

N^o. XXV.

A letter from Major Jonathan Heart, to Benjamin Smith Barton, M. D. Corresponding member of the Society of the Antiquaries of Scotland, Member of the American Philosophical Society, and Professor of Natural History and Botany in the University of Pennsylvania,——containing observations on the Ancient Works of Art, the Native Inhabitants, &c. of the Western-Country.

Fort-Harmar, 5th January, 1791.

S I R,

Read Feb.
3, 1792.

A GRE E A B L E to promise, I now enter on the different subjects of enquiry contained in your favour of the 24th of January last, but find myself unable to give that satisfactory information which the nature of your work may probably require: however, such observations as opportunity has enabled me to make, I am happy in laying before you.

With respect to **A N C I E N T W O R K S**. Those at the mouth of the Muskingum are the only vestiges of any considerable works I have very particularly attended to, a plan of which, with some remarks, is published in the *Columbian Magazine*. Those remarks, not having been made under an expectation of their being published, were not so accurate as I could now wish they had been; but improvements having since been made over the whole extent of the works, no very considerable investigation has since been made. We did, at that time, open the big mound and some of the graves, dig into the caves, on the walls, elevated squares, and at different places within the compass of the works, but
nothing

nothing was found more than I mentioned in those remarks.

The works at Grave-Creek I have carefully viewed, but never traced the lines with such accuracy as to enable me to give you a plan. They are very extensive, commencing about four miles below Grave-Creek, and continuing, at intermediate distances, for ten or twelve miles, along the banks of the Ohio. The principal works are adjoining the big-grave, which is about half a mile from the Ohio, and about the same distance north of the mouth of Grave-Creek. The works are very similar to those at the mouth of Muskingum. The continuation of works each way consists of square and circular redoubts, ditches, walls, and mounts, scattered, at unequal distances, in every direction, over extensive flats. The big-grave, so called, has been opened, and human bones found in it; but not of an extraordinary size; neither have I ever heard of bones of an extraordinary size being found in any of those graves, many of which have been opened, and generally found to contain human bones.

These are the only considerable remains which I have myself examined. The common mounts, or Indian graves, or monuments (for they are not always found to contain bones), are scattered over the whole country, particularly along the Ohio, and its main branches: indeed, I have scarcely ever seen an handsome situation on an high flat, adjoining any large stream, where there were not some of the above mentioned vestiges of antiquity.

Travellers, whose authority I depend on, inform me that on a branch of the Scioto, called Paint-Creek, are works much more considerable than those at Grave-Creek, or Muskingum, a mount much larger, a greater variety of walls, ditches and enclosures, and covering a much greater extent of country; that they continue for nearly sixty miles along the Scioto to its junction with the Ohio, opposite

site which, on the Virginia-side, are extensive works, which have been accurately traced by Colonel George Morgan, and I have been told there are remains of chimneys, &c.

The next works of note are on the Great-Miami, about twenty miles from its junction with the Ohio. A Mr. Wells, a gentleman of nice observation and philosophical enquiry, who had viewed them, and had also examined the works at Muskingum, informed me, they were very similar, though he thought these more extensive, the walls higher, and the ditches deeper, than those of Muskingum. He also observed, there were similar works on the Little-Miami, about twenty miles from its junction with the Ohio, which would be about the same distance from the remains last mentioned.

These are the only traces of *ancient works* of which I have received such authentic information as will justify me in reporting them as undoubted facts. Many other remarkable vestiges of antiquity have been described to me, particularly, on the east side of a small branch of the Big-Black, a river which empties itself into the Mississippi, nearly in latitude 33. north, an elevation of earth about half a mile square, fifteen or twenty feet high, from the north-east corner of which a wall of equal height, with a deep ditch, extends for near half a mile to the high lands. This information I had from the Chacktaw-Indians, who inhabit that country, and it is confirmed by many white people, who resided with the Chacktaws, and had often been on the spot.

The tradition of the Chacktaws with respect to this elevation is as follows, viz. that in the midst is a great cave, which is the house of the *Great-Spirit*; that in that cave he made the Chacktaws; that the country being then un-

der water, the great spirit raised this wall above water, to set the Chacktaws on to dry, after they were made.

The same persons and others assured me that on the low grounds of the Mississippi, which are subject to overflow, at a place called Bio-Piere, is a very large mount encompassed by a number of smaller ones, in a perfect circle, at equal distances from each other, and at about two hundred yards from the centre, or Grand-Mount. These circumstances I have the more reason to believe, as every information assures me that country is covered with vestiges of ancient settlements: as far south as the head waters of the Yazoo and Mobile, my own observations confirm it.

Who those inhabitants were, who have left such traces; from whence they came. and where they are now; are queries to which we never, perhaps, can find any other than conjectural answers. I can only give my opinion *negatively*, that they were not constructed by Ferdinando de Soto. He was not on the continent a sufficient time to construct even the works at Muskingum, and from every circumstance it appears that he was no farther north than Chattafallai, a Chickafaw-village, on the Tombigbee-branch of the Mobile. 2dly. These works were not constructed by any European, Asian or African nation since the discovery of America by Christopher Columbus: the state of the works, the trees growing on them, &c. point to a much earlier date. 3dly. They were not constructed by the present Indians or their predecessors; or some traditions would have remained as to their uses, and they would have retained some knowledge in constructing similar works. 4thly. They were not constructed by people who procured the necessaries of life by hunting: a number sufficient to carry on such works never could have subsisted in that way. 5thly. I may venture to add, the people

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who constructed them were not altogether in a state of uncivilization: they must have been under the subordination of law, a strict and well governed police, or they could not have been kept together in such numerous bodies, and made to contribute to the carrying on such stupendous works. But my business is to give you facts, and not to form conjectures.

There are other matters with respect to this country worthy attention, viz. the quantities of SHELLS, CONCRETIONS, PETREFACTIONS, BONES, &c. the marks of high water, and the NATURAL MEADOWS, or as they are called *Praires*. On the head waters of the Mobile is the true oyster-shell of a monstrous size, and in such quantities that I cannot conceive that they were transported from the sea, which is three hundred miles off. The Chickasaw say these shells were there when they came into the country. They use these shells in making their earthen-ware. The fossil-shells are found in great plenty in all parts of the country, and petrefactions are very frequent, particularly at the falls of the Ohio. Near the bottom of the falls there is a small rocky island which is overflowed at high water. This island is remarkable for being the seat of petrefactions. I saw no petrefactions on it myself but wood, fish-bones, and the roots of shrubs which grow on the island: of these there was a great plenty. Gentlemen who have resided near, and whose veracity is not to be doubted, assured me that they had seen many different articles petrified, as part of a hornet's nest, fishes, and in one instance an intire bird. But what is more particularly to be remarked is that this petrefying quality is confined to the island, and does not so often afford samples of it on the opposite shores: yet, there is no spring of running water, and scarcely a green thing on the island. Neither does this quality exist, in any remarkable degree, either
above

above or below the falls. There is a like instance up the Tenassée of a particular spot, extraordinary for petrefactions, whilst nothing of the kind takes place either above or below.

The **BRG-BONES**, found at a place called the Big-Bone-Lick, are now to be seen in the different museums of the states. It is unnecessary for me, therefore, to make any remarks on them. At P. Lewis, on the Mississippi, I saw a number of gentlemen who had travelled up the Missouri: they said, there are many of these bones to the westward, and the Indians told them the animal was still to be found farther west.

The **NATURAL MEADOWS** cannot be accounted for: some of them have, doubtless, emerged from the waters of the Mississippi, which I presume was an arm of the sea, some distance above the mouth of the Ohio. Other of these meadows appear to have been lakes, the waters of which, in process of time, finding some out-let, have become dry lands. But some of these *Praires* are high lands, surrounded by an extensive timbered country, in many places much lower than the clear lands. Major Wylls informed me that he had the most unequivocal proof, from the appearances of rocks and other vestiges a little above the mouth of the Missouri, that the waters of the Mississippi had, in past ages, flowed seventy feet higher than the present high-water marks. On the French Broad-River, a branch of the Tenassée, are perpendicular rocks, on which, more than one hundred feet above the present high-water, are artificial characters of beasts, birds, &c. A Mr. Williams, a gentleman of reputation, assured me, that he had been at the place, and that there could be very little doubt of the characters being artificial, and that it was absolutely impossible that any person could get to the spot on any

other supposition, than that the waters of the river had, at some time, flowed so much higher.

With respect to the POPULOUSNESS of the natives, I cannot give you any satisfactory account; and from whence they came it is still more difficult to determine. The Chickasaw say they came from where the Sun sets in the water, and that they were seven years on the way, marching only one moon in a year, remaining the other part of the time at the same camp, preparing for the next year's march. The similarity between their language and that of the Chactaw evidently proves that they are from the same origin. The languages of the different tribes of the Six-Nations are also very similar to each other, as are the languages of many of the Western nations and the Creek-nations, or Muscows, *with very little alteration Muscovites*. But the languages of the Six-Nations, the Western nations and the Chickasaw are so different even in sound and in construction, that they never could have been derived from, or any way dependent on, each other.

With respect to their CUSTOMS and MANNERS, I am equally unable to give you any satisfactory information. I cannot help thinking it a great misfortune, that no measures have ever been taken which held out sufficient inducements for men of abilities to travel amongst the tribes which are so far removed from the nations of Europe, that we might be assured their customs were not borrowed from, or any way intermixed with, ours. It is equally a misfortune that we are suffering so many of their languages to become extinct, without preserving their radical characteristics: for there is a certain characteristic peculiar to different languages, not dependent on each other, which, though disguised with a variety of sounds, or different dialects, on accurate examination, will give some grounds to conjecture from what language they are derived ;

derived; and I cannot help thinking that a full investigation of the different languages of the nations will be the most probable means for forming reasonable conjectures from whence this continent was peopled. A knowledge of their customs and manners might also give us some light. Those, however, who argue that the Indians are descended from the ten tribes of Israel, from a similarity of some customs, do not consider that the children of Israel were but little removed from a state of nature; that nature is uniform, and that all things being equal ever operate the same. It is true that many customs of the Indians are the same as those of the children of Israel: but they were such as nature herself pointed out.

As to the GENIUS of the Indians, I believe they are as capable as any other nation in learning any art, either mechanical or liberal. Indeed, I never could find that they possessed any original ideas different from our own, or had any bias of mind, propensity to particular vices, or predominancy of any passion, which could not be traced to their origin in the human mind, and be found to arise from the different stages, between the absolute state of nature and the highest degree of civilization. In fact, we find them possessed of every passion, propensity, and feeling, of man.

With regard to the ARTS of the ancient inhabitants, there is very little ground for us to form conjectures. I wish measures had been early taken to collect and preserve the different articles which have been found in different places, and that all other artificial, as well as natural, curiosities, together with accurate descriptions of all the vestiges of antiquity, could have been collected and preserved. Perhaps, from the whole, some future inquiries might have led us to an investigation of the history of this country.

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I might have added a great number of informations, from travellers, concerning various tribes of Indians; their customs, their languages, &c. such as that there are Indians who speak the Welsh language; that there are others who live in works similar to the ancient remains, already described; that there are Indians who live a shepherd-life, and others who entirely cultivate the soil. But I have not such full assurance of the truth of these things as to authorise me in reporting them.

I have, thus, according to the best of my abilities, given every information in my power, on the various inquiries in your favor. I have little expectation of there being any thing new in them, or which will give light on the subjects: but such as they are, please to accept them as my earnest endeavours to serve you.

With every sentiment of respect,

I am, Sir,

Your most Obedient and

Humble Servant,

JONATHAN HEART.

N^o. XXVI.

An Account of some of the principal Dies employed by the North-American Indians. Extracted from a paper, by the late Mr. Hugh Martin.

Read Oct.
4th, 1782.

THE Indians die their *red* with a slender root, which is called in the language of the Shawanoes *Hau ta the caugh*. Upon my showing a specimen