

1835

Notes on the Mammoth Cave, To Accompany A Map

Edmund Lee

Follow this and additional works at: http://digitalcommons.wku.edu/dlsc_kl_non_mat



Part of the [Environmental Sciences Commons](#), and the [History Commons](#)

Recommended Citation

Edmund Lee, "Notes on the Mammoth Cave, To Accompany A Map" (1835). *Kentucky Library Research Collections*. Paper 12.
http://digitalcommons.wku.edu/dlsc_kl_non_mat/12

This Book is brought to you for free and open access by TopSCHOLAR®. It has been accepted for inclusion in Kentucky Library Research Collections by an authorized administrator of TopSCHOLAR®. For more information, please contact topscholar@wku.edu.

NOTES

Gas: Hanning Smith
ON THE

MAMMOTH CAVE,

TO ACCOMPANY A MAP,

BY

EDMUND F. LEE,

CIVIL ENGINEER.

CINCINNATI:

PRINTED BY JAMES & GAZLAY.

1835.

551.44
L 4 77 w



551.44
L 4 77 w
Kentucky

F

457

.M2

L42x

601

Entered according to act of Congress in the year 1835, in
the Clerk's office of the District Court of Ohio, by Edmund
F. Lee.

NOTES.

The Mammoth Cave of Kentucky may be ranked among those great and extraordinary curiosities, which so far surpass all others, that they are emphatically called the "Wonders of the world." It is remarkable above other caves, on account of its vast dimensions, the number and extent of its branches, the striking examples of the sublime and beautiful architecture of nature which it exhibits—the spacious halls, the lofty domes, the unfathomable pits, the subterranean cataracts, the echoes, the beautiful groves of stalactites, the various colored incrustations, the strange and fantastic forms—all of which tend to produce upon the mind a deep impression of the truly wonderful and sublime. When contemplating the cave as a whole, we are compelled involuntarily to exclaim, "this is not the work of man!"

The Mammoth Cave is, in fact, a system of caves, consisting of the main cave and its branches, varying in size, extent, appearance, and depth below the surface of the earth. Some branches wind about, and pass over others of a different depth; thus there are three caves, one above another at the Dog Hole—the Deserted Chambers, Wooden Bowl, and Main Cave. The Main Cave passes over the Deserted Chambers in three places; the Haunted Chambers passes over the Sick Room at the first echo, and at the second echo the higher branch passes over the lower. The end of the Symmes' Pit branch is above the Solitary Cave, &c.

be easily ascertained. At the place where I measured the Bottomless Pit, the depth was 173 feet, but I found, by throwing down stones, that after striking, they glanced off, and descended by steps through the side of the pit perhaps a hundred feet lower.

The deepest pit is in the Little Bat Room—about 280 feet deep, or 120 feet below the bed of Green River. The Bottomless Pit is also deeper than the bed of Green River, and I believe also the Covered Pit, and some others. It becomes an object of interesting enquiry, to determine in what way the water is disposed of which is continually falling into these pits.

The water does not accumulate, but passes off from the bottom. If it ultimately empties into Green River, the Ohio, or the Ocean, it must run a great distance under ground, with a very small descent, and I do not think its disappearance can be accounted for by evaporation or absorption.

The strata of limestone which forms the covering of the immense subterraneous cavities in which the water disappears, must be exceedingly compact and impervious, to prevent the water which flows upon the surface of the earth, from penetrating through.

AIR.

The air in the cave is pure, dry, and exhilarating, and of an agreeable temperature, which it preserves nearly the same at all seasons of the year—about 60° Fahrenheit. In the low branches it is somewhat cooler, and where there is water falling, and also near the mouth in winter. Although there is a continual stream of cold air passing in for several months in winter, the change of temperature is not perceptible at a greater distance than a quarter of a mile from the mouth.

FORMATION OF THE CAVE.

The higher branches were evidently formed by the rocks breaking out, and falling into lower caves, by which they were undermined. The walls and ceilings are flat or angular, and composed of dry, compact limestone. The bottom is of sand, or saltpetre earth, covered to a considerable depth with loose, broken rocks.

In the lower branches, the walls and ceiling are smooth and undulated. Where there is water near, the surface is partially disintegrated, and coated with a milky substance like wet chalk. The bottom is covered with sand, flints and pebbles.

I should think it probable, therefore, from these indications, that water was the primary agent in the formation of the cave.

I suppose the water, in the first place, wore channels between the strata of limestone, deep in the earth, which were not so much indurated as those nearer the surface, and that afterwards these channels became dry, and were some of them filled by the superincumbent strata falling in, thus forming new caves above; and that some still remain in their original state,

PITS AND DOMES.

The pits and domes, of which there are many in different parts of the cave, appear to have been worn through the solid rock, the sides being generally compact, smooth and continuous. The "*domes*," or *wells up*, as they may be called, are some of them so high, that their tops cannot be seen.

No person has ever descended to the bottom of any of the deep pits, and even their depths cannot

Respiration is performed in the cave with pleasure. The blood flows with freedom. The pulse is slow and full. The spirits are unusually buoyant—persons seldom complain of fatigue while in the cave. On emerging from the cave, after being in a few hours, the contrast is very perceptible, especially in summer. The atmosphere then seems to be charged with a thousand disagreeable odors, at first almost suffocating; the pulse is quickened, and a feeling of lassitude and drowsiness ensues. These sensations wear off after a time, as soon as the lungs become again accustomed to the vitiated air, and the change of temperature.

AIR CURRENTS.

There is a current of air passing into the cave during the winter, and out during the summer, with a velocity sufficient to blow out a candle. This I thought to account for, by the difference between the density and elasticity of the atmosphere and the air in the cave, caused by heat and cold—considering the cave as a vast reservoir, having but one outlet. But the solid contents or volume of all the branches taken together, amounts only to about 50 or 60,000,000 cubic feet, and a current of air passing in with the moderate velocity of fifteen miles per hour, would fill this space in three days. This explanation therefore, being insufficient, I suppose there must be a continued circulation kept up in this way: in winter, the cold air passing in, displaces the warm air of the cave, which rises and passes off into the open air through the domes, at the ends of the branches, and where there is water falling, &c. The cold air becoming gradually warmer, is displaced by fresh currents of cold air, rises in turn, and passes off. In summer the warm air descends through the different openings,

becomes condensed, and flows out at the mouth. The steam of the summer current may be felt at a considerable distance below the mouth, flowing down the bottom of the valley like water.

WATER.

The water of the cave is pure, perfectly transparent, and very pleasant to the taste. There are no mineral waters of importance in the cave. The springs, wells, water-falls, &c. found in the different branches, will be noticed in course.

The largest body of water is Long Pond, in the Solitary cave—40 feet long, 15 wide, and 2 deep.

PRODUCTS.

The cave abounds in nitrous earth, sand, pebbles, flints, chalk, red and grey ochre, gypsum, calcareous spar, soda, epsom and glauber salts, fibrous sulphate of lime, crystallized carbonate of lime, oolite, chalcedony inclosing geodes lined with crystals of quartz, &c.; no metals.

ANIMALS.

The only animals which have been seen in the cave, are rats, bats, and a kind of cricket, whose body is nearly transparent.

An immense number of bats enter the cave in the fall, and remain during the winter, in a dormant state. They generally occupy the walls and ceiling about the first hoppers. They attach themselves to the walls by their hind legs, forming clusters of some hundreds together. When swept from their hold, they remain wherever they happen to fall, being unable to fly. It is supposed that the cave rats feed upon them.

FORMER INHABITANTS.

In every part there are indications that the cave was formerly inhabited, such as paths much worn in the extreme branches, moccasin tracks incrusting, canes partly burnt, heaps of ashes, siftings, pickings on the walls, &c. Besides, there have been found in different parts, a great many skeletons, some said to be of a gigantic size, mats and moccasins of bark curiously woven, marble basins finely polished, conch shells, stone axes, cane whistles, &c.

SALTPETRE WORKS, &c.

During the last war, and for some years previous, a large quantity of saltpetre was annually made at this cave. The remains of the works are still standing. There are two ranges of pipes leading from the water fall, at the mouth, to the second hoppers; one range was used to supply the hoppers with water to leech the earth; the other served to convey the beer or water that had passed through the hoppers to the furnace at the mouth, where it was boiled down, mixed with the alkali, and crystallized. Visitors often amuse themselves, by conversing through these ranges of pipes. A person listening at one end may hear distinctly the smallest whisper from the other. An excellent opportunity is thus afforded for a certain class, who are deeply interested in each other's welfare, to express their secret thoughts and feelings, without the knowledge of the bystanders. I am persuaded, that many a conversation has in this way been carried on in apparent silence, which has materially effected the destinies of those concerned.

The cave is indeed a place peculiarly adapted to the development of the *tender passion*. Per-

sons witnessing together the scenes of interest, become inspired with those feelings which *make* love. It has been remarked by the guides, that lovers, however cool they may be towards each other when they enter the cave, never return without showing some unequivocal marks of tenderness and sympathy—that friends become more animated and generous, and that even scolding wives, after seeing the terrible pits, &c. become inoffensive, yielding, and manifest the greatest deference for their husbands.

SPECIAL DESCRIPTION.

The Mammoth Cave is on the left bank of Green River, in Edmonson county, Kentucky; 7 miles from Bell's tavern, a well known stand, about 96 miles below Louisville, on the Nashville road. The mouth of the cave is in the bottom of a valley, a quarter of a mile from Green River. The surrounding country is called "*the Barrens.*" The most remarkable features are, bare, isolated peaks, or knobs of compact limestone, short and deep valleys, and irregular basins or hollows, with sink holes in the bottom. Into these sink-holes the water is collected, and conducted off in subterraneous channels or caves to the banks of the rivers, where it bursts out in large springs.

The strata are first, vegetable mould; second, clay; third, sandstone; fourth, limestone.

The Barrens, in the summer season, are very beautiful, being covered with a small growth, (which has sprung up spontaneously within the last thirty years) interspersed with vines, roses, lilies, and innumerable wild flowers.

Let the reader now imagine himself to be standing at the head of a deep and narrow valley, looking towards the west. On the right hand is a cornfield, containing some twenty or thirty acres. On the left is

the residence of Mr. Gatewood, near which is a grove with seats, an apple orchard, a peach orchard, and a garden, all on the same level. Before you is the "Cave hollow," opening upon Green River, which is half a mile distant. At this point in the river there is a low island, caled "Cave Island," covered with willows. On the opposite bank, you see the rugged cliffs rising almost perpendicularly to the height of 300 or 400 feet. In some places the cliffs overhang their base, and form "rock houses," where the hunters formerly took up their abode.

Large rocks sometimes become detached from the cliffs and tumble into the river with a tremendous noise, crushing every thing before them. During the earthquake of 1811 so many fell, as materially to impede the navigation of the river.

You descend to the mouth of the cave by a gentle slope along the bottom of the valley. In summer the path is embowered in verdure, and the steep sides of the valley are covered with trees, vines and flowers, scattered in the wildness and profusion of nature. About half way down the valley, you pass around a furnace on the right, where saltpetre was formerly made, and turning to the east, a deep dark gulf presents itself.

The sensations on approaching the mouth for the first time, are strange and indescribable. You feel the cool air issuing out, as if a monster breathed upon you. You hear the lonely sound of a waterfall, echoing from the vaults of the cave, but the stream itself is invisible. There is a feeling of dread upon the mind, and you would if possible penetrate the darkness below, before you venture to descend.

MAIN CAVE.

1. The opening of the mouth is formed in a horizontal stratum of limestone, twelve or fifteen feet thick, imbedded in the bottom of the valley.

2. You descend into the cave by a winding path and steps, down a steep declivity; at the bottom of the declivity there is a pit, which was formerly sixty feet deep, but is now nearly filled with rubbish.

3. A considerable stream of water issues from the crevices of the rocks above, and falls into the pit.

4. It is probable that there was formerly a sink-hole at this place, and that the mouth of the cave was discovered by the rocks falling in.

5. From the mouth to the Door, the walls gradually approach, and the avenue becomes smaller.

6. At the Door there is a wall on each side, leaving an opening six feet high, and three feet seven inches wide.

7. Beyond is the Narrows, through which a convenient passage has been formed, by piling the rocks on each side. The ceiling of the Narrows is very low.

8. On entering the Main Cave from the Narrows, no object can be distinguished in the large area of the First Hoppers, until the eyes become accustomed to the darkness.

9. Above the First Hoppers there is a *break up* in the ceiling all around near the walls, which is covered by a smooth, flat rock, in the shape of an oval pannel. There are similar *pannels* in several places in the Main Cave and Big Bat Room.

10. Mr. Gatewood's house is directly over the area of the First Hoppers. The distance through from the surface at this place, is one hundred and five feet.

11. The Mountain is a large heap of loose rocks on the right; opposite this the path winds close under the left wall, which inclines over it.

12. The Kentucky Cliffs are so called from their resemblance to the cliffs of Kentucky river.

13. At the Battlements there are several rocky shelves or galleries passing around into the Church.

The ceiling of the cave is here sixty-three feet high.

14. The Church is a short branch or niche, in which there is a stand for preaching. Religious meetings have several times been held in this place. The voice of the speaker may be easily heard by a large audience. The effect is said to be extremely interesting when the church is well lighted up.

15. Just beyond the church, the ceiling breaks down irregularly, showing dark and light shades, which at a short distance have the appearance of clouds floating through a murky atmosphere. In several other places the ceiling has this appearance; the illusion is very perfect.

16. On the right, beyond the clouds, there was formerly a passage through the bottom of the Main Cave, into the Sick Room; it is now covered by the leeched earth.

17. The Well Cave is merely the openings between a mass of huge rocks, which appear to have been separated by some convulsion, and left in disorder. The entrance is near the ceiling, and the bottom is fifty feet below that of the Main Cave. The descent is difficult and dangerous.

18. The gallery is a high shelf, extending around from the niche on the left, over the main cave, and into the Haunted Chambers. It is sufficiently wide to walk upon, but is dangerous from being inclined.

19. The Ox Trough was used to feed the cattle in that were employed in hauling saltpetre earth to the bonfires. There is an abundance of cobs scattered

around, and the tracks of the cart and cattle are still visible. The report of a pistol at this place is deafening.

20. The Standing Rocks are several thin slabs partly buried in the earth, and standing about eight feet high from the bottom. They appear to have been precipitated from the ceiling.

21. The Spring just beyond, is in a basin at the bottom of a niche worn in the wall, down the back of which the water flows to supply the Spring.

22. The Well is about six feet in diameter, and twenty feet deep. At the bottom it expands into a room, from which there is no branch or outlet. It is probable that the water which falls into the well, filters through the bottom, and supplies the spring and branch in the Deserted Chambers. The ceiling of the cave is here only six feet wide, smooth and white; the right wall is perpendicular, the left inclined.

23. Near the Steamboat the incrustations commence, which form the figured ceiling. These incrustations are in such varied shapes, that a person may imagine they resemble almost any thing. Some of them have been named, the Elephant, Fox and Goose, Leviathan, Mermaid, Moon and Stars, &c. when looking intensely on the Moon and Stars (which are only white spots in the black incrustated ceiling,) the cave appears to be open at the top, and you see far beyond in the dark sky, the moon and stars gliding slowly and majestically through the broken clouds.

24. The Steamboat is a huge rock, separated from the wall, and lying in a careening position. Behind it is the entrance to the Deserted Chambers.

25. At the Steamboat, the cave sweeps around to the right, in a beautiful curve. Near the ceiling, the walls have the appearance of being hung with a border of black tapestry. The cave passes round a sharp corner, and resumes the general course. Opposite the sharp corner, is the entrance to the Sick Room.

26. The Side Cuts are passages lower than the Main Cave. The ceiling is generally waved, or in sweeping arches, covered with a black incrustation. In the Side Cuts are found calcedony, crystals of quartz, red ochre, gypsum and salts.

27. The Keelboat is a rock fifty or sixty feet long, and fifteen wide.

28. The Worm Hole Rock is a projection from the side of the cave, full of holes, which are smooth and round as if worn by water.

29. At the Trap Doors you can descend through the bottom of the Main Cave, and pass into the third Side Cut.

30. The Salts Room is a part of the cave where the walls and ceiling are covered with salts in crystals. The least agitation of the air, will cause the flakes of crystals to fall from the ceiling like snow.

31. In the Salts Room are the Indian Houses, under the rocks—small spaces, or rooms, completely covered, some of which contain ashes, and canes partly burnt.

32. The Devil's Looking-glass is a thin, standing rock. At the Cross Rooms the ceiling is one hundred and seventy feet wide, unsupported by any thing beneath.

33. The Cataracts are two streams of water issuing from holes in the ceiling about as large as a hog's-head. After a heavy rain the noise of the waters pouring into the abyss below, is heard at a distance in a rolling sound, like thunder. The concussion is so great, as apparently to shake the walls of the cave. The water immediately disappears among the rocks. Some few years ago, a mass of rocks fell from the right wall, and nearly filled the abyss of the First Cataracts. Since then, they have gradually sunk and disappeared, probably in a low cave.

34. The Temple is an immense vault, including an area of nearly two acres and covered by a single dome of solid rock, one hundred and twenty feet high. It excels in size, the cave of Staffa, and rivals the celebrated Vault in the Grotto of Antiparos, which is said to be the largest in the world. In passing through, from one end to the other, the dome appears to follow, like the sky in passing from place to place on the earth. In the middle of the dome, there is a large mound of rocks, rising on one side near to the top, very steep, and forming what is called the Mountain.

When first I ascended this mound from the cave below, I was struck with a feeling of awe, more deep and intense than any thing I had ever before experienced. I could only observe the narrow circle which was illuminated immediately around me; above and beyond was apparently an illimitable space, in which the ear could catch not the slightest sound, nor the eye find an object to rest upon. It was filled with silence and darkness. And yet I knew that I was beneath the earth, and that this space, however large it might be, was actually bounded by solid walls. My curiosity was rather excited than gratified. In order that I might see the whole, if possible, in one connected view, I built fires in several places with the pieces of cane, which I found scattered among the rocks. Then taking my stand on the mountain, a scene was presented of surprising magnificence.

On the opposite side the strata of gray limestone, breaking up by steps from the bottom, could scarcely be discerned in the distance, by the glimmering light. Above was the lofty dome, closed at the top by a smooth oval slab, beautifully defined in the outline, from which the walls sloped away on the right and left into thick darkness. Every one has heard of

the domes of the Mosque of St. Sophia, St. Peter's Church, and St. Paul's Cathedral—they are never spoken of but in terms of admiration—as the chief wonders of architecture, and among the noblest and most stupendous examples of what man can do when aided by science; and yet, when compared with the dome of the Temple, they sink into comparative insignificance. Such is the surpassing grandeur of Nature's works.

35. The Alarm Bell is a large, flat rock, weighing about three tons, so nearly balanced, that the weight of a man is sufficient to move it up and down, and cause it to strike against the rock beneath, on which it rests, thus producing a loud ringing sound, which reverberates from the dome in repeated echoes.

36. The Bachelor's Hall, Ross' Hall, &c. are parts where the walls are smooth, and the floor level and covered with sand.

37. Beyond Ross' Hall the walls are covered in places with crystalizations very brilliant.

38. At the Garret, and beyond, there are considerable quantities of salts. The crystals spring up from the earth about three inches long, or hang from the ceiling in flakes like snow.

39. The end of the Main Cave is filled with dry, thin rocks, piled to the ceiling.

BIG BAT ROOM.

This room is, in fact, a continuation of the Main Cave. In going to the end, you ascend very steep hills, and pass through the ceiling twice, at the places called the First and Second Chambers. The end is damp.

LITTLE BAT ROOM.

1. The Little Bat Room is a low branch, evidently worn by water. There are, in several places, channels or water veins winding about under the pathway. The Two Serpents are channels in the ceiling.

2. The deepest pit in the cave is in this branch—two hundred and eighty feet deep—through a crevice in the left wall, near the end. A stone thrown into it may be heard bounding from side to side, until the sound dies away in the depths of the earth. Some years ago, a negro boy was let down into this pit, by a rope tied around under the arms. After descending fifty feet, he alighted on a shelf, walked some distance in a cave branching from the pit, and returned in safety.

DISMAL HOLLOW BRANCH.

1. The end of this branch is a good specimen of the way in which most of the large branches terminate. There is a large limestone *dome*, or well up, in the ceiling, apparently worn by water, through which the sandstone rocks have fallen, and filled up the cave. The dome, also, is full of rocks, wedged in. The rocks in the dome are very large and round, so that a person may climb up to a considerable height through the interstices. A small stream of water passes off from the dome into Dismal Hollow, where it disappears. No water in the cave can be traced far.

HAUNTED CHAMBERS.

1. The ascent into the Haunted Chambers is by a ladder.

2. Opposite the mouth there was found a heap of ashes, ten or fifteen feet high, in the Main Cave;

supposed to have been left there by the Indians, or the old hunters, who formerly made saltpetre in the cave.

3. The ceiling of the Haunted Chambers, is in the upper branch level, white and smooth, and has the appearance of being plastered. In the low branch it is waving and rough.

4. The Post Oak is a large stalactic pillar; there are several of the same kind beyond.

5. The Bell is a stalactite, hanging four or five feet from the ceiling at the First Echo, which being struck, rings for some minutes like a common bell. It may be heard in the Main Cave.

6. The Partition, Market House, Wilkins' Arm Chair, Elephant's Head, &c. are masses of stalactites, cemented together in different shapes. Wilkins' Arm Chair is a very convenient seat, in which a person may rest the head and both arms. Behind the back of the chair, there was formerly a very good sulphur spring; it is now dry.

7. The Register Room is a part in which visitors generally write their names on the white ceiling.

8. At the Second Echo, near the Elephant's Head, the voice of a person in the Low Branch may be distinctly heard.

9. The white, level ceiling, continues to the end.

Low Branch.

10. At the Lover's Leap you descend into a deep valley, and pass through the Elbow crevice, (three feet wide, and thirty or forty high,) into the Low Branch.

11. Opposite the entrance is the Dining Table, a rock some fifteen or twenty feet across, which appears to have fallen out from the ceiling.

12. The Cooling Tub is a beautiful basin, six feet long, five wide, and two deep, worn in the bottom of

the cave, into which a stream of pure water, an inch in diameter, projects itself from a hole in the ceiling. On the right, near by, is the Flint Pit, which receives the water from the Cooling Tub.

14. Beyond this the cave becomes very low, and the bottom is covered with sand, washed in waves and furrows like the dry bed of a rivulet. It is probable, that the water from the end of the high branch sometimes passes off through this channel into the Flint Pit.

14. Napoleon's Grand Dome goes up from the ceiling, in the shape of a sugar-loaf, flat at the top, smooth, continuous and dry; there is no pit beneath. The Balcony is similar, but smaller.

15. The Salts Room is a small low branch, from which great quantities of salts have been taken. The ceiling is arched, and incrustated black.

16. The Salts Room Pit is nearly covered with rock, leaving only a small opening on one side. There appears to be a cave branching from it at the bottom. It is dry.

17. The Pool of Clitoris is about twelve feet long, six wide, and two deep. The water is so transparent and motionless, that persons often walk into it unawares. On the left are the Cinder Banks—black stalagmatic masses, on which water drops from the ceiling, and supplies the pool.

18. The Waterfall is in a dome through a crevice in the right wall. The water issues in a stream a foot in diameter, from a high cave in the side of the dome, falls upon the solid bottom, and passes off by a small channel into the Cistern, which is directly on the pathway of the cave. The Cistern is a large pit, which is usually kept nearly full of water.

19. Near the end of this branch there is a crevice in the ceiling over the last spring, through which the sound of water may be heard falling in a cave or open space above.

ROCKY CAVE.

1. This cave is nearly filled with rocks—some fifteen or twenty feet cube, piled in disorder.

2. On the left side of the path there is an old Indian blanket about a yard square, spread out upon a rock. It is of twisted bark, curiously woven, and crumbles to dust when exposed to the air.

DESERTED CHAMBERS.

1. There are two entrances into the Deserted Chambers, one behind the Steamboat, and another in the first side cut.

2. Near the mouth of the entrance, behind the Steamboat, there is a large flat rock hanging in an inclined position from the ceiling by one corner, apparently ready to fall.

3. The Wooden Bowl is a fine circular area, the bottom of which is covered with sand. In the centre is a sounding board. From the Wooden Bowl you descend by shelving rocks in a kind of well, called the Dog-hole.

Bottomless Pit Branch.

4. The Spring Branch is a small stream running across, in a channel worn in the bottom. The earth about here answers the purpose of soap in cleansing the hands. Close under the walls there are prints of moccasin tracks partly filled with dust.

5. The ceiling between the Dog-hole and Spring Branch, is broken and rough; beyond, it is waving, white and smooth, as if worn by water.

6. The Covered Pit, is in a little branch to the left; this pit is twelve or fifteen feet in diameter, covered with a thin rock, around which a narrow

crevice extends, leaving only a small support on one side. There is a large loose rock resting on the centre of the cover. The sound of a waterfall may be heard from the pit, but cannot be seen. This is a dangerous place.

7. The Side Saddle Pit is about eight feet wide, and twenty feet long. On the brink is a convenient seat, on which persons may sit in safety, and view the interior of the pit and dome.

8. The Covered Way is a narrow, deep channel, which enters the Bottomless Pit, about fifty feet down.

9. The Bottomless Pit is, in section, something in the shape of a horse shoe, having a tongue of land running out into the middle, twenty-seven feet long. A stone thrown into the pit, makes a loud, buzzing noise before it reaches the bottom, then strikes, and bounding from shelf to shelf, descends into the earth until the sound can be no longer heard. The water falling from the high dome above, gives back, at first, a quick, sharp sound, which mingles with the deeper tones of that which is falling from the benches lower down, and produces a kind of wild and melodious harmony, not unlike the tones of the Eolian harp. There is a wide crevice between the Pit and Big Dome, over which a huge rock, weighing one hundred and fifty tons, is suspended on two points. It would require but a small force, apparently, to precipitate it into the pit.

10. The Big Dome is forty or fifty feet in diameter, and so high that its top cannot be seen.

There is a hollow beneath, but no pit.

Black Snake Branch.

11. The Sanded Alley is a part in which the walls and ceiling are very white. Between this and Flint Island there are plenty of flints, gypsum, and crystals of lime. Beyond this the cave becomes so low that

a person is obliged to stoop for a considerable distance. Beyond the stooping place the walls are black, and the passage is very narrow and serpentine.

12. The most remarkable feature of this branch, is the deep and narrow crevices, which wind across, above and below, resting upon each other.

13. The walls have been pecked in every part with stone hammers, some of which are yet found on the shelves, where they were left probably by the Indians.

Preston's Branch.

14 The walls and ceiling in this branch are in waving arches, beautifully white and smooth, and in some places studded with crystals; the bottom is level and covered with sand.

15. Washington's Grand Dome is a dry dome about fifty feet high, through a crevice on the left. It is shaped in section like a triangle, with the corners rounded off. There is a dry tub in front, in which you descend to enter the dome.

16 The Flint Spring is in a circular crevice around the bottom of a tub, ten feet in diameter, and eight deep. There is a mound of flints in the centre.

17. The Dome Spring is through a crevice in the right wall. A beautiful cascade of water falls from a high cave into a basin, worn in the bottom, under the dome, and passes off in a channel through the wall.

18. The Rotunda is a large dome, nearly filled with large rocks, wedged in.

19. The Weeping Willow Pit has a projection on one side, which is worn into little channels, resembling the branches of a willow. In the bottom there is a pool of water.

20. The end is stopped, as usual, by sandstone rocks, through which water is filtering.

SICK ROOM.

1. This branch is so low that it is necessary to stoop in going through it, almost all the way.

2. It is only remarkable for the heaps of broken stones in different places, which appear to have been sifted. The end is under the Main Cave, near the Church.

FOX'S HALL.

1. This is a wide side cut near the Cross Rooms. The ceiling and bottom are smooth.

BLACK CHAMBERS.

1. The walls and ceiling are generally black and rough.

2. At the Ruins there are a great many large blocks, composed of different strata of rocks cemented together, resembling the walls, pedestals, cornices, &c. of some old castle, scattered over the bottom of the cave. The largest block of this kind is called the Ship Pillar.

3. The avenue is here so wide as to make it quite a task to walk from one side to the other.

4. On the right hand, beyond the Ruins, you enter the Right Branch, on the same level, the ceiling of which is regularly arched.

5. Through the Big Chimney you ascend into an upper room, about the size of the Main Cave, the bottom of which is higher than the ceiling of the one below.

Dark Room.

6. The Dark Room is a very low branch, ending in a dry dome, filled with rocks.

7. The Mountain Dome is regularly arched, and is, in like manner, filled with rocks, over which you may pass, close to the ceiling.

8. Mrs. Gatewood's Dining Room is a fine area, with a white ceiling. The floor is covered with sand. There are several piles of stones in this room, which are supposed to have been used as altars. The passage out is so small and obscure, as to be found with difficulty. Two men, who visited this place some years ago, after several ineffectual attempts to get out in different places, were about to destroy themselves in a fit of despair, rather than starve amid the gloom and darkness of the cave, when the guide haply discovered the right opening, and relieved them from their terrors.

Double Branch.

19. The Double Branch is composed of two rooms, one of which is about thirty feet lower than the other, running parallel, and having, most of the way, a common ceiling.

20. Near the end, the ceiling is beautifully figured with black circular spots, raised from the general surface, which is grey.

SOLITARY CAVE.

1. The entrance into the Solitary Cave is through a very low and wide passage, called the Humble Chute, which branches off from the hollow of the Second Cataract.

2. The walls and ceiling are white, and washed in regular curves. The bottom is level, and covered with sand.

3. The Solitary Spring is a basin of water in a small branch, having the same mouth with the Coral Grove Branch, but on a higher level.

4. The Coral Grove Branch is a kind of water vein, ending in a grove of Stalactites.

5. Alexander's Pit is about sixteen feet deep to the first bottom. On one side of this bottom there is a large opening, through which the sound of water may be heard falling to a great depth.

There is a sharp pointed rock standing up in the pit, six or eight feet high.

6. In the bottom of this branch there are in several places, deep crevices or fissures a foot wide, descending probably to lower pits.

7. The Solitary Cells are a number of little branches, forming a kind of labyrinth, leading from a common area, into which you enter through a small, winding passage.

8. The earth on the bottom is slightly incrust-ed, so that a person walking over it, is continually fearful of breaking through into some hidden gulf. Here Solitude indeed reigns in silence and gloom.

9. The Robber's Kettle is worn in the solid rock, perfectly smooth, and regularly shaped.

10. Tecumseh's Grave is a gulf on the right, about fifteen feet deep; it does not extend far.

11. The Rat Hole Branch is a very small water vein, in which there is a nest made of sticks and moss; beyond this, the branch has not been explored.

12. The Fairy Grotto is a part of the cave near the end, in which there are great numbers of stalactites. Some of them are nearly solid, leaving only a small aperture through the centre, admitting the passage of small quantities of water, which drops continually from the lower end; some are very large and hollow, forming irregularly fluted columns; some are solid near the ceiling, and divided lower down

into a great number of small branches, like the roots of a tree, curiously intertwined; some are long and straight, like a pipe-stem.

The substance of which they are composed, is semi-transparent, and being encrusted in places with small crystals, exceedingly pure and brilliant, the effect is very pleasing, by the reflection of lights.

BLUE SPRING BRANCH.

1. This branch is remarkable for the regularity of its appearance throughout.

2. The bottom is covered with broken rocks.— There is, however, a very good path, the rocks having been thrown up from one side, discovering a bed of sand to walk upon. This was done by the former inhabitants of the cave. The ceiling is generally about the same height, (10 feet,) but uneven and broken. The walls are in places encrusted with a thin, flaky substance, on the surface of which there are crystals.

4. At the Hanging Groves, the ceiling, for a considerable space, is hung with clusters of stalactic substances, like bunches of grapes.

5. The Blue Spring is in a basin about a foot long, and four inches wide, the sides of which are raised from the bottom, and inclined inward. The inner surface is studded with beautiful globular crystals, always brilliant. There are no deposits of dust in the bottom, and the water cannot be riled by being disturbed. The basin is overhung by an umbrella shaped rock, covered with a blue, transparent incrustation. In the middle of the top there is a small stalagmite, on which water drops from the ceiling, and supplies the spring.

This is considered a great curiosity

SYMMES' PIT BRANCH.

1. This branch varies very much in size and appearance in different parts; the ceiling is generally rough, and the bottom covered with broken rocks.

2. At the Sounding Board there is, probably, a hollow, or cave, under the bottom, as at the Echoes.

3. The Hanging Rock, is a large flat rock, about sixteen feet square, separated from the ceiling, and supported only by one side. It hangs so low, that it is necessary to stoop when going under it.

4. The Cul de Sac is a short niche, lower than the true passage, into which persons often enter, when returning the first time, and imagine the rocks have fallen and shut them in.

5. Catherine City is a large and beautiful area, which appears, when in it, to be enclosed and separated from the rest of the cave.

On the left side there is a range of stalactic pillars, branches, and moss-like clusters, covering almost the whole extent of the wall, and presenting an agreeable variety of shapes and colors. The passage to Symmes' Pit is through a very narrow defile, terminating on the verge of a precipice.

6. Symme's Pit is a well in the bottom of a deep hollow, in the shape of a funnel, the sides of which are covered with loose rocks, lying upon an inclination just sufficient to sustain them. Let none be tempted by curiosity to venture too near this Pit. Wishing myself to observe the appearance of the well, I suspended a lamp in it by a string attached to the end of a pole. In order to get a better view I was about to lean against a large rock, which was standing edgewise in a convenient place, when one of my assistants remarked, that he saw the light from the pit shining up between the rocks behind me; I

then found that this rock was resting on the edges of a narrow gulf, leading from the pit, which I had not previously noticed.

A gentleman who visited this place before me, was near being precipitated into this pit, by the rocks tumbling down the inclination from above—he saved himself by clinging to a projecting rock on the very verge of the pit, but was severely bruised.

7. Beyond Symmes' Pit there is a long stooping place, through which it is tedious to pass.

8. The Vale of Tears is a short room at the end, in section about as large as the Main Cave. Under the left wall, there is a range of pits into which water drops from the ceiling. At the end there is a steep hill of sandstone rocks, which have fallen from a limestone dome. Through the interstices of the rocks water filters, and passes off in small streams, into the pits and hollows of the valley, where it disappears as in other branches.

9. It is probable, that at this place the water descends through the Vale of Tears into the Coral Grove Branch of the Solitary Cave, and finally into the pits, to the depth of about four hundred and fifty feet below the surface of the earth.

INTERESTING ITEMS.

1. There is no *fire damp* in any of the pits and low places.

2. The length of all the branches of the cave, taken together, is about eight miles.

3. The farthest point from the mouth, is the end of Symmes' Pit Branch—two and a fourth miles and three hundred and eighty feet. The length of the cave has generally been estimated at from seven to fifteen miles, owing to the fatigue of walking over the rough rocks, and the variety of interesting objects which continually engage the attention.

4. No part of the cave runs under Green River.

5. There is no danger of the rocks falling from the ceiling upon the heads of those who enter the cave, as is generally apprehended. One of the guides, who has been in the constant practice of showing the cave to strangers for the last ten years, says he never knew one to fall.

WHITE CAVE.

1. In the vicinity of the Mammoth Cave there are several smaller caves, none of which, however, possess much interest, excepting, perhaps, the White Cave, which it may be well to notice.

2. The White Cave opens on the southern declivity of a hill, about half a mile south of the Mammoth Cave.

3. It is visited principally on account of the beauty of the stalactic formations which it contains.

4. In one place it is divided into two rooms by a thin partition, or stalactic sheet, hanging from the ceiling to the bottom. Through this partition there are a number of openings of different sizes and shapes, some of which are only separated by single pillars.

5. The ceiling is white, and generally from ten to fifteen feet high.

6. On the right hand side of the cave going in, there are several ranges of shelves projecting one beyond another, from the ceiling downward, and covered with a stalactic drapery, resembling festooned curtains.

7. At the end of the first room, there is a dome thirty or forty feet high, resembling a conch shell, called the Involute Dome.

8. In the second room there is a basin ten feet long, five wide, and one foot deep, containing very pure, cold water. The sides of the basin are not more

than an inch thick, and appear to have grown up from the bottom, by the gradual attraction and deposit of particles from the water. The inner surface is studded with crystals.

9. Near the end of this cave there are several stalagmites fifteen or twenty feet in diameter at the base, and twelve or fourteen feet high.

10. The length of the cave is about eight hundred feet. The width varies from forty to sixty feet. The air is damp.

Read French

Bot Crank Book

Fortunes of the

Take a quantity of the

Edinburgh Encyclopedia