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Horace B. Howey.

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ABOUT THE ASSOCIATION

The American Spelean History Association is chartered as a non-profit corporation for the study, dissemination and interpretation of spelean history and related purposes. All persons of high moral and ethical character who are interested in these goals are cordially invited to become members. Annual membership is \$5.00; family membership is \$6.00. Library subscriptions are \$4.00; libraries please note; invoices are not accepted; please remit check with order.

ABOUT THE QUARTERLY

The Association anticipates the publication of the Journal of Spelean History on a quarterly basis. Pertinent articles or reprints will be welcomed. As a photo-offset process is in use, articles should be submitted in a form which can be photographed for direct use, i.e. single spaced, on 8 1/2 x 11 paper with adequate margins. Submissions of rough drafts for preliminary editing is strongly recommended. Line drawings are no problem; photographs require special handling and the editor should be contacted. Dark, clear xerox copies of books, etc. reproduce well

ABOUT THE COVER ILLUSTRATION

The Reverend Horace C. Hovey needs no introduction to readers of this journal. With the Johnson Reprint Company reprint of his Celebrated American Caverns due shortly, John Bridge's presentation of Hovey's "Brigham, the cave dog" seems particularly timely. The cover photograph was Hovey's favorite. It was taken in 1897 by an unidentified photographer named Thompson, and an engraving was subsequently made by E.G. Williams & Bro. of New York. It has appeared in several books and articles and is especially familiar to cavers through its use on the title page of the 1912 "Revised Edition" of Hovey and Call's Mammoth Cave of Kentucky.

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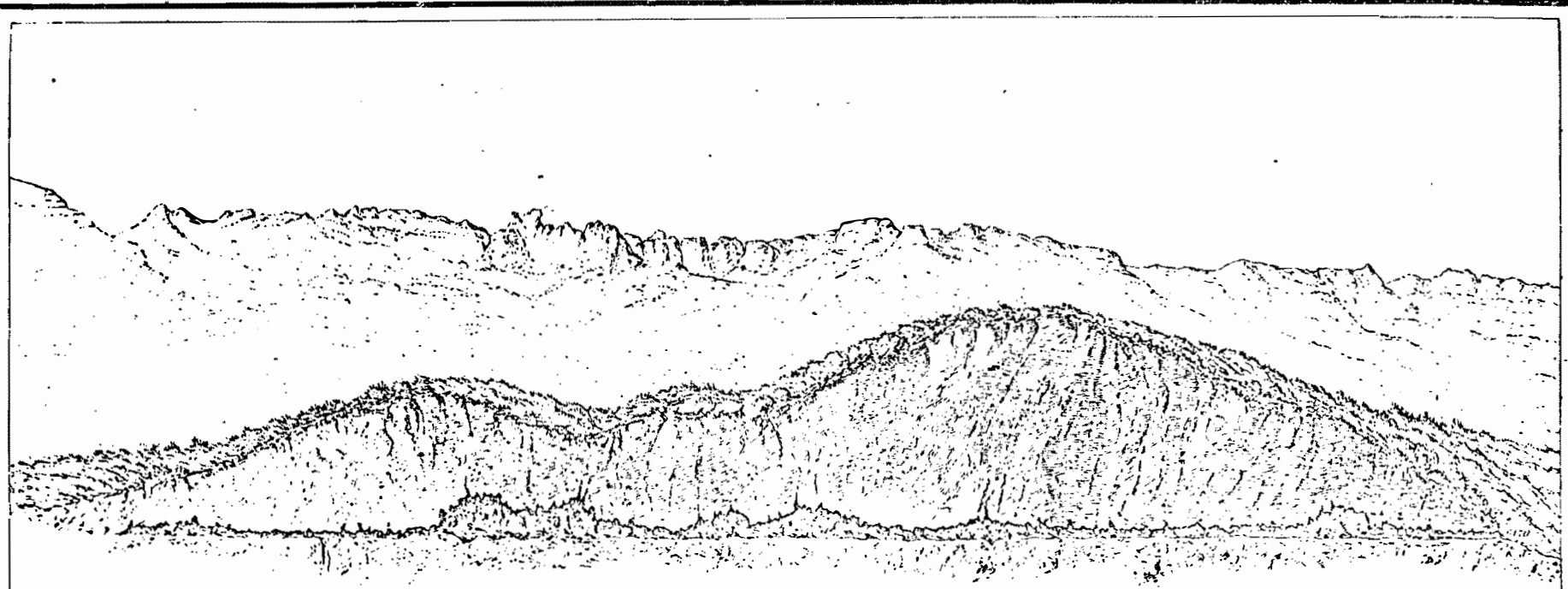
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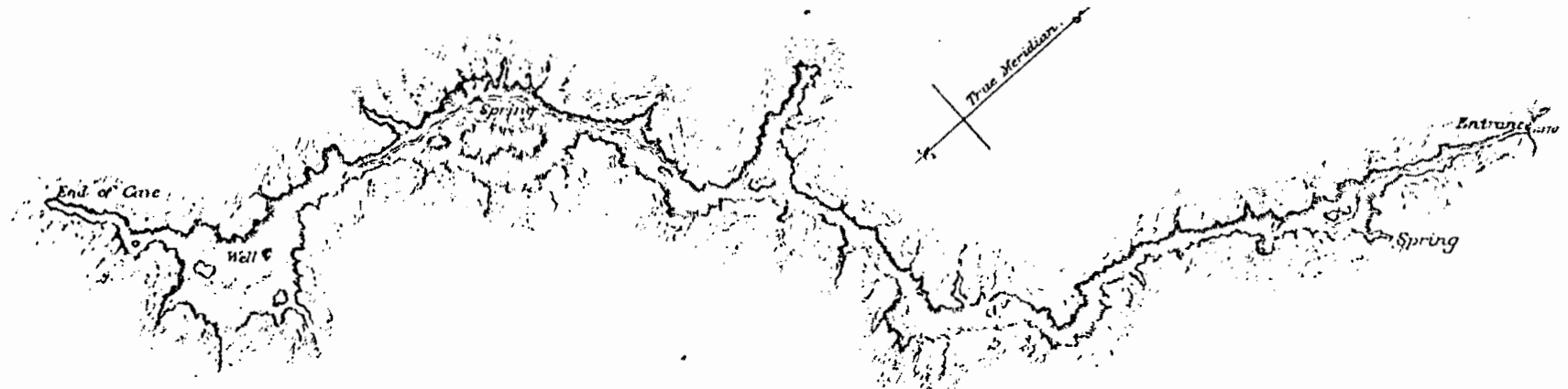
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Vertical Scale.
 0 100 200ft.



Plan and Section of Cave, in Cave Valley, Southeastern Nevada.

Horizontal Scale.
 0 500 1000ft.

Surveyed by P.W. Hornel, 1860.

Drawn by Weyss & Thompson.

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HISTORY OF CAVE VALLEY CAVE, LINCOLN COUNTY
NEVADA - From 1858 to 1968

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Abstract

Cave Valley Cave was one of the first caves discovered and surveyed in Nevada. It is about 3,000 feet long and consists of low wide rooms and immense chambers that are bewildering to explorers. Cave Valley Cave was discovered by members of the second White Mountain expedition of the Latter Day Saints Church on April 14, 1858. The next important visit to the cave was in 1969 when it was surveyed and explored by 23 members of the Wheeler Survey to a distance of 3,000 feet from the orifice. An interesting 1890 article relates the exploration of the famous mud-plastered shaft and reports it to be 94 feet deep. F.C. Schrader, of the U.S. Geological Survey, visited the area in 1930. He states that the cave contains an estimated 200,000 cubic yards of clay, and that the maximum thickness is 40 feet or more. A partial analysis of the clay had revealed 27.8 percent aluminum oxide, 0.4 ounces of silver to the ton, 0.251 percent of uranium oxide, and small quantities of iron, phosphorous, lime, magnesium, and silica, and traces of gold, copper, arsenic, antimony, and vanadium. In 1942 Carl L. and Earl L. Hubbs discovered a new cave species of polydesmoid milliped (*Tidesmus hubbsi*) deep within the cave. In 1953 the California-Nevada Speleological Survey - 1952, and in 1954 W.R. Halliday reported on the stalagmitic form, termed cave money, a flat multilaminated formation about the size of a half dollar.

Introduction

Cave Valley Cave is "a remarkable cavern in a remarkable country" (Lange, 1953). It is located somewhat east of center in a vast area called the Great Basin Section of the Basin and Range Province (Fenneman, 1931). This area covers about 150,000 square miles and is characterized by linear, north-south trending block-faulted mountain ranges which are separated by closed valleys. The mountains are typically rugged, one range exceeding 13,000 feet in altitude. The valleys are generally high, 3 - 6 thousand feet in elevation - thus it isn't uncommon to find 5,000 to 6,000 feet ^{of vertical} relief within a few miles. The climate is semi-arid, and in Cave Valley the precipitation probably averages 8 - 9 inches per year.

Cave Valley Cave has a preponderance of names - among them are: Mammoth Cave of Nevada, Mormon Cave, Great Cave of Nevada, Wheeler Cave, Patterson Cave, and White Mountain Cave. This cave is approximately 3,000 feet long. It isn't famed for its size or beauty, but for the deep, viscous orange mud with which the cave is well supplied. This clay has been associated with unsuccessful mining ventures. The cave is developed in Pole Canyon Limestone of Middle Cambrian age (Kellogg, 1964), as are most of the caves in eastern Nevada, especially those formed in the imposing Snake Range.

Acknowledgements

The authors listed in this paper are acknowledged, both living and dead. Special acknowledgement goes to the speleologists who preceeded the author in compiling the published information on Nevada caves, namely Ray de Saussure, William Halliday, Arthur Lange, and Sidney Wheeler. Two bibliographies containing many speleological

listings were compiled by Grosscup (1957) and de Saussure (1952). The personnel of the Nevada State Museum, especially Jerry D. Gray and Donald R. Tuohy, are thanked ~~for~~ patience during the continued harrassment from the author desiring and getting information on Nevada speleology. The University of Nevada library, the Mackay School of Mines Library, and the public library in Reno were also hounded, and their unknown librarians are thanked. Lastly, the fine personnel of the Nevada History Society deserve special mention. With their wonderful memory, they often dug through their files and found exactly what this author wanted; especially thanked are Gretchen Boles, Eslie Cann, Myrtle T. Myles, and Marion Welliver.

Early History

Cave Valley Cave was discovered by members of the second White Mountain expedition of the Latter Day Saints Church on April 14, 1858. This information was recently obtained by Keith Trexler, (1966, p. 6) formerly chief Park Naturalist, Lehman Caves Natinnal Monument, who had compiled a commanding treatise on Lehman Caves. This information was supplied by one George Washington Bean to Brigham Young, the famous Mormon leader. Effie Read (1965, p. 135) in her History of White Pine County, also states that William H. Dana ^{of the white mountain expedition,} kept a diary and recorded in part:

"Wednesday, May 19... The Indians say the cave is inhabited by another race of beings who live there always, and that a long time ago two squaws went into the caves naked and after several weeks came out dressed in buckskin suits and reported a fine open country, pine trees, and deer; and no one can persuade the Indians to the contrary. The cave has been explored about half a mile without finding its end. It has many rooms and side passages which makes it very intricate...."

The nearly forgotten explorer, James H. Simpson, crossed the breadth of the Great Basin, a distance of 531 miles, in 1859. He (Simpson, 1876, p. 61-62) substantiates the discovery of Cave Valley Cave:

"It is reported by some of the mail company that there is a cave, about three days travel to the south of Steptoe Valley, into which persons have traveled a mile; some say as many as 3 miles, when they came to a precipice, which prevented them going further. They rolled rocks down, and the lapse of time before striking the bottom showed the depth to have been very great. There is said to be a number of rooms, in one of which is a beautiful spring. It was found by some persons who came from Fillmore City and traveled west...."

This proves that even 110 years ago the size of a cave gets bigger after each telling.

The next important visit to the cave was in 1869 when it was surveyed and explored by 23 members of the Wheeler survey to a distance of 3,000 feet from the office (Wheeler, 1899, p. 25). This was one of the first, if not the first speleological survey in the far west. The surveyor, P.W. Hamel, must be given credit for his accurate work under difficult conditions.

In the years that followed, several writers dealt heavily upon the Indian legends that concern the cave. William Min_tern (1877, p. 184-188) narrates the cave nicely and adds the story of "Cave Indian", who lived underground "in the cavernous paradise of small ponies and beautiful squaws". After "Cave" escaped from this "paradise", Indians held a fear of the cave and couldn't be persuaded to enter or go near the cave again.

Henry T. Williams (1877, p. 173) briefly mentions the Mammoth Cave of Nevada and thought that "in a short time must become a place of public resort".

George A. Crofutt (1878-9, p. 314) published an overland tourist guide and plagiarized Minturn's article. Two years later the great historical publishing firm of Thompson and West (Angel, 1881) published the voluminous History of Nevada. On pages 484 and 652 Cave Valley Cave is mentioned. It is said that a plank had to be laid over the deep shaft to get beyond, and that the shaft had lately been explored and found to be about 90 feet deep.

In 1890 (The Pioche Weekly Record, 1890) a person who penned his name as "R.", maybe ashamed to present his whole name, presented a somewhat fictional account of Cave Valley Cave. Rocks dropped down the shaft are not heard to strike bottom, but the sound of running water suggested a stream, possibly needing a boat for exploration! Dreams of great mineral wealth lies deeper in the cavern.

One month later a Mr. Eugene Howell (1890) sent a letter of rebuttal to the editor of The Pioche Weekly Record concerning the cave article by "R.". Possibly Howell's trips into the cave are the most thorough explorations that had ever been made in Cave Valley Cave. His interesting and amusing story is presented in entirety below which was under the heading "Communication" in the Paper .

"Seligman, Nevada, March 21, 1890
Editor, Record

"I note in the Record of 8th inst., a communication from one over the signature 'R' in regard to the cave near Patterson in Cave Valley never having been thoroughly explored, and in reference to the deep shaft or crevice in cave, in the fact, that rocks have been thrown down same and never heard to strike bottom, and that it is known there is running water in this shaft and probably deep enough to float a boat.

"Now this is all bosh; and for the benefit of the person who styles himself 'R', I will say, that in company with D.C. McDonald now of Ely, we have together been over ⁶/₁₀ inch of this same cave upon two different occasions, in March 1879 and April 1880.

"The last visit we left Bristol with 400 feet of rope, tar balls, blue lights, picks, shovels, &c, for the purpose of making an exhaustive examination of the bottomless pit and cave in every part.

"We spent ten days in this examination and three in the cave at one time, without coming out, having supplied ourselves with sufficient provisions, and quenching our thirst with the seepage water that abounds in parts of the cave.

"We did not find any mummies, or petrified Indians, or wild beasts, or sharks, or living whales, or anything of that kind, nor no more show to float a boat than on the top of Jeff Davis Peak.

"We found the pit instead of reaching to China, to be just 94 feet deep on the perpendicular, and anybody that happens to go down will find our names at the bottom in a can on the northeast side stuck in the clay. This pit goes a few ft. farther, on an incline, an angle of 28 degrees, in the shape of a funnel until it ends short. McDonald got down the shaft and couldn't get out, and I had to go to Parker station and get men to pull him out.

"When I got back at the mouth of the shaft, McDonald was in the bottom, swearing like a trooper, with his candle out. But we soon lowered the rope and McDonald tied himself in with a saddle cinch and we commenced to haul. He could have climbed the rope easily but it was all covered with wet clay and too slippery to hold.

"But the 'yahoos' who went with me were afraid of petrified Indians, or getting pulled in, or one thing or other, that it took me about an hour to get any work out of them; but we finally landed McDonald safe and sound and so plastered with clay that he resembled a grave digger more than anything else, or a man with the la grippe.

"There has not been a foot of this cave that we have not been over from one end to the other, and I will say this; that McDonald and I will take a contract to explore any cave on the coast, and when any tenderfoot commences to give us the Rider Haggard or Jules Verne business on a Cave that we know something about, it is time for him to quit, or hie himself back to the wilds of Minnesota or the forests of primitive Wisconsin."

Major Howard Egan explored in the West from 1846-1878.

During this time he collected "The Indian Story of a Great Cave"

(Egan, 1917). An Indian chief had two squaws, one old and one young and beautiful, who were always fighting which made the chief very angry. The chief gave the young squaw a hard beating and said now let there be peace or there will be something worse coming. The young squaw, leaving her one year old son, went into the cave to die. After a long time of traveling, she entered another country with strange animals and met a man whose wife had died recently, and who cared for her and bought clothes for her that covered the body from neck to ankle. One day the beautiful squaw began crying, and asked to return to her people, especially she wanted to see her son. Eventually, she made the trip back through the cave and found her husband's band of Indians who were surprised to see her dressed so fine and beautiful. The Chief's older wife had by now died and the young squaw continued to live with the chief and her son.

At the turn of the century, the inhabitants from the new camp of Southern Klondike celebrated the 4th of July with a trip to the new Mammoth Cave (Belmont Courier, 1900; also mentioned by Myles, 1968). This is a fictitious account, which, in part, follows:

"The cave in itself is a wonder. It has an underground passage a mile in length by a half mile in breadth. Mr. George Ladd was the first to make the perilous descent. When he reached the surface an agreeable surprise was in store for us. He had found a stream of water teeming with fish, which were without eyes. Nevertheless, they were of the finest flavor to be found in any county."

Now, indeed, a party of people that can rise at 4:00 a.m., climb a 7,000 foot peak, return to eat breakfast, travel at least 170 miles to a cave - by horse and buggy, explore a cave and have a blind fish-fry, return 170 miles, partake in a sumptuous repast beneath the joshua trees, participate in athletic events, and

continue dancing until daylight the next day, they have to be some remarkable individuals.

Recent History

The next important report on Cave Valley Cave was by F.C. Shrader (1931), of the U.S. Geological, when he visited the Patterson mining in Lincoln County for an investigation of radium reserves in 1930. He states that the cave contains an estimated 200,000 cubic yards of clay, and that the maximum thickness is 40 feet or more. A partial analysis of the clay had revealed 27.8 percent aluminum oxide, 0.4 ounces of silver to the ton, 0.251 percent of uranium oxide, and a small quantity of iron, phosphorous, lime, magnesium, and silica, and traces of gold, copper, arsenic, antimony, and vanadium.

In connection with aboriginal studies in the West, Julian Steward (1930, p. 13) mentions the cave in Cave Valley. He notes that legends are recorded that this cave leads to another world where superior and well-dressed people lived, and that one main Indian Village near the cave is called Daint; the people are also called Daint. On June 25, 1942, Carl L. and Earl L. Hubbs discovered a new species of polydesmoid milliped (Tidesmus hubbsi) deep within the cave (Chamberlin, 1943, p. 36). This is the only occurrence of this troglodyte as far as the author knows.

It wasn't until the early 1950's that Nevada became known as an important speleological state. However, as early as the 1930's, the late Sidney M. Wheeler began compiling information and a bibliography (unpublished manuscript, Nevada State Museum) on Nevada caves. Most of his published articles pertain to archaeology,

and he hadn't published any material on Cave Valley Cave.

Don Emerson and company, from the Southern California Grotto, visited several Nevada caves on Labor Day weekend in 1951 (Emerson, 1952). According to William Halliday (written communication, 1969) it was Don's trip that brought the eastern Nevada area to the attention of organized speleology. Emerson visited Cave Valley Cave, and by a set of old survey marks found the cave 2,250 feet long with 750 feet of side passages. He recorded a cave temperature of 49 degrees F. and a relative humidity^{of} about 95 percent.

In 1952, the California-Nevada Speleological Survey spent 15 weeks recording and studying caves in Nevada and California (deSaussure, Mowat, and Lange, 1953). This was an important contribution to western speleology, however, as their work is only in 12 mimeographed copies, this report isn't easily obtainable by researchers. This group spent two days exploring Cave Valley Cave. Their significant discovery was a formation that they termed cave money. This formation is described on pages 13 and 14:

"The small flat deposits are reminiscent of sand dollars which may be readily seen along the ocean beaches. Actually a form of embryo stalagmite occurring under conditions of mud floors and low ceilings, they are of fairly uniform size, up to about 10 centimeters in diameter, and not more than several centimeters in thickness. In the specimen observed, a considerable amount of mud appeared to be included in the deposit, which gives a mud brown color to the sample. To date, this type is uniquely represented in California and Nevada by this specimen which have been observed at Cave Valley."

William Halliday (1954) soon visited the cave and expounded upon the speleogenesis and other important features of the cave. He noted two obscure interesting stalagmitic speleothems:

"One is a flat multilaminated form about the size of a silver dollar, the other, a thin, calcareous lining of drip indenta-

tion in the mud like a portion of eggshell."

John Douglas (1958, p. 167-168) briefly mentions the Great Cave in Cave Valley, "famed for its coin-shaped limestone formations, known as 'cave money'".

Again, Halliday (1950, p. 173) mentions Cave Valley Cave and states that this cave is perhaps best known for the depth and stickiness of its mud and the variety of names which have been applied to it.

Dwight Deal has been keeping tabs on where he has noted boxwork (Deal, 1965, p. 87). Among numerous other western caves, he noted this phenomenon in Cave Valley Cave.

In the bitter winter of January and February 1965, Tom Mathey and companions explored several Nevada caves in eastern Nevada (Mathey, 1965, p. 34-35). They thoroughly sloshed around the mud in Cave Valley Cave and were temporarily confused. Tom states, "I knew where I was all the time, it was the cave which was messing things up".

These are all of the sources pertaining to Cave Valley Cave that this author has personally checked. However, for sake of completeness, four references are recorded below which mention Cave Valley Cave: Preliminary Report Upon a Reconnaissance Through Southern and Southeastern Nevada, 1869, U.S. Army, Engineering

Department, by George M. Wheeler, 1875; Truman Supplies Funds for Stanford Grotto's Three-month Expedition to California and Nevada Caves, NSS News, Volume 10, Number 12 (December), by Arthur Lange, 1952; and apparently the cave has been mentioned in the California Caver, Volume 1, Number 3, 1949 and Volume 3, Number 8, 1951.

Undoubtedly, more articles on Cave Valley Cave exist, and later research may turn up an interesting or historical sidelight on this immensely interesting cavern.

Even today, if you inquire about Cave Valley Cave, the local inhabitants will tell you that the end has never been found!, the cave has collapsed, recent sinkholes prove it, and that for one year the water from nearby Cave Spring was diverted into the cave and it never filled up...

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The founding of the National Speleological Society

by William J. Stephenson

Early in 1938 I became active in an unusual young people's social group at All Souls Unitarian Church in Washington, D.C. where I was then employed by the U.S. Patent Office. Every Sunday afternoon this group took a cross-country hike. On holidays, it conducted all-day and weekend hikes, usually in the mountains adjacent to the famous Shenandoah Valley of Virginia. There were several well-known commercial caves in this area, so when we stumbled across caves in the course of some of the hikes, we naturally had to take a look at what was inside. This was done with flashlights and candles and whatever else was at hand.

Going into a wild cave was exceedingly novel to us even though at first we did not penetrate very far. These first explorations aroused a desire in some of us to look into others, so a few of us secured carbide "miners lamps" and launched forth to explore bigger and better caves.

The first caves we so explored were, of course, well known caves that we learned about readily: Flowing Cave at Millboro Springs, Va., Spring Hill Cave at Lexington, Va., and John Brown's Cave at Harper's Ferry, West Va.

Soon I started wondering about bats. Why weren't they in the same part of the cave when we went back a second time. I went to the Smithsonian Institution. Nobody seemed to know. Others got curious about other things. We soon realized that neither we nor anybody else we could locate knew anything about caves. A boy scout leader suggested I study bats myself. Since several of our little group had considerable scientific training, we decided to do our own studying of caves.

To do the studying, however, obviously involved developing proper equipment for exploring caves, and also techniques for getting into caves - and insuring that we always also got out.

Early in 1939, the Sunday edition of the Washington Star published an illustrated article about caves, by Jo Chamberlin. It was the kind of article that would be of interest to a reader who had never heard of the term "speleology", with photographs of commercially developed caves like Luray Cavern, Howe Cavern, and Mammoth Cave. It also stated that for some years, speleological societies had existed in France and England.

I promptly wrote Jo for any information he might have concerning any speleological society in the United States. About the same time I also wrote the U.S. Geological Survey and the Smithsonian Institution for information on caves or someone who knew about caves. In both those instances, the reply was vague and noninformative. Jo, however, wrote back squarely. To his knowledge there was no U.S. caving organization and why didn't I try to organize one?

So we did. But since we couldn't find out who - if anybody - in the U.S. was an authority on caves, we decided to start by organizing a local society: the District of Columbia Speleological Society. Attended by more than 20 eager cavers, the organizational meeting was held at my home in May, 1939. I was elected president, Daniel J. Tyrrell, vice-president, Elmer Harmon, secretary and James LaVelle, treasurer. Alden Snell made up the fifth member of the initial Board of Governors.

Looking back, it is fun to note that newspaper reports of this meeting referred to our hiking club members as "experienced cavers", although none of us knew as much as a new U.S.S. member often has learned by his second or third trip now. But we started to learn in earnest. We wanted to learn how to get up and down a pit. How to map. What were cave formations really like? We were probably first-rate vandals, for in our ignorance, we removed formations for geological study, for display to the public to engender interest in caving, and even for private collections. The same was true of cave life. A toll was taken of bats, salamanders, crickets and even cave rats. Soon, however, with the establishment of committees to study each aspect of caving, including conservation and photography, picture taking was substituted for indiscriminate collecting.

By Autumn, 1939, we thought we were ready to tackle the big ones. The first real cave exploring expedition in the name of organized American speleology set off to explore the now-famous Schoolhouse and Hellhole caves of West Virginia. With no knowledge of rockclimbing techniques, and with only 75 feet of homemade rope ladder plus three or four hundred feet of manila rope, we were able to place Don Bloch (Editor of U.S.S. Bulletins 1 through 9) at the top of Cascade Pit and begin the conquest of Schoolhouse Cave. Using a hand-powered winch, a party mapped the main portions of Hellhole Cave, our first use of telephone communications in deep pit exploration.

Continuing efforts were made to contact anyone in the United States who was interested in caves in any way. Within six months, we found people who originally had refused us information for fear of our being lost or killed, now coming forward to ask our help in exploring and studying their caves. We found a group of outdoor enthusiasts centered around Steubenville, Ohio and Wheeling W. Va., headed by Jack Preble. On May 30, 1940, a joint field trip to explore the Sinks of Sandy, in West Virginia, drew an attendance of 30 or 40. Headquarters for this "Tbin-thruthesinks Club" meeting was Davis, W. Va., later to become the scene of the first "Old Timer Reunions".

By the end of its first year, the S.S.D.C. was really a national organization, with about two-thirds of its membership of 100 outside the D.C. area. Notable in its membership were: Vernon Bailey, H.C. Barber, A.C. Hawkins, Harry H. Henderson, Walter B. Jones, A.D. Frause, Charles E. Mohr, Clay Perry, Jack Preble, J. Hanson Valentine, Walter Amos, R.S. Kessler, Victor S. Crum, Paul Herbert, R.J. Holden, Remington Kellogg, William McGill (who joined at Withero's Cave, Va.), J.P. Morrison, T.T. Perry, Jr., and Ralph W. Stone.

During 1940, contact was made with a group which had been exploring New England caves under the leadership of Clay Perry. It was amenable to joining in the establishment of a national speleological society, but claimed the right of being its first unit. Its organizational meeting for this was in a cave at Farnham, Mass. on Dec. 1, 1940. 24 attended.

It was agreed that the organization of the national society was to be generally the same as that of the D.C.S.S., but with the addition of provision for the establishment of local sub-organizations to be designated as grottoes. This term was chosen for the "caviness" of the term. It was intended that each grotto would be responsible for the work of the society in its area, with members free to join grottoes or not, at will.

The constitution was written by Miles Pillars. Naming the new organization was a problem. "American Speleological Society" was most favored, but the Steubenville boys vowed to resign en masse before they would associate with the initials of that name, and the second choice of National Speleological Society won in a landslide.

The date of January 1, 1941 was selected for the changeover. The 12-member board of the D.C.S.S. became the Board of the N.S.S. It included Dr. R.S. Bassler, paleontologist of the U.S. National Museum; George Hall, Jr., Washington, D.C. engineer; Al Lewis, Potomac Appalachian Trail Club member employed by an advertising agency; Arthur Lembeck, another P.A.T.C. rockclimber; Dr. Joe Morrison of the U.S. National Museum; Thornton Perry, Jr., postmaster of Charles Town, W. Va.; Bill Schlichtig, of the Navy Department; Alden Snell, Washington accountant; Daniel Tyrrell of George Washington University, a Boy Scout leader; William Welch, M.D., Rockville (Md.) rockclimber; and Jack Wilson, another Washington rockclimber in the lumber business.

The New England Grotto thus is listed as Grotto #1 of the N.S.S., although it was formed a month before the N.S.S. itself. The District of Columbia Grotto was #2; Richmond (where several Patent Office employes had gone) was #3. Philadelphia, Charleston (W. Va.) and Pittsburgh soon followed. The first student grotto was organized at Virginia Polytechnic Institute in the fall of 1942; Tommy Watts was its president.

The first national election was held in the spring of 1942, and the first annual meeting in the U.S. National Museum during that year. By the time of Pearl Harbor, membership had skyrocketed to around 400. Serious problems arose during the war, and the society was only held together by the effort of J.S. Petrie. But the story of the N.S.S. during World War II is a different story.

What cave is this?

A MEXICAN CAVE VISIT IN 1664

The extract that follows is taken from pp.318-319 of an anonymous paper in the Philosophical Transactions, Vol.[3], no.41, dated Nov.16,1668, pp.317-324. What cave is this?

" An Extract
of a Narrative, made by an Ingenious English Gentleman
now residing at Seville, concerning his Voyage from Spain
to Mexico, and of the Minerals of that Kingdom.

...
"I was once desired to visit a famous Cave there, some Leagues from Mexico on the North-west side of the City beyond the Lake. This was said to be gilded all over with a kind of leaf-gold, which had deluded many Spaniards with its promising Colour, they never having been able to reduce it into a body, neither by Quick-silver nor Fusion; though the fame ran, that the antient Indians knew how to make use of it, and that the great Montezuma had borrowed thence a considerable part of his Treasure. I rid thither one morning, taking with me one Indian only for my guide, with a Tinder-box and a Candle, and some other instruments for my design. I found it situated somewhat high, in a place very convenient for generation of Metals; but the mouth so barricaded with stones, that both my Indian and I had work enough to clear the passage for my entrance, which being open'd, I went in with my Candle lighted, but could not make the Indian follow me, being afraid of Spirits and Hobgoblins. The light of the Candle soon discover'd to me on all sides, but especially above my head, a glistering Canopy of the said Mineral Leaves; at which I greedily stretching forth my hand to reach some parcels of it, there fell down presently so great a lump of clotted sand on my head and shoulders, that not only it put out my Candle, but my eyes also. And calling out with a loud voice to my Indian, who remain'd at the mouth of the Entry, there rebounded within those hollow Caverns such thundring and redoubled Echo's, that I admired it, and the Indian imagining by those Tumultuous voices, that I was wrestling with some infernal Ghosts, soon quitted his station, and thereby left a free passage for some rays of light to enter, and to serve me for a better Guide: My sight meanwhile being not a little indangered by the corrosive acrimony of that Mineral dust. Having got my Candle lighted again, I proceeded in the Cave, and heaped together a quantity of the Mineral mixt with sand, and scraped also from the superficies of the Earth, a quantity of the same kind of glittering leaves; none of which exceed the breadth of a pins nail, and with the least handling they divide themselves into many lesser spangles, as with a little rubbing they leave one's hand all gilded over like gold."

- - submitted by Trevor Shaw

Introduction

The Reverend Horace Carter Hovey published his first article on his caving activities in 1855. Although he was a practicing minister all his life, he has left his name indelibly engraved on the pages of American Speleological literature. During his life he published his well-known Celebrated American Caverns and his Guidebook to Mammoth Cave went through 15 editions. In addition to these works he wrote more than 100 articles in various magazines and journals. His capabilities as a scientific writer won him the distinction of being elected one of the original fellows of the Geological Society of America.

In most of Hovey's writing we can detect little of his personality. He had his share of battles with various people in support of his scientific ideas and personal integrity. In none of his other writings is his humble sensitivity more revealed than in the following article which appeared in a children's magazine. I think, myself, that it is the best article he ever wrote.

— John Bridge



BRIGHAM, THE CAVE-DOG.

BY H. C. HOVEY.

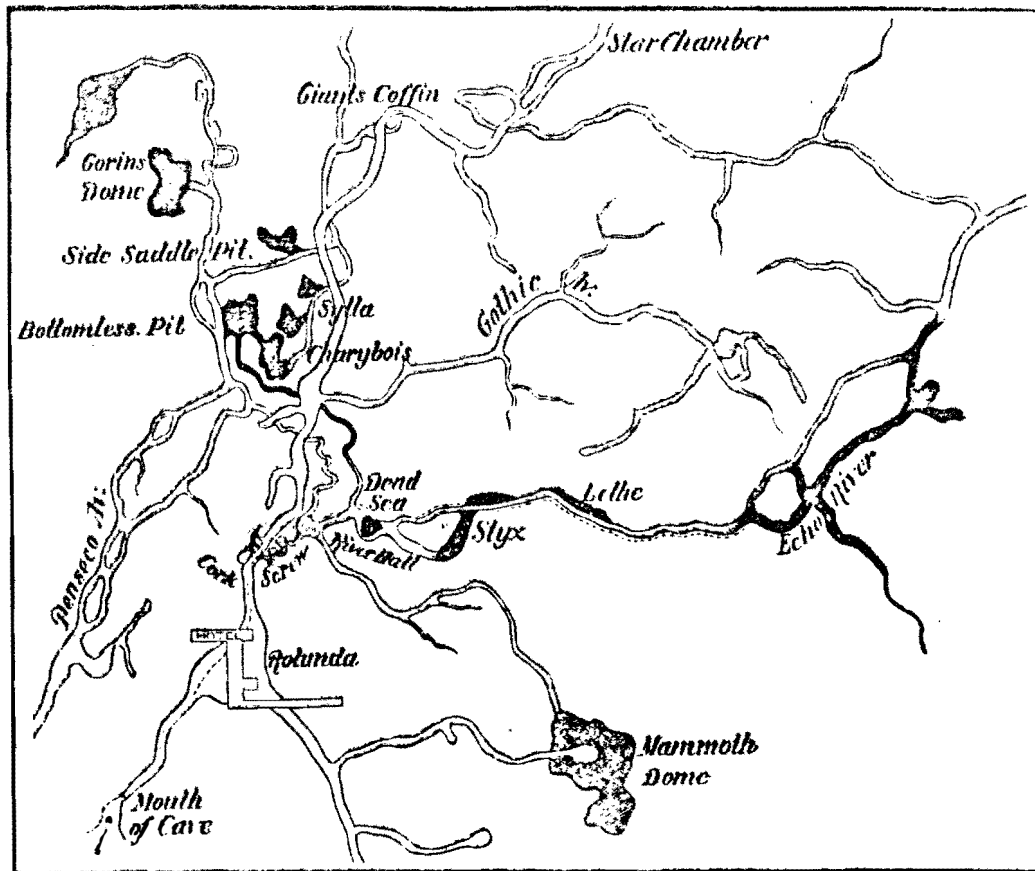
MANY a dog will bravely go through tangled forests, swollen streams, and mountain ravines; but when it comes to following his master down into a dark and silent cave—that is another matter! Never, until recently, have I known one that did not plainly regard it as a very solemn performance.

Jack, the old house-dog, the volunteer escort of visitors to Mammoth Cave, is no exception to this rule. He watches the negro guides trim the lamps and bunch them on canes ready for distribution. When the bell rings, he leads the company among the tall trees to the mouth of the cavern. On he goes, under the bright cascade, and beneath the black ledges, as far as the Iron Gate. He peers a moment between the bars, as if overcome by his awe of the unknown. Then, when the gate is unlocked and all have gone in, his duty is done, and he trots home again, absolutely refusing to go beyond the last glimpse of daylight!

But Jack has a companion in his old age, a common yellow cur, the hero of this true story. William—a wag, as well as a first-rate guide—explained to me the odd name given to the new dog: "We call him *Brigham*—'cause he's young, you know!"

This creature is remarkable for but one thing, and that is his fondness for life below ground. He seems at home among the elves and gnomes, and appears to have no fear of darkness. The two dogs trot, side by side, as far as the Iron Gate. But there they part. Jack, as usual, returns to the hotel; but Brigham advances, pushing ahead of the guides, choosing his own path, digressing now and then, yet always returning in safety to the light of the lamps.

Brigham and I became fast friends, during my fortnight's stay at Mammoth Cave, last summer. The gentle dignity with which he sought to aid my



PART OF MAMMOTH CAVE. (BY PERMISSION OF THE OWNERS.) THE DOTTED LINE SHOWS BULLIEN'S ROUTE, ETC.

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under-ground researches was very amusing. How sedately he examined each of the huge saltpeter vats, three in the Rotunda and eight in the Amphitheater! It really seemed but an act of common politeness to explain to him that these were historical relics; and that the saltpeter made here was carried by oxen and pack-mules to Philadelphia, to be used in making gunpowder, during the war with Great Britain in 1812.

Each striking object—the grotesque stalactites, the uncouth rocks, the mysterious Star-chamber—commanded the dog's attention as well as our own.

Usually a silent observer, he howled piteously while the guide told the melancholy story of the Consumptive's Cottage. This is a stone building, nearly a mile within the cave, and is one of fifteen huts in which several invalids, tempted by the great purity of the cave atmosphere, and the uniformity of temperature (just fifty-four degrees, Fahrenheit, at all seasons), sought to regain their health—alas! in vain. They every one died, like the shrubs they planted about their abodes.

I suppose Brigham did not understand all this; but probably he was affected by the deserted and desolate appearance of the place, or by the lugubrious tones of the guide.

Brigham was a great favorite with the manager of the cave, who particularly warned us not to lose him; for it was feared the dog would be unable to find his way out again. Other curs that had been left behind invariably staid in the place where they had become lost, not daring to stir, but yelping and howling till help came.

The dreaded accident happened at last. We went one day on what is called the Long Route, to the end of the cave, said to be nine miles from the entrance; and Brigham went with us. We left the main cave at the Giant's Coffin, by an arched way, leading among some pits, the most famous of which has long been known as the Bottomless Pit. My guide, however, measured it, and found that it was exactly one hundred and five feet deep. There are six pits in all at this place, two of them lately discovered. We named them Scylla and Charybdis—because, in trying to keep out of one, you are in danger of falling into the other. These we measured, finding them to be more than two hundred feet deep.

Brigham did not like the pits very well. It was only by much coaxing that we led him across the narrow bridge thrown over the Bottomless Pit. But, indeed, we all were glad to get away from that dangerous place.

Our path next led us down still farther, among great rocks, into such a crooked labyrinth that I think it will puzzle some of my readers to trace it on the map, although this is correctly drawn.

We went through the "Fat Man's Misery," and entered River Hall, where there are several deep lakes. Presently we came to Echo River, about thirty feet deep, from twenty to two hundred feet wide, and three-fourths of a mile long. Getting into a small boat, we paddled our way over the clear, cold water, waking the echoes from the steep, rocky walls, Brigham helping with some lively barking. Presently, we landed on a nice sandy beach at the farther end. Thence we went on, by widening avenues not marked on the map, to the terminus of the Long Route; and then we started back again.

Poor Brigham became very tired, and cared less for the lovely arches of flower-like crystals than for some cozy nook where he might curl down for a nap. At length, after taking lunch with us in Washington Hall, he started in chase of a cave-rat, and probably availed himself of the chance to take his siesta. At all events, he disappeared, and made no answer to our calls.

"Perhaps he has gone ahead to Echo River," said I, "and is waiting for us there."

"Like enough," said William, the guide. "I had n't thought of that."

But no bounding form nor joyful bark welcomed our approach. The echoes answered our calls, until it seemed as if a thousand voices were crying, "Brigham, Brigham!" in every conceivable tone, from the softest whisper to the deepest bass; and our whistling was, in like manner, repeated, until it seemed as if all the spirits of the cave had been let loose for an Æolian concert.

Plainly, the dog was lost. William thought Brigham might track us as far as the river; but that on reaching the water he surely would lose the scent, and would not try to swim across. Lighting a freshly filled lamp, William set it on a ledge, so that in case the dog should come thus far he might not feel too lonely.

Sadly we returned to the hotel, where our announcement of the loss caused a sensation; the ladies especially declaring it "perfectly dreadful to leave the poor thing alone in that horrible cave all night,"—as if it were darker there at midnight than at noon!

Early the next morning, a party of explorers crossed Echo River, and were met by Brigham. The guide reasoned with him, as one might reason with a runaway child, and tenderly took him in his arms aboard the boat.

Alas, the warnings were wasted! For, almost as soon as we had landed, that capricious cave-dog disappeared again; and, as before, refused to obey our loudest summons. Compassion was now mixed with indignation, and we left him to his fate.

Nothing was seen of him all that day; and this

time, of deliberate choice, he remained a second night under-ground.

And now comes, perhaps, the strangest part of my story. On the following morning, Jack, too, was missing. The guides had to dispense with their customary canine escort. On arriving, however, at the Iron Gate, three hundred yards within the cave, they found Jack just outside, and Brigham behind the bars; and there the dogs stood, wagging their tails, and apparently exchanging the news!

Our curiosity led us to examine Brigham's tracks, to see by what route he had found his way back.

Beginning at the Echo River, we had no difficulty in seeing that he had, step by step, followed out trail; his only guide, of course, being the sense of smell. Here, his tracks were deeply printed in soft mud, and there, more sharply defined on the mellow banks of nitrous earth, less distinctly along ridges of sand, or over heaps of stone, or up steep stair-ways.

Thus Brigham had followed us, through darkness deeper than that of midnight, along the narrow beach of Lake Lethe,

across the treacherous natural bridge spanning the River Styx, up to the galleries overhanging the Dead Sea, through the wild confusion of Bandit's Hall, and by many a spot where one misstep would have sent the poor, lonely creature plunging downward in darkness to inevitable death.

It will be remembered that we had gone *in* past the Giant's Coffin, by the arched way among the deep pits, and through the mazes leading to River Hall. But we had come *out* by a newly discovered mode of exit, through an intricate set of fissures, known, on account of its winding nature, as "The Corkscrew." We preferred this, because it saved a mile and a half of travel. Our four-footed friend, pursuing the freshest scent, went, of course, up the Corkscrew. The opening is too irregular to be called a pit, or shaft. Yet it winds upward for a distance, vertically, of about one hundred and fifty feet; but fully five hundred feet, as one climbs, creeping through crevices, twisting through "auger-holes," and scaling precipitous rocks scattered in the wildest confusion imaginable. Three ladders have to be mounted in threading this passage. One emerges, at last, on the edge of a cliff overlooking the main cave, and down which he clambers to the level floor, where the road runs

smoothly along to the Iron Gate, a quarter of a mile distant.

Only think of it! Through all this intricate and hazardous pass, where, without a guide, we should have found it difficult to make our way, even with lamps and a map of the cave, that yellow dog had safely gone alone! He offered no explanation of his proceedings, nor told us what motive prompted his independent explorations. But that was his affair, not ours. We honored him as a hero, and obtained for him, from the manager, Mr. Francis Klett, the freedom of the cave for the rest of his life.

The fact should be mentioned, by contrast with this perfect and fearless operation of instinct, that expert cave-hunters find themselves nearly helpless, if left alone far within the cave and destitute of a light. The rule for any one so unfortunately situated is for him to stay where he is, as contentedly as he can, until assistance comes, which is sure to be within a few hours.

Several tales are told of persons whose reason has been lost under such circumstances; and, although I know of no instance in which life itself has been sacrificed, it can readily be seen that it might be imperiled. The stories one occasionally reads of novices finding their way out unaided by lights, are to be discredited. An exploit of that nature would tax the resources of the most expert guide. The cases are extremely rare in which it has been done, even by the guides themselves.

One of the most thrilling stories I ever heard was told to me by "Old Matt," a colored man, who has served as guide for more than forty years, and who is supposed to know every nook and corner of the explored parts of Mammoth Cave.

There had been a marriage in the Gothic Chapel, a grand, rocky chamber far within the cave. A maiden, who had promised her mother "never to marry any man on the face of the earth," had kept the letter of her pledge, and yet, in this underground spot, had wedded the man of her choice.

After the wedding there was wine, and then some of the young men took a ramble through the cave. Old Matt was at work in the vicinity of the great pits, when he heard them coming with song and with shout. Those were Ku-Klux times, and the ex-slave thought that "discretion was the better part of valor," and accordingly he hid in a crevice, put his lamp out, and quietly waited for the revelers to pass by. On coming forth from his hiding-place he found that he had no matches, and therefore could not relight his lamp.

The hour was late, and the next day was Sunday. He feared lest a long time might elapse before help should come, and therefore determined to make his way out in the dark. Feeling cautiously along with his staff, he went safely until it suddenly dropped into a pit of unknown depth. Brave as Matt is known to be, he fell in a swoon, and lay, no one knows how long, on the very edge of that horrible chasm. On coming to, he collected his wits as well as he could, and felt with his hands for the path. He presently found it and proceeded on his perilous journey, making his way finally to the surface.

Old Matt told me this story himself, as he and Brigham and I sat side by side on the brink of the abyss where the faithful guide so narrowly escaped finding a tomb. And, as I listened, I was glad that the lamps were burning brightly.