the guides were singing as Negro songs. 64

Often the guides and the tourists sang alternately. Hermann Zagel pointed out that after the guide, Henry Bransford, had given an impressive singing demonstration on the Echo River, he encouraged the tour group to "go ahead and sing a song, as custom demanded it." The group did so, with amusing results. Robert Lucas's account of his 1850 trip indicated that "[o]ur ride across the river was very pleasant. The ladies sung several songs such as farewell is a lonely sound [,] Uncle Ned [, and] Life on the Ocean wave [,] by the guide [, Mathew]." Mathew]."

Although most, if not all, of the post-1830s guides sang, the historical sources mention one in particular as an accomplished singer, Stephen Bishop. Although his biographers have neglected this aspect of Bishop's career at the cave, he had a solid reputation as a singer in his own day. For example, Carlton Rogers wrote that "I was particularly desirous of having Stephen the Charon to ferry us over the [River] Styx, and to hear the tones of his rich barytone [sic] voice."67 When he engaged Stephen Bishop as a guide for the following day, Rogers noted that "I notified Stephen the night before . . . that he must be prepared to do justice to his reputation as a singer, as we should expect him to 'discourse most eloquent music' on the occasion."68 Rogers was not disappointed, as the guide sang popular tunes including "The Canadian Boat Song," "My Old Kentucky Home," and "Oft in the Stilly Night." Stephen then sang "Old Hundred" accompanied by a tourist named Frazer. Rogers wrote that "[i]t was impressive beyond description."⁶⁹ Carlton's published account of his trip simply added to the guide's notoriety, as did the writings of popular travel author Bayard Taylor, who likened Bishop's voice on the Echo River to "an enchanting chorus."⁷⁰ Numerous other visitors commented upon his vocal abilities.⁷¹ Even worldly foreign travelers like Aleksandr Borisovich Lakier and Johann Georg Kohl were impressed, with Lakier stating that "[w]hen we were in the middle of the river Mister Stephen struck up a song that echoed in the caverns and then died away somewhere in distant rumbles. We stopped the boatman and asked him to sing the same thing again, and there was no end to our delight."⁷² Kohl wrote that "Stevens [sic], our black, revealed himself to be not only an extremely informative cave guide . . . but also as a highly accomplished singer. In the middle of the river, he rendered a little song in a remarkably well-modulated voice, whose echoes the rock walls returned in magically transformed tones."⁷³ For a final comment on Stephen Bishop the musician, it can be pointed out that the professional singer John Wilson stated that "a merry fellow is Stephen, and [he] has a good voice."⁷⁴ Music was yet another area of expertise for Stephen Bishop, in addition to his skills as an explorer, guide, and amateur geologist.

In conclusion, music was an important part of American culture, and when 19th century Americans ventured underground, they took their music, in all its rich variety, with them. Visiting the Mammoth Cave was not just a visual journey, but a sensual experience in which music helped tourists interpret, explore, and enjoy various aspects of the cave environment, including the social character of the tour itself. Guides used music to facilitate the tourist's exploration and enjoyment of the underground space. An examination of other caves popular in the 19th century would reveal music in those places as well. And to some extent the legacy of music in caves lives on, in the music cavers sometimes make on an ordinary trip, and in the sound and light shows in our contemporary show caves. When you next hear music in a cave, you'll be experiencing a living art, but one which has a rich historical tradition.

ACKNOWLEDGMENTS

The University of Houston Library Interlibrary Loan Department was instrumental in helping me assemble my Mammoth Cave files. Thanks are also due to the twenty-four institutions which loaned material to me. There include the University of Houston, Rich University, Texas A&M University, Houston Public Library, University of Houston - Clear Lake, Southern Methodist University, Baylor University, Texas Women's College, Texas Wesleyan University, East Texas State University, Duke University, Kansas State University, University of Oklahoma, Eastern Kentucky University, University of Kentucky, Kentucky Department of Library and Archives, University of Georgia, Harvard University, Kent State University, Mississippi Library, Wisconsin Library, American Museum of Natural History, Library of Congress, and the Harpers Ferry Library of the National Park Service. Ann Quiroz of the University of Houston put me in touch with

Alex Herda, who graciously translated the account of Ernst von Hesse-Hartwegg from German.

Research at the National Speleological Society's Library in Huntsville, Alabama was greatly facilitated by NSS Librarian Bill Torode. My research at the Kentucky Library at Western Kentucky University in Bowling Green was quite productive, thanks to the staffs in the Reading Room and Special Collections - Manuscripts, especially Nancy Baird and Pat Hodges. Additional research was performed at the Tennessee State Library and Archives in Nashville, Tennessee.

An early version of this paper was presented at the American Spelean History Association Meeting held in conjunction with the National Speleological Society's Annual Convention in Salida, Colorado in August 1996. I am grateful to numerous persons for comments on the paper at this conference. Finally, a Murray Miller Scholarship from the University of Houston Department of History enabled me to travel to Huntsville, Nashville, and Bowling Green in the summer of 1996.

NOTES

- 1. Quotation from Jack Larkin, *The Reshaping of Everyday Life*, 1810 1840, (New York, Harper and Row, 1988, p. 2.
- 2. "The Subterranean Voyage, or The Mammoth Cave Partially Explored," *Enquirer*, Richmond, Va., April 20, 1810. Reprinted in *Journal of Spelean History*, Vol. 3, No. 3, (Summer 1970), pp. 59, 60.
- 3. Gratz, Hyman, "Green River, or Mammoth Cave," *Medical Repository*, 17, 1815, pp. 391-393.
- 4. Blane, William Newnham, An Excursion Through The United States And Canada During The Years 1822-23, Baldwin Gradock & Co., London, 1824. Reprint ed., Negro Universities Press, New York, 1969, p. 268.
- 5. Bird, Robert Montgomery, *Peter Pilgrim: or A Rambler's Recollections*, 2 vols., Lea & Blanchard, Philadelphia, 1838, 2:113.
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FLOYD COLLINS' PHOTO SHERPA

By Roger Moore, Jr.

It was 75 years ago last May that Floyd Collins and his father, Lee, announced to the world (or at least to Kentucky) the discovery of their Great Crystal Cave. That Floyd and his cave have mythic significance for cavers hardly requires repeating.* But the myth has a personal significance for me that relates to the adventure of a young veteran recently returned from the trenches of France in the Great War: my father, Roger Moore, Sr. This story is the consequence of a brief period that he spent in Kentucky working in some capacity in the oil industry there.

During his stay, my father befriended a photographer for the *Louisville Courier-Journal*. As the leading newspaper in the state, the *Courier-Journal* was the medium of choice - or necessity - for the Collins in publicizing their new discovery. The centerpiece of this announcement was to be the first published photographs of the cave, to appear in the *Courier-Journal's* Sunday magazine supplement. A trip was arranged, and like every photographic trip today, the photographer needed a photo sherpa to help with lighting and his heavy gear. He invited his new friend, my father, to fill this role. My father eagerly accepted and thus became Floyd Collins' photo sherpa.

He handed down to me a now-crumbling copy of the newspaper article which is reprinted here (with the permission of the *Louisville Courier-Journal*). I have vainly sought out more information on the caving trip from several experts on the history of Flint Ridge caves and I'd like to acknowledge their cooperation: Dr. Stanley Sides, Bill Austin, of Kentucky Underground (whose family formerly owned Crystal Cave), Dave Foster of the American Cave Conservation Association's American Cave Museum in Horse Cave, Kentucky, Becky Bull of the Floyd Collins Museum, and "Red" Watson. The most interesting information to come to light from these contacts is that the 1921 article seems to have been unknown to researchers in the area.

Kentucky's New and Beautiful Cavern Another of the World's Great Wonders

By Alvin Durning Louisville Courier-Journal May 1, 1921

Did the mighty subterranean stream which eons and eons ago carved out Mammoth Cave change its course after completing one of the western world's grandest wonders and begin chiseling a great new channel through the limestone strata of Hart and Edmonson Counties? This is the query geologists are asking since the discovery of a new three-tiered cavern of gigantic proportions three miles from the great cave. Through the lower tier there rushes a river of such volume that its force carries a stream of cold water across the current of Green River when it emerges, showing up black and somber against the placid emerald of the parent stream.

Only such a river, say they, could have created the great cave - the Mecca of tourists for over a century - when its hills and cathedrals, pits and domes, stalactites and stalagmites, avenues of entrancing beauty and its gypsum, limestone and onyx, molded with uncanny touch into every conceivable form and shape.

Whither went those turbulent waters? Echo River, the bewitching stream that rises and falls with the tide of Green River, they say is not the answer. Surface rivers sometimes change their course; why not those that flow hidden from the eyes of man? Pioneering beneath the earth, Lee Collins, and his son, Floyd Collins, farmers, found in February what they believed to be the answer to the perplexing riddle after they discovered a pit leading down to a second gallery in a cave on their place, which they had already named Great Crystal Cavern from dazzling white gypsum which hangs in snowy folds from the roof and tiers of the underground passages.

A kerosene lamp, which shown with a yellowish gleam into the stygian darkness, revealed avenues of beauty never before trod by man, unless the aborigine knew this place and came here to hide from the foeman. Hardy explorers as they were they were overcome with astonishment and fright at first. A noise which they did not understand came to their ears. They listened and recognized it as the gurgling of water. Then cautiously they pressed on. Around a turn then weirdly the flickering light beams danced on the riffles of a stream forty feet wide. A ledge on one side gave ample footing. A mist rose into the air which only a Dante could depict, as the river dropped precipitately to a greathole below.

Only a moment they stood before the precipice and its yawning darkness, then retreated, feeling that they had gazed into the inferno. Two days later, after relating their adventure to skeptical neighbors, they resolved to try again. Climbing through the rat hole-like aperture which leads from the upper tiers, they carried lanterns and torches and food. Awed only a moment by the incessant roar of the water, they lighted a torch and threw it forward over the cataract. Spirally it descended, illuminating the sight with a ruddy glow, and then died suddenly in the raging waters. In that one brief moment they say they saw a wonder never before seen by man. Their dread overcome, they lighted other torches and watched the momentary lifting of the darkness in the gulf below. Estimating the distance at one hundred feet, they returned to tell their story to those who would listen.

Tarrying awhile and emboldened by what they had seen, they became enthralled with the task of exploring other passageways until lost in a labyrinth of turns and openings. Then the elder Collins discovered that their footsteps left an impression in the light glaze of sand on the cave floor. In this way they retraced their steps until they reached the upper tiers.

In four Kentucky counties, Hart, Barren, Warren and Edmonson, there are practically no creeks. The drainage is almost entirely subterranean and these hidden streams pour their waters into Green and Barren Rivers, mostly in the form of springs. The valleys are saucer shaped and flow to a center. Here are sinkholes into which the water disappears into a natural underground sewerage system - although the comparison is odious - and

through these laterals, crevices in the limestone strain, it makes its way to the mains.

As a consequence nearly every farm of any size in this region can boast of a cave. Sometimes the air rushes in and out of these vents with a whistling sound. For many years Lee Collins and his father before him knew there was a cave on his farm. The narrow sinkhole entrance which breathed with the rise and fall of the temperature, seemed sinister and forbidding. Then one day the younger Collins, who had explored other caves, decided to investigate the one at the threshold of his home. About that time some rock for road building was needed and he decided that the sinkhole was an appropriate spot to blast where the limestone outcropped. The result was a larger entrance.

That was two years ago. Mustering up courage, he descended with a long rope tied about his body. Sixty feet below, he reached bottom. It was large and roomy down there. That was nothing. Everybody had caves more or less large or small. Subsequent blasting lowered the entrance until it was possible to enter without the use of a rope. It was just a cave. No concerted effort was made at exploration, but gradually by way of diversion young Collins went in every now and then just a little farther each day until one day he walked two miles and the family took notice.

He reported the recesses a veritable fairyland with snowy incrusted [sic] walls and weird ornaments of nature of nature hanging from the ceilings. The reported find spread to Cave City, ten miles away, and embryo geologists went to the scene. The result was further explorations. A mile more of galleries were explored, but here where the walls showed the passage of a mighty stream some cataclysm of nature had shaken down the arches and blocked the passageway. This was the end.

Undaunted, the father and his two sons, Marshall and Floyd, slowly removed stone after stone. In a cave there is usually no place to put debris, but luckily they found a depression caused by dripping water and threw the stones into this. Only a few yards of broken down natural masonry removed and a wonder new avenue was opened to their vista. One mile farther they found another blocked passage. This has never been opened, but in the new areaway they found the hole that led to the lower cave. On another wing which they opened up through tireless effort was revealed what may alone be classed as one of the wonders of America, "The Grand Subterranean Canyon." Here the water has cut its way down sheer perhaps 170 feet.

To the visitor this is the most inspiring sight to be seen. The walls rise abruptly on each side in somber and silent beauty. The rays of the strongest calcium light barely penetrate to the smoothly carved roof. Here and there gigantic jagged boulders which somehow resisted erosion are ominously poised aloft and seem to sway in the glinking of the lights.

Right off to the right, the guide - one of the Collins boys - leads you to what he in unassuming voice calls "The Gates of Hell." There one sees where the river recently - perhaps a million years ago - bade adieu to the upper cave and plunged below. A fall of Herculean limestone blocks effectually bars man from following in its willful course.

Then turning away only a few yards and hidden under overhanging crags, the guide dispels the gloom by announcing "one glimpse of heaven." Many have marveled at the floral creations of the vegetated world, but here hidden 300 feet beneath the haunts of men, is a strange fantastic flower garden of the mineral kingdom. Beautiful snowy white lilies of gypsum exude in plentiful array through a thin film on onyx. "Nan Ramsey's Flower Garden," it is named after the first woman who saw it and went into ecstasies of admiration.

Over in Cave City and other towns along the Dixie Highway, there are many who deal in these curios of nature and find ready buyers among the tourists, but those who ponder must decline to break from their fastenings which nature through the ages has tediously and delicately molded, each tiny drop of water adding its infinitesimal grain of building material to the whole.

Passing on down the main avenue, one often walks over a floor as smooth as an asphalt thoroughfare, then tramps over sandy spaces and at other times up and down hill. Everywhere strange beauties unfold themselves. One great white gypsum coated rock, is called "The Titanic" and looks singularly like the great ship plunging head first into the Arctic seas. Most of the beauties are unnamed, but such names as "White Mountains" or "The Glaciers" came instantly to one's tongue when great piles of white incrusted rocks are opened to the panorama of views. There is another place where a lantern placed behind a thin partition of overhanging gypsum gives an impression of the setting sun.

Uncanny freaks have been played here and there by the forces of nature. In one spot on a dark limestone wall the white gypsum has formed in the shape of a tiger springing for his prey. Many other likenesses can be pictured in the various formations by those with imagination.

The writer ventured only part way down the "rat hole," where one is loathe to squeeze and crawl in his "Sunday best," but saw enough to convince that another underground series of chambers underlies the upper tiers. Here and there, the limestone floor above gives forth a hollow echoing sound which means space beneath.

After all, Great Crystal Cavern is a cave in the making with the upper floors completed. When this work started no one can daresay, but before the swarthy sons of Egypt built the pyramids, the work was doubtless far advanced.

What stories of tragedy, these vaulted chambers could tell, they have forever sealed, but the skeleton of one human being was found in its recesses and 300 feet above the Green River in a cove choken [sic] with stalactite and stalagmite, where the waters are believed to have found an outlet in the days gone by, three skeletons, almost molded away, believed to be those of a man, a woman and a child, were found beneath the bed of the cave. The bones still lie where they were found. No one seems to care. They are just dead of a bygone age, perhaps of a tragedy of the pioneer days, by mayhap a family circle of the misty past, a man, a woman and a child.

*But I'll repeat it anyway for those unfamiliar with the story of Floyd and his cave. Great Crystal Cave, later renamed Floyd Collins' Crystal Cavern, was opened commercially after the appearance of the newspaper article. Crystal Cavern was the site of the 1954 'C-3' expedition, the first large-scale survey effort organized by the National Speleological Society. Floyd's cave, Mammoth Cave, and numerous other once-separate caves have now been connected to form the Flint-Mammoth System, at over 350 miles the longest cave in the world.

Floyd's Crystal Cavern was a commercial failure because it was too far off the beaten path. This prompted him to search for a cave nearer to good roads. But Floyd met a sad and very public fate in 1925 while exploring the nearby Sand Cave as another prospect for commercialization. A rock was dislodged in an unstable crawlway, trapping him some 70 feet below the surface. The attempt to rescue him became one of the first 'media events' of the modern era, and a carnival-like atmosphere soon surrounded the surface efforts to reach the hapless caver. Floyd was sustained for a time by sandwiches brought by William Burke 'Skeets' Miller, a slightly-build reporter for the *Courier-Journal* who was the only person with the body and the courage to reach him. Miller issued daily dispatches on the rescue and his own efforts, work which won him the Pulitzer Prize.

After much confusion and failed efforts a group of miners began a vertical shaft to reach the trapped caver. In the interim, however, an additional collapse cut Collins off from Miller and the world. By the time the shaft reached him, Floyd had pushed his last crawl. His body lay in state for years as a formidable if morbid tourist attraction in the cavern which bore his name. Floyd was only recently buried in a rural cemetery. For further information on this tragedy, read Trapped: The Story of the Struggle to Rescue Floyd Collins from a Kentucky Cave (A. P. Putman & Sons, New York, 1979) by Robert Murray and caver Roger Brucker.