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THE JOURNAL OF Spelean History

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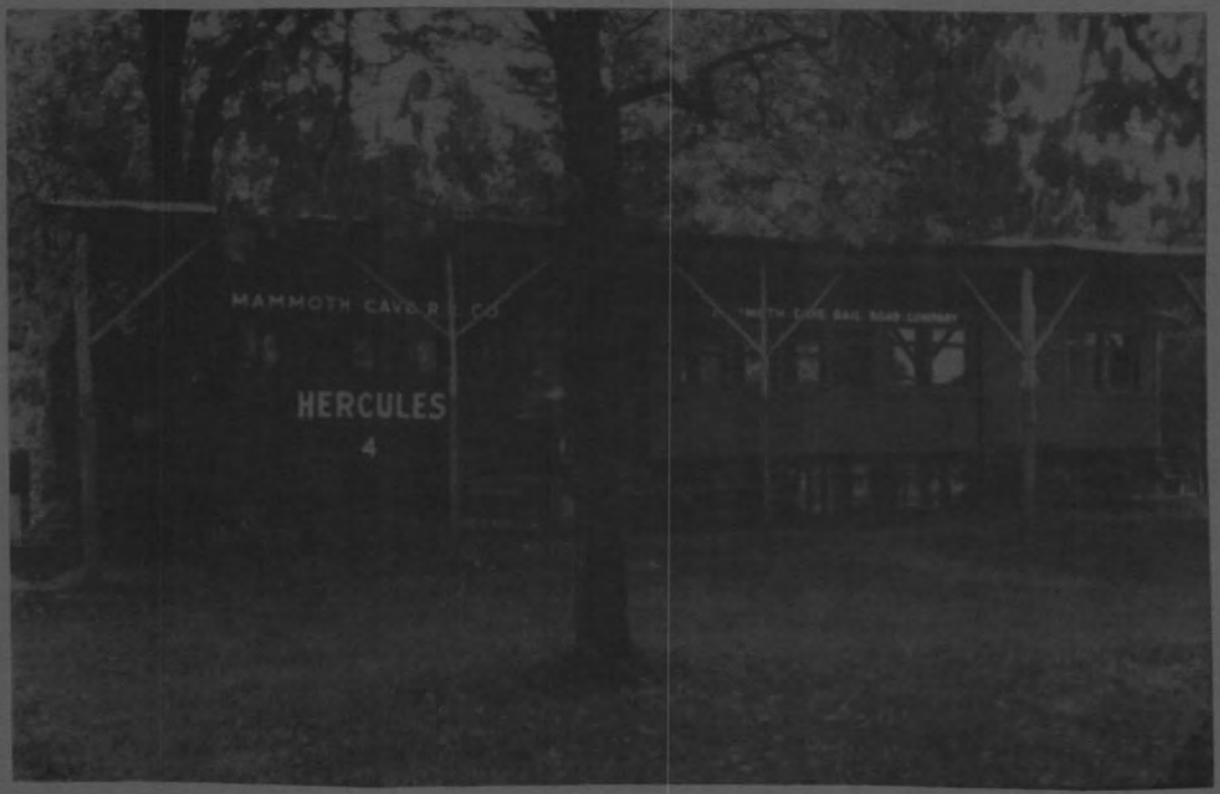

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Volume 20, No. 3 July-September, 1986

- - - THE JOURNAL OF SPELEAN HISTORY - - -

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FRONT COVER:
Picture of the Mammoth Cave Railroad Company locomotive, Hercules.

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THE JOURNAL

The Association publishes the Journal of Spelean History on a quarterly basis. Pertinent articles or reprints are welcomed. Manuscripts should be typed and double-spaced. Submissions of rough drafts for preliminary editing is encouraged. Illustrations require special handling and arrangements should be made with the editor in advance. Photos and illustrations will be returned upon request.

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A HISTORY OF THE MAMMOTH CAVE RAILROAD

Albert Churella

Throughout much of its history, the commercial exploitation of Mammoth Cave has been hindered by the lack of adequate transportation facilities. For example, saltpeter mining was profitable only during the War of 1812, when its inflated price exceeded shipping costs. The mushroom growing enterprise in Audubon Avenue failed because there was no economical means of transporting the fungus to the tables of Eastern restaurants. And, if it was difficult to get goods away from the cave, it was equally difficult to get people to the cave.

This natural barrier to the tourist trade was reduced in several steps. Tourists could reach the cave by stagecoach (1815-1859), then by railroad and stage (1859-1886), then entirely by rail (1886-1920's), and finally by motor car. One of these changes occurred in 1886 when the Mammoth Cave Railroad was constructed from Glasgow Junction (now called Park City) to the Mammoth Cave Hotel eight miles away. This paper will focus on the events that preceded the construction of this railroad, as well as those that transpired during its forty-five year history.

The impact of the Mammoth Cave Railroad on the region was, alas, minimal. Unlike the earlier Louisville and Nashville Railroad, which was completed in 1859, it did not lure hordes of additional tourists to Mammoth Cave. The pre-1886 stagecoach trip from Cave City to the hotel, though uncomfortable, was so short that it discouraged few people from seeing the cave. The Mammoth Cave Railroad was never the exclusive servant of the Mammoth Cave Estate, since it provided station stops at three competing caves along its route. And in spite of the railroad, Glasgow Junction lost forever the superiority over Cave City that it had known in the days of Bell's Tavern. The tiny Mammoth Cave Railroad was a nuisance to the mighty Louisville and Nashville Railroad system, and only a mild convenience for the few tourists and the small number of local residents who used it. It was a nice little railroad, but not an important one. This lack of relative importance does not mean that the Mammoth Cave Railroad should be forgotten, since it was one of the more interesting above-ground institutions in the region.

In the first half of the last century, the trip to Mammoth Cave was difficult at best. The poor traveling qualities of the stagecoach, combined with the difficult terrain of the region, caused the journey to Mammoth Cave to be scarcely less memorable than the tour of the cave itself. Few travelers before 1859 fail to mention their experiences on the Mammoth Cave stage.

In his book Health Trip to the Tropics, N. Parker Willis describes an overland stage journey that required him to spend one night in the plush and hospitable resort town of Bear Wallow, sixteen miles from the cave itself. After his tour of the cave, he departed for more civilized regions via Munfordsville, with the only delay in his journey being due to a broken wheel on the stagecoach. Another visitor, Leo Lesquereux, made a determined effort to enjoy his 1854 stage ride to the cave in spite of the locals and their boorish customs. The scenery was quite beautiful, and he felt "only an instant of emotion caused by the contemplation of these wonders when they pass slowly before your eyes,

without a single detail escaping . . . is it not better than the deafening distractions of a trip by train." [1]

Difficult as this journey was, it must have been nearly impossible in the years shortly after the War of 1812. Franklin Gorin, despite all his efforts to improve the cave itself, was unable to force Barren and Edmonson counties to improve the stage route from Bell's Tavern to the cave. The situation did not improve until the property was purchased by Dr. Croghan in 1839. Croghan encouraged the state to build a new stage road to the cave. This road, which is today US 255 north of Highland Springs and US 70 south of there, headed west from Cave City and not Glasgow Junction and thus bypassed Bell's Tavern. This tavern, which was once an important stop on the long and difficult trip to the cave, was destroyed by fire shortly before the Civil War.[2]

The construction of the first railroad through the region eased transportation problems considerably. The Louisville and Nashville Railroad Company was incorporated on March 5, 1850, to build a railroad between the terminal points of Louisville, Kentucky, and Nashville, Tennessee. The main line was completed during November of 1859. From then on, cave expert Horace Hovey noted Mammoth Cave could be "easily reached by trains on the Louisville and Nashville Railroad, all of them stopping at Cave City."[3]

Although the Mammoth Cave Estate obviously benefited from having a railroad station less than ten miles away, the situation was far from ideal for many people. Tourists were still required to make the bothersome stage journey from Cave City to the Mammoth Cave Hotel. In addition to being slow and uncomfortable, there was always the thrilling possibility of being robbed by the likes of Jesse James, who was thought to have operated in the area. Glasgow Junction residents were no doubt upset at losing their earlier days of glory when everybody who was anybody stopped at Bell's Tavern before going on to Mammoth Cave. Local cave owners were not happy about the new stage route from the Cave City railroad station to the Mammoth Cave Hotel. This route did not pass any significant caves until the 1920's, when the New Entrance was blasted open. The old stage route from Glasgow Junction to the cave via Chaumont passed within a short distance of Grand Avenue Cave, Diamond Caverns, Short Cave, Long's Cave, and Proctor Cave. The Croghan heirs were of course not particularly interested in giving tourists the opportunity to visit other caves in the area. However, they were probably willing to lose some business to Diamond Caverns and Proctor Cave in order to gain the advantage of a railroad link with the L & N at Glasgow Junction.

With this in mind, Whiteford R. Cole, Overton Lea, Jere Baster, J. Hill Eakin, R. H. Lacey, and L. J. Proctor founded the Mammoth Cave Railroad Company in 1886. Both Eakin and Lacey later served as presidents of the railroad. L. J. Proctor is described as being "the owner of a cave and a hotel." This is of course Proctor Cave, which was conveniently located within a short distance of the proposed railroad line. This cave, with its "wonderful succession of domes, and an endless variety of stalactites, with many gypsum rosettes and other 'formations'" would have been seen by few tourists had it not been for the presence of the railroad.[4]

Actual construction was begun on July 3, 1886, and completed on November 17 of that year. The total length of the railroad was 8.35 miles, not 8.7 as listed

by Margaret M. Bridwell. Of this, 6.34 miles were located in Edmonson County, with the remaining 2.01 miles located in Barren County. Of the trackage in Barren County, .63 miles were located within the town of Glasgow Junction. Scheduled stops were listed as Glasgow Junction (L & N Railroad connection), Diamond Caverns, Chaumont Post Office, Union City, Proctor's Hotel, Sloan's Crossing, and the Mammoth Cave Hotel. Of the intermediate station stops, Chaumont, Sloan's Crossing, and Union City were each reported to contain a general store or some similar establishment. The various stations were not separated by great distances. A person standing in the station at Chaumont could probably see the Diamond Caverns and Glasgow Junction stations to the east. The total distance between Chaumont and Union City was only about four thousand feet. The one-way trip from Glasgow Junction to Mammoth Cave required thirty minutes, covered at the breathtaking average speed of seventeen miles per hour. Since the railroad had no facilities for turning its equipment at either Glasgow Junction or the cave, trains were forced to operate backwards half of the time, with the engine pushing the passenger car.[5]

The concept of building short, tourist-oriented railroads to major national parks and other natural wonders was not unusual. The Yosemite Valley Railroad Company was chartered in 1902 to build a seventy-eight mile line, now abandoned, to the entrance of Yosemite National Park. In 1901 the Santa Fe Railway organized a subsidiary, the Grand Canyon Railway Company, to construct a line from Flagstaff, Arizona, to the canyon rim. For many years, the Santa Fe offered through sleeper service from Chicago to the Grand Canyon. This sixty-four mile line was, until recently, used to transport water and other supplies to the south rim of the canyon.[6]

Therefore, it is hardly surprising that someone would decide to construct a railroad to one of the most famous natural attractions in the eastern United States. What is unusual, however, is the low degree of quality with which this project was carried out. The Grand Canyon Railway was generously supported by the officials of its parent Santa Fe, who realized how much money they could make transporting pa-sengers from Chicago to Flagstaff. Even the independent Yosemite Valley Railroad was essentially a first-class operation throughout most of its history.

The Mammoth Cave Railroad, however, was a poor quality operation from start to finish. Surprisingly, the original founders of the company built the railroad using local labor and local financing. Apparently, neither the capital nor the experienced work crews of the L & N Railroad were used during its construction. It was not until September 15, 1886, when the railroad was nearing completion, that the L & N agreed to lease and operate it. The lack of L & N money and supervision may have resulted in the excessively cheap construction of the Mammoth Cave Railroad. The 1930 U. S. Geological Survey topographic map shows at least one curve of less than 400 foot radius, something that the L & N would not have permitted on its main line, except under extraordinary circumstances. The line was originally laid to a four foot, nine ince gauge with steel rail weighing fifty pounds per yard, roughly half the weight of the rail used on the L & N main line. Rail of this weight is barely adequate to support the weight of a train and probably accounts for the small size and low weight of the locomotive Hercules.[7]

Mammoth Cave Railroad president J. Hill Eakin and L & N Railroad president

Milton H. Smith must have finally realized the mutual advantages of consolidation, and the Mammoth Cave Railroad soon became a segment of the L & N. According to one author, this occurred in the form of a twenty-five year lease dated September 15, 1886. However, Poor's Manual of Railroads indicates that the Mammoth Cave Railroad was to be operated by the L & N only until such time as a receiver could be appointed by the court. This certainly casts doubt on the financial stability of the Mammoth Cave Railroad and seems to indicate that it was bankrupt right from the start. In any event, Poor's lists the Mammoth Cave Railroad as a separate entity from the L & N in the 1897 and all succeeding issues. This indicates that L & N operation of the Mammoth Cave Railroad ended sometime in 1896, ten years after the line was built. Throughout this period, the Mammoth Cave Railroad offices were located in Nashville, Tennessee, some distance from the cave and farther still from the L & N offices in Louisville.[8]

During that ten-year period, the mighty L & N probably considered the Mammoth Cave Railroad as more of a nuisance than anything else. At 8.35 miles, it was shorter than the other local L & N subsidiary, the 10.5 mile Glasgow Junction Railroad, whose line from Glasgow Junction to Glasgow was opened on March 1, 1869. In fact, only three branches of the L & N were shorter than the Mammoth Cave Branch--the Pontchartrain Railroad (5.00 miles), the Louisville Railway Transfer (4.13 miles), and the Mud River Branch (4.39 miles).[9]

Its short length produced equally short revenues. In 1889, the Mammoth Cave Branch of the L & N earned $8,393.07 in passenger revenues. This, combined with $1,374.40 in freight revenues and various other revenues, produced an inflow of $9,767.47. Operating expenses for that year were $7,806.56, leaving a total net income of $1,960.91. This indicates that the Mammoth Cave Branch had a net income of roughly $234 per mile in 1889. In the same year, its corporate parent, the L & N, had a net income of $2,907 per mile.[10]

In 1889, the Mammoth Cave Railroad ran its trains a total of 17,676 miles in passenger service. When divided by the 16.7 mile length of a round trip over the line, this figure indicates that 1,052 round trips were made in that year. This averages about three trips per day. Those 1,052 trips accomodated 8,314 passengers, indicating that the highly successful Mammoth Cave Railroad, on average, carried fewer than eight people per trip.[11]

It is therefore not difficult to understand why the L & N wanted to unload the Mammoth Cave Branch at the earliest available opportunity. Sometime during 1892 or 1893, the Mammoth Cave Railroad Company authorized the construction of a .82 mile long branch line from Grand Avenue Junction to Grand Avenue Cave. This unwise expenditure of funds, combined with decreasing passenger revenues, was probably enough to bankrupt the railroad. The L & N could have easily prevented this situation by loaning or giving its subsidiary a few thousand dollars. Instead, they allowed the railroad to go into receivership. On August 12, 1895, the L & N Railroad relinquished all control of the Mammoth Cave Railroad and turned it over to the court appointed receiver, J. A. McGoodwin of Franklin, Kentucky. The railroad was sold under foreclosure on March 7, 1898, to J. Hill Eakin, its president, for $16,000. This purchase was financed through the sale of 160 shares of stock at $100 per share. Mr. Eakin may have acquired the railroad at something under its fair market value, since the state of Kentucky, in 1897, valued the 8.35 mile main line at $50,100 for tax purposes. At

this time, the day-to-day operations of the railroad were still controlled by the receiver in Franklin rather than by the new owner in Nashville. After this time, the Mammoth Cave Railroad is no longer listed in conjunction with the Louisville and Nashville Railroad.[12]

The Mammoth Cave Railroad was finally released from receivership in 1903. R. H. Lacey was elected president, with the railroad's offices remaining in Nashville. [13] Around 1912, the company offices were removed to Franklin, Kentucky, where they remained until the railroad was abandoned.

In 1910, the railroad issued $30,000 worth of twenty-five year, five percent bonds to retire a debt of $8,216 and to "allow some leeway for emergencies and unforeseen expense." The fact that the company borrowed 21,784 unneeded dollars at five percent interest indicates that its owners must have been anticipating a great deal of unforeseen expense. It is fortunate that the railroad did borrow this money, since its financial situation was becoming increasingly worse. In 1907, the company had the lowest net receipts of any railroad in Kentucky, $378, or $46 per mile, and its tax valuation had declined from $50,100 to $17,500. By December 31, 1919, the railroad had accumulated a total profit/loss deficit of $23,076, indicating that expenses had exceeded revenues by that amount over the past sixteen years. Total passenger revenues for 1918, the year of America's greatest involvement in World War I, were only $9,051, a substantial decrease from the $12,373 of two years earlier. The railroad operated at a loss in both years, however, $185 in 1916 and $421 in 1918.[14]

During 1919-20, the original fifty pound steel rail installed in 1886 was replaced with fifty-six pound rail. This may have occurred in response to a January 7, 1913, decision to upgrade the railroad to allow through sleeping car service in cooperation with the L & N Railroad. However, it is unlikely that this service was actually instituted. The low volume of traffic to the cave did not justify the use of an entire sleeping car, and it was not difficult to transfer passengers from one railroad to another at Glasgow Junction. In addition, the light rail and rotting ties of the Mammoth Cave Railroad were probably not capable of supporting the eighty-ton all-steel sleepers that were coming into service during the early 1920's.[15]

The increasing number of automobiles bringing tourists to the cave made the continued operation of the railroad itself doubtful. The original stage road from Cave City to the Mammoth Cave Hotel was still unpaved, but it had been improved enough to allow fairly reliable auto travel. In addition to being more convenient, auto travel was cheaper. It cost as much to travel from Glasgow Junction to the cave by rail as it did to get into the cave itself, provided one took the short tour. The use of a car also made it easier to see Morrison's New Entrance to the cave, which was located close to the highway but far from the railroad.

On February 1, 1928, the ailing Mammoth Cave Railroad was purchased by F. L. Gallup, "who had some plan of building a branch line to connect with the asphalt mines on the Green River." He probably intended to connect it to the Kyroc (Kentucky Rock Asphalt Company) Railroad north of the Green River, and visible at the upper left hand corner of the 1930 topographic map of the area. Unfortunately, it would probably have cost more to build a bridge over the Green River than what the entire line was worth. He soon abandoned his plans and

sold the railroad in April, 1931, to the Mammoth Cave National Park Association, its fifth and final owner.[16]

The automobile, combined with the decrease in tourist travel brought about by the Great Depression, was enough to put the Mammoth Cave Railroad out of business. The steam locomotive Hercules made its last run in 1929. A diesel powered railbus was used for the next two years to transport the few remaining passengers. Finally, on June 8, 1931, the Mammoth Cave National Park Association voted to suspend operations of the railroad the following September 1.[17] The equipment was sold or put on display and the rails were ripped up. The Mammoth Cave Railroad was no more.

Although travelers could still reach Cave City and Glasgow Junction (Park City) by rail until the mid-1970's, the automobile is today the only means of reaching the cave itself. The "deafening distractions of a trip by train" have been replaced by the no less deafening distractions of a trip by car. Leo Lesquereux would have been happy.

FOOTNOTES

[1]N. Parker Willis, Health Trip to the Tropics (New York; Charles Schribner, 1853), pp. 147, 208; Joseph B. Rivlin, translator, "Daniel Boone and the Kentucky Character in 1855--A Letter From America By Leo Lesquereux," Filson Club History Quarterly, XV (1941), pp. 224-26.

[2]Roger W. Brucker and Richard A. Watson, The Longest Cave (New York: Alfred A. Knoph, 1976), p. 269.

[3]Poor's Manual of Railroads (New York: J. J. Little and Company, 1886), p. 49; Horace C. Hovey, Celebrated American Caves (Cincinnati: Robert Clarke and Company, 1882), p. 66.

[4]Margaret M. Bridwell, The Story of Mammoth Cave National Park, Kentucky (n. p.; ca. 1952), pp. 35-36; Poor's Manual of Railroads, 1890 edition, p. 378; 1904 edition, p. 313; Hovey, Celebrated American Caves, p. 65, not to be taken seriously.

[5]Bridwell, The Story of Mammoth Cave National Park, p. 36; Poor's Manual of Railroads, 1890 edition, p. 378; Eighteenth Annual Report of the Railroad Commissioners of Kentucky (Louisville: George G. Fetter Printing Company, 1897), pp. 69-70; Gordon Wilson, Sr., Folklore of the Mammoth Cave Region (Bowling Green, Ky.: The Kentucky Folklore Society, 1968), p. 31; U. S. Geological Survey, Topographic Map of the Mammoth Cave National Park, Kentucky (1930); Louisville and Nashville Railroad timetable (1923).

[6]Poor's Manual of Railroads, 1920 edition.

[7]Bridwell, The Story of Mammoth Cave National Park, p. 36; Poor's Manual of Railroads, 1890 edition, p. 378.

[8]Bridwell, The Story of Mammoth Cave National Park, p. 36; Poor's Manual of Railroads, 1900 edition, p. 455; 1897 edition, p. 1296.

[9]Ibid., 1890 edition, pp. 371, 377.

[10]Ibid., p. 373.

[11]Ibid., p. 371.

[12]Ibid., 1894 edition, p. 505; 1900 edition, p. 455; 1915 edition, p. 788; Eighteenth Annual Report of the Railroad Commissioners of Kentucky, p. 69.

[13]Poor's Manual of Railroads, 1904 edition, p. 313.

[14]Bridwell, The Story of Mammoth Cave National Park, p. 37; Twenty-Ninth Annual Report of the Railroad Commission of Kentucky (Louisville: The Globe Printing Company, 1908); Poor's Manual of Railroads, 1920 edition, p. 1874.

[15]Ibid.; Bridwell, The Story of Mammoth Cave National Park, p. 38.
[16]Ibid.
[17]Ibid.

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LETTER FROM A MINER'S WIFE

Jane Price, with an introduction by James Hedges

The following letter was written by Jane Price, the wife of a miner in the Iowa lead/zinc area, to Caroline Seymour of Vestal, Broome County, New York. It was discovered by my father, Robert M. Hedges, in a box of philatelic covers which he purchased for their stamps and postmarks. The letter is dated 30 April and is postmarked 5 May. We think the year would have been about 1847.

The center of the Iowa lead/zinc area is at Dubuque, on the Mississippi in the northeastern corner of the state. The Iowa area is part of the much larger "Tri-State District" centered around Shullsburg in Lafayette County, Wisconsin. Lead mines were being worked here by 1690, and from 1830 to 1871, the Tri-State District was America's most important lead-producing region. Production peaked about 1846, to the accompaniment of a mining "rush" similar to the California gold rush of 1849. Price's husband would have been part of the horde of treasure-seekers which came to the area at this time and exploited the easily accessible, near-surface deposits.[1]

Although virtually the only economic deposits of lead in Iowa were found in and near the city of Dubuque, "showings" of lead have been discovered in a large geographic area extending sixty miles south, west, and north from Dubuque and 100 miles east.[2] The Prices lived in Cascade, about twenty miles southwest of Dubuque, but well within the zone of potential "strikes" (according to the knowledge of that time).

The richest deposits of lead ore occurred as pure crystals of galena on the walls of caves ("gash veins") or mixed with clastic cave sediments. The "booths mineral cave" which Price describes probably is the Booth and Carter Crevice, now better known as Becker Quarry Cave, which is located in the 2000 block of Kaufman Avenue, Dubuque. In 1847, this would have been about a mile and a half from the city, along one of the principal roads. It really is about ninety feet below the surface, but is much less than a quarter-mile in length. Wooden rails and other mining artifacts yet remain in the cave.

Price's letter is here published with its original spellings and punctuation. Words in parentheses are indecipherable in the manuscript and have been supplied. Note that Price nowhere mentions what her husband is doing. I assume that he was a prospector, because she talks so much about mining. However, the Blackhawk War had just been concluded and the area west of Dubuque had just been opened for lawful white settlement. The Prices may have been homesteaders. Either way, it's an intimate picture of life on the frontier, in the mining/cave region near Dubuque.

Dear Cousin

How pleased I was with your letter two years ago yesterday I bid farewell to all but my little family that was dear to me on earth oh how time flies it seems but a few days ago that I left my native land the parting cene by me will never be forgotten I imagine I can see just how my dear mother looked when I kissed her lovely cheek for the last time Dear aunt Dolly how greived I felt when I heard that aunt Dolly was no more yes indeed dear Cousin we can sympathize with each other I have been very homesick since I have been here the first few months that I spent in Iowa was the lonesomest time that I ever spent in my life we wandered around from place to place (before) we found a location that suited us among strangers in a strange land felt deceived in the appearance of the country the (land) that now looks beautiful then looked wild and dreary five of the (travellers) from Pennsylvania that overtook us at Cincinatic soon returned back to there friends sick of the country this was not very comforting to us the first two weeks that I spent in Iowa I lived in an hired house five miles from Dubuque the lonesomest place that I ever saw most of the inhabitants following digging mineral for a living I could see them goinge in companies from one mineral bluff to another they were a blasting in a bluff a few rods from the house the rock lay so feel under the ground the report sounded like a heavy cannon some dig so deep or at least go so far under ground that they have to make air tubes they (call) them of cotton clothe -- to convey air to those who are at work some men in Dubuque have spent a greate deal of money and never raised but very little mineral while others have come there poor men and in a short time have struck a valuable lead and are now independent the rich employ men to dig for them and the digers the most of them are among the poorest class of people in the work they live in small cabins sod roofs sod chimneys puncheon floors on some of the roads from Dubuque into the Country it is not wise to travel in the night there is so many mineral holes anyone digs that has a mind to some will commence diging beside the road they will dig from 10 to 20 feet and if they do not find a prospect the will leave the place without filling it up and it is very dangerous a good many loose theire cattle they fall in the mineral holes and there die there has been a good many killed in the digins this Winter Deborah has been in booths mineral cave it is ninety feet from the top of the ground to the bottom of the cave they have a beautiful spring in the cave the water that drains off of the mineral in the cave forms it self in spars they call them they look something like a large icekle not quite as clear they are as hard as a stone I wish you could see some of them David Tallman is a prospecting the last news we heard from him was very faviourable I believe he has given up going east very soon we expected he was going east last fall I do not know why he did not go I expected if he went he would bring back an eastern lady David is an excelent young man he has had a good deal of trouble since he came west his expenses have been a good deal his mother and Brothers doctors bill and funeral charges were high no one to help him he has paid it all David Tallman left here this morning he is in good spirits he has raised some mineral he says the prospect is flattering the Congregationalist preacher has moved from Cascade 20 miles he moved this

week I feel lonely every time I think of it I think a greate deal of Mrs Turner Mrs Turner health is very poor & she has had one attack after another of the billous fever and the ague untill her constution is entirely broke to peices Mr and Mrs Turner are missiouries they are from Buffalow they have not been here 2 years yet to all appearance her work will soon be done I know she will die in the piek of usefulness yes she will fall at here post I formed an acquaintance with her when I was very homesick and she appointed feemale prayer meeting at her house and a good many times none but Mrs Turner and myself meet for prayer we enjoyed the meeting and this stregnthend (our) attachment we meet with a greate many hindeances and have to surmount difficulties that our eastern friends know nothing about dear Caroline I can not begin to tell you what I want to I do wish I could see you I could tell you a a greate many things that would be new and interesting how I would like to see you and talk with about dear aunt Dolly and my dear dear mother I have been looking at dear mothers and aunt Dolly hair I can not begin to tell you how I feel can it be that I shall never see you nor any the rest of my dear friends I enjoy myself better than I expected I should when I left my native land this is a very good Country the greatest objection is sickness Clarise Woodford is dead Mr Woodford has the ague yet dear Caroline do write soon farewell

Jane Price

FOOTNOTES

[1]James Hedges and E. Calvin Alexander, Jr., "Karst-Related Features of the Upper Mississippi Valley Region," Studies in Speleology, VI (1986), pp. 41-49.

[2]A. V. Heyl, Jr., A. F. Agnew, E. J. Lyons, and C. H. Behre, Jr., The Geology of the Upper Mississippi Valley Zince-Lead District. U. S. Geological Survey, Professional Paper 309 (1959), 310 pages.

THE HISTORY OF HELFRICH SPRINGS CAVE

Dean H. Snyder and
Bernie Szukalski

THE CAVE

Helfrich Springs Cave is located at the base of a limestone hill in the middle of a loop in the Jordan Creek near Whitehall, Pennsylvania. The cave is formed along the Allentown-Beekmantown contact, and is a linear passage roughly 400 feet in length which extends in a westerly direction into the hillside.

A bank on the right can be traversed from the entrance along the cave stream for approximately 200 feet. At this point the bank ends and a near-siphon is encountered. This usually allows six to twelve inches of airspace but reportedly siphons completely during flooding of the Jordan Creek after periods of heavy

rainfall. Beyond this the passage is widened by breakdown and the stream flows along a channel under boulders. The main passage terminates at a breakdown choke, although it is possible to continue for a short distance through the breakdown. Some of the blocks are unstable. A short crawlway extends from the rear of the cave towards the entrance, paralleling the main passage, before becoming too tight.

The rear of the cave lies in close proximity to the edge of the limestone hill where the Jordan Creek begins to loop around it. A cement wall is reported to have been built at the far end of the cave to prevent the Jordan Creek from flooding into it. No evidence of this wall can be found. However, the cave reportedly did have another entrance at one time.

THE HISTORY

The earliest inhabitants of Lehigh County were the Lenni Lenape Indians, a branch of the Algonkians. Although they never established permanent settlements, they used the woodlands as hunting, fishing, and camping grounds. The Lenni Lenapes certainly knew about the large limestone spring that never went dry, as arrowheads have been found in a garden near the cave. It is not known if the Indians entered the Helfrich Springs Cave.

The Indians were friendly to the pioneers that settled the area. They traded furs, deerskins, and baskets for the tools and guns that they needed. However, the relationship with the Indians soured and became openly hostile. The infamous Walking Purchase of 1737, in which the Indians were cheated out of their hunting grounds, did much to cause unrest.

The early settlers found fertile land and a dependable supply of water at Helfrich Springs. It was at the onset of Indian trouble that the springhouse was built at Helfrich Springs, or Cave Springs, as it was sometimes called. This springhouse is thought to date back to the Indian raids between 1756 and 1763. The water flowed through the cellar and the inhabitants lived on the upper floor. During times of hostile Indian activity, the family sought refuge in the stone building, content that a reliable supply of water was at hand.

The stone farmhouse was built by John Helfrich about 1800, after Indian hostilites had ceased. The owners of the property today have restored the structure to this time period.

Gordon's Gazetteer (1832) contained the following about the cave: "There is a remarkable limestone cave in North Whitehall t-ship, within 2 or 3 ms. of Allentown, on the bank of the Jordan Creek, near which is a spring equally remarkable, called the Cavern spring."

The water from the Helfrich Springs Cave has been used to power a grist mill, which still stands today on the property of Whitehall Township next to the Jordan Creek. The first mill was probably built in 1753 by miller George Hoffman. After Christopher Blank bought the mill in 1766, the spring was called Blank Spring. George Blank inherited the farm in 1790. Peter Grim built the present day structure in 1807. The two and a half story mill was constructed of stone with large oak and chestnut beams held together with pegs. In 1872 Reuben Helfrich bought the mill and built a dam on the Jordan Creek to add water for powering

the wheel. The mill has been named to the National Register of Historic Places, in part because it lacks a keystone in the archway over the millrace. Helfrich Springs Grist Mill is presently being converted into a museum, although it cannot be reverted back into a working mill.

Sylvester Helfrich inherited the spring, mill, and farm from his father in 1891. He was the last Helfrich to own the spring. In 1908, large ponds were created in front of the cave for the Minsi Fishing Club. Trout were raised in the clear spring water that emerged from the cave. Although the fish are no longer there, the ponds are still intact.

Helfrich Springs Cave, or Indian Cave, received the most attention after William Erdell bought the property in 1925. Erdell sold his interests in the booming cement industry to become a wealthy gentleman farmer. Although he lived in a hotel in nearby Allentown, he constructed a summer cottage on top of the hill. Many minor improvements were made to the grounds. On the other side of the street a bridge was built to obtain access to an island in the Jordan Creek. Local groups used this area for summer picnics, and it was called Camp Virginia. It was at this time that a wooden boardwalk was built in the cave for a couple hundred feet. Electric lights were installed to allow visitors to inspect the cave.

A few pieces of timber and some concrete are the only reminders of these improvements. The pure spring water has been tainted by the effects of urbanization. Helfrich Springs Cave is seldom visited today.

The archway above the millrace is unusual because it lacks a keystone.

This turn-of-the-century postcard reflects the quiet beauty of Helfrich Springs. The entrance to the cave is hidden by foilage near the middle left, next to the Springhouse.

Paul, Omie, and Karl Diefenderfer pose for their father at the entrance of Helfrich Springs Cave in 1915. The water from the cave exits to the left and continues through a concrete raceway to power the Helfrich Grist Mill. Photo by Eugene E. Diefenderfer.

The springhouse at Helfrich Springs provided shelter for settlers against hostile Indians.

The Helfrich Grist Mill, named to the National Register of Historic Places, was powered by water from the cave.

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ADDITIONAL BIBLIOGRAPHIC NOTES ON OLD SALTPETER CAVE (MEBANE SALTPETER CAVE, VIRGINIA) AND THE 1863 UTAH CAVE

William R. Halliday

At the time of publication of my recent article on use of Old Saltpeter Cave, Dublin, Virginia, during the American Revolution for saltpeter production (JSH, Vol. 19, No. 1, 1985, pp. 18-19), the full bibliographic reference on one publication was not known to me or to my source. Through the continued kindness of Mrs. Harry Bugel of Nashville, this now is available: Conway Howard Smith. In the Land that Became Pulaski County. Pulaski, Va.: B. D. Smith and Bros., printers [later Edmonds Printing Company], 1975.

The Utah cave described in the Chicago Tribune, July 4, 1863 (JSH, Vol. 19, No. 1, 1985, p. 19), is clearly Clinton's Cave, called Black Rock Cave by Steward in 1937. Some references on this cave include:

Halliday, William R. "Speleogenesis of Clinton's Cave, Utah." Salt Lake Grotto Techn., September, 1954, Note 18.
Halliday, William R. "Littoral Caves of Ancient Lake Bonneville." Salt Lake Grotto Techn., September, 1954, Note 19.
Halliday, William R. "Clinton's Remarkable Cave." Pacific Discovery, IX (March-April, 1956), pp. 26-29.
Steward, Julian H. Ancient Caves of the Great Salt Lake Region. Bureau of American Ethnology, Bulletin 116. Washington, D. C.: Government Printing Office, 1937.

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Donald G. Davis, a well-known National Speleological Society member from Parachute, Colorado, has recently published an extremely well researched and illustrated article about the discovery of Cave of the Winds in Colorado Heritage, Issue 3 (1986), pages 34-47, under the title, "That Much-Discovered Cave."

MEXICAN SPELEAN EXCURSION OF ULYSSES S. GRANT AND HENRY HETH

In the spring of 1848, a number of officers of the American army occupying Mexico obtained permission to visit the volcano Popocatapetl. Included in this party were Richard H. Anderson, H. H. Sibley, George B. Crittenden, Simon B. Buckner, Mansfield Lovell, Andrew Porter, Charles P. Stone, Z. B. Tower, R. H. Long, Montgomery P. Harrison, A. H. Seward, U. S. Grant, and Henry Heth, many of whom later became generals in the Union and Confederate armies during the Great Rebellion of 1861-65.

The effort to reach the summit of Popo was frustrated by harsh weather, and the party withdrew to the village of Ameca Ameca. Soon the weather cleared and about half the crew, including Anderson, Stone, and Buckner, decided to tackle the volcano again. This time they "succeeded in reaching the crater at the top." The rest of the group, including Grant, Sibley, Porter, and Heth, decided to "visit the great caves of Mexico, some ninety miles [away] . . . on the road to Acapulco."

They proceeded [taking several days] "south down the valley to the town of Cuantla, some forty miles from Ameca Ameca" and westward through Cuernavaca, spending the last night "at a large coffee plantation, some eight miles from the cave." In later years, both Grant (1822-1885) and Heth (1825-1899 and a Confederate general) wrote about the cave in their memoirs. Grant was evidently more impressed:

> The nest morning we were at the mouth of the cave at an early hour, provided with guides, candles and rockets. We explored to a distance of about three miles from the entrance, and found a succession of chambers of great dimensions and of great beauty when lit up with our rockets. Stalactites and stalagmites of all sizes were discovered. Some of the former were many feet in diameter and extended from ceiling to floor; some of the latter were but a few feet high from the floor; but the formation is going on constantly, and many centuries hence these stalagmites will extend to the ceiling and become complete columns. The stalagmites were all a little concave, and the cavities were filled with water. The water percolates through the roof, a drop at a time--often the drops several minutes apart--and more or less charged with mineral matter. Evaporation goes on slowly, leaving the mineral behind. This in time makes the immense columns, many of them thousands of tons in weight, which serve to support the roofs over the vast chambers. I recollect that at one point in the cave one of these columns is of such huge proportions that there is only a narrow passage left on either side of it. Some of our party became satisfied with their explorations before we had reached the point to which the guides were accustomed to take explorers, and started back without guides. Coming to the large column spoken of, they followed it entirely around, and commenced retracing their steps into the bowels of the mountain, without being aware of the fact. When the rest of us had completed our explorations, we started out with our guides, but had not gone far before we saw the torches of an approaching party. We could not conceive who these could be, for all of us had come in together, and there were none

but ourselves at the entrance when we started in. Very soon we found it was our friends. It took them some time to conceive how they had got where they were. They were sure they had kept straight on for the mouth of the cave, and had gone about far enough to have reached it.

In contrast, Heth only wrote that "There was nothing worth mentioning about this cave except its immense size. We were informed that its entirety had never been explored. All caves are pretty much alike; stalagmites and stalactites abound, differing only in the queer shapes, which they assume."

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THE PUBLIC SPRING OF LEXINGTON, KENTUCKY

Gary A. O'Dell

Although tradition holds that Lexington was first named at the McConnell camp in 1775, it was not until four years later and a mile and a half east that the actual construction of the Lexington community began. In mid-April, 1779, Colonel Robert Patterson set out from the fort at Harrodsburg, thirty miles distant, to establish the first garrison north of the Kentucky River. With a party of twenty-five men, he reached the intended site on the evening of the 16th and camped "at a magnificent spring, whose grateful waters emptied into a stream nearby."[1]

This spring was previously known to Patterson. He had built a small hut of buckeye poles by the same spring in 1776 and planted some crops. Recovering from wounds at his Pennsylvania home early in 1777, he described the location of the spring and hut so well to his brother William, about to set out for Kentucky, that the latter had no trouble finding it in the wilderness. A few months later Robert had recovered suffieiently and made the trip to Harrodsburg, meeting William there, and with "a small armed party" had gone on to the spring and his cabin and "raised a small crop of turnips from seed I had brought along, about all we had to eat most of the winter except jerk, as the Indians had destroyed crops and run off the live stock." When the orders from Virginia came to find a suitable location for a fort north of the river, Patterson knew just where to go.[2]

On April 17 construction of the blockhouse was begun. The first tree was cut by Josiah Collins, a burr oak two feet in diameter that stood at the head of the spring. When trimmed, the log was used in the foundation of the blockhouse. The blockhouse and spring were located near what is now the southwest

corner of Mill and Main streets. By April of 1780 a stockade had been erected a few feet north of the spring, enclosing twenty-two cabins. The cabins were built so that the two outer rows formed part of the stockade walls, pickets filling the spaces between.[3]

The Public Spring, as it came to be called, supplied the water needs of the occupants of the fort and continued to do so for many years after the Indian alarms ceased and the community expanded beyond the bounds of the fort. Attempts were continually made to improve the spring as the demands of the town increased, originally be clearing out the opening of the spring. Martin Wymore, a resident, observed that they "dug that one in further and more, and it got stronger as they went further into the bank." When the stockade was finally torn down, more permanent improvements were made. The spring was dug even deeper and walled up, and a large tank constructed so that horses might be watered from the spring.[4]

The rapid growth of Lexington brought attendant problems with the usage of the spring by not only the residents of the community but also by the inhabitants of the county and travelers, for "there was but one spring and altho' forty or fifty persons only used to attend, the townsmen had to go and bring up all the water they needed before these persons would come, for the spring would be muddied then so as to be unfit for use." Several new springs eventually opened up along the banks of the Town Branch and eased the demand upon the single spring for a few years, but there still remained problems in keeping the spring clean and orderly. During the summer of 1790, the town trustees issued orders that "the public spring on Main Street and the one near the school house, no longer be used as washing places." Apparently not a great deal of attention was paid to this notice, for in July of 1795 the trustees "issued threats to prosecute anyone doing washing at the public spring." Evidently the unsanitary conditions at the spring were such that the trustees were required to appoint men to supervise their use. Maintenance costs for the Public Spring were also allocated out of the town budget.[5]

Sometime after the beginning of the nineteenth century the water supply was facilitated by piping the spring flow. The pipes used were wooded, made from logs that had been hollowed by burning through the interior, most likely with a red-hot iron rod. Some log pipes may have also been made by boring through the center with a long auger, a practice that is known to have been used at that time in other areas of the state. Each log was tapered at one end so it would fit snugly into its neighbor and form a continuous run of pipe. In April of 1981, during excavations for the new Vine Center in downtown Lexington, just such a log pipe was uncovered and rescued. In excellent condition, the pipe had the tapered end and its interior showed signs of charring. An extensive plumbing system could be constructed of these wooden conduits, leading to a reservoir. Along the twenty foot length of the pipe found in Lexington were holes bored at intervals through the sides; when fitted with a wooden stopper, these allowed the inhabitants to uncover the holes at will and collect a bucket of water--the origin of the word "fire plug."

Property became more valuable in Lexington as the town continued to grow, and although many lots and houses were advertised to include a "spring of cold water," others were filled in so that better use of the land might be

made. The Public Spring, however, continued to be used and was regarded as a valuable asset. In 1807 William W. Worsley subleased the Public Spring lot from Joseph Charless, who had obtained an eighteen year lease from the Town Trustees at an annual rent of eighty dollars. When Charless transferred his lease to Worsley, it was ruled that regardless of the leaseholder, it "was in no case to affect the privileges granted Englehart Yieser by the Trustees of Lexington to convey water from the Public Spring."[6]

The Public Spring lot was eventually sold by the Trustees. The value of the land eventually caused it, like the other small springs in town, to be covered and buildings erected upon their sites.

When, in December of 1980, heavy earth-moving equipment began excavating the Vine Plaza in downtown Lexington, they dug into the buried fragments of Lexington's pioneer days. From the rubble of two centuries' development, water seeped. Water that may well have been the long buried and diverted remnant of Robert Patterson's lovely spring, the spring that provided the first settlers with water. A little time passed, the machines renewed their work, and a giant building rose against the sky. Perhaps, in another century, the hidden spring may again be exposed to the light.

FOOTNOTES

[1]William H. Perrin, History of Fayette County, Kentucky (Chicago, 1882), p. 225; John D. Shane's 1841 interview of Josiah Collins, Lyman C. Draper Collection, Wisconsin Historical Society, Madison, 12CC64-78, 97-110.

[2]Charlotte R. Conover, Concerning the Forefathers (New York, 1902), pp. 144, 163.

[3]John D. Shane's 1841 interview of Josiah Collins.

[4]John D. Shane's interview of Martin Wymore, Lyman C. Draper Collection, Wisconsin Historical Society, Madison, 11CC128; George W. Ranck, History of Lexington, Kentucky: Its Early Annals and Recent Progress (Cincinnati, 1872), p. 24.

[5]John D. Shane's interview of Martin Wymore; The Kentucky Gazette, August 15, 1790, and July 3, 1795; Charles R. Staples, The History of Pioneer Lexington (Lexington, Ky., 1939), p. 140.

[6]Ibid., p. 173; C. Frank Dunn, Old Houses of Lexington (unpublished manuscript, copy of Lexington Public Library), pp. 137-38.

HUNTER'S CAVE, PENNSYLVANIA, POST OFFICE

William R. Halliday

Recently, I acquired a registered cover postmarked Hunter's Cave, Pennsylvania, dated February 1, 1880. This post office was unlisted in the Speleo Stamp Collector, and I can not recall ever hearing of a Hunter's Cave in Pennsylvania, much less one important enough to have a post office. In any reader has any information on this, please let me know.

HOW TO FIND LOST CAVES

Russell Gurnee

Often information about a cave is in elaborate detail--except where it is located. When this occurs it becomes "lost" and the description enters into legend and exists only as a tale that changes each time the story is told. The term "lost" might better describe the predicament of the searcher rather than that of the cave. Mystery seems to surround caves, and since a powerful motivation for cave search is the anticipation of an adventure, stories are passed from generation to generation.

There are a number of ways to set about the search for a lost cave. First, there must be a substantial report regarding the cave. Widespread local knowledge is a good indication of substance in a story, but the physical evidence of written material or some artifact taken from the cave is a better starting point. So many caves have been discovered that have evidence of former visitation by man that a systematic search stands a good chance of success by the speleo-historian-explorer.

We will assume that the reader has exhausted the files of the National Speleological Society and there is no further information that can be gleaned from that source leading to the rediscovery of a specific cave. Some alternate routes might be as follows.

MYTHOLOGY AND LEGEND

The underworld fascinated the early Greeks and it is possible that actual caves prompted some of the stories that feature events in caves. Zeus was born in a cave, the Minotaur lived in a cave in Crete, and Theseus and Ariadne started the practice of using string to escape from the first labyrinth. Later, Homer told of Ulysses's Odyssey over the "wine dark sea" of the Mediterranean and told of CYCLOP CAVE where a giant kept his sheep. Other legends from Greek Mythology concern caves and it is possible that they all contain some clue that might be traced to an actual cave.

In the Valley of the Kings in Egypt, most of the tombs of the Pharaohs were looted by grave robbers. The priests despaired of protecting the sites so they took the remains of forty rulers and hid them in a natural cave high on the canyon wall. For a thousand years the mummies lay undisturbed and "lost" until they were found by local tribesmen. More recently, the Dead Sea Scrolls, papyrus records of the early stories of the Jewish Bible, were also hidden in small caves in the Jordan Valley, forgotten until discovered by wandering Bedouins.

One question about the caves of prehistory in the valleys of southern France is now they could have been lost. There caves were used for many thousands of years as a sanctuary for individuals to perform certain ceremonies. The speculation today assumes that these activities were only known to a few people of the community and the location of the cave a closely guarded secret. This knowledge could have been lost in a famine or common disaster by pinching off the leaders who took the secret of the access to the cave to their graves. No written history existed for the information to be passed on, so the link of

oral communication was broken and the caves became "lost." These caves were rediscovered by explorer/archaeologists who decuced that they were known by early man and their search was rewarded.

In 1924, Norbert Casteret was intrigued by the entrance of a small cave near Montespan in southern France. In spite of the waterfilled passageway that prevented access, he guessed that the cave might have evidence of early man. His exploration by solo diving into the stream and passing the water barrier discovered a sanctuary of prehistoric man and revealed the oldest statues made by man. He discovered deep within the cave several clay figures in the shape of animals that were formed by ancient hunters more than twenty thousand years ago.

In the United States many caves were discovered during the Civil War by southern explorers in Virginia, Tennessee, and parts of Alabama. The blockade by the Union forces cut off the supply of gunpowder to the Confederates, setting off a search of the limestone areas of the south for "petre dirt" as an ingredient of this vital commodity. Some caves mined for this material were abandoned after the war and their locations forgotten. Other caves were discovered, searched, and, when they proved to be unsatisfactory as a source of niter, remained hidden and also unrecorded.

Each state has legends of caves. Some are pure fantasy, but others are true and the caves described have been found and their features verified. However, more are still unproved, such as the lost cave of Pharaoh Mountain in New York State, reported in the early 1800's by two boys who visited a cave with an Indian playmate. Located near Ticonderoga in the Adirondack Mountains, the cave was reputedly covered with Indian paintings. The children took shelter in the cave during a storm and while there one boy picked up a piece of metal that later proved to be a gold coin with an etching of a mastadon. Many people have tried to locate the cave, but it has eluded the searchers. The only tangible evidence of the story is the enigmatic gold coin.

This is enough information to give the idea that there are many tales and stories to be told about "lost" caves, and now it is necessary to select a likely tale, research it and then attempt to seek out the entrance of the cave. Sources for specific additional information can come from many areas.

NEWSPAPERS

Cave discoveries were always good news stories for newspaper editors. Before wire services, deadlines sometimes prompted editors to draw upon their imaginations and make up stories of interest and appeal for their readers. This manufactured news did not always report the truth and some of the most fanciful of cave descriptions come from the facile pens of practical jokers of the last century.

One story, now called the MAGNETIC CAVE HOAX, was widely circulated. The original story was of a cave in California, reputedly with peculiar magnetic properties. In rooms, where most of the magnetism occurred, a hatchet carried by one of the original explorers was snatched away by invisible forces and hurled to the ceiling where it stuck fast. Later the magnetism was so strong it pulled nails from the adventurers' boots.

Another cave, also in California, was reported to have an enormous colony of honey bees that made such a roaring sound that they could be heard for miles. There is a cave in Kings Canyon in California that has a colony of bees, but it is only a tiny crevice and the noise no greater than an ordinary hive.

The line between fact and fancy was drawn finely by the early newspaper writers and there was enough possibility in all of the stories to have it fall either way--partly true and partly false.

The bizarre nature of the story did not always mean that the story was false. In 1950, Jose Storek of Guatemala City, wrote an article for the local paper describing experiences he had while searching for caves in the back country of Guatemala. He told of caves where live steam heated the baths of Indians; where Indians went deep within to an underground stream where they caught great fishes in baskets; a cave where the Indians mined liquid mercury by the drop from the walls; ceremonial sites within a cave where religious meetings were held and incense and resin were burned; and a great natural bridge formed of sinter, 1,600 feet long where one river crossed over another.

All of these stories proved to be true and the caves existed to prove them. In the process of searching out and proving these stories there were caves visited that had skeleton remains, hundreds of skulls and desicated bones, pottery, alters, and idols all hidden from view for hundreds of years.

Newspapers can also be useful in finding lost caves today by simply advertising in the local area for information regarding the cave. The most valuable research tool, however, is the microfilm record of many early newspapers. It is possible in most libraries to gets of newspapers that have been put on microfilm. These can be borrowed through inter-library loan for the study of a specific time and place. Some of the larger newspapers, such as the New York Times, have been indexed for reference for the past one hundred and fifty years.

BOOKS

One source of information on lost caves is the published word of books. Early travel writers were particularly interested in the natural sights along the way. Descriptions of caves by Alexander Von Humbolt, Thomas Jefferson, and Lewis and Clark aided in the further study of caves. Some of the caves described by early writers have been "lost" and it is uncertain that the information given in their accounts can ever be verified. An example might be the ice cave described by Captain Burslem of the British Army in 1840 while he was stationed in what was then Toorkistan. He told of the Cave of Yeermalik that he visited with some local tribesmen. The cave was held in superstitious fear by local people since the time Genghis Khan trapped the entire population of the local village in the cave in the twelfth century. When Genghis Khan could not get them to exit the cave he built a fire at the entrance and exhausted the oxygen from within thus killing more than seven hundred people. The visit of Captain Burslem verified the finding of the victims (more than 600 skeletons), some with small skeletons of children on their breasts. This description has not been verified in recent years and it is possible that the cave is not accessible or locally known as this time. With the political

situation in Afghanistan near Kubul, it is doubtful that we will know more of the cave in the near future.

MAPS AND DEEDS

If the cave selected can be traced to a specific area, (and the local people do not know of it), it might be possible to consult old local maps or deeds that will give a clue to the location. If the cave has an individual's name associated with it, follow up on the property ownership and find some of the heirs of the property. If this is not successful, consult the geological maps to see where the limestone and favorable bedrock might be found. A local well driller has well logs that tell of the stone cut with his drill. He might also tell of voids struck in the course of this work that might lead to the discovery of the cave in question.

LOCAL HUNTERS AND WOODSMEN

There is no substitute in mountainous and wooded land to ask the local hunters and fishermen about the caves. The Rod and Gun Club of an area always has a few avid hunters who know the region and can help you with the search for the cave. Another source of information is the oldest citizen of the region to verify the tales that led you to the area.

FIELD SEARCH

If you have gathered all of your information regarding the cave and have an accurate description you are ready to start the field quest. The thrill of discovery after research is sweeter than the original discovery for you can savor the expectation of the goal. There is usually sufficient surprise in the exploration to compensate for not being the original discoverer. Treat the cave gently as it as afforded you the pleasure of search, discovery, and now enlightenment. This is a combination that is hard to duplicate in everyday endeavors.

Good luck on your search.

CIVIL WAR RAIDS ON GUERRILLA CAVES IN MISSOURI AND ARKANSAS

The Official Records of the Rebellion contains several reports of skirmishes at caves in Missouri and Arkansas, where Confederate guerrillas were routed by Union patrols. On December 24, 1863, Lieutenant A. J. Garner, 2nd Arkansas [U. S.] Cavalry, was ordered away from Cassville, Missouri,

> to proceed in the direction of and beyond Pineville, and reconnoiter, with 50 men, and ascertain, if possible, the movements of [Confederate Brigadier General] Stand Watie, who was said to be in that neighborhood with 500 or 600 men. Lieutenant Garner arrived on Cowskin Creek; found that Stand Watie had been there,

but left the day before. He followed his trail to the line; but the enemy being too far ahead, the pursuit was fruitless, and abandoned. At the headwaters of Butler's Creek, where he turned off, Lieutenant Garner found and took possession of a cave with a blacksmith's shop and about 100 bushels of corn in it. He destroyed all. Ten miles below, on the same stream, in another cave, of 3 guerrillas found there, 1 was killed and 1 wounded; the other escaped. In this cave Lieutenant Garner found a small parcel of dry goods, about 2 pounds of gunpowder, 1 bushel of salt, 1 shotgun and 1 rifle. These (but the dry-goods) he ordered destroyed.[1]

On January 17, 1865, while at Springfield, Missouri, Captain William L. Fenex, Company M, 73rd Enrolled Missouri Militia, reported an affair which took place near Sugar Loaf Prairie, Carroll County, Arkansas, five days earlier:

> . . . on the 8th instant I started a scout of twenty-five men, under the command of Lieutenant Kissel, to look after old Snavles' [Schnable's] whereabouts, and, if possible, to capture or exterminate Alfred Cook and his band, that had so long been a terror to the loyal people of Taney, Christian, and Stone Counties. After reaching the Sugar Loaf Mountains, about thirty miles south of Forsyth, Lieutenant Kissel there learned, through strategy, that Cook, with his band, was in a cave some two miles from his house, when he immediately determined to press Cook's son, a small boy, to pilot him to the cave, which he did, and found Cook and thirteen others with him. After surrounding the cave he demanded an unconditional surrender of all in the cave, which was refused. He then gave them four hours to consult, with the promise that all that surrendered in that time should be carried to Springfield and there be turned over to the proper authorities to be dealt with according to law. He made this proposition as the last hope of salvation for them. At the expiration of the time allowed nine of the party surrendered, leavingin the cave some five others [with] Alfred Cook, their leader, which explains the reason that Cook and Ed. Brown were not brought to Springfield. The lieutenant and his brave boys continued the siege until the next morning, when Cook and his party succeeded in getting their Southern rights. . . .

Besides Cook and Brown, it was announced in a newspaper that the other men killed were "Hiram Russell and two others named Manly."[2]

On the morning of February 16, 1865, Captain James H. Sallee, with a detachment of Company B, 16th Missouri Cavalry, USA, left Lebanon, Missouri, on a scout

> . . . with fifteen days' rations, and proceeded to Little North Fork, in Ozark County, Mo. Here I met with four citizens of Douglas County, Mo., viz, Isham Lamar, Johnson Lamar, William Lamar, and George Lamar, who reported to me that they had been to White River, near the Widow Magness', and had found some rebels in a cave and wanted assistance to catch them. I immediately started in search of the cave, the Lamars accompanying me as guides. On arriving at

the cave I found three bushwhackers, viz, Williams and Riddle, one unknown, who on our approach started to run, but Williams was killed and the others wounded, who made their escape in the bluffs and brush. After this affair I prepared to move on down the river and did so, but the Lamars would not go any farther.[3]

SOURCES

[1]Official Records of the Rebellion. 70 volumes in 128 parts. Washington, D. C.: Government Printing Office, 1880-1901. Series 1, Volume XXII, Part II, pages 768-69-

[2]Ibid., volume XLVIII, Part I, page 37; Memphis Bulletin, February 4, 1865, page 1, column 7.

[3]Official Records of the Rebellion, Series 1, volume XLVIII, Part I, pages 116-17.

NASHVILLE SPELEOHISTORICAL MINITRIP

William R. Halliday

Buffs of spelean history with a little free time in Nashville will enjoy a quick trip to DeMonbreun's Cave on the bluff of the Cumberland River. Actually it runs under an old house at 1700 River Hills Road. The rear entrance is on the other side of the road, at the lower end of a stream gully. The cave is about 150 feet long, four to twelve feet high and two to eight feet wide. It is a joint-controlled, slightly sinuous cave which occasionally floods to the ceiling but has a considerable biota. It is partly floored with a cement walk, which with the cement stairs at the rear entrance are said to have been installed by the WPA in the 1930's. It is almost entirely a single stream slot. The main interest of the cave is its pioneer use by the French trader who was the first white man to settle in the Nashville vicinity. A historical marker stands alongside Lebanon Road about a mile farther south. A good reference about the cave and its history is: "Cave Dweller," Nashville Tennessean, Sunday Magazine, September 10, 1950, page 26. Traditionally, the cave was the birthplace of the first Caucasian baby in Tennessee, but the cave appears uncomfortable for anything other than an emergency or overnight shelter, since a seasonal stream probably left puddles throughout the cave before construction of the cement walkway. Despite the indiscriminate dumping of trash unfortunately characteristic of the Tennessee-Kentucky cave area, the cave and the nearby river bluffs makes a pleasant one or two hour outing from almost any part of Nashville.

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John L. Smyre's massive report of Big Bone and other caves of Van Buren County, Tennessee, as of yet has not been printed. If things go better, it will finally appear in 1987.

LETTER RECOGNIZING DR. WILLIAM HAZLETT'S SERVICES AT SAND CAVE, KENTUCKY, 1925

Contributed by William R. Halliday

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF STATE ROADS AND HIGHWAYS
FRANKFORT

E. N. TODD
STATE HIGHWAY ENGINEER

STATE HIGHWAY COMMISSION
W. C. MONTGOMERY, CHAIRMAN
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Feb. 20, 1925

St. Lukes Hospital,
14th Street & Michigan Blv'd
Chicago, Ill.

Gentlemen:

It gives me a great deal of satisfaction and pleasure to thank the hospital for choosing Dr. William Hazlett as the physician to come to Cave City during the rescue of Floyd Collins.

Dr. Hazlett, at all times, was a perfect gentleman and extended sympathy and administered to the workers his aid and encouragement during the fourteen days of work in attempting to rescue Floyd Collins. His counsel and advice was respected by every worker at Sand Cave, and his sympathy to the injured and to the Collins family was more than appreciated by everyone.

Upon his arrival at Sand Cave there was no organization whatsoever for the treating of injuries or wounds, and Dr. Hazlett first ordered a Red Cross tent and nurses through the Louisville Red Cross Chapter, and got them on the ground immediately. The next step of his was to call a meeting of the Barren County Medical Association, and he got all the doctors organized to take turn about in serving eight hours each at Sand Cave. The physicians of Barren County respected him, and although after three or four days they became lax in their attendance at the cave, Dr. Hazlett at no time ever shirked in any way at all, and was on duty over 24 hours at one time.

There was something like thirty to forty minor injuries treated each day or medicine given for colds and caughs, and every worker who came to the Red Cross tent would first ask for Dr. Hazlett in preference to any local physician. His association with the workers, with his encouragement, had a great deal of effect upon the energy and endurance which the rescue party showed during this work, and he cooperated at all times with the field representative, Mr. Barry of the American Red Cross, and was with the different state officials who were designated by Governor Fields in charge of this rescue work.

I wish to extend to the hospital my personal thanks for choosing Dr. Hazlett, and can assure you that his visit to Kentucky will always be remembered by everyone whom he came in contact with, He proved himself to be a full-blooded American citizen and a perfect gentleman in every respect.

With the very kindest regards to the hospital staff and especially the ones who were responsible for choosing Dr. Hazlett to make this trip to Kentucky, I am

Yours very truly,
Wm. E. S. Posey.
(Governor's Personal Representative at Cave City)

WESP:GW

NOTE: William H. Hazlett, a surgeon at Chicago's St. Lukes's Hospital, was at Sand Cave February 4-17, 1925, where he organized a field hospital. See Robert K. Murray and Roger W. Bruckner, Trapped! (New York: G. P. Putnam's Sons, 1979), pages 136, 137, 138, 218.