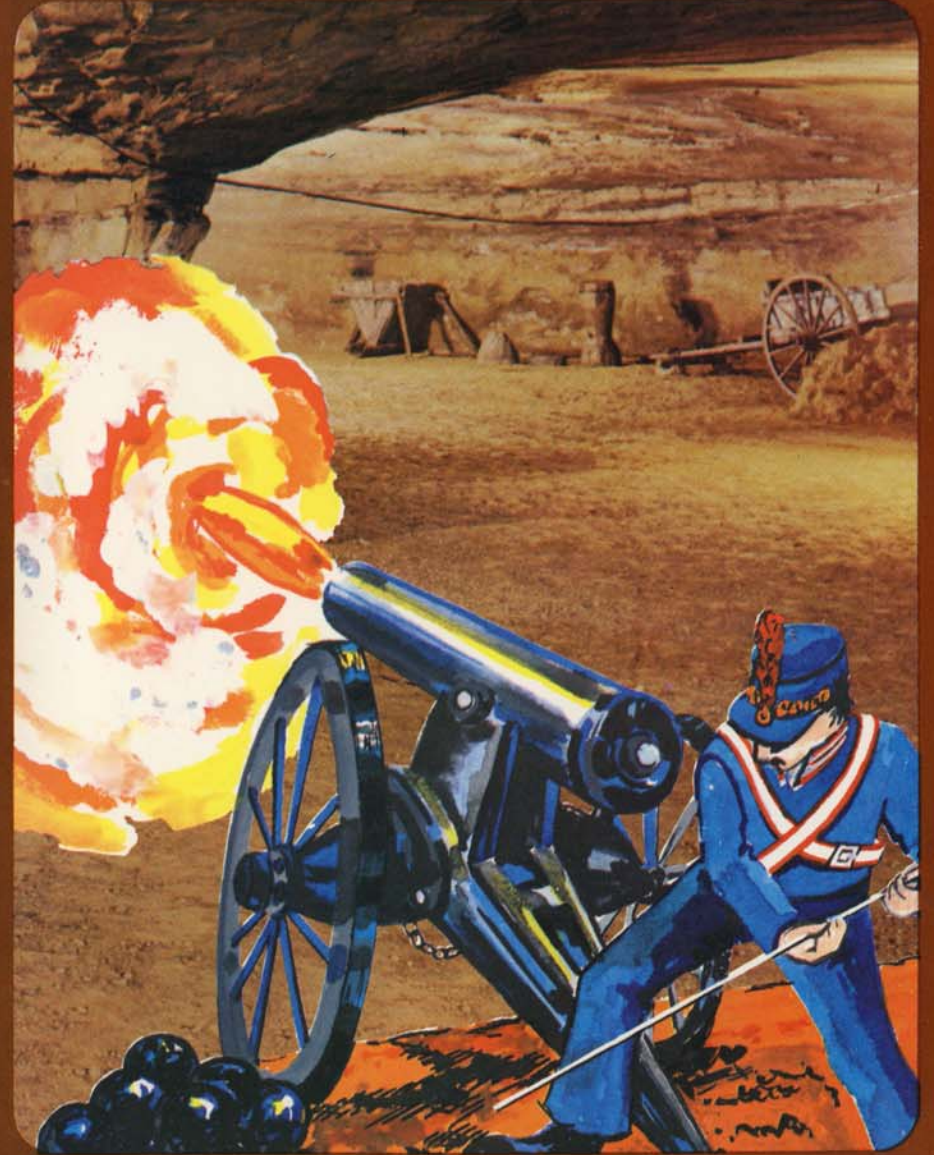


**GREAT**  
*Saltpetre*  
**CAVE**

**NEAR**  
**WORLD FAMOUS Renfro Valley, Ky.**



**ONE OF THE NATION'S MOST HISTORIC CAVES**

FROM \_\_\_\_\_

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\_\_\_\_\_

TO \_\_\_\_\_

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STAMP

The main passage of this unusual cavern runs entirely through a spur of Big Hill Range with an opening on each side of the mountain. Crooked Creek, fed by nine cave springs as it traverses the four hundred and fifty acre cave tract, lives up to its name by flowing past both the North and South entrances of the cave.

Great Saltpetre Cave in 1804 housed the biggest single industry in Eastern Kentucky when more than seventy men were employed here in getting out saltpetre for powdermills in Pittsburg, Philadelphia and New Orleans where it was used in manufacturing gunpowder for the American Armed Forces.



American Soldier—1812



Ever since the early 1300's, when firearms first came into use, gunpowder has ruled the destiny of nations and its principal ingredient, saltpetre, has been in world-wide demand. We are told that the settlers of Jamestown colony spent much of their time searching for new sources of saltpetre for their own use and to ship back to England.

In America, the uneasy peace following the Revolutionary War and leading into the War of 1812 found the infant republic increasingly conscious of its need for its own source of gunpowder, independent of any European supply. Scholars and scientists seemed acutely aware of this need and particularly those who



DR. SAMUEL BROWN

Photo courtesy of Albert Benjamin Chandler Medical College.

were members of The American Philosophical Society, originated in Philadelphia by Benjamin Franklin, its first president.

The membership of this society was wide-spread, including leaders in their field in every part of America. Among these



was Dr. Samuel Brown, of Lexington, Kentucky, founder of the College of Medicine at Transylvania University. Dr. Brown had long had a lively interest in the study of the chemical elements in saltpetre and had apparently kept up with its production, so when word came to him early in 1800 of a new-found cave in the heart of the Kentucky Wilderness he made it his business to visit it and was somewhat amazed at what he found. The saltpetre works at the time of his visit employed more than seventy men, making it the most important enterprise in Eastern Kentucky at the time.

Making the long journey by horseback, from Lexington, Kentucky, to Philadelphia, Pennsylvania, Dr. Brown read before the Philosophical Society, of which Thomas Jefferson was then president, a paper on the importance of this cave in the military defense of the nation. Supposing it to be the largest in Kentucky, (Mammoth Cave had not at that time been discovered) he named it Great Cave and estimated its probable output of saltpetre at one million pounds. On account of its production of this commodity during the War of 1812 and the War with Mexico it became known as the Great Saltpetre Cave, the name it still bears.



Among the earliest explorers of the Kentucky Wilderness were the Long Hunters, so called on account of the fact that they sometimes extended their expeditions over a period of as much as two years or more. One organized group of such hunters followed the Warrior's Path, the oldest road in Kentucky, through Cumberland Gap as early as 1763, six years before Daniel Boone and five hunting companions came through on a hunting trip that lasted until March of 1771, during which time they had visited Great Saltpetre Cave, Daniel had left his name on its walls and his brother-in-law, John Stewart, had been killed by the Indians within five miles of the cave. His skeleton, found in a hollow tree, was identified by Boone five years later by his powder horn, on which he had carved his initials.



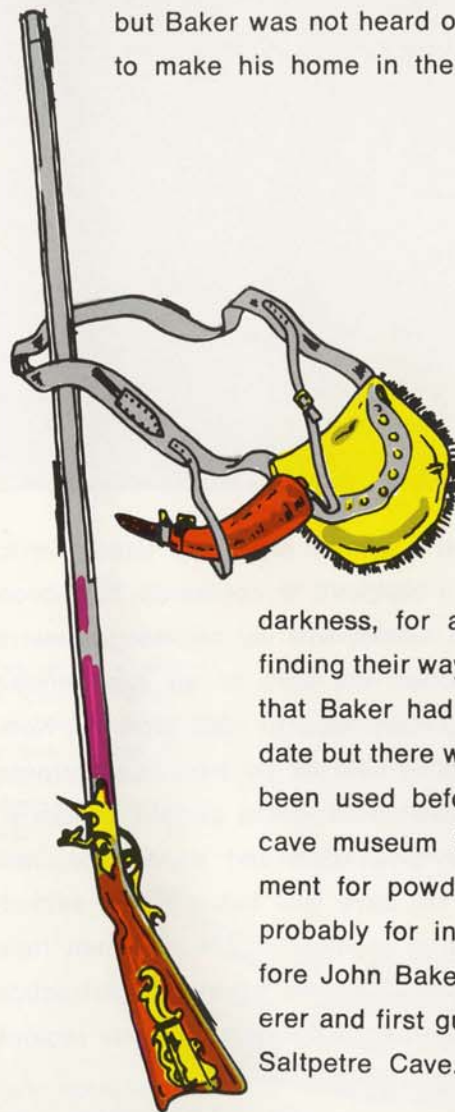
Reuben Baker, 91 years old when this photo was made in 1942, is shown with the Kentucky rifle carried by his ancestor, John Baker, one of Kentucky Long Hunters of early fame. The rifle was changed from flint lock to percussion just after the Civil War and the brass trim added at a much later date.

two boats and three canoes loaded with furs and bear's oil. After selling their cargo all went home except John Baker and Casper Mansker, who stayed out several weeks longer. Mansker later figured largely in the history of the settlement of Kentucky

but Baker was not heard of again until he had returned to make his home in the new state. He later moved to the vicinity of Great Saltpetre Cave, where he remained until his death early in 1800.

Dr. Brown in his account of the cave wrote that John Baker, his wife and three children, were exploring the cave in 1798 when their torchlight was extinguished and they were lost, in utter

darkness, for a period of 48 hours before finding their way out again. Dr. Brown thought that Baker had discovered the cave on this date but there was ample evidence that it had been used before by white hunters. In the cave museum is preserved primitive equipment for powder-making on a small scale, probably for individual use many years before John Baker became the official discoverer and first guided tour conductor of Great Saltpetre Cave.

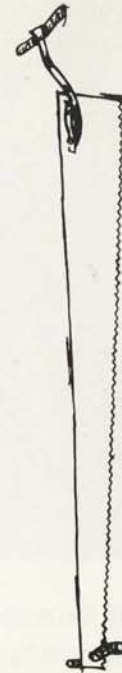




Four years before Dr. Brown's written report on Great Cave, word of the rich deposits of saltpetre it contained had been carried back to the Virginia settlements by returning hunters and explorers and had reached the ears of an experienced powdermaker, George Montgomery, who in 1802 took out Kentucky Land Office Warrant Number Two for the tract of wilderness land on which the cave was situated. Since certain phases of saltpetre processing require great skill and experience, and since the area surrounding the cave was but sparsely settled, he found it necessary to bring in most of his workmen from Pennsylvania, Virginia and the Carolinas where the extraction of saltpetre had long been carried on in the cavernous regions of those states.

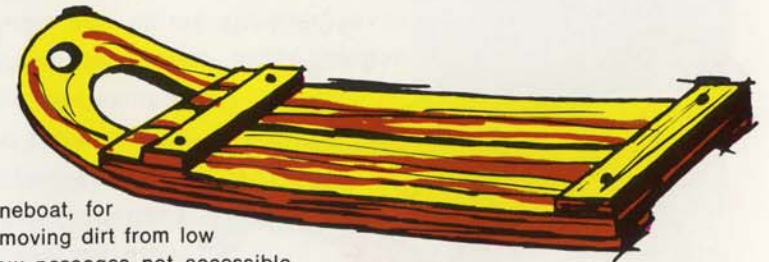
By the time of Dr. Brown's visit in 1804 Montgomery had his operation in full swing and new workmen were coming in almost

daily, lured by the chance of employment in what was then considered a big enterprise. Many brought their families and figured largely in the early settlement of this part of the state, notably Singleton Valley, Cove and Renfro Valley.



Pit saw, a primitive whipsaw with a curved "tiller" on one end and a box handle on the other, used in ripping out boards and timbers in making vats.

First step in the process of the extraction of saltpetre from the nitreous earth was the erection of large log-pen vats, remains of which are still present in the cave. These were lined with hand-rived boards and made as nearly waterproof as possible. The floor of such vats slanted toward the front and drained into troughs hollowed out of large logs. After the vats were filled with dirt it was saturated with water which trickled out and into the troughs as a form of lye and upon being combined with wood ash lye and boiled in large iron kettles to complete evaporation left a residue of saltpetre caked in the bottom of the kettle. This was removed and ground to a powder. To seventy-five percent of this saltpetre was added fifteen percent of charcoal and ten percent of sulphur. The resultant mixture, ground and blended between wooden rollers (to avoid the danger of sparks) was gunpowder.



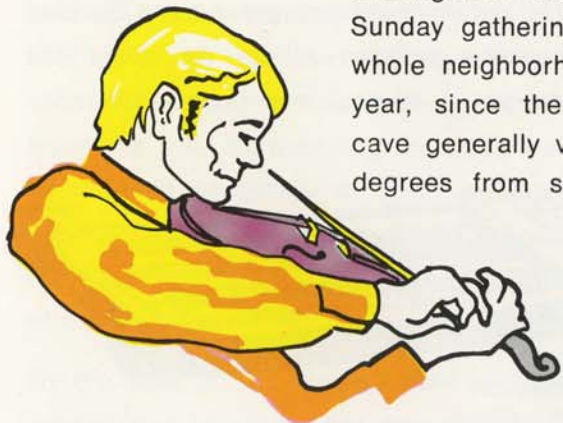
Early stoneboat, for use in removing dirt from low and narrow passages not accessible to carts and other wheeled vehicles.



Since earliest days Great Saltpetre Cave has served as sort of a community house for its surrounding area. Before church houses were built in the early settlements religious services of the "Camp Meeting" type were held in its huge torch-lit chambers. At other times fiddling and dancing held sway, both day

and night. It was for many years a favorite Sunday gathering place for families and whole neighborhoods at all times of the year, since the temperature inside the cave generally varies not more than two degrees from season to season. Inside

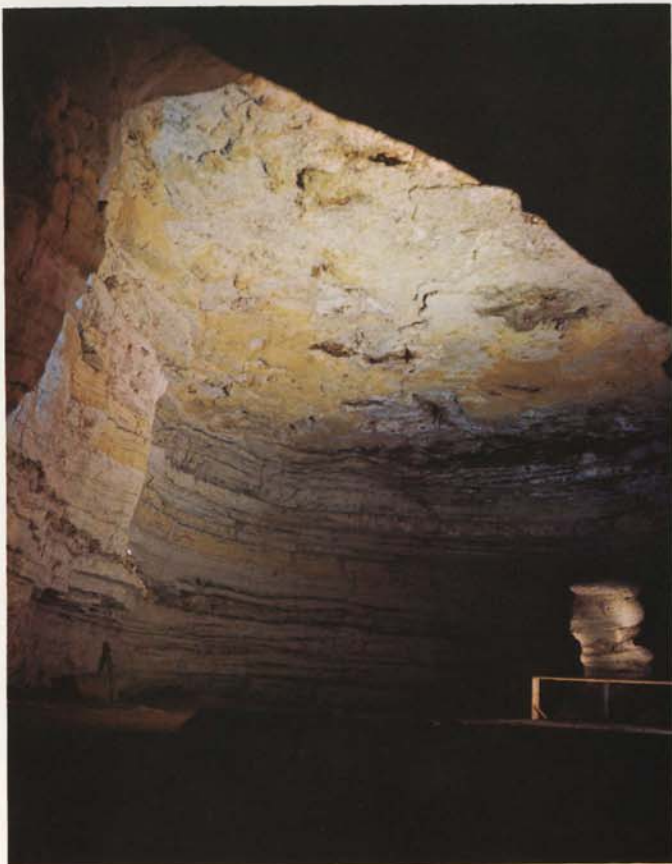
picnics within its cool depths were summertime favorites and big indoor barbeques and cookouts were no less popular in the dead of winter.



Shows and exhibitions of all kinds have been featured here through the years and now that interest in the cave as a tourist attraction is being promoted the big auditorium room, provided with a natural stage and crypt-like dressing rooms, is ideally suited for stage productions. Here each Sunday afternoon during the summer season groups of real talented old-time country musicians hold forth in the manner of the performers of earlier programs in Renfro Valley. In fact, many of them are earlier Renfro Valley folks, who helped John Lair build The Valley to world-wide fame and remained with him after he sold the Renfro Valley Complex and took up the promotion of Great Saltpetre Cave.



A section of Echo Auditorium set aside for a ballroom is the scene each season of many enjoyable social affairs. The annual Rockcastle Shrine Club dinner-dance finds many Shriners and their Ladies in attendance. The auditorium is available for special events.



**Echo Auditorium**

**Echo Auditorium** inside Great Saltpetre Cave is probably the most natural theatre in underground America. One hundred and sixty-five feet long, by sixty-five feet at its widest place with a 50-foot ceiling, which forms a perfect dome, it has a seating capacity of around 1,500 people. Its acoustics are so perfect that a conversation may be carried on in normal speaking tones between persons at opposite ends of the auditorium without amplification of any kind. When Mr. Lair's seventy-seventh birthday party was staged in this room, with his life-long friend, Colonel Harlan Sanders, in attendance to help with cutting the cake, the auditorium was taxed to its capacity.

**The Museum** inside Great Saltpetre Cave is made up largely of primitive tools and hand-made equipment used in processing saltpetre during both the War of 1812 and the Mexican War. The collection includes old vats, huge log troughs, wooden water pipes made by boring length-wise through small logs and an old English axe used in hewing timbers. There is the long augur used in boring out logs for pipes, the pioneer pit saw with which to rip the planks for flooring the vats and an odd-appearing tool with which petredirt was removed from places hard to get at with more conventional equipment. An object of much curiosity is the old wooden shovel with which the ingredients of gunpowder were mixed in the final stages. The two-wheeled ox cart is of the type used in transporting petredirt but was not used in the original operations. The huge iron kettles are a few of the many used in the evaporation process. The hailgrit stones were used in



reducing saltpetre crystals to powder form and the small primitive grinder, together with the Indian kettle and the grease lamp, were found in the cave at the time of its official discovery in 1798.





A feature of the carriage collection in John Lair's Pioneer Museum in Renfro Valley is what is no doubt the oldest genuine Wells Fargo stage coach in useable condition anywhere in the country. During part of the summer months it is kept at Great Saltpetre Cave to afford an opportunity for visiting youngsters—and older folks as well—to enjoy a ride in a real stage coach that was once a part of The Old West.

This old moonshine still has seen many years of service, having been moved about from time to time to hide its operations from prying revenue agents. It is a working model and until it was rendered useless by the sheriff punching holes in its copper boiler it could run off a batch with the best of them.



*inside the cave*

- BOOGER BRANCH ● MOONSHINE STILL
- RUSSIAN DOME where workmen climbed to a 65-foot crypt to take sweat baths in the excessive heat gathered there.
- ECHO AUDITORIUM ● CAVE MUSEUM
- OLD SALTPETRE WORKS ● CART TRACKS;
- OX HORN MARKS Preserved since 1802.
- OLD WOODEN WATERPIPE ● SOLDIER GRAVES



Graves of 31 guerillas killed in fight inside the cave for possession of the powder-works.



- HOSPITAL ROOM
  - CIVIL WAR WORKS ● FROZEN CASCADES
  - D. BOON NAME Scratched on wall in 1769.
  - ATLAS PILLAR ● PINCHEMTIGHT ALLEY
- The thing you'll see last and remember longest. Some places you'll have to turn sideways to get through. If you have no "sideways" better take the alternate route.



Crooked Creek, one of the very few Kentucky streams cold enough for trout, winds through the 450 acres of mountain woodland comprising the Great Saltpetre Cave estate furnishing more than a mile of shoreline like this for campsites (some with hook-ups) picnicking and fishing.





**HOME OF JOHN LAIR**—Founder of famous Renfro Valley Barn Dance and Sunday Morning Gathering. At right is the oldest house in Renfro Valley, formerly the home of Mrs. Lair's great grandparents.

**OLDEST HOUSE IN RENFRO VALLEY**—Built by Colonel William Fish following his return from the Expedition against the Indians on the Wabash. Later it became the home of Mrs. Lair's great grandparents.



Mr. and Mrs. John Lair and their four daughters. Standing, left to right, Nancy, wife of Major L. B. Griffin, stationed at Colorado Springs, Colo. Ann, who is the wife of Dr. J. W. Henderson, Mt. Vernon, Ky. Seated, Barbra, whose husband is Captain E. P. Smith, Ft. Shafter, Hawaii, and Virginia, who married Earl Teater, Jr., and lives in Lexington, Ky. This is the family group owning and operating Great Saltpetre Cave, Inc.



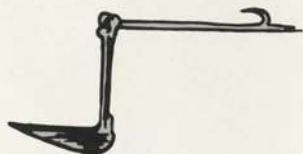
Old-fashioned ashhopper for leaching out small quantities of petredirt.

a slave of Captain James Estill who brought him to Boonesborough in 1776. He is said to have procured his saltpetre from a cave in Madison County. Since Great Saltpetre Cave was then in Madison County, and since its' earliest official discoverer found in it crude equipment for powder-making, it seems logical to conclude that this was the scene of Monk's activities.

In earliest operations the saltpetre produced here was carried by pack horse and canoe beyond the confines of Kentucky. Later, when a powdermill was erected at Lexington, Kentucky, it was taken there by ox-drawn wagons. Still later, a local powder mill was established in near-by Powdermill Hollow and the entire powdermaking process was carried on locally. Operations continued here during both the War of 1812 and The War With Mexico but had been suspended some time prior to The War Between the States.

Gunpowder was a matter of life or death to the early pioneers in Kentucky. History recounts many perilous journeys back to Old Virginia for much-needed supplies of this precious commodity.

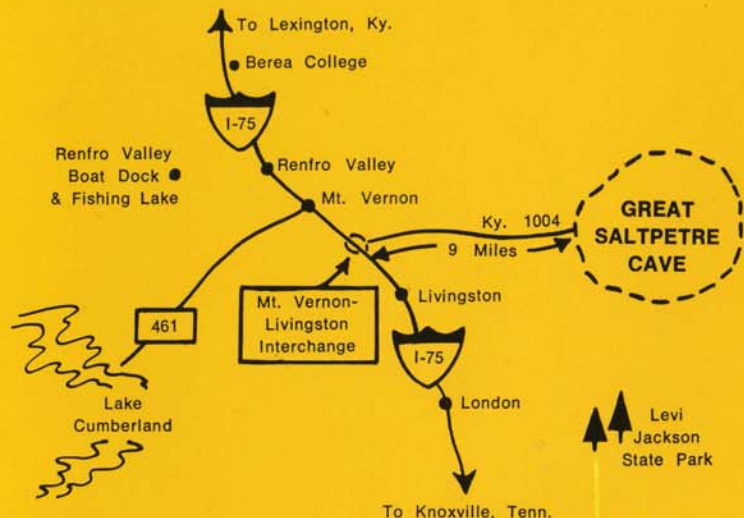
Historians seem in general agreement that the first gunpowder actually made in Kentucky was produced by Monk,



Grease lamp found in cave.



Indian clay and musselshell boiling kettle found in cave. (Rounded bottom so it could not be set down but had to be suspended over fire.)



This interchange is three miles South of Renfro Valley, the original settlement of which was brought about largely by early activities at the cave.

**For More Information Write:**

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