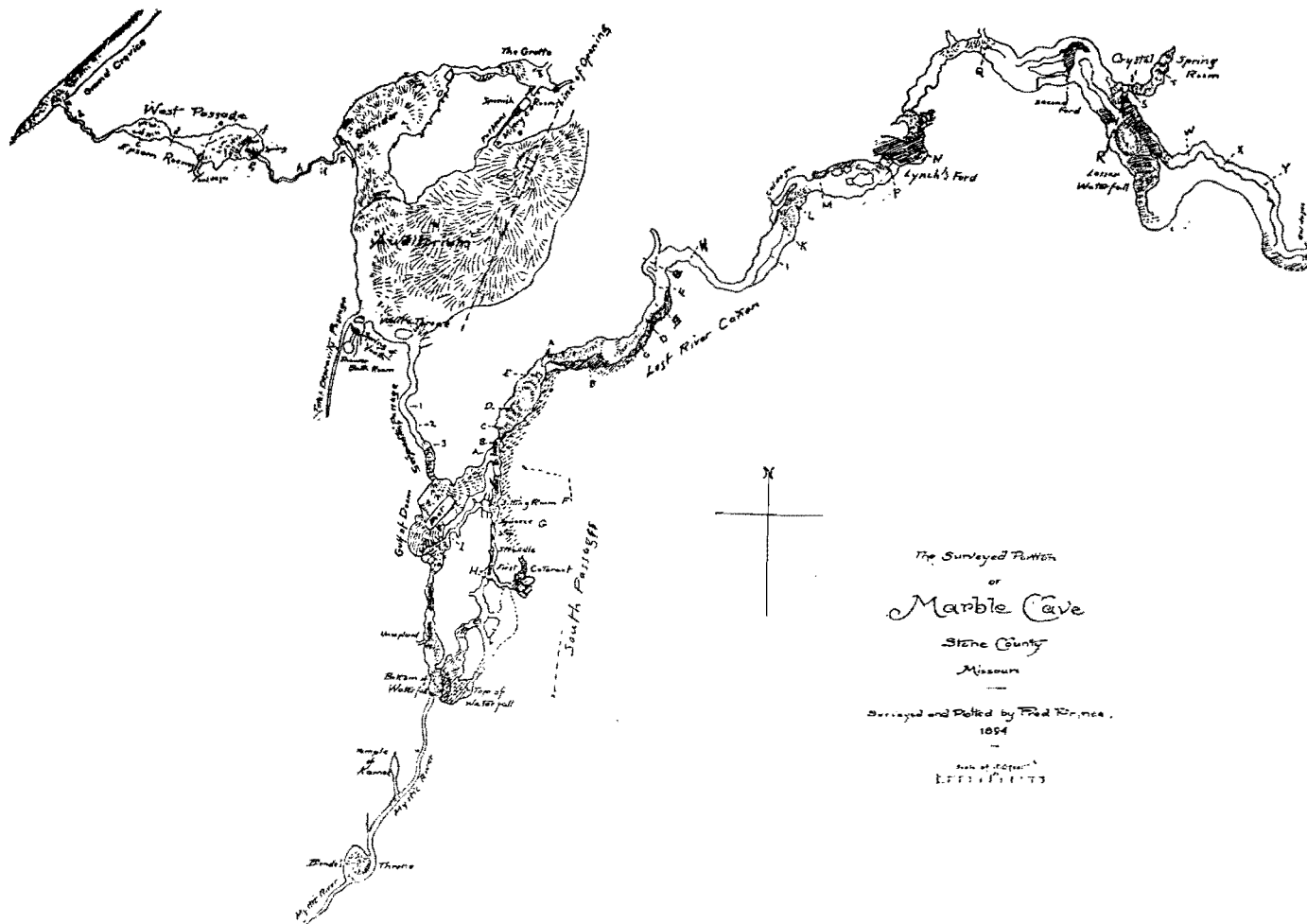


4

The Journal of Spelean History

OFFICIAL PUBLICATION of The AMERICAN SPELEAN HISTORY ASSOCIATION



ABOUT THE ASSOCIATION

The American Spelean History Association is newly chartered as a non-profit corporation for the study, dissemination and interpretation of spelean history and related purposes. All persons of high ethical and moral 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 8½ x 11 paper and 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 fine map of Marble - now Marvel - Cave, Missouri which appears on the cover shows numerous passages not now open to the public. Together with a vertical section, it was included in Luella Agnes Owen's Cave regions of the Ozarks and Black Hills (1898, Editor Publishing Company, Cincinnati) and also in Spelunca (Bulletin de la Societe de Speleologie). Concerning Mr. Prince, the editor knows nothing except that he also drew a three-dimensional sketch of the cave, also published in Spelunca. Any information would be welcomed.

Table of Contents

Front Cover: The 1894 Fred Prince map of Marvel (Marble) Cave, Mo.

- 87 Abstracts of papers presented at the History Session of the National Speleological Society Convention, August 22, 1968 at Springfield, Mo.
- 89 The commercial caves of Missouri, 1886-1968
by H. Dwight Weaver
- 103 Historic Caves of St. Louis, Missouri
by Charlotte A. Rother
- 109 A new concept of the initial history of Mammoth Cave
by Harold Meloy and William R. Halliday
- 117 Reviews and book news
- 118 Book and memorabilia exchange
- 120 Association business
- 120 Colloquy

Planned for the next issues:

Martel on Mammoth Cave, translated by Fred Dickey

Another Missouri article by Dwight Weaver

Howe Cavern, N.Y. in 1845

Discovery and exploration of Oregon Cave

Membership list

PRE-CONVENTION ABSTRACTS

25th ANNUAL CONVENTION OF THE
NATIONAL SPELEOLOGICAL SOCIETY
SOUTHWEST MISSOURI STATE COLLEGE, SPRINGFIELD, MISSOURI
AUGUST 18-24, 1968

HISTORY SESSION

H. Dwight Weaver, Ozark Caverns, Camdenon, Missouri. Presiding

1. THE PAST TWENTY-FIVE YEARS OF THE NATIONAL SPELEOLOGICAL SOCIETY

Donald N. Cournoyer, 2318 N. Kenmore St., Arlington, Virginia 22201

The NSS celebrated its 25th, silver anniversary in 1966, but many members know very little about the Society's past 25 years, especially the younger generation. For the younger members to be knowledgeable and appreciative of the growth of the NSS it is important to know and understand the past as well as look toward the future including conservation, the closing and preservation of caves, the goals and purposes of the NSS, and the Society's areas of special interest.

A review of the past includes the early organization of the NSS, the establishment of grottoes and regions, services and improvements to the membership, the establishment of conventions, field trips in the early days such as Floyd Collins Crystal Cave, Wind Cave, Rio Camuy, Guatemala and Aquas Buenas, and special recognition of individuals who have made outstanding contributions toward the growth and development of the National Speleological Society.

2. A NEW CONCEPT OF THE INITIAL HISTORY OF MAMMOTH CAVE, KENTUCKY

Harold Meloy and William R. Halliday, Seattle Washington

Recent research has revolutionized traditional concepts of the history of Mammoth Cave during the years up to 1813. Basic is the new concept that the traditional three sales during one day in 1812 actually was a misconception based on the filing of deeds in order to clear title to the cave.

3. THE HISTORIC CAVES OF ST. LOUIS, MISSOURI

Mr. and Mrs. Hubert Rother, Jr., 5945 Scanlan Ave., St. Louis, Missouri 63139

St. Louis has more caves than any American city and its caves attracted the brewing industry to Missouri in 1840. The Anheuser-Busch Brewery dates from 1852 and was founded in a cave. Cherokee Cave, Uhrig's Cave and English Cave are among the best known brewery caves of St. Louis. Old brewery caves are still being re-discovered from time to time beneath the city, and many forgotten ones still await re-discovery.

4. THE COMMERCIAL CAVES OF MISSOURI 1886 - 1968

A Brief History of their Commercialization, Historical Significance and Developers.

H. Dwight Weaver, P.O. Box 272, Osage Beach, Missouri 65065

Missouri has more commercial caves than any state. The development of Missouri caves has been influenced by historical significance, public popularity, personal ambition, the Great Depression, and tourism.

The historical significance of Missouri caves is broad and many faceted but the stories of the developers are often as fascinating as the caves themselves. Among these is the story of Lester B. Dill, the developer of Meramec Caverns. His is a story of perseverance, while the early years of Onondaga Cave were times of turbulent, dramatic events unparalleled in the annals of Missouri cave development.

An account of Crystal Cave in Greene County is a pioneer adventure and the personal story of Alfred Mann and his daughters Agnes, Ada and Margaret; and the saga of J.A. "Dad" Truitt, the beloved and renowned Cave Man of the Ozarks, is a tale of a nomad.

THE COMMERCIAL CAVES OF MISSOURI 1886 -- 1968

A Brief History of their Commercialization, Historical Significance and Developers

By H. Dwight Weaver

Development Trends

Missouri is a leader in the commercial cave field. It is a well known fact that the Show-me State, now affectionately called "The Cave State" by many, has more commercially operated caves and caverns than any state. Nearly 50 of Missouri's more than 2,000¹ known caves have been a part of this enterprise since the turn of the century. Some caves have proven worthwhile investments for their owners, and others have not.

It is interesting to note that at hardly no time since World War II have there been fewer than two dozen caves in operation throughout the state in any one given year. In fact, so many Missouri caves were being shown to the general public by the end of WWII, that the 63rd General Assembly of the State of Missouri passed a law, in September of 1945, requiring all owners of commercial caves to submit to annual inspection by the Missouri State Bureau of Mines. The inspection insured the viewing public of the adequacy of the cave walkways, stairs, guard rails, platforms and lighting. For this annual inspection the Missouri cave owner pays a nominal fee and is issued a certificate for public display, provided his cave meets the public health and safety requirements of the Bureau of Mines.

The commercial development of caves in the United States began in the eastern states in the 19th century and spread westward at a modest rate. By the late 1800's Mammoth Cave, Kentucky, Wyandotte Cave, Indiana and Cave of the Winds, Colorado, were being publically viewed. At least three, and possibly five Missouri caves were commercially operated before the year 1900. Marvel Cave in Stone county, Crystal Cave in Green county and River Cave in Camden county were opened to the public in the interim of 1893 to 1894. There is some evidence to suggest that Mark Twain Cave at Hannibal, Missouri, may have enjoyed a brief and possibly abortive commercialization on a limited scale as early as 1886. Fisher Cave in Meramec State Park may also belong in the category of those caves commercially viewed before 1900.²

Among other early developed caves in Missouri are Onondaga Cave, 1904, Fisher Cave, 1910, Ozark Wonder Cave, 1916, and Mt. Shira Cave in 1920.

The encouragement for the development of Missouri's first 8 commercial caves was 1) historical significance, 2) public popularity, and 3) personal ambition. These factors have continued to be significant in the opening of caves to the public, even to present times. But many other factors have also influenced commercialization.

Until 1930 the development of Missouri caves progressed slowly, spasmodically over a 37 year period of time. Then suddenly, coincidental with the Great Depression years of 1930 to 1940, 13 additional Missouri caves were commercialized. The 1930's saw a great deal of development activity throughout the state.

The Great Depression was many things to many people. To some a bread line, or frustrating job hunting. It meant the lose of life savings. And to a good many it meant business failure and the necessity for a new start.

The 1930's was a time when public attention was being focused upon the nation's natural resources. It was a time of the improvement of our national parks, monuments and forests. The building of great dams. The construction of thousands of miles of new highways.

To this we may add the development of many Missouri caves.

It is notable that of the first 8 caves commercialized in Missouri, 7 are still dependably operational; but of the 13 new caves opened during the Great Depression years, only 5 are still open to the public.

World War II struck a death blow to tourism and several commercial caves in Missouri failed during this period. Some were unable to recuperate after the war. But times had changed by wars end. Missourians were now cave conscious and convinced that cave development was a safe and worthwhile business investment.

The growth of tourism in Missouri after the war, and the impoundment of Ozark waterways to create great reservoirs for power generation and recreation have also been instrumental in cave development. Since WWII more than 20 caves in Missouri have been opened to the public. Of these, more than half are still dependably operational.

In recent years the greatest single influence upon cave development has been tourism which is now Missouri's third largest industry.

The greatest concentration of Missouri commercial caves is in the south central and southwest portions of the state; areas which are vast recreation centers with hundreds of resorts and tourist attractions. In these areas are located Lake of the Ozarks, Clearwater Lake, Lake Wappapello, Lake Taneycomo, Lake Norfolk, Bull Shoals Lake, Beaver Lake and Table Rock Lake. But a full 30% of the commercial caves are found in other regions of Missouri.

Missouri commercial caves can be readily classified into two categories -- highway caves and tourist area caves. Caves which fall outside tourist areas depend upon major highways and cities for their support. Caves located along Interstate Highway 44, such as Meramec Caverns, Onondaga, Boone, Fisher, Fantastic and Crystal, enjoy high traffic counts of nearly 10,000 cars per day traveling past their turn off signs.

Major towns and cities of Missouri which help support several caves include Springfield, Columbia, Joplin, Branson and Carthage.

Several tourist areas within the state attract vast numbers of vacationers and thus provide a captive audience for commercial cave owners to draw upon. For example, the White River tourist area of Missouri, which embodies the Table Rock and Taneycomo lakes, attracts as estimated 4 million people a year.³ This area includes such caves as Fairy, Marvel, Crystal Caverns, Bluff Dwellers, Ozark Wonder, Old Spanish and Truitts.

A more accurate survey of the effect of tourism upon commercial cave development can be ascertained by a brief look at the Lake of the Ozarks tourist area of Missouri.

The Lake of the Ozarks is Missouri's largest man-made lake. It was impounded in 1930 with a dam on the Osage River. The Lake has a wooded shoreline of 1375 miles, a main channel length of 129 miles, 60 miles of tributary waters, and averages one to 3 miles wide.

Today, after nearly 40 years of growth, the area has close to 500 individually owned and operated resorts, motels and entertainment attractions. The region can accommodate more than 25,000 persons each night and is doing an annual business volume in excess of \$62,000,000.⁴ The Lake of the Ozarks is attracting more than 4 million visitors annually.

The commercial development of the Lake of the Ozarks has led to the commercialization of 10 caves of which 7 are currently open to the public. Accurate figures are difficult to obtain but a figure of 200,000 total number of visitors annually is believed to be conservative for these 7 caves.

The first of these 10 caves, River Cave, was initially opened to the public before the turn of the century but its operation has been sporadic through more than 75 years. Three caves, Flanders, Bunch and Cleveland, were opened between 1932 and 1938, but these caves have now been closed for some time. In 1948 Bridal Cave was developed, followed by Stark Caverns and Jacob's Cave in 1950, Ozark Caverns in 1952, Indian Burial Cave in 1960, and Arrow Point Cave in 1968.

Many things are required to make a commercial cave operation successful and profitable other than skillful management. The geographic location is important as well as the cave's location within a given area. If situated too far from a major highway or artery of travel, it will not draw people. A location near a terminal of vacation activity or tourist travel is necessary.

Advertising is needed for the success of any enterprise. Just as anyone selling a product or service, the cave operator must sell his cave to the public. And it has recently been learned that in Missouri, nearly 70% of a cave's business is derived from roadside advertising.⁵ Missouri caves are nearly all privately owned and financed.

A cave should also have some specific qualities which recommend it and make it worthwhile to the viewing public. Ideally, caves should not only be entertaining but educational. And last but not least, the public facilities and access roads must be adequate.

By and large, the commercial cave operations of Missouri are scrupulously honest, sincere endeavors. As one historian has said "cave operators, whether public administrators or private owners have usually been careful custodians of the wonders which they are in a position to display."

Missouri caves have proven themselves very popular with the public and figures released by the Missouri Caves Association show that an average of 2 million people tour the state's caves each year.⁶ Figures for individual caves are normally not available and when so, often misleading, as such figures are frequently computed on annual dollar gross rather than ticket sales.

Meramec Caverns, Stanton, Missouri, and Marvel Cave, Branson, Missouri, are the state's leading cave operations at this time. Marvel is the home of the famed Silver Dollar City, one of the nation's finest restorations of frontier Americana.

While caves in and of themselves are popular, it has proven expedient in this day and age for cave operators to rely more and more upon attendant enterprises in order to make their operations truly profitable. Thus the use of artifact displays, museums, antiques, frontier restorations, and other related attractions to create additional interest for the traveling public. A full 50% of the state's caves have large, well stocked gift shops for added income.

Perhaps one of the most provocative aspects of Missouri's commercial caves are the elaborate transportation systems that have been installed to move traffic either to, through, or out of many caves. Boat rides, jeep rides, trail rides, and incline railways and cable cars have all been used quite successfully.

Historical Significance

Commercial caves in Missouri known especially for their decorative beauty include Meramec, Onondaga, Bridal, Ozark, Jacob's, Round Spring, Bluff Dwellers, Crystal, Fairy, Ozark Wonder and Cathedral.

Caves which rely heavily upon Indian artifacts and bones for their popularity include Indian Burial, Arrow Point, Stark and Bluff Dwellers.

Some Missouri cave names have become almost synonymous with the names of both the famous and infamous. Mark Twain Cave after Samuel Clemens; Meramec with Jesse James; Onondaga with Daniel Boone; and Fantastic Caverns with the Ku Klux Klan.

And in some incidences, the individuals or families that have been instrumental in the development of certain Missouri caves are as fascinating as the cave's themselves. In reviewing the history of Missouri's commercial caves we encounter such interesting people as Wm. Henry Lynch and the Lynch Sisters; the Mann Sisters, Agnes, Ada and Margaret and their father Alfred; Truman S. and Waldo Powell; the famous and eccentric St. Louis surgeon of the 19th century, Dr. Joseph N. McDowell; and the beloved Cave Man of the Ozarks, J. A. "Dad" Truitt.

Missouri caves are quite interesting historically. The Indians were, of course, the first to utilize them. Later the frontiersmen and pioneers extracted saltpeter from the caves. The names of Lewis and Clark, Henry R. Schoolcraft, and Daniel Boone are interwoven in Missouri cave history.

Missouri cave streams were harnessed throughout the Ozarks to supply water power for Iron works, tanneries, paper mills, distilleries, grist mills and woolen mills. And in St. Louis, caves were used for the storage and aging of beer and cheese.

Frontier life attracted criminals and crude, rough individuals as well as ordinary settlers. Caves served as hideouts for outlaws, gangs and extremist groups. Thus the saga of Jesse James, Crabtree, the Younger Brothers and the KKK thunders in and out of the stygian depths of Missouri caves. Although, in many instances, the stories and legends of the more infamous outlaws have been greatly embellished and fictionalized over the decades of time, they still make Missouri caves fascinating to the traveling public.

Cave Developers

In a few instances Missouri caves have been developed through the labor, efforts and personal ambition of one person; however, most Missouri caves have been commercialized through the joint efforts of several individuals including partnerships, small corporations and family teams. Thus Mark Twain Cave was developed through the joint efforts of Judge E. T. Cameron, Harry Scheidker and Frank Russel in 1923, and Meramec Caverns in 1935 by Lester B. Dill and Pete Peterson.

Three men, Jim Banner, R. L. Wilkerson and B. F. Krehbiel were responsible for the development of two caves, Bridal Cave and Ozark Caverns. The Truman S. Powell family was instrumental in the opening of both Marvel Cave and Fairy Cave; the Alfred Mann family team of 4 commercialized Crystal Cave in Green county; however, the most renowned Missouri cave developer of them all was J. A. "Dad" Truitt, better known as the Cave Man of the Ozarks.

Time permitting, it would be entertaining to recount all the stories of the various caves and their illustrious developers, but for the purposes of this paper, I have chosen only a few representative stories.

The account of Lester B. Dill of Meramec Caverns is one of patience and perserverance.

Lester B. Dill was born in St. Louis in 1898, the 2nd of 9 children. His father was a construction worker and carpenter. There were many stormy years in Lester's childhood but many happy ones to. Raised in the vicinity of many caves, it was only natural that sooner or later he would explore them. As a youth, his first caving experience came at the age of 6 when his father took him to see several of the caves in the Meramec Valley area.

In the year 1910, Fisher Cave, not far from Lester's home, was commercialized. Lester became the first guide though he was only 12 years of age. He worked at the cave every summer until he graduated from High School. Upon graduation,

he spent a year in the army and then returned home to get married. Shortly thereafter he came to live in Florida but moved back to Missouri and the Meramec Valley in the late 1920's.

Upon his return to Missouri he discovered that his father had sold the farm to the Missouri State Park then being established in that local. The area was already a favorite retreat for the people of St. Louis. With the coming of the park the traffic increased considerably. Lester decided to commercialize a cave and chose Mushroom Cave as his first venture.

But Mushroom Cave was on state property so Lester's next step was to convince the State Park people that it would make a good commercial cave. Successful at this, a contract was worked out.

Times were hard and advertising costly. Lester was not getting rich off his cave but he was able to feed and clothe his family. It required some time to develop the business and he used wood salvaged from old abandoned farm buildings on the park property to construct his outside buildings at the cave. Soft drinks and food sold were homemade.

Lester's contract with the state expired in 1933 but by this time he had explored many other caves in the area. He thought Meramec Caverns was the most beautiful of them all. Allowing his contract to expire, he purchased Meramec Caverns from an old prospector by the name of Charlie Ruepple.

Development of Meramec Caverns was slow and costly but in 1935 he was finally able to open it to the public. During this period of time he and his family actually lived in the cave.

Once during the early years of operation Lester tried to use the cave as a dance pavilion and hired a plumber to dry up the moisture on the prospective dance floor. To do this the plumber tried gas but the feed line broke, ignited and threw flame. Lester was burned and badly enough below the knees that he spent some 7 months in the hospital recuperating. To help make a living during this period his wife, who had just given birth to their third child, went to work in a shoe factory. On weekends she helped his partner, Pete Peterson, operate the cave.

Success hailed Lester, Mrs. Dill and Pete's efforts and today Meramec Caverns is one of the greatest tourist attractions in America.

Our next story begins a few miles south of Meramec Caverns at Onondaga Cave. The story of Onondaga is one of the most turbulent, dramatic stories in Missouri cave development.

Onondaga Cave, reportedly discovered by Daniel Boone in 1798, has a long and intriguing history. Its stream once drove a grist mill. Between 1890 and 1900 it was quarried for its beautiful cave onyx deposits. And it was toured for the first time publically in 1904 as a part of the St. Louis World's Fair. In 1904 the cave was controlled by stock holders of the Frisco Railroad Company.

In 1904 many World's Fair visitors saw the cave. They were brought to Leasburg from St. Louis by the Frisco Railroad and transported by surry and spring buggies to the cave itself.

One of the Frisco stock holders was a St. Louis resident, Bob Bradford. Around 1907 he purchased the cave, buying out the other stock holders, and, with the help of his wife Mary, assumed full management of the cave.

Bradford continued with the cave for nearly 35 years, until his death, but he died a broken man for the cave had been a mighty burden.

The story of Onondaga Cave in the decade preceding Bradford's death is a schizophrenic tale unmatched in the annals of Missouri cave development. It is the story of one cave torn in two by desperate men. A cave which knew not its name for almost half a decade, and where men fought each other futilely in the darkness of its hollow arteries.

Onondaga is a large, lengthy cave. In the early 1900's Bradford was showing the public only a small part of the cave.

In the early 1920's, 160 acres of land originally homesteaded by John Easton, one of the first explorers of the cave in 1886, was purchased by the Indian Creek Land Company, and the Fischer and Benoist families, all of St. Louis. Shortly after this purchase the land was leased to a Dr. Lee Mook, a skin specialist of world renown. Dr. Mook had been in charge of all American Expedition Forces in France during WWI. It was his desire to develop the leased property into a resort, catering in particular to doctors. It was called the Schmulche Giddion Project.

But the good doctor also opened a cave that ran under his property. Development for public viewing began in 1924 and he called it Missouri Caverns. But exploration soon determined that Missouri Caverns and Onondaga Cave were one in the same. Eventually, a barbed wire fence was erected to establish boundary lines in the cave and this infamous spot is known today as "San Juan Hill".

There was great antagonism between Bradford and Mook. Pitch battles were frequent in the cave with considerable rock throwing across the barbed fence. Because the only road to Onondaga Cave crossed Mook's property, tension and jealousy was even greater.

In 1925, tired of futile battles underground, Mook began court proceedings to acquire the property rights of Onondaga Cave. But Bradford was not to be taken so easily. He fought back and the cave of Missouri Caverns VS Bradford drug through the courts for nearly ten years. It eventually reached the United State Supreme Court. The cave finally led to a law governing the rights of ingress and egress.

In 1934, after having lost almost one quarter of a million dollars in court costs, Dr. Mook died. He left half interest of his Missouri Caverns lease to a brother, and the remainder to the Bernard Free Skin and Cancer Hospital in St. Louis.

Bradford's death came in 1941 and in 1943 his widow left Onondaga Cave also to the Bernard Free Skin and Cancer Hospital. It was the director of the hospital, Charles M. Rice, who became the next manager of the cave. Rice had no illusions, and wanted no easement problems, so he consolidated several land titles and various commercial enterprises in the area and brought the saga of Onondaga to a befitting close.

Crystal Cave in Green county, is but a few miles outside of Springfield, Mo., and has been a commercial cave since 1894. Its story is the life story of Alfred Mann and his three daughters, Agnes, Ada and Margaret.

When Alfred Mann came to America in 1870 to seek his fortune, he was an ambitious 17-year-old with a lust for excitement and adventure. Living in Illinois and working as a carpenter, he fell in love with America, the great land of opportunity. But he was not able to remain in America long. He returned to his home in England after a few years. There he met his future bride, Agnes, and they were married in 1874.

It was a fruitful marriage. Agnes gave him three daughters and a son. Agnes, their firstborn, was named after her mother, and arrived in 1875. Ada was born in 1877, Margaret in 1879, and their son in 1881. And while his wife was busy tending their lively family, Alfred became a highly successful and skilled businessman.

A desire to return to America stayed with Alfred. His enthusiasm was so great his wife wanted to come to the new country to, so they saved their money carefully. By 1881 they knew the time had arrived so, when Agnes regained her strength after the birth of their son, they booked passage on a ship to America. In 1882 Alfred looked for the last time upon the town of Brighton, England, where he was born in 1853. With a wife and four young children, he set out on a 3,000 mile ocean voyage. They eventually settled in Kansas.

In Kansas Alfred established a furniture business. His speciality was the making of cabinets. But the flat lands of the Sunflower State were not to his liking. A nature lover, he was fond of wooded slopes and rolling hills. In 1887 he moved to Springfield, Missouri, where he built a mattress factory and then began looking for a suitable farm where he could raise his family. He met Dr. E. T. Robertson, an M.D. in Springfield, who owned several farms in the area and had them up for sale. From Dr. Robertson he learned that one of the farms north of the city had a cave on it. Fascinated by this, Alfred persuaded the good doctor to not only show him the farm but the cave as well.

Known as the "Old Jenkins Place", Alfred purchased the farm in 1892 without much hesitation, and always maintained in later years that what he bought was the cave — that the land was just thrown in.

He lost no time in developing the cave for public viewing and opened it to the public in 1894.

The operation of Crystal Cave has always been a family business. Alfred Mann died in 1925, followed in 1930 by his wife. After the death of their parents, the Mann children carried on with the cave. The oldest of the three girls, Agnes, died in 1960, followed recently by Margaret. The only boy of the family died in 1870 as the results of a gunshot wound.

The surviving member of the family, Ada, is no longer able to manage the cave but her keen interest and guiding spirit is still there. And the cave is still open to the public at the time of this writing.

In closing this paper, I would like to pay tribute to a most unusual man, J. A. "Dad" Truitt, the Cave Man of the Ozarks. Few men have been as influential as he in the development of so many Missouri caves.

J. A. "Dad" Truitt was born in Shelbyville, Illinois in 1864 and attended the public schools there. Then, at the age of 22 he packed up and went to southwestern Kansas, but by 1889 he was back in Illinois running a tile factory. Kansas, for some reason, looked attractive to J. A. yet, and so in 1891 he went back to western Kansas. His luck did not hold. He tried farming the land but drought forced him out.

In 1893 the Cherokee Strip was opened and J. A., true to his roadrunner spirit, was right at the head of the race ready to stake a claim. But setting on a claim turned out to be too boring for him. There was still too much farmer's blood flowing in his veins. He traded his claim for 80

acres of farmland west of Arkansas City and tried farming again. But bad times were just around the corner. The price of wheat fell to 25¢ a bushel and broom corn only brought \$30.00 a ton. Disillusioned about farming, J. A. quit and headed east.

The year 1896 found him making a living as a street car conductor in St. Louis. He stayed with his job for nearly eight years but 1904 found him on the road again and headed for Corpus Christi, Texas. From Texas to Portland, Oregon, where he was lucky enough to prove up a timber claim on the west coast. He sold the claim in 1906 and invested his money in a mine in old Mexico. But the Mexican Revolution broke out and J. A., feeling the sting of failure, lost his investments in the Mexican mine.

Where many men might have given up at this point, for J. A. was approaching his middle 40's, he only shrugged and struck out again. In 1907 he found himself in Colorado Springs where he received his first introduction to commercial caves.

Cave of the Winds in the foothills of the Rockies was, in 1907, a major tourist attraction for it had been opened to the public for many years. In 1907 the cave was first wired and illuminated by incandescent bulbs and carbon arc lights. J. A. became a guide at the cave and immediately fell in love with the wonders of the netherworld. Having lived in Arkansas and traveled widely throughout the Ozarks, he knew the Ozark hills were densely populated with caves. He made up his mind while a guide at Cave of the Winds that he would someday move to the Ozarks and buy a cave.

It was 1914 before J. A. realized his dream, but in the intervening six years he made several other moves. First he went to Loma, Colorado in 1908 and ran a hotel. In 1910 he bought and sold some land in Ashland, Oregon, and then spent a brief time in California before going to Phoenix, Arizona where he worked as a street car conductor for a time. From Phoenix he journeyed to Kingsville, Texas and ran an experimental farm for a man in Celeste, Texas. His last stop before landing in the Ozarks was the Rio Grande Valley where he raised onions.

In the year 1914, at the age of 50, J. A. "Dad" Truitt landed at Elk Springs in McDonald County, Missouri. J. A. once wrote: "I landed at Elk Springs in 1914, where I.... opened my first cave..." He called it "Ozark Cave". Today it is known as Ozark Wonder Cave.

Settling down at Elk Springs he became a store keeper, station agent and proprietor of his first commercial cave.

In 1919 he sold Elk River Court which he owned, as well as his cave, to R. H. Whitt, and went to Noel, Missouri, to serve as postmaster. While in Noel he built the Mt. Shira Resort and developed his second cave, Mt. Shira Cave. He managed the cave for many years. During this time he was instrumental in the development of two other caves in the region (one near Jane called Bluff Dwellers Cave, and another which was called Polar Bear Cave). At the age of 65 he discovered and explored his last cave which was near Lanagan, Missouri, at the junctions of Highways 71 and 59. In 1930 he purchased Indian River Highlands near Lanagan and finally opened to the public, this, his last cave, and called it Truitt's Cave.

There are many stories told and untold about Missouri caves. These are but a few. There will be many more stories to tell in the decades to come.

ACKNOWLEDGEMENTS

The author is indebted to innumerable people for both help and encouragement in the gathering of information presented in this paper. Among them, many cave owners, developers, operators, and guides both past and present. To Paul Johnson for his frequent assistance in field work, and to Rosetta Weaver for patience and perseverance in the collection of this material, and for help in editing.

This material was gathered over a 10 year period of time, the greater bulk of it collected in personal interviews during the summers of 1963, 1964 and 1965. The information presented here is but a portion of a much larger unpublished manuscript entitled The Famous Caves of Missouri.

REFERENCES

- Autobiography of Mark Twain, The, Published by Washington Square Press, Inc., New York, N. Y., 1961, p. 81
- Bretz, J Harlen, Caves of Missouri, Mo. Geo. Survey and Water Resources, 2nd ser., vol. 39, 1956
- Eightieth Annual Report of the Div. of Mine Inspection of the Dept. of Labor & Industrial Relations, State of Missouri, 1967, p. 38
- Schoolcraft, Henry R., View of the Lead Mines of Mo., New York, 1819
- Stevens, Walter B., Missouri The Center State 1821-1915, S. J. Clarke Publishing Co., Vol. I, 1915

Taylor, Joe, 100 Years of History and Progress - McDonald Co., Mo., 1849-1949, Centennial Edition of McDonald Co.

Weaver, H. Dwight, The Famous Caves of Missouri, 1965,
Unpublished manuscript

Weaver, H. Dwight, A Guide to the Scenic Wonders of the Lake of the Ozarks, Camden Co. Hist. Society, Camdenton Mo., 1968

NOTES

1. 1968 Records of the Missouri Speleological Survey, Inc.
2. Information obtained by the writer during a conversation with Lester B. Dill in August 1968 indicates that there may have been limited commercial touring of Fisher Cave during the late 1800's.
3. According to figures given in an unpublished study on Round Spring Caverns and the commercial caves of Missouri, 1966, by Hallauer-McReynolds and Associates, St. Louis, Mo.
4. According to figures released by Southwestern Bell Telephone Company, June, 1968.
5. From figures released in 1967 by a Washington Univ. Survey pertaining to the Hwy. Beautification Act and its effect on tourism in Missouri; and a 1967 University of Mo. study devoted to the same subject.
6. Missouri Caves Association reports.

Historic caves of St. Louis, Missouri
By
Charlotte A. and Hubert Rother, Jr.

It has been asserted that Missouri has more caves than any other state in the United States. If so, surely St. Louis has more caves than any other city in the country.

First of all, the St. Louis caves were responsible for attracting the brewing industry to St. Louis. In 1840 lager beer was introduced to this country, long before refrigeration was known and the only way the beer could be made was with provisions for storage cellars which maintained a constant cool temperature, in all kinds of weather. It was learned that natural caves would serve this purpose and German brewers began to investigate the St. Louis caves with an eye to practical purposes.

By 1860 the number of breweries in St. Louis had grown to 40, indicating the abundance of caves that were found and used. There isn't space to go into the history of all of these caves beneath the streets of St. Louis, so I will only touch on some of the larger and better known ones.

In 1852 a St. Louisian named Schneider discovered a large cave within a few blocks of the Mississippi River and founded a small brewery. The "Bavarian Brewery" as it was called then, passed into the hands of Mr. Anheuser in 1857 and later became known as the Anheuser-Busch Brewery.

Nearby at 13th and Cherokee Streets was the Lemp Brewery that had reached approximately the same size and capacity before Prohibition. It too made use of a vast cave beneath its brewery building. The following account of a visit through its cave is taken from the book, St. Louis, the future great city of the world, published in 1875.

"The cellars, three in depth, extend 50 feet below the curbstone, and are supplemented by a vast natural cave, more perfectly adapted for the purpose than if it had been constructed by art. Descending from the brewery with lamp in hand, we see by the glimmering light long rows of those immense casks in which the beer is kept while maturing. With the foreman, who evidently knows each foot of that changing labyrinth, we traverse passage after passage with casks on each side and flagging under foot again and again. We descended into lower depths, and then at last through a vaulted way hewn in the solid rock, we see that we are in the cave. Here is a natural cavern with a comparatively smooth horizontal roof overhead, scarred and discolored in places, yet showing no marks of the mason's chisel except where the stalactites have been reared up and there, and a few stalactites hung down from the roof."

Lemp's Cave was rediscovered by Mr. Lee Hess in 1947 and a portion of it

was opened to the public as a tourist attraction and became known as "Cherokee Cave". It received added recognition when a vast number of bones from an extinct species of peccary were discovered in the cave.

Another well known brewery cave was the one Joseph and Ignatz Uhrig purchased in 1849 at the corner of Washington and Jefferson Avenues, where the Jefferson Bank stands today. The land was part of an old Spanish land grant owned by Dr. William Beaumont and was part of a beautifully wooded 25 acre park surrounding his family home. The Uhrig brothers were more interested in the natural limestone cave underground than the surface of the property. They expanded the cave to a length of 210 feet, 20 feet wide and 20 feet high. They bricked in the tunnel and built arches. The floor of the cave was 42 feet below the surface. They connected this cave with a series of similar caverns running all the way to their brewery at Eighteenth and Market Streets, and installed a narrow gauge railroad for the easy movement of beer from the brewery over to what became famous as "Uhrig's Cave" used for a place of entertainment and a beer garden.

Many other beer gardens in connection with caves became popular in St. Louis in the late 1800's as pleasure seekers discovered the natural air-conditioning qualities of underground beer parlors.

The southernmost portion of Uhrig's Cave came to light as related in a newspaper article taken from the Post-Dispatch September 2nd, 1955, which said, "After more than 100 years of service and disuse an arched entrance and roof of bricks over an abandoned beer cellar has been uncovered by workmen razing buildings in the Plaza Redevelopment area."

Then four years later on May 28th, 1959 this item appeared in the Post Dispatch. "A large area of ground in the Plaza section caved in today. The cave-in was in the block bounded by 17th, 18th, Market and Chestnut Streets. The depression was about 25 feet deep and measured 38 feet by 22 feet on the surface."

Less than a month later, on June 7th, 1959 the final chapter was written in this article which appeared in the Post. "Collapse of a metal floor which divided an old brewery cave into two stories caused the recent cave-in. Cranes and clamshell buckets brought up much more than was expected. They brought up the rails and sheet metal which had been used to make two stories in the main cave area. The cave was rediscovered a few years ago when some of these buildings were razed from the Plaza. It was filled then, engineers thought, but the recent collapse of the flooring showed there was life left in the old cave yet. The 4000 cubic yards of fill ought to bury the cavern permanently officials said, in the hopes it would never reappear to haunt anybody again."

Other newspaper articles tell of interesting rediscoveries of some of the forgotten caves of St. Louis, and fortunately not all of them met

the fate of Uhrig's Cave. The Star-Times printed the following story on October 11th, 1924.

"Far down beneath the thickly settled sections of South St. Louis a cavern has been discovered, which has been the basis for speculation in South St. Louis for years. It was discovered by men working for the United Construction Company while tunneling for a relief sewer, under Nebraska Avenue near Lafayette. It was through the courtesy of the Superintendent of Construction that this Times reporter was permitted to descend into the cave through a sewer tunnel.

One crawls into the cave like a worm would crawl into a hole. The crawl is about 5 ft. in length and slimy mud adds to the welcome and attractiveness of the entrance. The reporter looked around for a switch to turn on and finally found it on his flashlight. Had he been of timid nature he might have shivered slightly because yawning before him was the picture of a dragon's mouth with teeth projecting from the top and bottom. They were weird looking things and many queer formations when the first view of the cavern was obtained. Later with hundreds of them flashing before the eyes of the visitor they became more or less commonplace. There was plenty of room in the cave after entrance was obtained. The cave was more or less in the shape of a cut diamond. In places it was 20 feet wide and the flat roof was eight to ten feet above the uneven floor.

Running through the bottom of the cave was a stream of water approximately $3\frac{1}{2}$ feet in width. Walking along the so-called foot path in the cave was a treacherous proposition. A slimy covering of mud made it decidedly slippery and one had to watch the roof overhead in an effort to save his head from crashing against these stony projections called stalactites. Breathing in the cavern so far underneath the surface of the earth was difficult because of powder smoke that seeped into the cave from the sewer tunnel and the lack of oxygen in the air of the cavern. After slipping along the bottom of the cave for about 20 feet a natural bridge was discovered crossing the underground stream. The bridge was used to get across to the other side, where walking was a little better. In another 15 or 20 feet it became necessary for the reporter to get his feet wet because the foot path quit for a short distance. Other natural bridges were encountered at a distance of between 20 to 30 feet apart.

The cavern runs in a northwesterly and southeasterly direction from the entrance at the sewer tunnel. A movement of air is noticeable and a match remains ignited only a fraction of a second. Somewhere it is believed the natural tunnel comes to the surface, but it may be miles away. More than 40 feet of rock lie between the cavern roof and the deposit of earth above. It is through this rock that the construction company is making rapid progress in the construction

of the Montrose Relief Sewer tunnel. Construction has been started at three points. With the completion of the sewer the underground cavern will soon be forgotten even in that district."

The cave did remain forgotten until March 5th, 1930, when this article appeared in the Post-Dispatch.

"Sewer Digger Finds Cave. A natural cave, beginning 70 feet under the ground north of California Avenue and Sidney Street and full of big stone rooms and stalactites was one of the reasons he lost \$117,000 on a sewer contract with the city, John Vogt, contractor testified yesterday in Circuit Court. He said his workmen drilled into the natural cave, north of California soon after work on the relief sewer began. He said the cave extended for more than a mile in a general northwesterly direction, and ran for several blocks under Nebraska Avenue. When the cave was discovered, several workmen were overcome by gas. Before he could explore the cave it was necessary for him to pump fresh air into the cave. Vogt said in places the cave shrank into a small passageway, in which a man had to stoop to get through. At other places it was a series of big rooms. A stream of water ran through the cave. Vogt declared the cave caused him a vast amount of unforeseen expense and necessitated shorings, cement work and the like, which otherwise would not have been required".

This is the last bit of printed matter I have ever been able to find with reference to this cave, and it is assumed portions of it still remain intact and sealed beneath South St. Louis Streets.

To best tell the story of my favorite St. Louis cave, which is sealed and for the most part forgotten beneath Benton Park, I will once again let the published material I have acquired tell the story for me. The story of English Cave begins with a legend printed in the March 25th, 1888 issue of the Post-Dispatch.

"The English Cave, between Arsenal and Wyoming Streets is something ambitious as well as a place of novelty. Years ago when St. Louis was but a trading post this cave was known to the Indians. The entrance then was by means of a natural shaft, or well some sixty feet deep. There was but one opening. Once down the shaft a man would find himself in a chamber about 400 feet long and varying in width from a dozen feet to 50. It is said that an Indian maiden with her brave fled from the wrath of an irate chief who wanted her for himself. They sought refuge in the cave, were tracked, and a watch set upon the cave to prevent their escape. There they starved to death, and early investigators found their bones locked in each others' arms."

In 1826 Ezra English rediscovered the cave and put it to use as storage cellars for his small brewery. The area which is now Benton Park wasn't even a part of St. Louis in those days and travelers stopped at his inn and brewery and underground tavern to refresh themselves. Later he took a business partner named Isaac McHose. The first printed account of the cave I have been able to find was in the Missouri Republican, in its August 11th, 1843 issue, which reads in part as follows:

"A few days ago we visited the cave in the St. Louis Commons owned by Mr. McHose and English. They have spent a considerable amount of labor on the grounds and on the cave. The latter is so improved that those who have seen it in its original shape would hardly recognize it. The mouth of the cave has been walled up and stone steps laid down to the entrance. The front room has been enlarged by the removal of earth from it. From the first chamber you descend about 10 feet into a second, which is of considerable length, and in this there is a delightful spring falling from the top of the cave. It is the intention to remove the earth from this chamber and when this is done it is probable that a way will be found into some other large chambers; and beside all the natural attractions, Mr. McHose and English keep in the front chamber their beer and ale, and here it may be drank as cool as the water of the spring."

Another report of English Cave appeared in the book "History of St. Louis" which was printed in the early 1900's:

"The venerable Ezra English manufactured a malt liquor better known as ale than beer half a century or more ago, and upon an extensive scale judged by the storage capacity of the "English Cave", not far from the present site of Benton Park, and which was then used as subsequently, for the storing of beer. The cave itself has a romantic history, and while it is believed to lead to the river, has never been throughly explored in its inmost recesses, nor further than sufficient to afford capacity for storing three thousand five hundred barrels."

The English Brewery went out of business in the mid 1840's and the cave was forgotten about until 1873 when the City officials considered opening the cave to the public and adding it as a feature to Benton Park which had been acquired by the City seven years earlier. The Park Commissioner's report in 1888 said, "If this piece of land could be added to Benton Park and an easy and ornamental entrance to the cave be constructed it would prove an extraordinary attraction to visitors from home and abroad, there being no other park in the world possessing so novel and interesting a feature. The cave is now used for raising mushrooms and I must fear that the desired improvement will never be made."

In 1897 the cave was used by the Paul-Wack Wine Company, which went out of business a few years later, and the cave was sealed and forgotten.

To summarize the uses to which St. Louis caves have been put in the past: they were used mostly by breweries for storage cellars, by some wineries, by the Union Army during the Civil War to store ammunition, by beer gardens as a means of natural air conditioning, by mushroom growers, by speak-easies during prohibition, and later by some as a depository for rubbish when caves such as the one beneath the Green Tree Brewery were converted into subterranean trash heaps. As some of the old brewery

building were torn down it became more economical to simply dump all the bricks from the buildings into the cave than to pay to have them hauled away. This also acted as a fill for the ground so new structures could be erected. Some, such as Cherokee Cave, met their fate when highways were constructed through the heart of the city. But fortunately many still lie hidden and forgotten beneath the city streets and parks waiting for the day they may be rediscovered and once again put to use.

A New Concept Of The Initial History Of Mammoth Cave, 1798 - 1812
by
Harold Meloy and William R. Halliday

At the entrance to Mammoth Cave, a plaque repeats the legend that the cave was discovered in 1799 by a hunter named Houchins when he followed a wounded bear into it. This legend has been repeated--with variations--to cave visitors for the last 100 years.

Curiously, it was not told during the first half century the cave was shown commercially. In fact, the legend appears to have appeared only after the Civil War. Prior to 1870, no mention of Houchins or his bear had appeared in any of the written histories or stories about the cave. During the last 1860's, Dr. William Stump Forwood was writing a book about the cave. He queried Franklin Gorin, a former owner, for information about its early history. Gorin answered that it was discovered in 1809 by a hunter named Houchins who chased a wounded bear into the entrance. Gorin's letter was included in the book (Forwood, 1870; pp. 21-26). This is the first known publication of the Houchins-Bear Story.

Another indication that the legend appeared about 1870 is the name given to the entrance avenue. Since 1870 it has been called "Houchin's Narrows", while prior to that time it was known simply as "The Narrows".

Even after Horace C. Hovey, prolific writer on Mammoth Cave matters, placed his official stamp of approval on the 1809 discovery date (Hovey, 1882, pp. 55-56), the guides continued to use 1802 as the date of the cave's discovery. The traditions of their predecessors in the guiding business were more authoritative to them than the opinion of outsiders. Then, too, they could quote earlier writings which gave the 1802 date. Houchins and his wounded bear were moved from 1809 back to 1802!

Later, Collins' History of Kentucky was found to use the date of 1811 as the discovery date. Then, Houchins and his multi-dated bear were moved again-- this time to 1811. But not by the guides who continued to use their traditional 1802 date.

In 1901, rival factions of the Croghan family were contesting at the cave and in the courts for the management of the cave and the cave hotel. One group wanted to continue Henry C. Ganter; the other group favored William S. Miller, Jr. Miller's father had been a former manager on two prior occasions; and his grandfather had been one of the early saltpeter makers at the cave. Miller was more than willing to replace Ganter, and he gave a story to the Louisville Courier-Journal that his father had found an old record in the Courthouse at Bowling Green stating that the cave had been mentioned in a land description in 1797 (Anon., 1901). Almost at once, the story of Houchins and his famous bear was moved back to 1797.

During the last 67 years, reporters, lawyers, title examiners, and historians have tried to locate the supposed 1797 reference in the old records at Bowling Green. None of them have. They did find a 1799 reference. So, Houchins' bear was moved again-- to 1799. And there the legend remains.

A second and more recent story about the cave's early history (and one which is widely accepted as historical fact) tells us that Mammoth Cave once sold for \$116.67; and on the same day in 1812 was resold for \$400.00; and still on the same day at the height of the saltpeter boom, was sold again for \$3,000.00. Until very recently, a diagram was prominently displayed in the Visitor's Center graphically illustrating this sudden increase in value within a single day, by a drawing of three stacks of dollars.

This story supplanted earlier legends that the cave once sold for a horse valued at \$40.00, or was traded for a slave, or for a yoke of oxen, or for a flint-lock rifle, depending on who was telling the story.

At the time when the cave was being purchased for a National Park in the late 1920's, the purchasers were interested in tracing the title. They had no difficulty in finding the 1799 reference at Bowling Green. It referred them to a Land Certificate by number; and when this was located in the archives at Frankfort, they found that it was issued to Valentine Simons on September 14, 1798. This is the earliest written record pertaining to Mammoth Cave yet located.

The original Land Grant (based upon the land certificate) was made by the Governor of Kentucky to Valentine Simons on January 31, 1812. Then, on July 9, 1812, the three deeds were given; and these are recorded for all to see in Bowling Green.

The first of the three deeds was from Simons to John Flatt for \$116.67; the second one, from Flatt to George, John, and Leonard McClean for \$400.00; and the third, from the McCleans to Charles Wilkins and Fleming Gatewood for \$3,000.00.

Herein lay a puzzling inconsistency, for Gorin's 1868 letter (Forwood, 1870, p. 22) says: "McLean, I believe, was the first person who attempted to make saltpeter there, perhaps in the year 1811". If McLean (McClean) made saltpeter in M.C., it could hardly have been during the several minutes in that one day in July 1812, when he supposedly held a deed for it. He must have been at the cave for a much longer period than a small part of one day in July 1812.

All of this was known for almost 40 years; but little, if anything else, came to light until recently. Probably two circumstances impeded the search for additional information. First, the name "Mammoth Cave" had

not yet been coined in the very early years of the cave's recorded history; and second, during the period of which we speak, the cave was located within the boundaries of Warren County instead of Edmondson County. Hence, casual Mammoth Cave historians paid scant attention to the mention of any cave (not called Mammoth Cave) located in Warren County, Kentucky.

When it was realized that to learn more of the cave's early history, it would be necessary to search for records of a cave (not identified as Mammoth Cave) located in Warren County (not Edmondson County), gates began to open for further research. This research has been undertaken in libraries, record depositories and other sources across the United States, from the Library of Congress to the Huntington Library in California - and a Seattle used book store. The bulk of this research, however, has been by one of us (HM) in the Warren County Courthouse, Bowling Green, Kentucky, and the Kentucky State Archives, at Frankfort.

Many details of the early history of Mammoth Cave are still obscure. The pre-Columbian exploration of Mammoth Cave is beyond the scope of this paper; it will suffice to say that its discovery is irretrievably lost in the mists of prehistory. Nor do we know when the first non-Indian came upon Mammoth Cave, nor who he was. The date may have been well before the mid 1790's; the Green River country seems to have been known earlier than some historians originally believed. Though apparently not a part of the history of Mammoth Cave, large areas designated as "lands south of the Green River" were reserved for land grants to Revolutionary War veterans of the state of Virginia. In 1792, despite the location of Great Saltpeter Cave and other rich saltpeter sources virtually alongside The Wilderness Road, Imlay wrote that saltpeter earth in caves "is discovered in greater plenty on the waters of Green River than it is in any other part of Kentucky". Many settlers then manufactured their own gunpowder from this saltpeter (Imlay, 1792). The casualness with which Kentuckians regarded this manufacture is shown by Pike's anecdote regarding a Kentuckian he encountered in then - Spanish Santa Fe in 1807 (Pike, 1810):

"In the history of New Mexico it may not be improper to record the name of James Pursley, the first American who ever penetrated the immense wilds... Pursley was from near Baird's town, Kentucky, which he left in 1799... (spending three years in the Great Plains region). He arrived at Santa Fe in June 1805... he was once near being hanged for making a few pounds of gun-powder, which he innocently did, as he had been accustomed to do in Kentucky, but which is a capital crime in these provinces."

As yet, we have been unable to determine if Mammoth Cave was one of the caves of which Imlay wrote. If so, it apparently was considered only one of many. It is recalled that in its early days, Carlsbad Cavern was called "The Big Cave" (Long & Long, 1956); some such descriptive term may have been applied to Mammoth Cave before a definitive name.

After the hunters and explorers, settlers came to the Green River country. Apparently they came first to the Bowling Green area, by boat up the Green and Barren Rivers, then worked eastward toward Mammoth Cave. Warren County (then much larger than it is today) was established in 1796; the town of Bowling Green was chartered in March 1798.

On December 21, 1795, the Kentucky legislature allowed 200 acres to bona fide settlers "on the south side of Green River" as of January, 1796, providing that proper entry, notice and survey were performed and payment made at \$30 per hundred acres (Ch. 220, Littell's Laws of Kentucky, Vol. 1, 1795). No entry was made for Mammoth Cave under this act; therefore it appears to be a reasonable presumption that Valentine Simons and others had not yet settled that far back in the ridges.

Farther west, however, and perhaps even in the Mammoth Cave area, many other settlers soon were moving into the area south of the Green River. They in turn demanded similar legislative assistance. Another act was passed March 1, 1797, allowing up to 200 acres to bona fide settlers on land south of Green River on or before July 1, 1798 (Ch. 315, Littell's Laws of Kentucky, Vol. 1, 1797). Payment was to be at the rate of \$40 or \$60 per hundred acres depending on its quality. This was modified by an amending act of February 10, 1798 (Ch. 55, Littell's Laws of Kentucky, Vol. II, 1798.)

As of September 14, 1798, Valentine Simons filed for the Mammoth Cave property under the amended act (Land Certificate #2428, survey packet #2599, Kentucky Land Office). Therefore he probably was one of those who settled in the area not long before July 1, 1798. His tract of 200 acres included what were to be known as Mammoth Cave and Dixon's Cave. Neither appears to have had a specific name at this time.

Under the authorizing law, Simons was required to live on the land for one year from the date of his certificate, September 14, 1798. In compliance with another requirement, he had his tract surveyed September 3, 1799 (Warren County Surveyor's Book A, pp. 268-269, Bowling Green, Kentucky).

For his land, Simons was obligated to pay the Commonwealth of Kentucky a total of \$80 plus interest. He may have paid as little as \$10 toward this; several legislative acts allowed great leniency on these matters. In 1812, he still owed \$70 (see below).

Of Simons, we know only that in 1812, he was living in the next county. If he ever mined saltpeter for more than personal use, no record has been found.

Simons had no deed, so when he came to sell, he could only assign his interest in the property. This, however, was the commonly accepted practice in the area, and was used in all pre-1812 Mammoth Cave transactions. As yet we do not know the date he and his wife sold the property to John Flatt.

The lack of other knowledge about Simons suggests that he may have sold and moved on soon after the 1799 survey.

When the deed covering this sale was executed in 1812, the consideration was stated to have been \$116.67 (Deed of bargain and sale recorded Warren County Book 6, pp. 48-49). This sum may have represented the total price, a sum due plus interest (although this would seem a peculiarly fractioned sum for this possibility), a remaining balance, or part of a large deal. It appears most logical for this to have been a one-third balance, to be paid when Simons obtained a patent for the land. If this is true, the sale price totalled \$350.00; this, however, is only conjecture.

Thus at a date still unknown, Flatt moved onto the premises and the bigger cave became known as Flatt's Cave, a name encountered repeatedly in legal documents. Quite possibly Flatt became the proprietor of a small saltpeter business but Brown (1809) was not impressed by the volume of Warren County saltpeter mining in 1805-06.

Sometime before January 22, 1808 (a date which will be discussed below), Flatt sold to three McClean brothers for an unknown sum. The situation was much like that at the time of the sale by Simons to Flatt; the "consideration" was stated in 1812 to have been \$400 (Deed of bargain and sale recorded Warren County Book 6, pp. 49, 50, 51, 52).

1808 was a year of much activity at Mammoth Cave. On January 22, 1808, the McCleans sold Dixon's Cave and part of their acreage to a Charles S. Morton, at a time when that cave was producing saltpeter commercially. Much credit is due Dr. Samuel W. Thomas of Louisville for the discovery of the contract of this sale in the Huntington Library, San Marino, California. This sale specifically excluded Mammoth Cave and seven surrounding acres. One of us (HM) has traced the metes and bounds described. They show that the McCleans were selling only 44 acres to Morton; it is of some interest that Dixon's Cave then was just one of the "McCleans' Caves". Since Mammoth Cave was a much better saltpeter source than Dixon's Cave, it appears likely that it, too, was being operated commercially by this date.

Again, we do not know the exact date of the next step in the history of Mammoth Cave: the sale by McCleans to Fleming Gatewood and Charles Wilkins. The amount was \$3,000 (Deed of bargain and sale recorded Warren County Book 6, pp. 52,53). In April, 1810, ornithologist Alexander Wilson wrote that the cave had "lately been sold for \$3,000 to a saltpeter company" (Wilson, 1810). From deeds executed in 1812 (see below), we know that Gatewood and Wilkins for this amount acquired 156 acres from the McCleans rather than the residual seven acres referred to in the Morton contract; we do not yet know whether this was one sale or two.

Similarly, we do not know the exact date of the coming of Arch Miller to run the saltpeter operation. During the winter of 1822-23, Miller

stated that he had been at Mammoth Cave fifteen years (Blane, 1824). It is regrettable that no more exact information is at hand on this significant event because it appears likely that Miller was hired by "the saltpeter company" of Gatewood and Wilkins rather than by the McCleans. At least one other source gives 1808 as the year of Miller's arrival, and this is tentatively considered the year of sale by the McCleans to Gatewood and Wilkins.

Late in 1810, the first published mention of the cave reached a wide eastern audience (Wilson, 1810), bringing the news of sale of a remote saltpeter cave for an astounding sum. Some historians have wondered if Hyman Gratz, a Philadelphia merchant with wide saltpeter interests, already was interested in the cave. If so, no evidence thereof has come to light. Initial Gratz inquiries in the winter of 1810-11 appear satisfactory as a working hypothesis.

At this time, the name Mammoth Cave had not appeared. One of us recently showed that this name arose in the course of promotional activities of the Gatewood-Wilkins saltpeter company (Meloy, 1968b). This catchy name was a stroke of genius. Contemporary writings demonstrate widespread interest in the Mammoth bones and tusks frequently unearthed by pioneers, and the name related well to the enormity of the cave itself. Yet, because it was a new, promotional name, it was not fully accepted for several years after its 1811 appearance on a map sent to Dr. Benjamin Rush of Philadelphia by Dr. Ridgley of Lexington, a brother-in-law of Charles Wilkins.

It should be noted also that on September 11, 1811, John D. Clifford wrote to Benjamin S. Barton in Philadelphia and referred to the cave of the mummy (Short Cave) as a cave adjoining that of Mr. Wilkins (Mammoth Cave) indicating that Charles Wilkins had an owner's interest in Mammoth Cave in Sept. 1811 (Meloy, 1968a, pp. 22-23 and note 17).

The promotion was successful. Gratz and others became increasingly interested. By the end of 1811, the saltpeter company was moving to clear the title, presumably on the insistence of Gratz. For this, two steps were necessary. First, Simons' patent had to be issued by the Commonwealth of Kentucky. Then, "deeds of bargain and sale" had to be completed and recorded for each transaction.

Fortunately, all prior owners were available in the adjoining counties. The legal requirements for Simons' patent were completed January 4, 1812 (Auditor's office receipt 54-2599) with a payment of \$70.93 to the commonwealth. The patent was issued later that month (Grants south of Green River, Book 11, p. 47, Kentucky Land Office).

Then on July 12, the Simons, the Flatts, the McCleans and legal representatives met in Hardin County. Balances due were paid and successive "deed of bargain and sale" were signed covering the Mammoth Cave property. These deeds were recorded in Warren County two days later (see above citations).

Six weeks later, Gratz paid \$10,000 for Gatewood's half-interest of what was now officially Mammoth Cave. This he did in person, at Bowling Green (Warren County Book 6, pp. 59, 60, 61). Sometime in 1812, he visited Mammoth Cave, probably at the time of the sale.

A new period of Mammoth Cave history opened with the Gratz purchase. The War of 1812 was underway and the new nation's need for saltpeter immense. Soon, Nahum Ward would widely exhibit and describe a supposed Mammoth Cave mummy (Meloy, 1968a). From a local curiosity, Mammoth Cave was about to become a household word.

REFERENCES

- Anon. 1901. The owners of Mammoth Cave. Louisville Courier-Journal, Sept. 20, Section 3, p. 2, L. 1.
- Blane, W.N. 1824. An excursion through the United States and Canada. Baldwin, Craddock and Joy, London, p. 276.
- Brown, Samuel. 1809. A description of a cave on Crooked Creek, with remarks and observations on nitre and gun-powder. Trans. Amer. Philos. Soc., Vol. VI, no. 39, p. 236.
- Bryant, Wm. Cullen. 1874. Picturesque America. D. Appleton & Co., New York, p. 540.
- Forwood, W. Stump. 1870. An historical and descriptive narrative of the Mammoth Cave of Kentucky. Philadelphia, J.B. Lippincott & Co., p. 225.
- Hovey, Horace C. 1882. Celebrated American Caverns. Cincinnati, Arthur H. Clarke Co., p. 228.
- Imlay, G. 1792. A topographical description of the western territory of North America. J. Debrett, London, p. 122.
- Long, Abijah & Long, Joe N. 1956. The Big Cave. Cushman Publs., Long Beach, Calif., p. 126
- Meloy, Harold. 1968a. Mummies of Mammoth Cave. n.p., Shelbyville, Indiana, p. 40.
- ibid, 1968b. Early maps of Mammoth Cave. Jour. of Spelæan History, Vol. I, no. 3, p.p. 49-58, Summer.
- Pike, Zebulon M. 1810. An account of expeditions to the source of the Mississippi and through the western parts of Louisiana... in the year 1807. C. & A. Conrad & Co., Philadelphia, Appendix to Part III, pp. 16-17.
- Wilson, Alexander. 1810. Letter from Nashville. Port Folio, Vol. IV, p. 318, Oct.

REVIEWS

Cleon Turner, DISCOVERY OF THE CRYSTAL ONYX CAVE AND MY BIOGRAPHY.
Published by the author, Cave City, Kentucky, 1968. 123 pages offset
on 8½ x 11 paper. \$5.00 plus postage.

I hardly know how to begin a review of this manuscript. It is the transcript of a taped interview of several interviews with Cleon Turner, guide and partial owner of Crystal Onyx Cave. I shall not dwell on the obvious, but only try to present a picture. If you have ever been guided through Crystal Onyx Cave by Mr. Turner, herein you will find a complete written record of the lecture. In addition there are included about 60 pages of ramblings dealing with his personal history, philosophy, and conceptions of geology. All summed up--- it's an incredible document.

The value of this work is in the fact that it exists. It is unique. Of those who lived through the era of the Cave Wars and who were contemporaries with Floyd Collins, Cleon is the only one to even attempt to record his adventures. We may criticize his attempt, which has been not very successful. But he is to be applauded for his effort. Don't read this book if you are seeking untold secrets. There aren't any revealed. If you are interested in understanding the rural people of Central Kentucky, you may want to read Mr. Turner's story.

(JB)

R.K. Hogberg & T.N. Bayer. Guide to the caves of Minnesota. Minn. Geol. Survey Educational Series Pub. no. 4, 1967. 61 pp. 50¢.

According to this badly mistitled pamphlet, "Stillwater caves are the most historic of the Minnesota caves". Its authors appear almost completely lacking in understanding of the historic significance of Carver's Cave and Fountain Cave in St. Paul. The shortcomings of this work have been adequately discussed elsewhere; here it will suffice to remark that it is a good guide to the geology of the Minnesota cave areas and a guide to the commercial caves of Minnesota - and not much else. Included is the information that Fountain Cave and the remnant of Carver's Cave are currently sealed; it is not mentioned that the latter has been the case intermittently for over a century.

(WRH)

OTHER BOOK NEWS

Burton Faust's long-awaited posthumous Saltpetre Mining in Mammoth Cave was ready just in time for the N.S.S. Convention. John Bridge reports that it is now available for \$1.65 from: Cave Research Foundation, 464 M Street, SW, Washington, D.C.

The latest word from Johnson Reprint Corporation is that their publication date from the Celebrated American Caves reprint will not be determined until early 1969.

Trevor Shaw writes from England that his Cave illustrations before 1900 is now out of print. However, he hopes to publish a second edition some time in the future, and would appreciate information on similar non-photographic illustrations, especially of American caves, which he missed. Address: CDR Trevor R. Shaw, "Shavercombe", Cramstone, YELVERTON, Devon, England. Mail will be forwarded even while he is aboard the H.M.S. Intrepid in the Singapore area.

BOOK AND MEMORABILIA EXCHANGE

Peter Hauer (1506 Miller St.), Lebanon, Penn. has about 16 duplicate antique stereo photos of caves, mostly from the 1882 Luray series; one Grand Canyon cave, others. Pete wants to trade for other stereo views or cave literature of similar age. Also wants antique post cards and other memorabilia of caves.

Tom Meador (Box 3216, San Angelo, Texas) wants Speleodigest 1957, 1958; NSS Bulletin 8, NSS News August and November 1948, April and July 1954; Dawkins' Cave Hunting, Hendrix's The Cave Book, many others. He has for trading: Speleodigest 1956, 1960; 1938 Greystone Press edition of 10 years under the earth; Baumann's Caves of the great hunters; Cave studies #1-11; many Texas publications, etc. What do you need?

Chuck Pease at last report had the following duplications for trade (or sale): Jackson's Wyandotte Cave; Casteret's 10 years (same edition as above); Hogg's Deep Down; Halliday's Depths of the earth & Adventure is Underground; Casteret's My caves, Descent of Pierre St. Martin & Darkness under the earth; Lavaur's Caves and cave diving; Cadoux's Thousand meters down; Folsom's hardback Exploring American Caves; Douglas' Caves of Virginia; Thornber's 1959 Pennine underground; Hovey & Call's 1897 paperback Mammoth Cave of Ky; Scott's Caves in Vermont; Stone's Penn. Caves (I dunno which); Halliday's Caves of Washington; Bridwell's Story of Mammoth Cave National Park; Thrailkill's Introduction to caving; NSS convention guide books to Carlsbad and Mountain Lake, Va.; Moore & Nicholas' Speleology; Mohr & Sloane's Celebrated American Caves; Windels' Lascaux Cave; Cullinford's 1962 British Caving; Speleodigest 1960, 1961, 1962; Bretz' Caves of Missouri; Lawrence & Brucker's Caves beyond; Sloane & Gurnee's Visiting American caves; Davies 1958 Caverns of West Virginia; Chevalier's Subterranean climbers; Mohr & Paulson's Life of the caves; Tazieff's 1953 hardback Caves of adventure; Attout's Men of Pierre St. Martin; Noyce's Springs of Adventure; Cuvay's Cave painting; Casteret's 1940 British edition 10 years.

The editor (1117 -36th Av. E., Seattle, Wash.) has the following for trade: McGill's Caverns of Virginia; Perry's Underground empire & New England's

Buried treasure; Cadoux's Thousand meters down; Visiting American Caves; Caves Beyond; (paperback) Caves of adventure; Chevalier's Subterranean Climbers; Dopp's The later cave men; Casteret's More years under the earth & Descent of Pierre St. Martin; Exploring American caves (paperback); Long's The big cave; Hovey & Call's 1897 Mammoth Cave of Ky.; 1927 Wind Cave National Park pamphlet; fiction: A hole in the ground; The secret of the Wallowa Cave; Nat. Geogs. 1924 and later. Also many grotto and regional publications. What have you???

Dr. Stanley Sides (Apt. 50, 175 Malabu Drive, Lexington, Ky.) wants to buy Hartley's Tragedy of Sand Cave, Lee's Official story of Floyd Collins, Johnston's Mammoth Cave by flashlight and Randolph's Mammoth Cave and the cave region of Kentucky.

Ross Eckler (Route 18, Spring Valley Road, Morristown, N.J.) has a Celebrated American caverns for trade. He wants Owen's Cave regions of the Ozarks & Black Hills, Bailey's Great caves of Kentucky, Amann's 1882 History and description of the Luray Cave, Binkerd's Mammoth Cave and its denizens, & Pictorial guide to Mammoth Cave, and Hartley's Tragedy of Sand Cave.

John Bridge (206 W. 18th Ave., Columbus, Ohio) has for trading three different Casterets, Subterranean Climbers, Thousand meters down and several mountain books. Also some 1924-25 Geographics.

Ernst Kastning (RFD #2, Pound Ridge, N.Y.) has for trading bound magazine volumes including Hovey's 100 miles in Mammoth Cave, his 80 miles in Indian caves, Egersoll's The Caverns of Luray (1881), Porte Crayon on Weyer's Cave (Grand Cavern), Va., Shaler's Caverns and Cavern Life (1887), and Bigelow's The romance of a cave. He wishes to trade for "comparable articles or books on caves... especially desired are 1800's books on caves in general or on specific caves".

ASSOCIATION BUSINESS

Elected to the ASHA board of trustees for 1968-69 were John Bridge, Jerry Frahm, Bill Halliday, Harold Meloy and Tom Meador. As a result of a tie for the fourth place, the board was enlarged to five members.

A business meeting of the ASHA was held August 23, 1968 in Springfield, Mo., following the history session of the NSS convention. Journal policy was discussed; most preferred only occasional special issues spaced among general issues. Another discussion considered the affiliation of the ASHA to the NSS as its history section or in some other form. It was agreed that the new president would investigate and report his recommendations during the coming year.

The treasurer's report indicated a balance of about \$19.00, insufficient to print the fourth issue of the Journal. (This has been remedied by the acceptance of about 30 new applications for membership.)

A short meeting of the Board of Trustees followed. John Bridge was elected ASHA president for the year 1968-69; Jerry Frahm was elected secretary-treasurer. The editor was appointed to continue in that post.

The next meeting of the association is scheduled to occur at the time of the 1969 N.S.S. Convention. This is tentatively listed for mid-June in Lovell, Wyoming, east of Yellowstone National Park. Watch the N.S.S. News for confirmation of place and date.

COLLOQUY

Jim Reddell, Chuck Pease and Ron Bridgemon are working on updating the bibliography of Mexican speleology. Please send all references on Mexican caves (in any language) to Ron at 238 Lang, Ft. Sam Houston, Texas.

* * *

The editor recently bought a copy of Hovey's Celebrated American Caverns bound in forest-green like the 1896 reprinting but without the 1896 appendices and with the original 1882 title page. It carries an inscription dated 1894. Russ Gurnee has a similar copy with a 1884 inscription. Any information?

Peter Hauer, 1506 Miller St., Lebanon, Penn. is working on a national survey of saltpeter caves, state by state. He would appreciate any leads on saltpeter caves, their technology and tools or related history.

* * *

Jim Quinlan is back from Europe and South Africa and says he's working on his correspondence. To prove it, he mailed me a letter he wrote last February. He listed some trading material but it seemed a little out of date.

* * *

Red and Patty Jo Watson are due back from Turkey at the end of February.

* * *

Chuck Pease reports that there are two editions of Franke's Wilderness under the earth. The original was bound in black and has 17 photos; the book club edition is in green and has no photos.

Chuck also reports a third form of Browne's Ice Caves of France and Switzerland. This one has raised ribs on the binding of the spine like the one with the fancy gilt, but unlike the latter has the preface which was omitted in the fancy printing. Both of these have the same title page and other contents as the plain brown binding.

* * *

Miss Katherine Bartlett, Librarian, Museum of Northern Arizona, Box 1389, Flagstaff, Ariz., reports inability to find the cave mentioned by Father Garces on his 1776 trip, east of Flagstaff. This is on page 354 of On the trail of a Spanish pioneer; the diary and itinerary of Francisco Garces in his travels through Sonora, Arizona and California, 1775-1776. Translated and edited by Elliott Coues. 2 volumes, N.Y., 1900. Can anyone help?

* * *

With the permission of the author, The Mohawk-Hudson Grotto of the N.S.S. has reprinted Arthur H. VanVorhis' Lesser Caverns of Schoharie County (N.Y.) - \$1.80 including postage from Peter Teresco, 25 Brown St., Schenectady, N.Y.

* * *

Peter Hauer (address above) reports that he has examined the "alleged photo of Lester Howe's daughter's wedding in Howe Cavern in the 1850's. They didn't have such photography then. Also the persons hold kerosene lanterns which dates it later. I believe they have confused a picture from the '70s or '80s. They did, however, find a wedding reception invitation from the '50s (Howe's daughter) in a clay bank in the 1920's and this is still owned by the caverns. I still believe the Mammoth Cave 1866 series is the oldest example of spelean photography." Anybody disagree?