

nued for the space of eight minutes. So complete and general had been the convulsion, that a tremulous motion was communicated to the very leaves on the surface of the earth. A few yards from the spot 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 a 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 day I went on shore to examine the effects of the shocks: the earth about 29 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 most advisable to leave our landing as expeditiously as possible : this was immediately 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 lowering appearances 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 forests, precipitating themselves into the water with force sufficient to have dashed us into a thousand atoms.

It was now night, and we had an opportunity of beholding in full extent all the horrors of our situation. During the four first shocks, tremendous and uninterrupted explosions, resembling a discharge of artillery, was heard from the opposite shore: at that time I imputed them to the falling of the river banks. This fifth shock explained the real cause. Wherever the veins of the earth, quake ran, there was a volcanic discharge of combustible matter to great heights, an incessant rumbling was heard below, and the bed of the river was excessively agitated, whilst the water assumed a turbid and boiling appearance: near our 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 30 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 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 floated 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 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, through a thousand vents, sulphureous streams gushed from its very bowels, leaving vast and almost unfathomable caverns. Every where 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 the meed 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 of thunder; the bed of the river was incessantly disturbed, and the water boiled severely in every part. I considered ourselves as having been in the greatest danger from the numerous instances of boiling directly under our boat; fortunately for us, however, they were not attended with eruptions. One of the spouts which we had seen rising under the boat would inevitably have sunk it, and probably have blown it into a thousand fragments: our ears were constantly 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 astonishing than alarming to behold the oldest trees of the forest, whose firm roots had withstood a thousand storms and weathered the sternest tempests, quivering and shaking with the violence of the shocks, whilst their heads wore 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 in 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 in a 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 evidenced 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 over—still, however, the shocks continued, though not with the like frequency as before.

On Wednesday 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, 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 us 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 risen; they were generally on the beach, and have left large circular holes in the sand formed much like a funnel. For a great distance round the orifice vast quantities of coal have been scattered; many pieces, weighing 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 thro' the perils to which we had been exposed.

As we descended the river, every thing was a scene of ruin and devastation. Where a short time since the Mississippi rolled its waters in a calm and placid current, now subterranean forests have 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 peculiarly attracted my observation: a large sycamore had slipped from its station on the bank, and had so admirably preserved its equilibrium, that it has been left standing erect in the water, immersed about ten feet, and has every appearance of having originally grown there.

The shocks I conceive were most sensibly experienced on 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, on 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 now so considerably increased as to demand the utmost prudent and caution from subsequent navigators; indeed I am very apprehensive that it will be almost impassable in flood water, 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 sandbars, &c. may yet be caused by this portentous phenomenon. Many poor fellows are undoubtedly wrecked, or buried 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 this earthquake, or where the greatest injury has happened, from numerous inquiries, 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 in the height of it, the ruin immediately in the vicinity of the river, is most extensive on the right side descending. For the first two days the veins appeared to run a 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 confluence of the Ohio and on the right hand, the utmost consternation prevailed amongst the inhabitants; confusion, terror, and uproar presided; those in the town were seen running for refuge to the country—whilst those in the county fled with like purpose towards the town. I am happy, however, to observe that no material injury has been sustained.

At the Little Prairie, 103 miles from the same point, the shocks appear to have been more violent, and were attended with severe apprehensions—the towns were deserted by its inhabitant, and not a single person was left, but an old negro man, probably too infirm to fly; every one appeared to consider the woods and hills most safe—in these most confidence was reposed. Distressing, however, as are the outlines of such a picture, the latest accounts are not calculated to increase apprehensions; several chimneys were destroyed, and much land sunk, so lives however have been lost.

A, little below Bayou River, 130 miles from the same point, and r 3 miles from the spot where we lay, the ruin was extensive and general.

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

At and 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 historian, as one of the longest that ever occurred. From the time that the first shock was felt, at 2 o'clock in the morning of the 16th, until the last shock, at the same time in the morning of the 23d, 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 determinate 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 thro' the heavens—the sky was clouded, and a dreary darkness brooded over the whole face of 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 three others at 2 o'clock in the morning.

7. A. M. happened a very severe shock—8. nine shocks in quick succession—fl. 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, very severe shock—42 after 5, a shock—10 before 6, do—15 of 7, do—35 af. 7, do—10 of 8, do—5 af. 8, do—5 of 9, do—25 af. 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—22 after 11, severe shock—17th December, 30 minutes after 5, a shock—5 in the morning, a great and awful shock followed, with three others—5 after 12, meridian, a long and dreadful shock, ap-pearances 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 4, do—10 after 5, do—35 after .5, do. very severe—5 after 6, do—45 after 6, do—7 of 8, do—20 af. 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 min. after 5, A. M. 4 shocks in succession—17 of 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 shocks or distant thunder was heard—22d December, 11 o'clock, A. M. a slight shock—23d December, at 2 o'clock in the morning, a very severe shock.

Thus we observe, that there were in the space of time mentioned before, eighty nine 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 edifices which art ever devised.

I landed often, and on the main shore as well as on several islands, found evident traces of prior eruptions, all which seem corroborative of an opinion, that the river was formed by some great earthquake; to me, indeed, the bed appears to possess every necessary ingredient, nor have I a doubt out that there are at the bottom of the river strata upon strata of volcanic matter. The great quantities of combustible materials, which are undoubtedly there deposited, (end to render a convulsion of this kind extremely alarming; at least, however, the beds of timber and trees interwoven and firmly matted together at the bottom of the Mississippi, are tolerably correct data from which may be presumed the prior nature, &c. 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 at 4 or 5 knots per hour. The water is now low, and when we stopped on the 16th inst. at han after 4, P. M. we had then run from that 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 occur, red, or destruction below has created some great basin or reservoir for the disemboguing of the main body of the 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 a superficial view of this awful phenomenon; not so much to convey instruction upon a very interesting subject, as to gratify the curiosity of the public relative to so remarkable an event. At some more convenient season it is my intention, from facts which I had the opportunity of collecting; to canvass 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 circumstances occur relative to this phenomenon, I will do myself the pleasure of making you another communication. With much respect-j-l am, sir, your obedient servant,

WILLIAM LEIGH PIERCE:

NEW-ORLEANS, Jan.- 13, 3812.

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 in some degree throughout the Indiana Territory, and the states of Ohio and Kentucky and Tennessee. I have conversed with gentlemen from Louisville and Lexington, (in Kentucky) who state, that it was severe in both those places. At the latter, indeed, it continued for twelve days, and did some inconsiderable injuries to several dwellings. From thence it ranged the Ohio River, increasing in force until it entered the Mississippi, and extending down that 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 it was burst asunder and instantaneously closed, leaving no traces whatever of the shock; by the other it was rent, and an electric flash ran along the surface, tearing the earth to pieces in its progress. These last were generally attended with an explosion, and streams of matter, in a liquid state, gushed from the gaps, which were left open when the shocks 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 Mountains, up the Washita River, had been rent to its base. This information I received from a settler at the Hill, and his appearance was such as to attach credit to his information.

Your obedient servant,

WM. L. PIERCE.

## EARTHQUAKE.

We have postponed a number of articles prepared for this evening's paper, to make room for the following very interesting communication from an intelligent friend at N. Orleans. It is, we presume, the most particular and satisfactory account of the earthquakes on the Mississippi which has yet been published: and Mr. Pierce being an ear and eye witness to the scenes he describes, the authenticity of his narrative cannot be doubted.—*Even. Post.*

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 of contributing in 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. Thro' 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 where it receives the waters of the Ohio, on Friday the 13th day of this month, and on the 15th, in the evening, landed on the west bank of this river, about 116 miles from the mouth of the Ohio. The night was extremely dark and cloudy; not a star appeared in the Heavens, and there was every indication 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 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, if several boats had 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 was immediately roused and rushed, upon deck. We were first of opinion that the Indians, staidious of some mischief, had loosed our cables, and thus situated we were foundering. Upon examination, however, we discovered that 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 conti-