DESCRIPTIONS OF THE EARTHQUAKES AS GIVEN BY INDIVIDUALS TRAVELING DOWN THE OHIO AND MISSISSIPPI RIVERS IN THE WINTER OF 1811-1812

Ron Street May, 2011

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1. Accounts of individuals travelling down the Ohio and Mississippi Rivers at the time of the earthquakes on December 16, 1811, along with the location of the individuals on the evening of Dec. 15, 1811

Mr. Smith, who was at Marietta, Ohio

Marietta, Ohio [*Natchez Gazette*, February 13, 1812]

December 16, 1811

From Mr. Smith of the firm of Bracken and Smith, of this city, who arrived on Friday or Saturday last from Pittsburgh, we have received some further accounts of the violent shocks of earthquake, and their consequences on the River.

Mr. Smith lay aboard his boat at **Marietta** on the night of the 15th of December; but the boatman and himself being much fatigued, accustomed to the agitation of the boat on the water, and asleep, did not perceive the shocks which were comparatively light at that place. He was, however, informed in the morning that they had been very sensibly felt by the inhabitants of the town.

From Marietta to **Limestone** [Maysville, Ky.] the shocks had been felt all along the River. At the latter place they had been violent; and at Washington, four miles thence on the road to Lexington, some chimneys were thrown down. The effects were similar at Louisville, Cincinnati, Shawnee Town [present day Old Shawnee Town], below the mouth of the Wabash, and other places. At Shawnee Town, the people had been dreadfully alarmed by the steam boat descending in the night, having seen the gleaming of the light on the river, and heard the noise of the machinery like distant thunder. They expected a repetition of the shocks more terrible than the former. At the mouth of the Cumberland, Massac, and New Madrid the chimneys, the plaster, and the daubing of the houses, and almost everything most subject to be affected by such concussions, were shaken down. Various slight shocks were felt on board the boat at different places. From the Little Prairie to the lower Chickasaw Bluffs, the banks and channel of the river have suffered great change. At the lower Bluffs, Mr. Smith remained a week, the shaking of the earth was felt almost daily, and while he was there, two or three very violent shocks. He mentioned that the effects about the Bluffs were great, but that part of the country had suffered little in comparison with that from New Madrid all across the Arkansas, particularly at the settlement of Little Prairie; where the earth burst and threw up cinders, gravel, white sand, substances resembling stone and charcoal, with a sulfurous smell, and water to a height of twenty feet. The inhabitants had all moved off from that quarter. He saw about thirty families by whom he was informed that during the time of the most severe shocks, the brute creation appeared terribly

astonished and distressed. That the horses neighed, cattle roared, dogs barked and howled, the feathered tribe screamed, and all nature seemed struck with a kind of [illegible], as if the last day was approaching. The vibrations were so strong as to split large trees from the tops to the roots. A gentleman of veracity, who had kept an account, told him that there had been as many as eighty shocks felt.

Some Indians, who had been on the headwaters of the Arkansas, a distance of fifteen days journey, came in, who related, that before the first great shock, they had seen a great light towards the rocky mountains; that they had been dreadfully frightened, and fled from their hunting camp as fast as possible. They said they knew no cause for the shaking of the earth, unless the Great Sprit was angry with his red children for quarreling with the white people on the Wabash about their land; and in order to chaste them, had confined all of the thunder in the bowels of the earth, in the heart of their country, to destroy their whole race if they would not live in peace, and have nothing to do with the prophet.

In some places up the Ohio, Mr. Smith understood that the opinion prevailed, that from the increasing force of the shocks lower down, the whole Natchez country with New Orleans, had been totally indulged and destroyed.

He had been able to furnish a variety of other information, and has brought with him a collection of the substances thrown up from the channel. A number of cattle have been lost; and Mr. Shaw saw the father of the young lad who had perished between St. Francis and Arkansas. It appears that the earth in sundry places, as well as in the sand bars in the river, swelled up to a considerable height; and afterwards subsided, and sunk beneath their usual level, after the explosion and discharges, which in many places took place.

Account from a gentleman on board the steamboat that was between Louisville and Owensboro, Ky.

Account from a gentleman on board the Steamboat: [New Orleans]

Natchez, Jan. 7

Arrived here on Monday last the Steamboat from Pittsburgh, which had an account of low water been some time detained at the falls of Ohio; and is destined to run between this place and N. Orleans a regular trader. She was only 22 hours underway from Pittsburgh to this place.

No very satisfactory account of the shock of Earthquakes, and their effects, which lately happened could be expected; that received from a gentleman on board, is more so than we anticipated.

The shake, or jar, produced by the powerful operation of the engine rendered the shocks imperceptible, while the boat was underway. While at anchor, five or six shocks were felt, 2 or 3 more severe than the rest. On enquiry at New-Madrid, a small town about 70 miles below the mouth of the Ohio, they found the chimneys of almost all the houses were thrown down, and the inhabitants considerably alarmed. At Little Prairie

30 miles lower down, they were brought to by the cries of some of the people, who thought the earth was gradually sinking; but declined to take refuge on board without their friends, who they wished to collect. Some distant below Little Prairie, the bank of the river was caved away to a considerable extent, and two islands had almost disappeared.

We also understand that letters have been received from Louisville, Falls of Ohio, which state, that the houses have suffered considerable damage at that place.

Latrobe, Charles Joseph, an account by an individual aboard the steam boat that was between Louisville and Owensboro, Ky.

Latrobe, Charles Joseph (1835).

The Rambler in North America, pub. By R. B. Seeley and W. Brunside, London, England, V. 1, 167 p.

When they arrived about five miles above Yellow Banks [now Owensboro, Ky.], they moored the boat opposite the first vein of coal, which was on the Indiana side, and had been purchased in the interim of the State government. They found a large quantity already quarried to their hand, and conveyed to the shore depredators who had not found means to carry it off, and with this they commenced loading the boat. While thus engaged, our voyagers were accosted in great alarm by squatters of the neighborhood, who inquired if they had not heard the strange noises on the river and in the woods in the course of the preceding day, and perceived the shores shake - insisting that they had repeatedly felt the earth tremble.

Hitherto nothing extraordinary had been perceived. The following day they pursued the monotonous voyage in the vast solicitudes. The weather was observed to be oppressively hot; the air misty, still, and dull; and though the sun was visible, like a glowing ball of copper, its rays hardly shed more than a mournful twilight on the surface of the water. Evening drew nigh, and with it some indications of what was passing around them became evident. And as they sat on deck, they ever an anon heard a rushing sound and violent splash, and saw large portions of the shore tearing away from the land and falling into the river. It was as my informant said "an awful day; so still, that you could have heard a pin drop on deck." They spoke little, for everyone on board appeared thunderstruck. The comet had disappeared about this time, which circumstance was noticed with awe by the crew.

The second day after leaving the Yellow Banks, the sun rose over the forests and the same dim ball of fire, and air was thick, dull, and oppressive as before. The portentous signs of terrible convulsion continued and increased. The pilot, alarmed and confused, affirmed that he was lost, as he found the channel everywhere altered; and where hitherto known deep water, there laid numberless trees with their roots upward. The trees were seen waving and nodding on the bank, without a wind; but the adventurers had no choice but to continue their route. Towards evening they found themselves at lost for a place of shelter. They had usual brought to under the shore, but

everywhere they saw the high banks disappearing, overwhelming many a flatboat and raft, from which the owners had landed and made their escape. A large island in midchannel, which was selected by the pilot as the better alternative, was sought for in vain, having disappeared entirely. Thus in doubt and in terror, they preceded hour after hour till dark, when they found a small island, and rounded to, mooring themselves to the foot of it. Here they lay, keeping watch on deck during the long autumnal night listening to the sound of the waters which roared and gurgled horribly around them; and hearing from time to time, the rushing earth slides from the shore, and commotion as the falling mass of earth and trees was swallowed up by the river. The lady of the party. a delicate female, who had just been confined on board, as they lay off Louisville, was frequently awakened from her restless slumber by the jar given to the furniture and loose articles in the cabin, as, several times in the course of the night, the shock of the passing earthquake was communicated from the island to the bows of the vessel. It was a long night, but morning dawned and showed them that they were near the mouth of the Ohio. The shores and channels were equally unrecognizable, for every thin seem changed. About noon that day they reached the small town of New Madrid, on the right bank of the Mississippi. Here they found the inhabitants in the greatest distress and consternation; part of the population had fled in terror to higher grounds, others prayed to be taken on board, as the earth was opening in fissures on every side, and their houses hourly falling around them.

Proceeding from thence, they found the Mississippi, at all times a fearful stream, now unusually swollen, turbid, and full of great danger, thought they felt and perceived no more of the earthquakes, they reached their destination at Natchez, at the close of the first week of January, 1812, to the great astonishment of all, the escape of the boat having been considered an impossibility.

LaRoche, Firmin, who was 13 miles north of New Madrid La Roche, Firmin (13 miles north of New Madrid)

Excerpt from: The Missouri Historical Review, Floyd C. Shoemaker (ed.); The State Historical Society of Missouri, 268-270. A Sailor's Record of the New Madrid Earthquake, from an old clipping, no date, probably a St. Louis paper

It was in the year 1811 that the first great earthquake known to white men in the Mississippi Valley occurred, and the town of New Madrid, in the southeastern part of Missouri, was practically destroyed, its cemetery being especially the apparent object of the seismic convulsion and its dead unburied for the river to carry away.

There are very few trustworthy accounts of the down-river cataclysm, as the people who saw the most of it were neither accurate observers nor given to writing their impressions. Firmin La Roche, who was a patron or master of a fleet of flatboats going down river from St. Louis to New Orleans at the time of the disaster, has left an account of the earthquake which is still in the possession of his descendants, at Ninth and Sourland streets, and which has never before been printed. It was written in crabbed

and contracted French and one of the pages is so mutilated as to be almost undecipherable. Two handwritings are evident in the manuscript, the second being possibly that of the Fr. Joseph mentioned in the story, as it is more clerkly than La Roche's. The account appears to have been prepared at the request of somebody whose name is not known, but who seems to have put several questions, which Roche answers seriatim. The document begins:

New Orleans, Feb. 20, 1812

- 1. I am named Firmin La Roche, sailor, living in St. Louis, and I was present at the earthquake which lately occurred above and below the mouth of the River Ohio along both shores of the River Mississippi. There were with me the Fr. Joseph of the Mission of the Osages, returning to France; Jacques Menier, Dominic Berges, Leon Sarpy, Henry Lamel, five other men and the Negro slave, Ben, who was killed at New Madrid. I had three boats and I was taking to New Orleans some furs bought in St; Louis.
- 2. We set out from St. Louis on Nov. 8, 1811, but because of an accident to one of the boats, we were four days delayed near the mouth of the (probably the Meramec), and again we had to stop for a time at Chagres, so that on the evening of Nov. 15, we tied up maybe eight miles north of the New Madrid, near the house of my cousin, John Le Clerq.
- 3. No, we did not notice that the weather was bad at that time. It was chilly. There was, I think, some wind. I do not remember that there was clouds in the sky. I think not. Neither does Fr. Joseph remember. After we had supper we went to sleep, and I was awakened by a crash like thunder, and the turned upon its side so that Lamel, who slept beside, was thrown on me and both fell against the side. It was very dark. After perhaps half an hour, when we got away from the bank, we looked at the watch and it was 3 o'clock. When I could see, the trees on the shore were falling down and great masses of earth tumbled into the river. Lamel cut the rope that tied us to a log that was there, and in a moment so great a wave came up the river that I never seen one like it at sea. It carried us back north, up-stream, for more than a mile, and the water spread out upon the banks, even covering maybe three or four miles inland. It was the current going backward. Then this wave stopped and slowly the river went right again.

Everywhere there was noise like thunder, and the ground was shaking the trees down, and the air was thick with something like smoke. There was much lighting. We believed we must surely die. Fr. Joseph gave absolution. We did not see either of the other two boats; one of them we never saw again nor do I know whether the men in it were drowned. I do not know how long this went on, for we were all in great terror. Expecting death.

The following is in another's writing, probably the priest's.

I think there were two great shocks about half an hour apart and many small ones between and after. The water rose so where we were that a tree on the bank whose top must have been thirty feet above the river level was covered all over. All of the crew were sleeping and awoke greatly confused and frightened, so that even a few

hours after, when we were again safe, nobody could agree in his recollection of that awful night. It was dark. We saw two houses on fire on the left bank, and when we came to New Madrid there were houses also burning there. The people were crowed out upon the hillside and were in great fear. We tied up to the shore about dawn, and a hickory tree fell upon the boat, killing the Negro, Ben, and breaking the left arm of the patron; also the boat was damaged. We ran upon shore, thinking we would be drowned, but the vessel did not sink. Some people called to us that we should go back upon the water, or we would be killed. We went on, fearing the land less than the river. When the people there, about twenty at this place, understood that there was a priest present, they knelt and absolution. There were small shock now and then and much rumbling that frightened us greatly, as we looked for nothing but our destruction, and these noises, we expected, foreran our end. The sound was in the ground, sometimes muffled and groaning; sometimes it cracked and crashed, not like thunder, but as though a great sheet of ice had broken.

4. We made no effort to find out how many people had been killed, although it was told to us that many were. We saw the dead bodies of several and afterwards drowned persons we saw floating in the river. We hastened when it was light to mend the boat that we might get away. The load was thrown into the water by the people who crowded into the vessel with us, until we could take no more. We carried so many that we were all often in danger of being drowned before we could land them again as the bottom leaked badly.

The handwriting is again in La Rocke's from this point to the end.

- 5. We observed the mark of the earthquake upon the banks on both sides to a point forty to fifty miles south of the River Arkansas. Trees were thrown down. Great cracks were in the soil, some stretching, people said, ten or fifteen miles and very deep. We were told there is a new lake in Tennessee, and the water courses there have been changed. The Yazoo has a new mouth. I was in great pain with my broken arm, and having fever did not observe closely, not knowing that this information would be asked.
- 6. Of those who were with me there is not but Father Joseph now in New Orleans, nor do I know where the others have gone, except Leon Sarpy, who has returned to St. Louis. He would be there if a letter was written to him now. My personal loss I make \$600. I hope that this is what you require, and I am sorry I can tell you so little. It is three months ago now, and even had I written down what we saw when I first got to the city I could say little more. When a man expects nothing but instant death it is hard for him to think or notice anything but danger.

Your humble servant, Firmin La Roche

Treber, John, who was on a boat tied up at New Madrid

<u>Treber, John</u> (at New Madrid) [http:///www.scioto.org/Adams/bios/traber-family.html]

On their [Jacob Treber and George Smith] way, they, with others, bound on a

like voyage, tied their boats at New Madrid, Mo. At this time occurred the terrible earthquake at that place, a short description of which is here given in Mr. Treber's own language:

The first shock took place while the boat was lying at the shore, in company with several others. At this period there was danger apprehended from the Southern Indians, it being soon after the battle of Tippecanoe, and for safety several boats kept company for mutual defense in case of attack. In the middle of the night there was a terrible shock and a jamming of the boats so that the crew were all awakened and hurried on deck with their weapons of defense in their hands thinking the Indians were rushing on board. The ducks, geese, swans and various other aquatic birds, whose numberless flocks were quietly in the eddies of the river, were thrown into the greatest tumult, and with loud screams expressed their alarm and terror. The noise and commotion was soon hushed, and nothing could be discovered to excite apprehension, so the boatmen concluded that the shock was occasioned by the falling in of a large mass of the bank near them. As soon as it was light enough to distinguish objects the crew were all up making ready to depart.

Directly a loud roaring and hissing was heard, like the escape of steam from a boiler, accompanied by the most violent agitation of the shore and tremendous boiling up of the waters of the Mississippi in huge swells, rolling the waters below back on the descending stream and tossing the boats so violently, that the men with difficulty could keep their feet. The sandbars and points of islands gave way, swallowed up in the tremendous bosom of the river, carrying down with them the cottonwood trees, cracking and crashing, tossing their arms to and fro, as if sensible of their danger, while they disappeared beneath the flood. The water of the river, which the day before was tolerably clear, being rather low, was now changed to a reddish hue and became thick with mud thrown up from its bottom, while the surface, lashed violently by the agitation of the earth beneath, was covered with foam, which gathering in masses the size of a barrel, floated along on the trembling surface. The earth along the shore opened in wide fissures, and, closing again, threw the water, sand and mud in huge jets higher than the tops of the trees.

The atmosphere was filled with thick vapors or gas, to which the light imparted a purple tinge, altogether different in appearance from the autumnal lines of Indian summer or that of smoke. From the temporary check of the current, by the heaving up of the bottom, the sinking of the sandbar and banks into the bed of the river, it rose in a few minutes five or six feet; and as if impatient of the restraint, again rushing forward with redoubled impetuosity, hurried along the boats now set loose by the horror-stricken boatmen, as in less danger on the water than at the shore, where the falling banks threatened at every moment to destroy them, or carry them down in the vortex of the sinking masses.

They [Jacob Treber and George Sample] reached New Orleans in safety, and after disposing of the boat and cargo they returned home on foot, going by the way of Lake Pontchartrain, Mussel Shoals, Nashville and Limestone [Maysville, Ky.].

* Sterling, Edwards L. (1887), states on pg. 133 in his *History of Henderson County, Henderson, Kentucky*, Eneas McCallister was on one of the boats with

Wiseman, John, who was on board a boat tied up a few miles below New Madrid

<u>Wiseman</u>, John (a few miles below New Madrid) [in University of Missouri-Columbia, archives]

The writer is in possession of the following account of the earthquakes and its effects upon the Mississippi river that have never been written before hence never been published. John Wiseman from Nelson County, Kentucky, was born in 1790 and died in Missouri in 1851; was at New Madrid during the shakes. He was a flatboat pilot and descended down the Mississippi as far as New Madrid, with a flatboat loaded with whiskey that had been manufactured in Kentucky. He had lain at the wharf for several days and had dropped down his boat several miles below the landing where he tied up and remained until after the shakes. When the next morning before the day, (Dec. 16, 1811) he said: I was awakened by the roaring noise and as if my flatboat load of whiskey had sprung a leak and made the "Father of Waters" drunk it could not have committed more somersaults. It seemed that old Vesuvius himself was drunk, and from that time on, at intervals, that roaring and shaking of the earth continued until the 7th of February, and up to the 17th of February were many hard shakes, and on the latter day was one that excelled in noise force, and terror all preceding ones, when the earth was rocked about like a cradle and its surface rolling like waves a few feet high and in places causing fissures in the earth from which large volumes of warm water, sand and charcoal was blown up, the gas coming up from these fissures smelling like sulfur. The country immediately around where our boat was moored was not perceptibly sunk, but the country northwest and to the west from where came the roaring noise was sunk many feet and also over in Tennessee east of the hills was sunk to a great depth. It was then that we saw a sandbar below us, that extended clear across the river, and the water commenced rolling in terrific waves up the current and broke our boat loose from her fastenings. This bar lasted only a short time; in a few hours the retrograde current soon spread over it again and we succeeded on making our boat fast with stout ropes and then abandoned it and returned on foot to New Madrid with two of my flat boat hands. On the way we crossed a bayou near whose bank's was an "Indian wigwam" where lived a defunct Indian chief name "Wapacapa" (John Big Knife). Seeing nothing of the chief we stepped to the door of his wigwam when he arose without any fear or terror depicted in his countenance, but with a hideous and woe-begon look, uttered the usual Indian salutation "Woo! Hon Jo!!" (my friend,) and pointing his right hand finger to the heavens and with his left hand, showing the tottering motions of the earth, he said: "Great Spirit ke-chi-monito, whiskey too much: heap drunk, bine-by he make all gone Iniun hunten around."

On our arrival at New Madrid we found all was destruction; the site of the town appeared to have sunk ten or twelve feet, we returned to our boat in a few days and found it secure whilst nearly all other boats were lost. In a few weeks we continued our

journey on to New Orleans seeing terrible destruction of the country as far south as Memphis [Ft. Pikering]; but the greatest destruction was west of the Mississippi river beginning six to ten miles west and southwest of New Madrid.

Letter from New Orleans, written by an individual on board a boat tied up a few leagues below New Madrid

<u>Letter from New Orleans</u> (a few leagues below New Madrid) [Knoxville Gazette, February 10, 1812]

New Orleans, January 20, 1812

We have the following description of the earthquake from a gentleman who was in a large barge and lay at anchor in the Mississippi a few leagues [1 league = 4.83 km] below New Madrid, on the night of the 15th of December.

About 2 o'clock all hands were awakened by the first shock. The impression was that the barge had dragged her anchor and was grounding on gravel. Such were the feeling for 65 or 80 seconds, when the shock started. The crew was so fully persuaded of the fact of their being aground, that they put out their poles, but found water enough.

A seven the next morning a second and very severe shock took place, - the barge was underway, - the river rose several feet; the trees on the shore shook; the banks in large columns tumbled in; hundreds of old trees that had lain perhaps half a century at the bottom of the river, appeared on the surface of the water, the feathered race took wing, the canopy was covered with geese and ducks and various other kinds of water fowl; very little wind; the air was tainted with a nitrous and sulfurous smell; and everything was truly alarming for several minutes. The shocks continued to the 21st Dec. during that time, perhaps one hundred were distinctly felt. From the St. Francis to the Chickasaw buffs visible marks of the catastrophe were discovered; from that place down, the banks did not appear to have been disturbed.

Letter from Chickasaw Bluffs, written by an individual aboard a barge tied up 17 miles below New Madrid

Chickasaw Bluff's (17 miles below New Madrid) [Boston Independent Chronicle, Feb. 17, 1812]

December 21, 1811

From the *Liberty Hall*, Cincinnati, Ohio]

The Earthquake. – An interesting letter from a gentleman of respectability, dated Chickasaw Bluff's, December 21, states that the first shock of the earthquake occurred at 30 minutes past 2 o'clock in the morning of the 16th, the same time it seems to have been felt in the Atlantic states in this country. The shock was followed during the 16th and the following night by nineteen others; on the 17th there were three, and the

following night; on the 20th there were five, and on the 21st, when the letter was written, the earth was still trembling. The first and second vibrations, and that between 11 and 12 o'clock on the 17th, were the most violent.

The effects of the shocks appear to have been of the most alarming kind. The barge commanded by the author of the letter, was anchored in 2 ½ fathoms of water, about 17 miles below New Madrid, 87 miles below the Ohio. The boat was acted on by the water that excited the supposition of her being grounded, but upon sounding they could find no bottom. The current increased to three times the velocity it had the preceding evening; a crew of a boat at the shore testified that river rose six feet in a short time; and that no spot on land was to be found that was not (as they expressed it) "giving." Two flat-bottom boats that were lying at the shore were destroyed. One was broken entirely to pieces, and the other overturned – the crew saved themselves.

At the second shock, millions of trees that were embedded in the mud in the bottom of the river, suddenly had one end elevated to the surface, rendering the river almost impassable. At the same time the banks were shook into the river in large masses. Upon passing Little Prairie the inhabitants were found to have all fled to the high lands. It was stated by some hunters near Bayou River, that the ground was cracked into innumerable fissures, and some large quantities of water were issuing out of them. – An island just above the mouth of the Bayou River, was extremely agitated, and seemed to require but little to sinking. The lakes which lie in the valley of the Mississippi, were discharging large quantities of water into the river; and the water fowl of that region were observed throughout the whole of the 16th to keep constantly on the wing.

The writer of the letter had not heard from any farther down the river than Chickasaw Bluff's, about 170 miles below the moth of the Ohio; but his letter closes with an expression of the deepest anxiety respecting the country near the Gulf.

Bedinger, D.I., who was on a boat tied up 32 km below New Madrid

<u>Bedinger</u>, D.I. (32 km below New Madrid) [*National Intelligencer*, March 14, 1812]

December 16, 1811

Sir,

Believing the effects of the late earthquakes to have been different in different sections of the country, and that reports at Washington, however diversified were nonetheless such as to excite curiosity; I take the liberty of sending you the enclosed paper which, at a leisure moment may, perhaps, afford some amusement, & which you will be pleased to dispose of in any manner you think proper.

I am, &c. DI Bedinger

Extract from Journal of Daniel Bedinger on a voyage down the Mississippi;

December 13th, 1811. The barge Louisville, in which Doctor Foster – [missing a line] – Barges Venus and Ohio, captains Hedinton and Becktie. The Mississippi, it was observed, was lower than usual though not so low as it has been. The banks presented an elevation on the average of about 20 feet above the surface of the river. The winds were light and the weather gloomy.

December 14th. To avoid tiresome, repetitious, the temperature will generally be noticed in the manner following viz. Therm. 29 deg. and 46, which implies that the mercury of Fahrenheit's thermometer stood at 29 deg. at sunrise and 46 at 3 o'clock P.M. as was the case this day. The three barges above named and several other boat proceeded down the river. During the day there was little wind – the weather was very dark and foggy. In the evening we came to Island No. 8 as designated by the Pittsburgh "Navigator."

Dec. 15th. Therm. 40 and 49. Got underway and touched at New Madrid, a fine handsome bank, but the place little improved. Descended the river to Island No. 13 which lies about the latitude 36 deg., 29 min., north. The weather was very dark all day & had the appearance of what is sometimes called the *Indian Summer*.

December 16th. About 2 o'clock in the morning were alarmed by an unusual noise seemingly under the bottom of the barge, attended with violent trembling and shaking of the vessel; and as the boat in company were at the same time, equally affected all were soon convinced that the cause was no other than a violent shock of which lasted (without intermission) about 40 seconds. Immediately after which the boats rolled considerably (though there was not wind). The river appeared too much agitated. It was covered with thick froth. It rose at least 18 inches in a few minutes time, and became very rapid where the vessels lay. But about two hours after it subsided and the current became gentle. The *froth*, too had passed down stream and entirely disappeared before "day". In the meantime, the confusion which seemed to reign on all sides, was awful alarming. Many acres of land in a body (as was discovered on the approach of day) had sunk to a level with the surface of the river, and some much lower leaving only the tops of trees above water. Where the banks did not immediately tumble in, vast rents of fissures were made in the earth to an extent unknown. Some of these fissures received the waters of the river and others let out those of neighboring lakes and ponds, with no inconsiderable roaring. Frequent rumbling sounds were heard, resembling distant thunder, and numerous heavy reports, indicative of explosions seemingly from the bottom of the river and low lands adjacent together with the falling and crashing of many large and heavy trees at the same moment seemed to threaten universal destruction.

Immediately after the first shock, the thermometer was observed to be at 45. About 30 minutes after the first shock a second shock was felt; it was less violent and of shorter duration than [missing a line] time of daylight, nothing material occurred except repeated rumbling sounds, seemingly at a distance and a continual falling in of the banks of the river.

The boats, now all got under way and stood down the river. The thermometer at sunrise was still at 45. No perceptible change was observed in the temperature of the

river water. Nothing was seen like lighting, fire, smoke or anything of a volcanic nature. The weather remained dark and cloudy and the winds were light and variable.

About half past 7 o'clock there was another shock, which for violence (it was agreed by all on board) exceeded the first; but it lasted only about 20 seconds. Soon after was seen (a short distance from the head most boat) a large spout or body of water rising from the river to a height of 18 to 20 feet, when it seemed to burst, and was instantaneously followed by a loud report. Similar reports were heard from the neighboring low grounds at various distances from the river. A great number of logs and trees of enormous size, were cast up to the surface from the bottom of the channel, which caused the navigation (always difficult here) to be still more dangerous. The mischief done by these logs cannot be ascertained, but a Mr. Atwell of Salt River, Kentucky, lost two boats with their cargos by the rising of one of them. His first boat was bilged, and other being lashed to her, they both went down together. The people were saved.

At 8 o'clock there was a slight shock and at 10 another. The boats were now within a short distance of the village Little Prairie and desirous of knowing what effects had been produced by the repeated shock above mentioned, at and near the place, Doctor F. and D.B. got into the skiff and went ahead of the larger vessels. When they approached the town, they found it altogether unsafe to attempt a landing as the banks were all broken to pieces and huge masses, were at short intervals tumbling into the river. They however called aloud and were answered by a black man who showed himself at some distance off. From him they understood that all the inhabitants but himself that morning, in the utmost consternation, fled into the country to the westward of the village. That the earth was broken in many places and the openings filled with water. The houses much injured - the only brick chimney in the place entirely demolished and that the shock at half past 7 had been much [missing a line] obtained they returned to their barges, which by this time had passed the village.

They continued their course down the river. At 11 o'clock they felt a considerable shock, and at 20 minutes, another, not so severe. The thermometer at 3 p.m. was 52. In the evening all the boats in company came too, near Island 23. A landing was made on this island, which had been much rent and torn to pieces. Numerous springs or holes had all the appearance of having discharged large quantities of water, sand, mud and pieces of wood, which in color and weight, greatly resembled mineral coal. Some specimens were brought away.

December 17th. Thermometer 53 and 49. The wind first west, then northwest; the morning very dark and cloudy. Descended the river this day to the head of the Canadian reach. At 6 o'clock A.M. two shocks, each short duration. At 30 minutes past 11, one more violent. Occasional rumbling.

December 18th. Thermometer 30 and 45. Remained at anchor (being wind bound) all day. Wind strong at N.W. At 45 minutes past 11 A.M. a slight shock, and at 9 P.M. another.

December 19th. Therm. 24 and 36. Wind first west, then variable. A clear day. Proceeded to the first Chickasaw bluff and landed. On the high ground discovered no

marks of the earthquake. Near the river banks were broken, but nothing like those at the *Little Prairie*. A slight shock or jar at 3 P.M.

December 20th. Therm. 31 [missing]. A shock at 11 A.M. just passing of the 2nd bluff. The weather cloudy with some rain this day. Came too below the 3rd bluff.

December 21st. Therm. 47 and 51. A slight shock at half past 11 A.M. In the evening anchored off Fort Pickering. At the 4th bluff. Landed near the trading house, or Agency & were told that the Earthquake had been felt there and also at the distant of 40 miles to the eastward, but no damage done.

December 22nd. Therm. 49 and 50. Wind N.W. Felt a slight jar at 7 A.M. which was the last. Landed on the Louisiana side and could not discover traces of the earthquake; at this place which was near Council Island they afterwards found that the earthquake had been less violent below – that its force gradually diminished to the southward. They obtained their information on this point, at the mouth of the St. Francis, the Arkansas, Walnut Hills, Warrenton, and Natchez. Below the 31st degree of N. lat. they could not hear that it had been felt at all.

Foster, who was on the boat with Bedinger 32 km below New Madrid

<u>Foster</u>, (32 km below New Madrid) December 16, 1811 [Farmer's Repository, January 31, 1812]

Comment: based on Bedinger's description of the earthquakes and the passenger who was accompanying him on the boat and who Bedinger identifies as Dr. F., this letter as well as the next were written by the passenger, Dr. Foster.

The Earthquake. (Extract of a letter from a gentleman on his way to New Orleans, to a friend in this place - dated 20th December.)

We entered the Mississippi river on the morning of the 14th, and on the night of the 15th came to anchor on a sandbar, about 10 miles above the <u>Little Prairie</u>. Half past 2 o'clock in the morning of the 16th, we were aroused from our slumbers by a violent shaking of the boat. The alarm was considerable and various opinions as to the cause were suggested, all found to be erroneous; but after the 2nd shock, which occurred 15 minutes after the first, it was admitted to be an earthquake. We weighed anchor early the next morning and in a few minutes there came in quick succession, two other shocks, more violent than the former. It was then daylight. The bank of the river gave way in all direction, and came tumbling into the water; the trees were more agitated than I ever saw before then in the severest storms, and many of them from the shock they received broke off near the ground, as well as many were torn up by the roots. As we proceeded down the river, we observed every part of the banks of the Mississippi. In some places 5, 10 and 15 acres have sunk down in a body, even in the Chickasaw Bluffs, which we have passed did not escape.

The inhabitants of Little_Prairie and its neighborhood all deserted their homes, and retired back to the hills or swamps. The only brick chimney at that place was entirely demolished by the shocks. The ground is cracked and torn to pieces in such a way as to make it truly alarming; indeed some of the islands in the river that contained from one to two hundred acres of land have been nearly sunk, and not one yet that I have been but cracked from one end to the other and has lost some part of it.

There have been in all 41 shocks, some of them have been very light; the first one took place at half past 2 on the morning of the 16th, the last one, at 11 o'clock this morning (20th). The last was not as severe as some of the former, but it lasted longer, about 1½ minutes. During the period we frequently heard rumbling noises at a distance when no shocks were to us perceptible. I am fearful when I arrive at Natchez to hear that the whole city of Orleans is entirely demolished and perhaps sunk.

Immediately after the 1st shock and those which took place after daylight the whole atmosphere was impregnated with a sulfurous smell.

<u>Foster</u>, (32 km below New Madrid) [Farmer's Repository, Feb. 28, 1812]

December 16, 1812

More of the earthquake (copy of a letter from a gentleman in New Orleans, to his friend in Virginia. New Orleans, January 16, 1812

I have in former letters, made you acquainted with our progress as far as Baton Rouge; and in one from Fort Pikering, dated the 21st of December, I merely mentioned the occurrence of an earthquake, deferring a particular account of facts to a more convenient opportunity. A leisure moment now presents itself; and I believe I cannot fulfill my intention more concisely or more satisfactorily, than by giving you something like an extract from my journal, beginning at the mouth of the Ohio.

On the morning of the 14th of December, we entered the Mississippi, in company with two other barges bound to this place. The river presented nothing unusual as to its banks, the stage of its water, or the velocity of its current. The wind, as nearly as we could determine without a compass, was from the S.E. - the weather cloudy and dull. In the evening we came to island No. 8, distant 44 miles from the mouth of the Ohio. The mercury in Fahrenheit's thermometer this day, stood at 29 and at 46 deg. - On the 15th wind was from the same point - the weather misty. At night we came to close under a sand bank, at the foot of island No. 13, which is situated in about the latitude 35 deg. 20 N - distance this day 46 miles, mercury at 41 and 49 deg. - All was well and guiet, until about 2 o'clock on the morning of the 16th, when a sudden and violent shaking of our vessel, accompanied with a dreadful clattering of everything loose on board, and confused rumbling noise roused all hands from their beds. The first and most general impression as to the cause, was that we had dragged anchor, and were then beating over a rough sand bar. - This, however, was rendered improbable, when it was recollected that it had been perfectly calm all night; and, as soon as we found that the other vessels were affected in the same manner and at the same moment, our suspense was terminated, and the alarming conclusion rushed upon our minds, that

what we had felt was nothing less than the shock of an earthquake. Our anxiety and our fears, were now awakened, and everything became a subject of observation and enquiry. The river had risen about 18 inches and the water which was smooth and still when we anchored, now hurried by us at the rate of 5 or 6 miles an hour, carrying upon its surface a thick froth; but in about 3 hours it returned to its former stage and tranquility. - The duration of the shock was about 40 seconds - there was no sensible alternation in the temperature of the water, and the mercury stood at 45 deg. in the air. It was excessively dark, and no emission of light was observed in any part of the horizon - nor could we discover the slightest impregnation of the atmosphere with smoke or anything whatever although some of men (by hard sniffing) thought they smelt something like sulfur. The sand bank near us, which was about 5 feet above the surface of the river, was continually falling in by sections, into which it had been broken by the convulsion, whilst the disruption of immense bodies from the main bank on the other side, covered with heavy timber occasioned a most horrid crashing, and produced a swell in the river which caused our vessels to roll considerably. Reports like those of a musket in the woods, were often heard and sometimes heavy sounds like distant explosions. A rumbling like distant thunder, was heard every 20 or 30 minutes, but it seemed to fill the air so completely, that it was impossible to say from what quarter it came. There was no wind, but we heard a roaring upon the water at a distance. In half an hour after the first, we felt a second shock, the duration of which was about 20 seconds; and in two hours after the second, was felt a third shock, not so long or severe - both of which however made everything rattle that was loose and gave to the vessel a springing motion, similar to that which would have been made by many men running on deck. Thus passed the slow and dismal hours, until day - but the hopes with which the cheering influence of light had inspired out minds, were soon blasted.

About half past seven, soon after getting underway, we felt a fourth shock, as violent as the first, but it did not continue so long. Immediately after this Mr. B [Bedinger?] saw a body of water, two or three hundred yards from our vessel, and about a hundred from the bank, rise to a height of about twenty feet, and fell with a loud report. It appeared to be about the size and figure of a common hav stack - he called me to look, but I could not direct my attention to the spot sooner than to see the agitation of the water where it had fallen - the report was heard, I believe, by everybody on board. A large log or body of a tree, about sixty feet long, was thrown up very near us, and at the same time there appeared to be a boiling motion in the water, which brought up sawyers and planters, as well as fragments of wood, bark, leaves, etc. and numerous air bubbles - the water was very muddy and frothy. Here the falling of large trees, and the masses of the bank covered with cane, kept up a perpetual echo, like the retiring sound after a severe peal of thunder. We heard loud reports far in the swamp, and a noise like wind passing furiously through the woods. These, added to the darkness and gloom of the weather, and the solemnity of every countenance, and the perfect silence and stillness of everything on board, presented to the mind a scene inexpressibly awful. Every thirty of forty minutes after the fourth shock we felt slighter ones or tremblings of our vessel, succeeded by the distant rumbling. Between 10 and half past 11 A.M. we felt three tremblings or slight shocks. Mr. B. and myself went in the boat near the shore at the Little_Prairie (a small settlement on the west bank) - the inhabitants had fled their houses in great terror. A negro man, who told us that he was the only person than in the place, informed us that the swamp at the back of the prairie was completely inundated - that the fourth shock was much more severe than the preceding ones - and that it had damaged all their houses, and thrown down the only brick chimney. The bank was very much broken by extensive and longitudinal fissures; and we saw water gushing out a several transverse ones, which must have extended back at least as far as the swamp. A slight shock after 12 o'clock, weather cloudy and hazy, wind S.E. - cleared away by 3 o'clock - two or three slight rumblings since the last mentioned one.

We came too early in the morning, at island No. 24, and went on shore. - That part of the island which was covered with trees, was cracked in every direction, but the largest fissures were longitudinal. The middle of this part of the island, appeared to have sunk about 3 feet, as nearly as we could determine, from the elevation of the surrounding surface, on which the growth was light. The heavy trees in the depressed portion, had settled down and formed circular pits round their bases, from 4 to 6 feet in diameter, and from 6 inches to a foot (according to their weight) below the level of the general depression. The shore or beach of the island, did not appear so much cracked; but we saw a great many tumuli of different sizes, with circular holes in their center, from the margin of which their surfaces declined very gradually to the circles of their bases. The largest of them was about a foot high from the level of the beach through its center, and the hole in the top about the dimensions as well as figure of a large crown hat. The holes were lined with fine slimy mud, and balls of the same substance we found in and about them; they possessed no extraneous taste or smell. The surfaces of these tumuli appeared to be rubricated. The beach appeared to have been washed, and upon a shallow pond of water on it, there was a quantity of froth. About every 30 minutes this evening, weak and distant rumblings were heard which seemed to come from the W. And S.W. at 11 P.M. two considerable jars, and frequent rumbling - wind S.W. Mercury to day at 47 and at 52 degrees.

At 6 o'clock on the morning of the 17th felt two jars, (the between which as well as those last night, was about 60 or 90 seconds) - succeeded by distant rumbling from same quarter till 7 o'clock. The water still very muddy, but the froth gone by and the river appeared to have fallen 10 or 12 inches last night. At half past 11 we felt a heavy shock just below Bayou River, but of only 5 or 6 seconds duration. The left bank here to which we were close in appeared (from the deck) to have been very little affected; but at this shock, the tops and branches of large trees on it (particularly the cotton wood) switched so violently as to excite our astonishment. This accounted for the shattered trunks of trees from 20 to 30 feet high standing on the firm bank with the appearance of their tops having been recently snapped off. We came to a low willow island at the head of the Canadian (Long?) Reach. The W. Bank of the river two or three miles in length, and as far in as we could see, was a melancholy spectacle of desolation. A great portion of it was sunk beneath the surface of the river so that the tops only of some of the tallest trees were to be seen; and many of them shattered and prostrated by the concussion. That which appeared above water was broken and turned up as if a mighty

plough had passed through it. Wind N.W. cloudy and hazy - showered of rain this afternoon. At 6 P.M. a light jar. Mercury this day at 53 and 49 degrees - clear night.

The morning of the 18th was clear after a fresh wind all night from N.W. During the night frequent distant rumblings were heard which seemed to proceed from N. And W. At 8 o'clock this morning we felt a considerable shock; and a slight one at half past 11. Rumblings this afternoon, at 9 P.M. slight shock. Mercury at 30 and 45 degrees. On the 19th at 3 and a half past 5 A.M. slight shock - at 12 a slight jar, and one after two P.M. Came to early this afternoon at 1st Chickasaw Bluffs, clear sky and light S.W. wind. We went upon the hill, but could not discover any traces of the convulsion there; but the river banks was much broken and turned up by the fallen trees, and there were many small holes in the bottom between it and the hill, similar to those on No, 33 [Flour Island]. Slight jar at 8 P.M. Mercury at 25 and 30 degrees - 20th, the rumbling sound was heard two or three times during last night. As we passed the 2nd Bluffs, at 11 o'clock this morning, we felt a very considerable shock. The bluff did not appear much broken, but some loose earth was thrown down by this shock - The weather after noon was dull and rainy - wind S. Mercury at 21 and at 37 degrees - 21st, showers of rain last night and some weak rumbling, below 3rd Bluffs. - This morning, wind S. Thin clouds - no shock, jar or rumbling was felt this day; and no considerable effects of the convulsion were observed. In the evening we arrived at Fort Pikering, and were told by the people that they had felt the Earthquake very severely, and that it was felt many miles back, but we could not discover any other effects of it here other than the falling of some loose fragments of the cliffs. They said it was felt most sensibly on this side of the river, but our observation decided that the greatest extent of damage was on the western side. They saw spouts of mud and water rise from the river near the shore to the height of 15 and 20 feet. By the bank here appeared to have fallen three or four feet lately. -Mercury this day at 47 and 57 degrees.

22d. Some light rumblings last night. Weather cloudy this morning, and wind S.W. - The current of the river, which had frequently been observed to be more irregular than usual, now appeared to be natural, and the river free from these numerous sawyers, & planters, which had been thrown up in many places in the early part of the convulsion, and had rendered the navigation not only difficult, but dangerous. At 5 and 7 o'clock this morning a slight jar, light wind this afternoon from the north with a gentle rain. We stopped from 1 till 3 o'clock at island No. 57, on which there were no visible effects of the Earthquake, nor on the main west bank. Rainy and foggy evening - come to below council island. Mercury at 49 to degrees. 23d, high wind all night from the N. - clear morning, but the wind still too fresh for us to put off; no traces of the Earthquake. - Mercury at 32 and 43 degrees this day.

It will be sufficient to observe that upon enquiry at St. Francis river, the Arkansas, Fort M' Henry, Natchez and other places, the convulsion was less sensibly felt as we descended the river; although at Ozark Village, chimneys were aid to have been demolished and some houses injured, but at Walnut Hills nothing was felt after the 17th, and after we passed Red river, it was known by report only.

That you may form some idea of the force of the shocks from the effects which I have mentioned there to have had upon our vessel it is necessary to tell you that she is

a very strong decked barge about 85 feet in length and carrying about 60 tons. I must also tell you that our daily observations of the temperature of the air were made at sun rise and at 3 o'clock in the afternoon. With the rumbling sounds which were so frequently heard, we occasionally felt slight jars, but I have called those only shocks, which agitated our vessel considerably.

I do not feel prepared to enter into a philosophical enquiry upon the cause, its seat, or the effects of this most extraordinary and wonderful convulsion of the earth, but if we will examine and compare the facts which have been detailed, and recollect the nature of some of those productions which have been found up the Red River, and on the Missouri, we may hazard the conjecture that the effects which are now known were produced by some volcanic eruption to the N. West of the Mississippi. If this be admitted, and we consider the surface of the earth in the valley of this river as a great alluvial crust, we cannot wonder that it should be cracked and broken to pieces by such an explosion in its neighborhood. And it is not difficult to conceive that those tumuli, which have already been described, were occasioned by spouts of water, (similar to those seen to rise from the surface of the river) & that these spouts were owing to the subsidence of the heavy sections of the banks upon the adjacent water, forcing it through the less compact shores bed of the river: and this will account for the ejection of the logs and other matter from its bottom, the froth which floated on its surface. It is thought singular and unaccountable that the old trees which were thrown up, presented their roots up the river; but I think that circumstances may be easily explained by supposing that when those trees were first undermined, they carried entangled in their roots, a weight of earth sufficient to press them to the bottom - that the currents gave their tops a direction down the river - that these, by the gradual absorption of water, at length sunk to the bottom and became fixed in the mud more permanently than the more corruptible and less extensive roots - that the trunk and roots of these trees presented greater resistance to spouts of water than the open & evidently extended branches, by which the root of each tree was thrown upon the surface of the river & up borne in that position by the force of the current.

The sudden rise of the water on the morning of the 16th was most probably owing to the falling in of the banks and the contribution of water from the spouts; and from its sudden subsidence it was inferred that the severity of the convulsion had not extended far above us. - The subsequent fall of three or four feet, which was observed at the 4th Bluffs was no doubt owing to the depression of the water from the river into the low grounds swamps through the artificial Bayous, which have been spoken of.

The loud reports which were sometimes heard, were caused by the falling of the bodies of water, like that which was seen by Mr. B. After the 4th shock, for one of the same description, was seen about 20 miles below that, made by the rushing of water let in among the trees in the swamp.

My wish to be accurate in the account has perhaps, led me into unnecessary minuteness; but it is certainly very desirable that such particular information upon the subject be received from every quarter; as well as future day, compose a correct history of what may, as yet be regarded as a Phenomenon.

Davis, John, who was on a boat moored 122 km below New Madrid

<u>Davis</u>, John (122 km below New Madrid) [Otsego Herald, March 28, 1812].

Sweet Springs, February 18, 1812.

Mr. Pleasants - The following letter I received today from Capt. John Davis, of this place, and have sent you a rough draft, which if you have no previous account, please publish it in your paper. Yours respectfully,

A. Caperton

Natchez (M.T.) Jan. 5

Dr. Caperton - You have in my former letters from New Madrid, a description of my journey to that place; and on my voyage down the Mississippi to this place, I shall give you an alarming detail of an earthquake.

We arrived at night on the 15th of December, at the 25th island, and on the 16th, at ten minutes past 2 o'clock A. M., we were surprised by the greatest emotion that can possibly be supposed on the boat, which I could compare to nothing more picturesque than that of a team of horses running away with a wagon over the most rocky road in our part of the country. There were forty boats in the company, and each thought his boat was adrift and running over the sawyers, but a man on board a boat lashed to us hinted it to be an earthquake. An old navigator of the river just above us hailed us, and said it was occasioned by the banks falling in. We under a bluff bank, which immediately cast off, and fell in about a quarter of a mile, which drew us into the current on the right side of the islands, which was much the shallowest, where we stayed till day; but in the intermediate time we experienced about fifty partial shocks, which shook our boats with great agitation. At 7:12 we heard a tremendous distant noise, and in a few seconds the boats, islands, and mainland became perfectly convulsed, the trees twisted and lashed together, the earth in all quarters was sinking and the water issued from the center of the Twenty-Fifth Isle, just on our left, and came rushing down its side in torrents, and on our right there fell at once thirty or forty acres of land - some say 300 acres - but as I was then still perfectly collected, and, although then much alarmed, was less so than any person in the company. The shocks at this time became frequent at about every fifteen minutes; the water rose from the first shock till about 8 o'clock that day; seven or eight feet perpendicular, and the current ran seven or eight miles per hour, as we ran from the Twenty-Fifth Island and landed at Flour Island, a distance of thirty-five miles in five hours and twenty-five minutes, and lost half an hour endeavoring to make a landing at the lower end of Nine-Mile reach, which place and Ten-Mile reach were in perfect commotion. The logs, which had sprung up from the bottom of the river were so thick that it appeared almost impossible for a boat to find passage. There were three boats sunk, two of which belonged to Mr. Thos. Atwell, and laden from Kentucky, in value about \$3,000; the other a family boat. The logs and roots we passed had te sand and mud on them, which, probably, for many years lay in the bottom of the river, and which gave the appearance of timbered fields from the Nine to Ten mile reach, so

that it appeared as if the order of nature had been reversed. We experienced frequent shocks of earthquakes for eight days, and I have heard of no place more convulsed than where I was.

Comments:

- 1. This letter is also in Cramer, et al. (1814), pg. 179.
- 2. Davis' reference to Nine- and Ten-Mile reach is probably what Cramer collectively refers to as Long Reach.

Pierce, W.L., who was on a boat moored 117 km below New Madrid

<u>Pierce</u>, William Leigh (about 117 km below New Madrid) New York Evening Post, February 11, 1812.

> To the Editor of the New York Evening Post Big Prairie, on the Mississippi, 761 miles from N. Orleans

Dec. 25, 1811

Dear Sir,

Desirous of offering the most correct information to society at large, and contributing to some degree to the speculations of the Philosopher, I am induced to give publicity to a few remarks concerning a phenomenon of the most alarming nature. Through you, therefore, I take the liberty of addressing the world, and describing, as far as the inadequacy of my means at present will permit, the most prominent and interesting features of the events, which have recently occurred upon this portion of our western waters.

Proceeding on a tour from Pittsburgh to New Orleans, I entered the Mississippi, when it receives the waters of the Ohio, on Friday the 13th day of the month, and on the 15th, in the evening, landed on the left bank of this river, about 116 miles [about 20 km down river from Bayou River] from the mouth of the Ohio. The night was extremely dark and cloudy, not a star appeared in the heavens, and there was every appearance of a severe rain — for the three last days, indeed, the sky had been continually overcast, and the weather unusually thick and hazy.

It would not be improper to observe, that these waters are descended in a variety of small craft, but most generally in flat bottomed boats, built to serve a temporary purpose, and intended to float with the current, being supplied with oars, not so much to accelerate progress as to assist in navigating the boats, and avoiding the numerous bars, trees and other timber which greatly impede the navigation of this river. In one of these boats I had embarked — and the more effectually to guard against anticipated attacks from the savages, who are said to be at present much exasperated against the whites, several boats proceeded in company.

Precisely at 2 o'clock on Monday morning, the 16th instant, we were all alarmed by the violent and convulsive agitation of the boats, accompanied by a noise similar to that which would have been produced by running over a sand bar — every man immediately roused and rushed upon deck. — We were first of the opinion that the Indians, studious of some mischief, had loosed our cables, and thus situated we were foundering. Upon examination, however, we discovered we were yet safely and securely moored. The idea of an earthquake then suggested itself to my mind, and this idea was confirmed by a second shock, and two others in immediate succession. These continued for the space of eight minutes. So complete and general had been the convulsion, that a tremendous motion was communicated to the very leaves on the surface of the earth. A few yards from where we lay, the body of a large oak was snapped in two, and the falling part precipitated to the margin of the river; the trees in the forest shook like rushes; the alarming clattering of their branches may be compared to the effect which would be produced by a severe wind passing through a large cane brake.

Exposed to the most unpleasant alternative, we were compelled to remain where we were for the night, or subject ourselves to imminent hazard in navigating through the innumerable obstructions in the river; considering the danger of running two-fold, we concluded to remain. At the dawn of the day I went on shore to examine the effects of the shocks; the earth about 20 feet from the water's edge was deeply cracked, but no visible injury of moment had been sustained; fearing, however, to remain longer where we were, it was thought much advisable to leave our landing as expeditiously as possible; this was immediate done — at a few rods distance from the shore, we experienced a fifth shock, more severe than either of the preceding. I had expected this from the souring appearance of the weather, it was indeed most providential that we had started, for such was the strength of this last shock, that the bank to which we were (but a few moments since) attached, was rent and fell into the river, whilst the trees rushed from the forest, precipitating themselves into the water with a force sufficient to have dashed us into a thousand atoms.

It was now light, and we had an opportunity of beholding, in full extent, all of the horrors of our situation. During the first four shocks, tremendous and uninterrupted explosions, resembling a discharge of artillery, was heard from the opposite shore; at that time I imported them to the falling of the river banks. This fifth shock explained the real cause. Wherever the veins of the earth ran, there was a volcanic discharge of combustible matter to a great height, as incessant rumbling was heard below, and the bed of the river was excessively agitated, whilst the water assumed a turbid and boiling appearance — near out boat a spout of confined air, breaking its way through the waters, burst forth, and with a loud report discharged mud, sticks, &c, from the river's bed, at least thirty feet above the surface. These spoutings were frequent, and in many places appeared to rise to the very Heavens, - - - Large trees, which had lain for the ages at the bottom of the river, were shot up in thousands of instances, some with their roots uppermost and their tops planted; others were hurled into the air; many again were only loosened, and floating upon the surface. Never was a scene more replete with terrific threatenings of death; with the most lively sense of this awful crisis, we

contemplated in mute astonishment a scene which completely beggars all description and of which the most glowing imagination is inadequate to form a picture. Here the earth, river, &c. torn with furious convulsions, opened in huge trenches, whose deep jaws were instantaneously closed: there a thousand vents sulfurous streams gushed from its very bowels, leaving vast and almost unfathomable caverns. Everywhere nature itself seemed tottering on the verge of dissolution. Encompassed with the most alarming dangers, the manly presence of mind and heroic fortitude of the men were all that saved them. It was a struggle for existence itself, and made (illegible) to be purchased was our lives.

During the day there was, with very little intermission, a continued series of shocks, attended with innumerable explosions like the rolling thunder; the bed of the river was incessantly disturbed, and the water boiled severely in every part; I consider ourselves as having been in the greatest danger from the numerous instances of boiling directly under our boats; fortunately for us, however, they were not attended with eruptions. One of the spouts which we had seen rising under the boat would inevitably sunk it, and probably have blown it into a thousand fragments; our ears were continually assailed with the crashing of timber, the banks were instantaneously crushed down, and fell with all their growth into the water. It was no less alarming than astonishing, to behold the oldest trees of the forest, whose firm roots withstood a thousand storms, and weathered the sternest tempests, quivering and shaking with the violence of the shocks, whilst their heads were whipped together with a quick and rapid motion; many were torn from their native soil, and hurled with tremendous force into the river; one of these whose huge trunk (at least 3 feet in diameter) had been much shattered, was thrown better than a hundred yards from the bank, where it is planted into the bed of the river, there to stand, a terror to future navigators.

Several small islands have been already annihilated, and from appearances many others must suffer the same fate. To one of these, I ventured ina skiff, but it was impossible to examine it, for the ground sunk from my tread, and the least force applied to any part of it seemed to shake the whole.

Anxious to obtain landing, and dreading the high banks, we made for an island which evidence sensible marks of the earthquake; here we fastened to some willows, at the extremity of a sunken piece of land, and continued two days, hoping that this scene of horrors was near over — still, however, the shocks continued, though not with the same frequency as before.

On Wednesday [Dec. 18], in the afternoon, I visited every part of the island where we lay. It was extensive, and partially covered with willow. The earthquake had rent the ground in large and numerous gaps; vast quantities of burnt wood in every stage of alteration, and from its primitive nature to stove coal, had been spread over the ground to very considerable distances; frightful and hideous caverns yawned on every side, and the earth's bowels appeared to have felt the tremendous force of the shocks which had thus river the surface. I was gratified with seeing several places where those spouts which had so much attracted our wonder and admiration had arisen; they were generally on the beach; and left large circular holes in the sand, formed much like a funnel. For a great distance around the orifice, vast quantities of coal have been

scattered, many pieces weighting from 15 to 20 lbs. were discharged 160 measured paces — These holes were of various dimensions; one of them I observed most particularly, it was 16 feet in perpendicular depth, and 63 feet in circumference at the mouth.

On Thursday morning, the 19th, we loosed our cables, with hearts filled with fervent gratitude to Providence, whose protection had supported us through the perils to which we had been exposed.

As we descended the river everything was scene of ruin and devastation; where a short time since the Mississippi rolled its waters in a calm and placid current, now subterranean forests had been ushered into existence, and raise their heads, hard and black as ebony, above the surface of the water, whose power has been so wonderfully increased, that strength and skill are equally baffled. Our boat was borne down by an irresistible impulse, and fortunately escaped uninjured; we passed thousands of acres of land which had been cleft from the main shore and tumbled into the water, leaving their growth waving above the surface. In many places single trees, and whole brakes of cane, had slipped into the river. A singular instance of this kind peculiarly attracted my observation; a large sycamore had slipped from its station on the bank, and had so admirably preserved its equilibrium, that it was been left standing erect in the river, immersed in about 10 feet, and has every appearance of having originally grown there.

The shocks I conceive were the most sensibly experienced upon the islands, and numbers of them have been much shattered, for I observed where the stratum of earth was fairest, it did not crack, but undulated excessively. At Fort Pickering in the extremity of the fourth Chickasaw Bluff, and 242 miles from the mouth of the Ohio, the land is strong and high; here however, the earth was extremely agitated, and the block-house, which is almost a solid mass of hewn timber, trembled like the aspen leaf.

The obstructions in this river, which have always been quite numerous, are no so considerably increased as to demand the utmost prudence and caution from subsequent navigators. Indeed I am very apprehensive that it will be almost impassable I flood waters; for until such time it will be impossible to say where the currents will hereafter run, what portion (if any) of the present embarrassments will be destroyed, and what new sand bar, &c. may yet be caused by this portentous phenomenon. --- Many poor fellows are undoubtedly wrecked, or hurled under the ruin of the banks. Of the loss of four boats I am certain.

It is almost impossible to trace, at present, the exact course of the earthquake, or where the greatest injuries have happened. From numerous enquiries, however, which I have made of persons above and below us at the time of the first shock, I am induced to believe that we were very nearly at the height of it. The ruin immediately in the vicinity of the river is most extensive on the right side in descending. For the first two days the veins appeared to run due course from W. to E. afterwards they became more variable, and generally took a N. W. direction.

At New Madrid, 70 miles from the influence of the Ohio, and on the right side, the utmost consternation prevailed among the inhabitants: confusion, terror and uproar presided; those in the town were running for refuge to the country, whilst those in the

country fled with purpose towards the town. I m happy however, to observe, that no material injury has been sustained.

At Little Prairie, 103 miles from the same point, the shocks appear to have been more violent, and were attended with severe apprehensions. The town was deserted by its inhabitants, and not a single person was left but an old negro man, probably too infirm to fly; everyone appeared to consider the woods and hills most safe, and in these confidence was reposed. Distressing, however, are the outlines of such a picture, the latest accounts are not calculated to increase apprehensions. Several chimneys were destroyed, and much land sunk, no lives, however, have been lost.

A little below Bayou River, 103 miles from the same point, and 130 miles from the spot where we lay, the ruin begins extensive and general.

At Long Reach, 146 miles, there is on continued forest of roots and trees, which have been ejected from the bed of the river.

At the near Flour Island, 174 miles, the destruction has been very great, and the impediments in the river much increased.

At the Devil's Race ground, 193 miles, an immense number of very large trees have been thrown up, and the river is nearly impassable. The Devil's Elbow, 214 miles, is in the same predicament; below this the ruin is much less, and indeed no material traces of the earthquake are discoverable.

The western country must suffer much from this dreadful scourge; its effects will I fear be more lasting than the fond hopes of the inhabitants in this section of the union may at present conceive. What have already been the interior injuries I cannot say. My opinion is, that they are inferior in extent and effect.

The continuance of this earthquake must render it conspicuous in the pages of the Historians, as one of the longest that has ever occurred. From the time that the first shock was felt, at 2 o'clock on the morning of the 16th, until the last shock, at the same time in the morning of the 23rd, was 168 hours. Nothing could have exceeded the alarm of the aquatic fowl: they were extremely noisy and confused, flying in every direction, without pursuing any determinant course. The few Indians who were on the Banks of the river, have been excessively alarmed and terrified. All nature indeed seemed to sympathize in the commotion which agitated the earth. The sun rarely shot a ray through the heavens. The sky was clouded, and a dreary darkness brooded over the whole face of the creation. The stars were encircled with a pale light, and the Comet appeared hazy and dim. - - - The weather was incessantly varying from oppressive heat to severe cold, and during many of the shocks some rain fell.

I subjoin the ensuing table of the shocks, with the exact order of time in which they occurred, as extracted from my minutes.

16th December - the first shock followed by 3 others at two o'clock in the morning. 7 A.M. happened a very severe shock - 8, nine shocks in quick succession - 9, three more shocks - 10 minutes after 11, one shock - 25 after 11, another - 5 after 12, a violent shock - 25 after 1 P.M., another - 31 after 1, a long and violent shock - 42 after 1, a shock - 10 after 5, a very severe shock - 42 after 5, a shock - 10 before 6 do. - 15 after 7 do. - 35 after 7 do. - 10 0f 8 do. - 5 after 8 do. -5 of 9 do. - 25 after 9 do. - 20 of 10 do. - 15 of 10 do. -10 of 10 do. - 15 to 20 of 11, three do. - 12 of 11, great shock -28

after 11, severe shock. 17th December, 30 minutes after 5, a shock - 5 in the morning, a great and awful shock followed, with 3 others; 5 after 12 meridian, a long and dreadful shock, appearances extremely threatening; 18 after 11 P.M. two severe shocks - 24 after 11 a shock - 26 after 11 do. - 35 after 11 do. - 48 after 11 do. 18th December, 17 minutes of 3, A.M. a shock; 17 after 3 do. - 30 after 3 do. - 5 of 4 do. - 10 after 5 do. - 35 after 5 do. Severe - 5 after 6 do. - 45 after 6 do. - 7of 8 do. - 10 after 12 meridian - 10 after 1 P.M. do. - 25 after 2 do. severe - 30 after 2, five shocks in succession - 3 o'clock, a shock - 15 minutes after 3 do. Severe - 43 after 4 do. - 8 after 10 do. - 10 after 11 do. very severe. 19th December, 30 minutes after 5 A.M. 4 shocks in quick succession - 17 0f 9 severe shock - 30 after 1 P.M., a shock - 17 of 2 do. - 30 after 8 do. - 30 after 9 do. - 30 after 11 do. 20th December, 30 minutes after 9 A.M. a shock - 10 after 11, a long and tremendous shock. 21st December, several reports of shock or distant thunder were heard. 22nd December, 11 o'clock A.M. a slight shock. 23rd December at 2 in the morning a very severe shock.

Thus we observe that there were in the space of time mentioned before, eightynine shocks - it is hardly possible to conceive the convulsion which they created, and I assure you I believe that there were many of these shocks, which had they followed in quick succession were sufficient to shake into atoms the firmest edifies which art ever devised.

I landed often, and on the same shore, as well as on several islands, found evident traces of prior eruptions, all of which seem to [illegible] an opinion that the river was formed by some great earthquake - - - to me indeed the bed appears to posses every necessary ingredient, nor have I a doubt but that there are at the bottom of the river strata upon strata of volcanic matter. The great quantities of combustible matter, which are undoubtedly there deposited, tend to render a convulsive of this kind extremely alarming, at least, however, the bed of timber and trees interwoven and firmly matted together at the bottom of the Mississippi, are tolerable correct data from which may be presumed the prior nature, of the land. The trees are similar to the growth upon the banks, and why may not an inference be drawn that some tremendous agitation of nature has rent this once a continued forest, and given birth to a great and noble stream. There are many direct and collateral facts which may be adduced to establish the point, and which require time and investigation to collect and apply.

It is a circumstance well worthy of remark, that during the late convulsions the current of the river was almost instantaneously and rapidly increased. In times of the highest floods, it rates from 4 to 5 knots per hour. The water is now low, and when we stopped on the 16th inst. at half after 4 P.M. we had then run from the morning 52 miles, rating at 6 knots generally. This current was increased for two days, and then fell to its usual force. It is also singular that the water has fallen with astonishing rapidity. The most probable and easy solution of this fact, which presented itself to my mind, was, that the strength of the Mississippi current was greater than the tributary streams could support. Either this must have been the case, or some division of waters above has occurred, destruction below has created some great basin or reservoir for the [illegible] of the main body of water. The latter presumption I apprehend cannot be correct, as our progress towards the mouth of this river is marked with little or no injury.

Thus, my dear sir, I have given you a superficial account of this awful phenomenon; not so much to convey instruction upon a very interesting subject, as to gratify the curiosity of the public to so remarkable an event. At some more convenient season it is my intention, from the facts which I had the opportunity of collecting, to canvas the subject more in detail; you are therefore at liberty to make whatever use you please of this brief sketch; and publish the whole, or extract such parts as you may deem best adapted.

Should other interesting circumstance occur relative to this phenomenon, I will do myself the pleasure of mailing you another communication.

With much respect, I am sir your obedient servant, William Leigh Pierce

Comment: Since Pierce was 116 miles (190 km) below the mouth of the Ohio on the evening of Dec. 16, 1811, his comments about New Madrid (113 km) and Little Prairie (166 km) and other locations along the Mississippi upriver of his position on the 15th, must be based on second-hand accounts.

Comment about an account by an unidentified individual in the Winthrope Sargent papers

Comment: In the Winthrope Sargent papers of the Massachusetts is an account of the New Madrid earthquakes written by an unidentified individual, an account that is very similar to that of Pierce's. The unidentified individual was on a boat that was moored at the same places Pierce's on Dec. 15 and Dec. 16, and the author describes the same willow island and observations, although there are slight differences in the times of the earthquakes. The unidentified individual was probably someone who was in company with Pierce at the time of the earthquake.

The call number of the account of the unidentified individual is MS. -877, Microfilm Call Number P-28, 7 reels. The account is copyrighted and cannot be reproduced without permission of the Massachusetts Historical Society.

<u>Pierce</u>, William Leigh, New York Evening Post

Dear Sir,

Agreeably to my promise, in the last communication which I had the pleasure of making you, I present a further detail of the late earthquake.

Its range appears to have been by no means confined to the Mississippi. It was felt to some degree throughout the Indiana Territory, and the states of Ohio, Kentucky and Tennessee. I have conversed with gentlemen from Louisville and Lexington (in Kentucky), who state that it was severe in both of those places. At the latter, indeed, it continued for 12 days, and did some inconsiderable injury to several dwellings. From thence it ranged the Ohio River, increasing in force until it entered the Mississippi, and

extending down the river to Natchez, and probably a little lower. Beyond this it was not perceived.

It is a singular, but well authenticated fact, that in several places on the Mississippi, where the shocks were most severe, the earth was rent (as it were) by two distinct processes. By one that burst asunder, and instantaneously closed, leaving no traces whatever of the shock; by the other it was a rent, and an elective flash ran along the surface, tearing the earth to pieces in its progress. - - - The last were generally attended with the explosion, and streams of matter, in a liquid state, gushed from the gaps which were left open when the shock subsided, and were in many instances of an immense depth.

It is also reported through the medium of some Indians, from the country adjacent to the Washita, who arrived a few days since at the Walnut Hills, some distance above Natchez, that the Burning Mountain, up the Wichita River, had a rent to its base. This information I received from a settler at the Hills, and his appearance was such as to attach credit to his information. - - - Your obedient servant.

W. L. Pierce

Bradbury, John, who was on a boat moored 311 km below the mouth of the Ohio River

<u>Bradbury</u>, John (1819). (about 311 km below the mouth of the Ohio River) Travels in the Interior of North America in the Years of 1809, 1810, and 1811, London (beginning on page 203)

In the evening we came in view of a dangerous part of the river, called by the Americans the Devil's Channel, and by the French Chenal du Diable. It appears to be caused by a bank that crosses the river in this place, which renders it shallow. On this bank a great number of trees have lodged; and, on account of the shallowness of the river, a considerable portion of the branches are raised above the surface; through these the water rushes with such impetuosity as to be heard at the distance of some miles.

As it would require every effort of skill and exertion to pass through this channel in safety, and as the sun had set, I resolved to wait until morning, and caused the boat to be moored to a small island, about five hundred yards above the entrance into the channel. After supper we went to sleep as usual; and in the night, about ten o'clock, I was awakened by a most tremendous noise, accompanied by so violent agitation of the boat that it appeared in danger of upsetting. Before I could quit the bed, or rather the skin, upon which I lay, the four men who slept in the other cabin rushed in and cried out in the greatest terror, "O mon Dieu! Monsieur Bradbury, qu'est ce qu;il y a?" I passed them with some difficulty, and ran to the door of the cabin, where I could distinctly see the river agitated as if by a storm; I could distinctly hear the crash of falling trees, and

the screaming of the wild fowl on the river, but found that the boat was still safe at her moorings. I was followed by the men and the *patron*, who, in accents of terror, were still enquiring what it was: I tried to calm them by saying, "Restez vous tranquil, c'est un tremblement de terre," which term they did not seem to understand.

By the time we could get to our fire, which was on a large flag, in the stern of the boat, the shock had ceased; but immediately the perpendicular banks, both above and below us, began to fall in the river in such vast masses, as nearly to sink our boat by the swell that occasioned; and our *patron*, who seemed more terrified than even the men, began to cry out, "O mon Dieu! nous perirous!" and "Allons a terre! Allons a terre!" As I found Mr. Bridge the only one who seemed to retain any presence of mind, we consulted together, and agreed to send two of the men with a candle up the bank, in order examine if it had separated from the island, a circumstance that we suspected, from the island, a circumstance that we suspected, from hearing the snapping of the limbs of some drift trees, which were deposited between the margin of the river and summit of the bank. The men, on arriving at the edge of the river, cried out, "Venez a terre! Venez a terre!" and told us there was a fire, and desired Mr. Bridge and the patron to follow them; as it now occurred to me that the preservation of the boat in a great measure depended on the depth of the river, I tried with a sounding pole, and to my great joy, found it did not exceed eight or ten feet.

Immediately after the shock we observed the time, and found it was near two o'clock. At about nearly half-past two, I resolved to go ashore myself, but whilst I was securing some papers and money, by taking them out of trunks, another shock came. terrible indeed, but not equal to the first. Morin my patron, called out from the island, "Monsieur Bradbury! Savuez vous, sauvez vous!" I went ashore, and found the really frightful [chasm], being not less than four feet in width, and the bank had sunk at least two feet. I took the candle to examine its length, and concluded that it could not less than eighty yards: and at each end, the banks had fallen into the river. I now saw clearly that our lives and been saved by the boat being moored to a sloping bank. Before we completed our fire, we had two more shocks, and others occurred during the whole night, at intervals of from six to ten minutes, but they were slight in comparison to the first and second. At four o'clock I took a candle, and again examined the bank, and perceived to my great satisfaction that no material alteration had taken place; I also found the boat safe, and secured my pocket compass. I had already noticed that the sound which was heard at the time of every shock, always preceded it by at least a second, and it uniformly came from the same point, and went off in the opposite direction. I now found that the shock came a little from the north westward of east, and preceded to the westward. At daylight we had counted twenty-seven shocks during our stay on the island, but still found the chasm so that it might be passed. The river was covered with foam and drift timber, and had risen considerably, but our boat was safe. Whilst we were waiting till the light became sufficient for us to embark, two canoes floated down the river, and in one we saw some Indian corn and clothes. We considered this as melancholy proof that some of the boats we passed the preceding day had perished. Our conjectures were afterwards confirmed, as we learned that three had been overwhelmed, and that all on board had perished. When daylight appeared to be sufficient for us, I gave orders to embark, and we all went on board. Two men were in the act of loosening the fastenings, when the occurred nearly equal to the first in violence. The men ran up the bank, to save themselves on the island, but before they could get over the chasm, a tree fell close to them and stopped their progress. As the bank appeared to me to be moving rapidly into the river, I called out to the men in the boat, "Coupez les cordes!" on hearing which, the two men ran down the bank, loosed the cords, and jumped into the boat. We were again on the river; the Chenal du Diable was in sight, but it appeared absolutely impassable, from the quantity of trees and drift wood that had lodged during the night against the planters fixed to the bottom of the river; and in addition to our difficulties, the patron and the men appeared to be so terrified and confused, as to be almost incapable of action. Previous to passing the channel, I stopped that the men might have time to become more composed. I had the goo fortune to discover a bank, rising with a gentle slope, where we again moored, and prepared a breakfast on the island. Whilst that was preparing, I walked out in company with Morin, our patron, to view the channel, to ascertain the safest part, which we soon agreed upon, whilst we were thus employed, we experienced a severe shock, and I found some difficulty in preserving ourselves from being thrown down; another occurred during the time we were at breakfast, and a third as we were preparing to re-embark. In the last, Mr. Bridge, who was standing within the declivity of the bank, narrowly escaped being thrown into the river, as the sand continued to give way under his feet. Observing that the men were still very much under the influence of terror, I desired Morin to give to each of them a glass of spirits, and reminding them that their safety depended on their exertions, we pushed out into the river. The danger we had now to encounter was of a nature which they understood; the nearer we approached it, the more confidence they appeared to gain; and indeed, all their strength, and all the skill of Morin, was necessary; for there being no direct channel through the trees, we were several times under the necessity of changing our course in the space of a few seconds, and that so instantaneously, as not to leave a moment for deliberation. Immediately after we cleared all danger, the men dropped their oars, crossed themselves, than gave a shout, which was followed by mutual congratulations on their safety.

We continued on the river until eleven o'clock, when there was another violent shock, which seemed to affect us as sensibly as if we had been on land. The trees on both sides of the river were most violently agitated, and the banks in several places fell in, within our view, carrying with them innumerable trees, the crash of which falling into the river, mixed with terrible sound attending the shock, and screaming of the geese and other wild fowl, produced an idea that all nature was in a state of dissolution. During the shock, the river had been much agitated, and the men became anxious to go ashore; my opinion was, that we were much better on the river; but finding that they laid down their oars, and that they seemed determined to quit the boat for the present, we looked out for a part of the river where we might moor in security, and having found one, we stopped during the remainder of the day.

At three o'clock, another canoe passed us adrift on the river. We did not experience any more shock until the morning of the 17th, when two occurred; one about twelve this day, had a severe shock, of very long duration. About four o'clock we came

in sight of a log house [had to be on the west side of the river], a little above the Lower Chickasaw bluffs. More than twenty people came out as soon as they discovered us, and when within hearing, earnestly entreated us to come ashore. I found them almost distracted with fear, and that they were composed of several families, who had collected to pray together. On entering the house, I saw a bible lying on the table. They informed me that the greatest part of the inhabitants in the neighborhood had fled to the hills, on the opposite side of the river, for safety, and that during the shock, about sun-rise on the 16th, a chasm had opened on the sand bar opposite the bluffs below, and on closing again, had thrown the water to the height of a tall tree. They also affirmed that the earth opened in several places back from the river. One of the men, one of the men who appeared to be considered as possessing more knowledge than the rest, entered into an explanation of the cause, and attributed it to the comet that had appeared a few months before, which he described as having to horns, over one which the earth rolled, and was not lodged betwixt them; that the shocks were occasioned by the attempts made by the earth to surmount the other horn. If this should be accomplished, all would be well, if otherwise, inevitable destruction to the world would follow. Finding him confident in his hypothesis, and myself unable to refute it, I did not dispute the point, and we went on about a mile further. Only one shock occurred this night, at half past seven o'clock. On the morning of the 18th, we had two shocks, one betwixt three and four o'clock, and the other at six. At noon, there was a violent one of very long duration, which threw a great number of trees into the river within our view, and in the evening, two slight shocks more, one at six, and the other at nine o'clock.

- 19th. We arrived at the mouth of the river St. Francis, and had only one shock, which happened at eleven at night.
- 20th. Detained by fog, and experienced only two shocks, one at five, the other at seven in the evening.
- 21st. Awakened by a shock at half past four o'clock; this was the last, it was not violent, but it lasted for nearly a minute.

On the 24th in the evening, we saw a smoke, and knowing that there were no inhabitants on this part of the river, we made towards it, and found it to be the camp of a few Choctaw Indians, from whom we purchased a swan, for five balls and five loads of powder.

25th. - Monsieur Longpre overtook us, and we encamped together for the evening. He was about two hundred miles from us on the 15th, by the course of the river, where the earthquakes had also been terrible. It appeared from his account, that at New Madrid the shock had been extremely violent; the greatest part of the houses had been rendered uninhabitable, although, being constructed of timber and framed together, they were better calculated to withstand the shocks than buildings of brick or stone. The greatest part of the plain on which the town was situated has become a lake, and the houses were deserted.

2. Accounts by individuals traveling down the Mississippi River at the time of the February 7, 1812, earthquake

Speed, M., who was on a boat moored at Island No. 9 that is a few miles above New Madrid

<u>Speed, Mathias, M.</u> (at island 9, a few miles above New Madrid) [*Pennsylvania Gazette*, March 18, 1812]

Earthquake From the Bardstown Repository

Sir- - The effects produced on the Mississippi, by the Earthquake on the 7th of February, are so great as to render it highly interesting to the community in general, and more particularly so at this crises when so many of our fellow citizens are about to adventure down that river. Under this impression I have procured the enclosed written statement of Mathias M. Speed, just returned from New Madrid, with a view of giving it publication thru' the medium of your paper. The account I am told is substantially corroborated by another man, who passed through Bardstown a few days ago. I am, very respectively, your humble servant,

Tho. Speed, (March 3d, 1812)

In descending the Mississippi, on the night of 6th February, we tied our boat to a willow bar on the west bank of the river, opposite the head of the 9th island (counting from the mouth of the Ohio), we were lashed to another boat. About 3 o'clock, on the morning of the 7th, we were waked by the violent agitation of the boat, attended with a noise more tremendous and terrific than I can describe or anyone can conceive, who was not present or near to such a scene. The constant discharge of heavy cannon might give some idea of the noise for loudness, but this was infinitely more terrible, an account of its appearing to be subterraneous.

As soon as we waked we discovered that the bar to which we were tied was sinking, we cut loose and moved our boats for the middle of the river. After getting out so far as to be out of danger from the trees which were falling in from the bank - - the swells in the river was so great as to threaten the sinking of the boat every moment. We stopped the outholes with blankets to keep out the water - - after remaining in this situation for some time, we perceived a light in the shore which we had left - (we having a lighted candle in a lantern on our boat,) were hailed and advised to land, which we attempted to do, but could not effect it, finding the banks and trees still falling in.

At day light we perceived the head of the tenth island. During all this time we had made only about four miles down the river - - from which circumstance, and from the immense quantity of water rushing into the river from the woods - - it is evident that the earth at this place, or below, had been raised so high as to stop the progress of the river, and caused it to overflow its banks - - We took the right hand channel of the river of this island, and having reached within about half a mile of the lower end of the town [New Madrid], we were affrightened with the appearance of a dreadful rapid of falls in

the river just below us; we were so far in shock that it was impossible now to land - - all hopes of surviving was now lost and certain destruction appeared to await us; We having passed the rapids without injury, keeping our bow foremost, both boats being still lashed together.

As we passed the point on the left hand below the island, the bank and trees were rapidly falling in. From the state of the alarm I was in at the time, I cannot pretend to be correct as to the length or height of the falls; but my impression is, that they were about equal to the rapids of the Ohio [Louisville, Ky.]. As we passed the lower point of the island, looking back, up the left channel, we thought the falls extended higher up river on that side than the other.

The water of the river, after it was fairly light, appeared to be almost black, with something like the dust of stone coal - - We landed at New Madrid about breakfast time, without having experienced any injury - - The appearance of the town, and the situation of the inhabitants, were such as to afford but little relief to our minds. The former elevation of the bank on which the town stood was estimated by the inhabitants at almost 25 feet above common water; when we reached it the elevation was only about 12 or 13 feet - - There was scarcely a house left entire - - some wholly prostrated, others unroofed and not a chimney standing - - the people all having deserted their habitations, were in camps and tents back of town, and their little water crafts, such as skiffs, boats and canoes, handed out of the water to their camps, that they might be ready in case the country should sink.

I remained at New Madrid from the 7th till the 12th, during which time I think shocks of earthquakes were experienced every 15 or 20 minutes - - those shocks were all attended with a rumbling noise, resembling distant thunder from the southwest, varying in report according to the force of the shock. When I left the place, the surface of the earth was very little, if any, above the tops of the boats in the water.

There was one boat coming down on the same morning I landed; when they came in sight of the falls, the crew were so frightened at the prospect, that they abandoned their boat and made for the island in their canoe - - two were left on the island, and two made for the west bank in the canoe - - about the time of their landing, they saw that the island was violently convulsed - - one of the men on the island threw himself into the river to save himself by swimming - - one of the men from the shore met him with the canoe and saved him. - - This man gave such an account of the convulsion of the island, that neither of the three dared to venture back for the remaining man. The three reached New Madrid by land.

The man remained on the island from Friday morning until Sunday evening, when he was taken off by a canoe sent from a boat coming down. I was several days in the company with this man - - he stated that during his stay on the island, there were frequent eruptions, in which sand and stone, coal and water were thrown up. - - The violent agitation of the ground was such at one time as induced him to hold a tree to support himself; the earth gave away at that place, and he with the tree sank down, and he got wounded in the fall. - - The fissure was so deep as to put it out of his power to get out at that place - - he made his way along the fissure until a sloping slide offered him an opportunity of crawling out. He states that frequent lights appeared - - that in on

instance, after one of the explosions near where he stood, he approached the hole from which the coal and land had been thrown up, which was now filled with water, and on putting his hand into it he found it was warm.

During my stay at New Madrid there were upwards of twenty boats landed, all of whom spoke of the rapids above, and conceived of it as I had done.

Several persons, who came up the river in a small barge, represented that there were other falls in the Mississippi, about 7 miles below New Madrid, principally on the eastern side - - more dangerous than those above - - and that some boats had certainly been lost in attempting to pass them - - but they thought it was practicable to pass by keeping close to the western shore.

From what I had seen and heard I was deterred from proceeding further, and nearly gave away what property I had. On my return by land up the right side of the river, I found the surface of the earth for 10 or 12 miles cracked and in numberless places, running in different directions - - some of which were bridged and some filled with logs to make them passable - - others were so side that they were obliged to be surrounded. In some of these cracks the earth sank on one side from the level to the distance of five feet, and one to three feet there was water in the distance of five feet, and from one to three feet there was water in most of them. Above this the cracks were not so numerous nor so great - - but the inhabitants have generally left their dwellings and gone to higher grounds.

Nothing appeared to have issued from the cracks but where there was sand and stone coal, they seem to have been thrown up from holes; in most of those, which varied in size, there was water standing. In the town of New Madrid there were four, but neither of them had vented stone or sand - - the size of them, in diameter, varied from 12 to 50 feet, and in depth from 5 to 10 feet from the surface to the water. In traveling out of New Madrid those were frequent, and were to be seen in different places, as high as Fort Massac, in the Ohio.

MATHIAS M. SPEED (Jefferson County [Ky.], March 2, 1812)

Shaler, W., who was on a boat moored 13 miles above New Madrid

<u>Shaler</u>, W., February 7, 1812 *in*, S.L. Mitchill (1815), pg. 300.

Dear Sir:

Knowing the interest you take in all natural events, I do myself the pleasure to communicate to you the following simple account of the late earthquake, as I received it from the patron of a Kentucky boat lately arrived here. On the 7th of last February, at 3 A.M., being moored to the bank of the Mississippi, about thirteen above New Madrid, he was awakened by a tremendous roaring noise, felt his vessel violently shaken, and observed the trees over the bank falling in every direction, and agitated like reeds on a windy day, and many sparks of fire emitted from the earth. He immediately cut his cable and put off into the middle of the river, where he soon found the current changed, and the boat hurried up, for the space of a minute, with the velocity of the swiftest horse; he

was obliged to hold his hand to his head to keep his hat on. On the current's running of its natural course, which it did gradually, he continued to proceed down the river, and at about daylight, he came to a most terrible fall, which, he thinks, was at least six feet perpendicular, extending across the river, and about a half a mile wide. The whirls and rippling of the rapid were such that his vessel was altogether unmanageable, and the destruction seemed inevitable; some of the former he thinks were, at least, thirty feet deep, and seemed to be formed by the water's being violently sucked into some chasm in the river's bottom. He and his men were constantly employed in pumping and bailing, by which, with the aid of Providence, he says, he got safe through! As soon as he was able to look around, he observed whole forests on each bank fall prostrate, to use his own comparison, like soldiers grounding their arms at the word of command. On his arrival at New Madrid he found that place a complete wreck, sunk about twelve feet below its level, and entirely deserted; its inhabitants, with those of the adjacent country, who had fled there for refuge, were encamped in its neighborhood; he represents their cries as truly distressing. A large boat loaded with five hundred barrels of flour, and other articles, was split from end to end, and turned upside down at the bank. Of nearly thirty loaded boats only this and one more escaped destruction; the water ran twelve feet perpendicular, and threw many of them a great many rods on shore; several lives were lost among the boatmen. Another fall was formed about eight miles below the town, similar to the one above, the roaring of which he could distinctly hear at New Madrid. He waited five days for the fall to wear away; during that time the earth was constantly trembling, at intervals of about five minutes. He observed many fissures in the earth below the town, five or six feet wide, extending in length out of sight, and one side several feet lower than the other. On the fifth day he passed the lower fall which had worn away to a practicable rapid. He felt a succession of shocks of earthquake until he came down to Flam island. He spoke of many physical changes in the river, particularly a great multiplication of sawyers, but he does not describe them with sufficient accuracy to enable me to give you an account of them.

I have also seen several persons who passed New Madrid on the 20th of February; they report that the earth still continued to tremble there, at that time. The falls had worn away to smooth rapids.

With very great respect and esteem I am, Dear Sir, your very humble servant,
W. Shaler

3. The effects of the earthquakes along the Mississippi River as described by travelers who descended the river after the main events of 1811-1812

Austin, Stephen, Diary of ...

<u>Austin</u>, Stephen, STEPHEN F, AUSTIN'S DIARY, May 17-19, 1812; Annual Report of the American Historical Association for the year 1919 (1924)

This is one of the (wor)st Eddies in the River (and) aught carefully to be guarded against by hug(ging) the left shore very close, the River turns short to the left and opens very wide immediately below the Eddy forms itself into two currents which are divided by an Island the left being the Main channel in low water but the right the nearest and best in flood.

The navigation from Cape Girardeau is very good - except at the Grand Tower where the upmost caution should (be used) the Current being both (swift) and furious. It is best (to) pass as near the Tower as you can with safety - James Rich settled on the right bank at this place - Cape Girardeau where landed on the 17th is a flourishing little Place situated most delightfully on an eminence which command a fine view of the river, this place has another most fertile tract of country Back of it, in that country which is filling up very fast with emigrants from the neighboring States, and bids fair one day to become a Rich and flourishing place-

The Earthquakes were felt severely here having t(h)rown down, or cracked every chimney in the place and Ruined two handsome brick Buildings which were not quite finished -

Left the Cape on the 18 and pass the settlement at Tiwappita which is very considerable on the right Bank - at the Lower and of the settlement took leave of the last high land which appears on the Right Bank of the River from this place to Balize landed near the mouth of the Ohio on the Right Bank - the next day pass by the mouth of the Ohio and stop a few hours at Birds to get some vegetables &c found them very obliging and hospitable, while I lay there a chorsu pass by from Pittsburgh - and put off just as the second one was coming out of the Ohio with which we floated in company the Balance of the day she was from Marietta. The Mississippi is not as wide nor by any means has so beautiful and Majestic appearance as the Ohio has at their junction had a short glimpse of the clear pellucid water of the Ohio as I pass between the two currents which however only serve to heighten the thick muddy appearance of the Mississippi by the forcible contrast which the approximation of the two water presented.

The settlements from the mouth of the Ohio are very thin and wretched the land on the Right shore being so low and swampy as to be unfit for cultivation and that of the left belonging to the Chickasha nation of Indians - made a good landing about sundown

on Wolf Island at house of Mr. Hunter, who was rather <u>More</u> than hospitable being anxious to reclaim by hi acts of apparently disinterested hospitability, that the character which some of his deeds whil living near N. Madrid had render suspitious,

The next day the 19th landed at N. Madrid.

The Philanthropic emotions of the soul are never more powerfully exercised then when called on (to) witness some great and general calamity originating in the cupidity and oppression of Governments which envolves the defenseless Subject in Misery and want and even renders his Precarious, or in the wise Dispensations of Providence who withholding the ordinary aid in bring the maturity the natural productions of the husbanman with Famine or putting in motion and terrible engines of his Power and by extraordinary convulsions throwing a hitherto country into dessolation and plunging such of the unfortunate wretches who survive the ruin, into Misery and disrepair.

These emotions I experienced when on landing at N. Madrid the effects of the Earthquake were so prominently visible as well as in the sunken and shattered situation of the Houses, as in the countenance of the few who remained to mourn over the ruins of their prosperity and past happiness As I view the present situation of this place and reflected on the cause which desolated it I could not refrain from having a sigh at its departed prosperity and at the same time from regarding fearful astonishment the Force of a Power sufficient thus to agitate the Earth.

The effects of the Earthquake began to be visible about 20 miles above this place by the shattered state of Bank of the River. 6 miles above this place the Bed of the River rose on the night of the 7 Feb. The most severe shock which has been felt, and formed a kind of a falls very similar to the falls of Ohio, and re(n)dered the navigation very dangerous until the spring floods had wash it away being only sand. There were a number of boats lost at this place, and may lives. The Banks are much shattered and sunken from this place to N.M. where the Bank has sunk about nine feet which reduces the former site of the Town, below high water mark. The shock of 7 Febry. alto not attended with quite so terrible a catastrophy, yet excited all the horrors of the most violent, and destructive Earthquakes in those who were at this place - the agitation was so great that a man could not stand without holding on by something and the Mississippi rose in an instant 15 feet which brought the water all around and in some of the Houses, which justified the Idea that the whole country was sinking, and as thee was no high land to fly to they considered themselves lost - happily however there was not many lives Lost, an unfortunate family who were moving down the River and had Landed here a fiew days before was all lost by the overturning of their Boat which was carried with a number others some distance into the woods and left dry by fall of the water, - Having had occation to go into the country twenty Miles to the Big Perain (sic) I had an opportunity to seeing all damage which was done-this is nothing compar to what has been reported to considerable. The Earth is very much crack all the way to the Perain and perferated with holes of different sizez out of which emmence quantities of white sand has been discharged mix.d wiht a Kind (of) stone coal which alto itresembles the common fossil coal in smell yet is more regular in its grain and of cleaner Black and will not burn so freely.

There is not any of these places the smallest appearance of Volcanic Matter alto. there are numbers of marks of the most violent operation of heat- as well in the coal which was discharged as in a kind of Cinder which has been found in small quantities -

Cramer, Zodak, Extract of a letter to his friend ...

<u>Cramer</u>, Zodak, EXTRACT OF A LETTER FROM ZODOK CRAMER TO HIS FRIEND IN PITTSBURGH, Dated Natchez, Jan. 23, 1812

This morning, at 3 o'clock, another pretty severe shock of an earthquake was felt. Those on the 16th utl. and since, have done much damage on the Mississippi River, from the mouth of the Ohio to Little Prairie particularly. Many boats have been lost, and much property sunk. The banks of the river, in many places, sunk hundreds of acres together, leaving the tops of trees to be seen above the water. The earth opened in many places from 1 to 3 feet wide; through those fissures stone coal was thrown up, in pieces as large as a man's hand. The earth rocked, trees lashed their tops together. The whole seemed in convulsions, throwing up sandbars here; there sinking others; trees jumping from the bed of the river, roots uppermost, forming a serious impediment to navigation, where before there was no obstruction; boats rocked like cradles; Men, Women, and Children confused, running to and fro, and hollering for safety; those on land, pleading to into the boats, those in boats willing almost to be on land.

This alarming and distressing scene continued for several days, particularly at and above Flour island. The long reach now, though formerly the best part of the river, is said to be the worst, being filling with innumerable planters and sawyes which have been thrown up from the bed by the extraordinary convulsions of the river. Little Prairie, and the country about it, suffered much, new lakes having been formed, and the bottom of the old ones raised to the elevation of the surface of the adjacent country. All accounts of those who have descended the river, since the shocks, give the most alarming and terrific picture of the desolating and horrible scene.

Drinkler, Henry W., Journal of a passage from St. Louis ...

<u>Drinker, Henry W.</u> General

[Excerpts from: Journal of a Passage from St. Louis to New Orleans, containing remarks of the late ravages of earthquakes on the bank of the Mississippi, Commencing March 13, 1812, Henry W. Drinker, Copy at St. Louis Mercantile Library, University of Missouri-St. Louis, transcribed by N. K.Moran]

Friday, March 20, 1812. At $\frac{1}{2}$ past 2 came opposite Cape Girardeau, here the chimneys of most of the houses had fallen by the late earthquakes.

Saturday, March 21, 1812. Last night we experienced two shocks of Earthquakes, one of which was pretty severe.

Monday, March 23, 1812. At 5 o'clock passed a boat with a family from New Madrid, bound up to the district of St. Genevieve wither they were remaining to removing, in order to avoid the Earthquakes. Passed another boat another boat from St. Louis district Louisiana, this boat was bound up the Ohio, having been scared from St. Louis by the Indian Wars, Sickness and Earthquakes.

...about five miles below the mouth of the Ohio, on the Louisiana side, ...a man & his wife came to us offering to sell us eggs, he informed us we should find no one below him until we arrived at New Madrid, that upwards of four hundred people have removed either into Kentucky or higher up the Mississippi, many since the Earthquakes have crossed the Mississippi, thinking that the river would prove a barrier to the Earthquakes, as they observed the shocks proceeded from the West. During the night felt 2 pretty smart shocks of Earthquakes.

Tuesday, March 24, 1812. This morning passed six plantations and houses entirely deserted. At 7 o'clock felt a slight Earthquake preceded by a rumbling and heavy noise – passed more plantations and houses deserted. At 9 came to a house and plantation not yet abandoned nearly opposite the Iron Banks two more deserted houses. At 10:30 came up with the Iron Banks which extend about one mile along the river. These banks are named from the appearance the present of iron in the Earth, the extreme height of these may be about 60 feet above the level of the water. Our men say they are much changed and more broken than formerly, our part bears evident marks of having been split and having fell from some violent cause...

Three miles below the Iron Banks are the Chalk banks, of white and chalky appearance, and opposite of these is Wolf island of about six miles in length, there are or were before the Earthquakes several houses & settlers on this Island which is high, large and fertile. The main channel in descending appeared to be on the right of the Island notwithstanding the navigator says the reverse. Passed four houses on the Louisiana side opposite of Wolf Island, only one of which appeared to be inhabited.

5 miles below Wolf Island passed 4 house and farms, two inhabited, the others abandoned.

At 5:30 [p.m.] came to a place on the Louisiana side where the Bank and all the trees on it evidently settled and from the boatmen's account is at least 3 feet lower than usual, this place is about 42 miles from the mouth of the Ohio, this appearance continued for near 6 miles until opposite the 9th island from the mouth, the quantity of trees fallen along this shore all in appearance recent, is wonderful; and I for the first time could with certainty trace the ravages committed by the late Earthquakes. Attempting to land, we ran our boat on a Tree from which we extricated ourselves with great difficulty. Attempted to land twice again, but were unable from the number of trees standing upright or laying across each other. At length at 6 o'clock we were successful and landed. Mr. De Munn and myself went on shore in order to explore the woods. We found many alarming proofs of the "Tremblement de Terre" – earthquakes –

the Earth was cut up by many large and small crevices, and spots of $\frac{1}{4}$ of acre were sunken from two to three feet below the surrounding land. Here also were several holes, which having thrown up sand over dead leaves gave us warning of their existence, numbers were hidden by the dead leaves making walking somewhat dangerous. I sounded my way as I proceeded with our canoe's paddle, which I had taken in hand for that purpose. There was really no solidity in the Earth in any place, all sounded hollow and shook beneath our feet at every step. I do not wonder that the inhabitants have abandoned their dwellings, it is only wonderful that so many remain. A boat passes us from the Ohio with a family descending in all probability below the Arkansas to cultivate cotton; At Sun down a large barge passed & hailed us, she was from Frankfort Kentucky, loaded with hemp and yarns, bound to Orleans.

Our Flats did not come up with us during the night & we are determined not to wait for them here, but at New Madrid accordingly set off for that place. The banks from our landing place last night until 8 this morning appear entirely sunk, in some places several feet for above ½ a mile in length. The water being now on the rise in the river it rushes in among the heavy Timber, making it very imprudent for boats to keep near the shore least they should be drawn into the Woods. The trees have in many places, fallen totally, in others lean their tops together which interlock - again they are found laying across each other, but more than half way to the Earth. The Cane is so thrown together as to form a green bed in which you can scarcely find an upright plant.

We are now 56 miles from the Ohio and about 10 above New Madrid, which we shall reach about noon. 5 miles above N. M. the river is full of planters snags & sawyers, here we discover our Flat boats ahead of us. At 10:30 saw N. M. being nearly N.W. distant about 4 $\frac{1}{2}$ miles. The settlement appears to extend a mile along the river and there are some few houses above it for 2 $\frac{1}{2}$ miles. The Falls in the Mississippi which were said to have had existence, I looked for in vain, and am perfectly convinced they do not exist, but I am not prepared to say they did not exist at the time of alluded to (the 7th February), and every succeeding hour makes it appear more than probable.

From our camping ground to this place a distance of 13 miles, the banks of the river and inland as far as I could see, have sunken more or less. At 10:45 as we approached New Madrid we are more and more pleased with its situation, it appears as though it were in a deep bay near the sea board, and the increasing width of the river at this place would convince me I was in some bay close to the sea did I not certainly know myself near 1000 miles from it. 2 miles above New Madrid we came to the ruins of two houses which were abandoned, they were built lower than the ordinary bank of the river which in this stage of the water were about 3 ft high. When the water rises to its ordinary spring height these houses must be totally inundated, 500 yards further came to another house where the bank was not 8 inches in height. The whole land here has undoubtedly settled down several feet, below this the river is either in the woods or the woods in the river, this and the position of the trees denotes some recent exertions of nature.

The wind rising, our stay at New Madrid will probably be the whole day. For 1 $\frac{1}{2}$ miles above the town, there is no apparent bank to the river, the water runs with the

greatest violence through the woods and extending farther back than my eye could reach. Came up with our flat boats & passed thru. At 11 o'clock arrived at New Madrid.

The town is situated in a deep bay on a beautiful level plain, at the upper end it is a creek of some width which forms a point in the creek and at this point most of the boats which stop at N. M. come to. This creek is called Bayou St. John. In walking into town, De Munn & myself found every chimney down, most houses half unroofed and some entirely fallen, on our way we met a Captain McKay who told us several circumstances which had taken place during the late Earthquake on the 7th. Boats at that time ran up the stream with far greater velocity than they had ever came down, they crossed the river in various directions, some were going west at the same time others were going east, all was in the most horrid confusion; many boats and some lives were lost. The highest part of the bank at N. M. does not at this time exceed 4 feet & as the water will rise all probability this summer near 8 feet, much of the place will be under water. I know not its present population, the number of houses were formerly considerable but at this time the habitable dwellings are easily counted, 9 or 10 are all that could be lived in if shelter was the objects of the occupants. This Captain McKay of whom I spoke, is a man of consideration, from him we have learned many circumstances attending the late "Wonder of the West" as well as many changes in the vicinity of the town, where formerly was the lakes of St. Mary, St. Francis & Big Lake (this is the largest of the three, was then called Lake Ann), is now to be found dry ridges of land and mounds without one drop of water. We proceeded on our walk & found fences and the bark of trees, in one place found 5 large canoes which the neighbors had hauled from the river to the camp in order to have them ready, should all the solid earth around be swallowed up and covered with water.

Came to the hut of a friend of De Munn, Madame Verome who is the proprietress of the Saline below St. Genevieve. She appears to have felt less alarm than any person I have seen, she did not guit her house on the 16th December nor the great shock of 7th February, when part of the wall and all her chimneys fell, and she encamped in the open air. She says 2/3 of the inhabitants yet remain here, and that some who fled returned, she thinks also that many of the people of Little Prairie will again settle there. We left her and making the circuit of the town in the rear returned to our boats by the banks of the river here we found many places sunken, found a lake of about 60 feet in diameter & 30 feet deep with cracks in the earth round it for some distance, crack in the vicinity of the river proceeded in a nearly straight line along the whole front of the town. The perpendicular descent of the land on one side of the crack was various, sometimes nearly 2 feet and in other places not above 8 inches, besides this and many other evidences of violence, which I have seen, the old inhabitants inform me that the whole Esplanade or level plain was sunken bodily several feet, I have but little doubt of the fact, some say the bank at this season ought to be 12 feet above the river of this I am no judge, but can only say that in no place is the bank above six feet in height, in many places less than 2 and generally about 4.

During a sort absence De Munn was invited out to Dinner and I dined alone aboard. Afternoon I went in search of him in order to pay a visit to Lake St. Ann about 1 ½ miles distant below town, my search was in vain for De Munn was on a visit to that

and other lakes with the gentleman with whom he dined. Lake St. Ann was within 1 ½ miles of the lower end of town (new Madrid) was near 3 miles in length and 200 to 400 yards in width, round it were many plantations which depended on it for water & procured good supplies of fish from it, the houses are now for the most part deserted "it was beautiful spot ", the general depth of the water in this lake in the center was about 8 feet and its enclosing banks about 2 feet in height, it is now a long ridge of land sloping to its former banks & is in the center full 5 feet higher than the old banks, consequently the perpendicular rise in the soil has been 15 feet. In the woods near the lake one may see large cracks and fissures in the earth and acres of land have sunk perpendicularly from 1 to 2 feet. At 4 I returned to my boat, at 5 De Munn came into town and joined me loaded with muscle shells filled with various substances thrown up out of the bed of the late lake through fissures in the earth. In the morning after the 7th of February, several carts loaded with fish from the then dry lake came into New Madrid, boats and canoes once floating on the water, now lie on high ground exposed to the sun. I procured from De Munn some of the coal he found in the lake. During the night felt 2 smart shocks of earthquakes.

Thursday, March 26, 1812. Left New Madrid in company with 17 boats of from 18 to 30 tons. As we proceeded we met many others and by 12 o'clock there were 40 in sight at one time. Just below New Madrid we experienced a slight shock of Earthquake, here the bed of the river is lined with snags, planters, and sawyers, which I am told is only the case since the 7th.

.... On proceeding down, each bank of the river afforded abundant proof of the late violent convulsions of the earth, trees fallen crosswise, the cane brake matted and in the greatest confusion, the sunken earth near the bank already forming Bayous up which water begins to rush, and the confused & broken appearance of the cypress swamp, where proof positive and awful (see entry for March 30). ... Sunk, sunk, everywhere sunk, and on every side of the river is rushing into the woods & the confusion which nature is thrown cannot be described. A high wind has suddenly arose and we must land. At 11 run towards the shore, amongst the trees and the bushes 100 yards from any firm land, made fast to a fallen tree, from here we saw the shore sunk in some places 6 feet perpendicular below others - Old Chaos reigned, where the sweetest harmony once resided. Came on a light rain which so deadened the wind, as to allow us to proceed on our voyage. 2 miles from where we landed came to the head of the 14th large island from the mouth of the Ohio, to the left of this are 4 small widow islands. Passed 2 boats under full sail 28 miles below New Madrid and 5 above Little Prairie came to a cleared spot of ground where remained the skeletons of 2 horses, the ground appeared from the river as tough an undulated country had been recently ploughed up, the furrows however were from 1 to 3 feet in depth.

Independent of which this spot was "Sunken en Masse" the banks not more than 2 ½ feet in height, and the whole place must be entirely inundated by the Spring fresh, ½ mile farther down passed another clearance, sunk equally with the first, and here was a log house flat on the ground a total ruin. ¼ of a mile lower down passed a house unroofed and apparently sunk below the present level of the river, the water has yet

kept off by a little uneven bank, of from one to two feet in height. ...we are moored at the Little Prairie, this was a settlement of 1 ½ miles in length, laying high and handsomely situated what scenes does it present, the late high and perpendicular banks are now broken into steps for thirty yards from the river, every step we stride over large cracks in the Earth, mount a hill or descend perpendicular 6 or 7 feet on a sunken ½ acre of ground. The houses are in heaps of ruins – trees split and uprooted & the foundation of the earth shaken and removed.

With my friend De Munn I walked through the village which we found cracked in almost every part, in some places the low ground was carried up into small eminences; this is a fact worthy of remark that low places & swamps alone appear to have been raised all the rest has more less sunken; back of the settlement we found a continued crack of ½ mile in length, in every 20 yards of this was a small crater out of which had been thrown coal & abundance of white sand with immense columns of water which had deluged the adjacent country-strong marks of sweeping torrents from these craters yet remain.

The inhabitants of Little Prairie (about 12 in number) who weathered the storm related that columns of water & sand (during the Earthquake of 7th Feby after) rose from the sink holes full 100 feet in height & that the fall of the water was like the roar of the sea, none say that fire came from these places though many say meteors enlightened the air during the shock; Some pumice stone, it is said, has been picked up, I however doubt the correctness of the tale, having seen no appearance of any. No one could stand on his feet, all were prostrate or on their knees, the cattle bellowed and fell, beasts of the forest fled in every direction & the birds of the air joined in the general cry of horror. ... We found 24 volcanoes or sinkholes, the largest was about 12 feet in diameter most others about 7. ...

Returned to our boats after collecting some of the different substances which had been thrown out of the earth. Little Prairie is about 105 miles below the mouth of the Ohio river situated on the western or Louisiana side, it once had 26 or 27 homes in it and about 100 inhabitants, now there is not one house which is not unroofed & almost completely fallen, while the inhabitants are nearly all removed they were built of logs and were only story high otherwise they must have been entirely destroyed. Their insignificance (like that of the [illegible] where the oak was split) saved them from total destruction.

In the night we experienced a shock of earthquake ...

Friday, March 27, 1812. In the morning the storm had ceased but the heavens were clouded and weather threatening & dark – left shore & proceeded without accident through a small rain for about one hour when a storm blew up & we prepared to try and make a landing, after half an hour search for a spot where we could safely land we discovered one & came too about 7 miles below Little Prairie, in the State of Tennessee: here we found a lake formed by the late earthquake and distant about 50 yards from the river banks the Mississippi is now running with a gentle stream into will soon fill it up to its own level. ... The sun made its appearance but a high wind continuing so as to detain the boat. De Munn & myself took a long rumble of 4 miles through the woods on

our route where everywhere we observed large cracks, holes, miniature volcanoes; from the latter had been thrown out bodies of water, sand stone?, coal & gravel; the issue of these craters covered the soil from 100 to 200 yards in diameter in depth from 1 to 2 ½ feet, here also was a singular crack in the earth averaging 10 feet in width and extending as far as we explored at least one mile. Came to about 40 acres of land perfectly free from brush, stump or tree, and much higher than the surrounding wood and it was considerably raised in its crater; I found many shells and some dead crawfish within the circle, it had no question been a pond or lake. After taking up some large pieces of coal and other substances thrown out of the various craters around us we began to retrace our way towards the boats. The ground is covered with tracks of deer, bear, opossums, wild-cats & turkeys; Saw several large trees standing upright split in two by the earthquake the roots holding on, each side of the crater or crack. On examination I found the heart of the tree thus split more or less destroyed which accounted for the otherwise singular circumstance, I passed through the body of one of these without difficulty. Returned to our boat & burned some of what we supposed stone coal in the fire, being rather doubtful if it was coal or no; its smell and appearance to me while burning was decisive; the wind continuing we were forced to remain, in the evening felt a slight trembling but unaccompanied by noise.

Saturday, March 28, 1812. Ere the sun had risen felt 5 shocks of earthquake in rapid succession, all of them quite sharp. In the course of the morning passed the most sunken place I have seen in one spot it was sunk a full 20 feet for only the upper parts and tops of the trees in a whole forest remained above water, near this is the ruins of a house with little more than the roof above water.

... At 6 being at the lower end of Long Reach, I landed and encamped on the Tennessee shore, here the marks of Earthquake were not inferior to any above. At midnight felt a pretty violent shock marking much noise in the woods and crashing among the trees one of which feel a short distance from us, the wolves and beasts howled amazingly.

... On this side of the island (Flour island) and on both sides of the river are marks of the earthquakes fury, but little less strong than above. ...

... (landed just below the 2nd bluffs)... Our men went hunting I could not follow being badly poisoned I however made shift to walk a few hundred yards from the bank, and to determine the progress made by the late earthquakes. I found little if any less damage, than above & I know not if I have laid down the spot where the greatest force was applied, I shall be able to fix it with certainty, when I give the character of this river. Our hunters came in without having seen anything but numerous tracks of deer, bear, etcs; During the night experienced a slight shock of an earthquake.

Monday, March 30, 1812. At day break got under way with a slight head wind, a small rain, the weather cloudy & threatening. At 8 felt a sharp shock of an earthquake, passed a long island to the right of which is a place called "Devil's Race Ground" ... (having landed in the bend of Devil's Elbow) After examining the ground where I found strong marks of earthquake & several large cracks, ... Since leaving the Little Prairie we

have seen but few houses, I recollect but 2 near the river or Bayou Barjourice & these sunk & abandoned; the river for 140 miles which is the distance from Little Prairie to the 4th Chickasaw Buffs is uninhibited on either side ... At sun down we camped about 3 miles above Fort Pike & the 4th Chickasaw Bluffs; back of our camp we found a pretty well beaten path, in all probability leading to the fort, such a thing as a well beaten path was quite a novelty & gave me the pleasurable ideas. ... During our stay here we felt 2 shocks of earthquake ...

Tuesday, April 1, 1812. ... (on an island a little below Council Island) Here the traces of Earthquake become faint, a few trifling cracks in the earth are the only visible marks of its existence.

Hunt, Jessee, Letter from ...

Hunt, Jesse General [Western Spy, Cincinnati, Ohio, April 4, 1812]

The following is the substance of a letter from Mr. Jesse Hunt, of this town, date near Fort Pikering, Feb. 17th.

Mr. Hunt had got this far on his passage down to Natchez, without experiencing any uncommon obstruction on the Mississippi, tho' frequently shook by earthquakes, especially on reaching the river. About [illegible words] received. About 20 miles above New Madrid the land was sunk from one to 5 feet in depth; the buildings entirely knocked down, and not a chimney left standing. According to report of inhabitants, the country for 20 miles back was entirely destroyed; in some parts sunk; in others broken up with fissures, and lying in waves like the ocean' - It was also said, the river rose from 10 to 20 feet in the short space of 20 minutes – that several boats were lost, others driven on shore; that a family of a mother and 7 children were lost with one of the boats, the husband only being saved. From Ft. P. to the Little Prairie, Mr. H. says, the scene is truly distressing and far beyond the account given of it by Mr. Beckle published in the Western Spy some time since. Mr. Blackman, a gentleman of company and well acquainted with the Mississippi says, he does not see much difference, as to the sawyers, except that in one or two places, they are turned with their roots upwards, and stand somewhat thicker than before the convulsions occurred. Mr. H. confirms what was said in our last number, as to the inhabitants of New Madrid having fled and encamped in the fields; and adds that the cause of the ruin was the early shock of the 7th Feb. The Little Prairie was entirely abandoned.

McBride, Journal of a voyage down the Mississippi ...

McBride, James (1910). Voyage down the Mississippi River, Quarterly Publication of the Historical and Philosophical Society of Ohio, vol., 27-31.

Mississippi River, April 1, 1812

Dear Aunt

About the first of March I received a letter from you, and omitted to answering it until now, which was, not occasioned, or owing to negligence, but because I thought the intelligence I would have to give, if I wrote it truly, would occasion you some little uneasiness, as a t that time I was engaged in making preparations to make a voyage to New Orleans and am now so far on my way. Last winter I entered into a co-partnership with Joseph of Hamilton (Ohio) with the intention of carrying on the business of merchandising; we purchased a quantity of flour and whiskey in the Miami country and located two flat boats on the Miami river which we have brought out of the stream and are thus on our voyage. When we go to New Orleans we shall sell our cargo, go around by sea to Philadelphia and purchase goods and return with them to Hamilton.

As you had no doubt heard very alarming accounts about the earthquake and other dangers descending the Mississippi river, I suppose you would have looked upon me as going to certain destruction. Thank kind Providence, I think we have now passed those dangers, and if some untoward accident does not overtake us shall pass safely to New Orleans and if flour bears the price, which I understand it does, we shall make something very handsome. Our cargoes consists of seven hundred barrels of flour and some whisky and pork which we purchased in the Miami country on very reasonable terms, as the reports prevailing of the angers to be encountered from the Indians and the Earthquakes had so much frightened the people that none would venture to encounter them. These stories I considered improbable, but have since found them too much reality to exist in them, particularly those relating to the Earthquakes.

I shall give you some little account of what I saw and experienced although it must be a very cursory account, as I was only on the shore at certain points, and then but a short distance from the river. The following is extracted from the journal which I kept.

Soon after entering the Mississippi river, we began to discover the effects of the earthquake - the region of which we were now approaching. Above New Madrid (Missouri) on the west side of the river is a grove of cotton wood and willow trees two or three miles long, these were all bent up stream and stripped of their leaves and branches in a singular manner. It is said that at the time of the violent shock the river at this place for some time ran up stream with great velocity, and from the appearance I have no doubt of the fact, as I know nothing else that could have produced the appearance here exhibited - we were now experiencing considerable shocks every few hours.

We passed New Madrid (Missouri) in the afternoon, intending to land before night. Mr. Hough had command of one boat and myself of the other, we each steered

our own boat and had only two other hands on each boat to row. Mr. Hough, who was rowing to shore to land on the west side of the river, discovering that the landing place would be a critical situation, by signs motioned me to keep out. I immediately turned my boat and rowed for the middle of the river again; I made every effort to land on the other shore, but was unable; at dark I made a willow-island in the river and fastened to the willows, where we remained all night in a very exposed situation. The island was all overflowed, but barely sufficient where we lay to float our boat which drew somewhat over three feet of water. The river was falling and myself and hands were obliged frequently during the night to jump overboard into the water, cold as it was, to push off the boat and prevent her getting fast aground. As soon as day dawned we put off from our dangerous harbor, in a dull rainy morning and at ten o'clock landed at Little Prairie about 30 miles below New Madrid. Here had been a small village of some twenty houses and a settlement extending back six or eight miles from the river, principally French & Spaniards. On landing we soon discover that the place where we moored had been part of the town, now the bed of the Mississippi river. A considerable portion, several acres, on which the town had stood, had sunk down with the buildings and the river flowed over the place. The place where we made fast our boat was a burying ground, part had sunk into the river, and coffins were exposed along the bank. The tenants had been Roman Catholics, as the cross was erected at the head of each grave. A large cross made of strong cypress wood placed, no doubt, at the grave of some pious Christian, was broken and prostrated to the earth. Although it rained considerably, after securing our boat I wrapped myself in my great coat and went on shore to see what discoveries I could make. Of about a dozen houses and cabins which I saw, not one was standing, all was either entirely prostrated or nearly overturned and wrecked in a miserable manner; the surface of ground cracked and fracture in every direction. At the back part of the village I found three Frenchmen who were sheltering themselves in a temporary booth of boards taken from some of the desolate houses. They informed me in broken English that the beautiful village and settlement was now wholly destroyed. The inhabitants had fled with what property they could take with them. They and only they, were left to tell the passing stranger of the melancholy fate of the place. I continued my excursion about two miles back from the river, although it was with considerable difficulty, and at every step witnessed some new phenomenon of the desolating effects of the Earthquake.

The surface of the ground was cracked in almost every direction and stood like yawning gulps, so wide that I could scarcely leap over them, at other places I came to spaces of ground several poles in width, sunk down two or three feet below the common level of the ground. But what particularly attracted my attention were circular holes in the earth from five or six to thirty feet in diameter, the depth corresponding with the diameter so as to be about half as deep as wide, and surrounded by a circle of sand two or three feet deep, and a black substance like stone coal but lighter, probably carbonized wood, I took some pieces of this to the boat, and putting on fire I found they would burn, at the same time producing a strong and disagreeable sulphurous smell. These holes I presume must have been produced by a strong current of air issuing from the bowels of the earth, throwing up sand and water and this black substance which

was perhaps wood, long embedded in the earth prostrating the trees and everything else where they happened and producing the most terrible disorder. I observed in several instances where small explosions had occurred under large trees, that the trunk of the tree was split up ten or twelve feet and separated two or three feet wide at the ground and thus remained standing. The day was dark and gloomy with [little?] light; I heard and felt from time to time the rumbling noise of these explosions; all nature around me had the most melancholy appearance. A sudden dread came over me all at once and I returned to the boat. I stayed at Little Prairie until the afternoon of the next day during which time se experienced eight or ten shocks, some of them so severe to shake from their places loose articles in the boat. Each shock continued about two minutes and was preceded by a rumbling noise like thunder or the discharge of a cannon at a great distance. We experienced slight shocks at intervals for the distance of one hundred miles above and below Little Prairie. The shores of the river in this region presented the melancholy spectacle, the banks cracked and fractured, trees broken off and fractured, and in many places acres of ground sunk down so that the tops of the trees just appeared above the surface of the water. All nature appeared in ruins and seemed to mourn in solitude over her melancholy fate.

In the afternoon of the next day, Mr. Hough, with the other boat, made his appearance. The place where he had to land was in the head of an out-let so far down that he was unable to put out and gain the channel of the river again from that place, but the next day with great labor and the aid of some friendly Indians, who came along, they towed the boat some twenty or thirty rods up stream, from whence they were able to regain the channel.

I am now lying at shore on the bank of the Mississippi river, I suppose about one hundred miles above Natchez. Yesterday a violent storm compelled us to land here, it continued all night so violent as to require us to be up to prevent the waves from dashing our boats on shore. The high wind still continues today, and the river so rough that we cannot pursue our voyage. I therefore devote the day to writing this letter intending to put it in the Post-Office when I arrive at Natchez. You may suppose that I am not in a very comfortable situation writing, nor do I feel in a mood for writing after the fatigue I have undergone. I have brought a boat loaded with 350 barrels of flour from Miami to this place with only two hands, labor, watching and anxiety have at times reduced me to almost exhaustion. Dear Aunt, your affectionate Nephew

James McBride

McCallister, Enas, of Henderson County...

McCallister, Eneas. *in* Edmund Starling (1887). History of Henderson County, Henderson, Kentucky, pg. 133.

An eyewitness who was in a flat-boat loaded with produce, bound for New Orleans thus narrated the scene.

In the middle of the night there was a terrible shock and jarring of the boats, so that the crews were all awakened and hurried on deck with their weapons of defense in their hands, thinking the Indians were rushing on board. The ducks, geese, swans and various other aquatic birds, whose numberless flocks were quietly resting in the eddies of the river, were thrown into the greatest tumult, and with loud screams expressed their alarm in accents of terror.

As soon as it was light enough to distinguish objects the crews were all up making ready to depart.

Directly a loud roaring and hissing was heard, like the escape of steam from a boiler, accompanied by the most violent agitation of the shores and tremendous boiling up of the waters of the Mississippi in huge swells, rolling the waters below, back on the descending stream, and topping the boats so violently that the men with difficulty could stand on their feet. The sand bars and points on the island gave way., swallowed up in the tumultuous bosom of the river, carrying down with them the cottonwood trees, cracking and crashing while they disappeared beneath the flood. The water of the river, which the day before was tolerably clear, changed to a reddish hue, and became thick with mud thrown up from the bottom. The earth on the shores, opened in wide fissures, and closing again threw the water, sand and mud in huge jets higher than the tops of the trees. The atmosphere was filled with a thick vapor or gas to which the gas imparted a purple tinge altogether different from the autumnal haze of Indian summer of that of smoke. From the temporary check of the current by the heaving up of the bottom, the sinking of the banks and sand bas into the bed of the stream, the river rose in a few minutes five or six feet, and again rushed forward with redoubled impetuosity, hurrying along the boats, now set loose by the horror-struck crew, as in less danger on the water than at the shore, where the banks threatened every moment to destroy them by the falling earth.

Many boats were overturned in this manner and their crews perished with them. Numerous boats were wrecked on the snags, and old trees thrown up from the bottom of the river where they had quietly reposed for ages, while others were sank or stranded on the bars or islands.

Eneas McCallister, father of John McCallister, was in one of the flat-boats spoken of, and witnessed the frightful scenes. He says the scenes which occurred for several days during the repeated shocks were horrible. The most destructive ones took place in the beginning, although they were repeated for many weeks, becoming lighter and lighter until they died away.

The sulphureted gases that were discharging during the shocks tainted the air with their noxious effluvia, and so strongly impregnated the water of the river to the distance of one hundred and fifty miles below, that it could hardly be used for any purpose for a number of days.

Comment: This account is very similar to that given by John Treber.

Smith, James Smith, James

Mississippi Trader

The following (illegible) and highly interesting letter has been communicated to the Editors of the Ohio and Mississippi Navigator, by Mr. James Smith. Copies of the corrections can be had by those who are already furnished with the Navigator gratis, by calling at the Bookstore of Cramer, Spear, & (illegible), Market-Street, Pittsburgh.

Mississippi River, Natchez Feb. 10(?), 1812

Gentlemen,

Your being Editors of that useful guide (illegible) the Ohio and Mississippi Navigator, induces me for the sake of the westward country traders to inform you as clearly as in my power the wonderful changes for the worse in some parts of the Mississippi river, occasioned by the dreadful earthquake which happened on the morning of the 16th December last, and which has continued to shake almost every day since. As to its effects on the river I found but little from the mouth of the Ohio to New Madrid, from which place to the Chickasaw Bluffs, or Fort Pikering, the face of the river is wholly changed, particularly from Island 30 to Island No. 40(?) (see page 183) this part of the river burst and shook up hundreds of great trees from the bottom, and what is most singular they are all turned roots upwards and standing in stream in the best channel and swiftest water, and nothing but the greatest exertions of the boatman can save them from destruction in passing those places. I should advise all those (illegible) need to be particular in approaching Island No. 32, where you must wrap around through a great number, and when past them, bear well over from the next right hand point for fear of being drawn into the right schute of Flour Island, Island 33, which I should advise against, as that pass is becoming very dangerous unless in very high water. Two boats from Little (illegible) are lately lost, & several much injured in that (illegible). Boats should hug the left shore where there is but few sawyers, and good water and fine landing on the lower on the lower point of the island, from there to the next dangerous place. In the Devil's Race Ground, Island 36 (page 187) Here I would advise boats never to past to the left of the island and by all means to keep close to the right hand point, and then close around the sand bar, as the lower end of the schute is very dangerous and the gaps so narrow that boats can scarcely pass without being dashed on some of the snags, and should you strike one you can scarcely extricate yourself before you receive some injury. From this scene you have barely time to breath and (illegible) before you arrive at Devil's Elbow (illegible, 4 words), Islands No. 38 and 39, (page 183) by far the worst of (illegible) in approaching this schute you must hug close round the left hand point until you come in sight of the sandbar whose head has the appearance of an old field full of trees, then pull for the island to keep clear of these, and pass through a small schute [sic] leaving all of the island sawyers to the right and take care not to get to near them, for should you strike the current is so rapid it will be with great difficulty you will be able to save your boat and cargo.

I shall advise all those descending the river not to take the right hand of island No. 38, as it appears entirely choked up with drift and rafts of sawyers. When through these bad places the worst is over, only fuller of snags, but mind well the corrections in the *Navigator* and there will be no danger. (illegible word) the Grand cutoff No. (illegible), (page 192). In all stages of the water, hug close to the right hand point, this pass is good. Take the left of St. Francis No. 59, left of No. 62, right of (illegible) and island No. 63, and right of No. 76, in all the different stages of the water. All of these channels are much the best and safest. Should this be the means of saving one boat load of provisions (illegible) of industrious citizens how amply I shall feel rewarded for noting this, whilst with gratitude I acknowledge the obligation we boatmen are under to you for your (illegible) guide, and the excellent work the Ohio and Mississippi Navigator, much to be valued for its accuracy and geographical accounts of this immense country.

I have the honor to be, gentlemen, your sincere friend and humble servant.

4. Comment about an account attributed to a Prof. Ruter, and why it is not included in this compilation

Comment about an account by Prof. Ruter of Masonic College of Kentucky, published by Ben Caseday & Co., 47 Wall Street, Louisville, Ky. (1849). This account, though colorful, is suspected because of factual errors in the account. For example, the account talks about the steam boat passing their barge when they were near Little Prairie, Mo. However at the time of the earthquake on December 16, 1811, the steam boat was upriver from Yellow Banks (now Owensboro), Ky., and it had arrived at Natchez by January 7, 1812.