



HISTORICAL AND STATISTICAL  
INFORMATION RESPECTING THE  
HISTORY CONDITION AND PROSPECTS OF  
THE INDIAN TRIBES OF THE UNITED STATES  
Collected And Prepared Under The Direction Of The BUREAU OF INDIAN AFFAIRS  
Per Act Of Congress Of March 3, 1847

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Illustrated by  
S. EASTMAN, CAPT. U. S. ARMY



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PART I  
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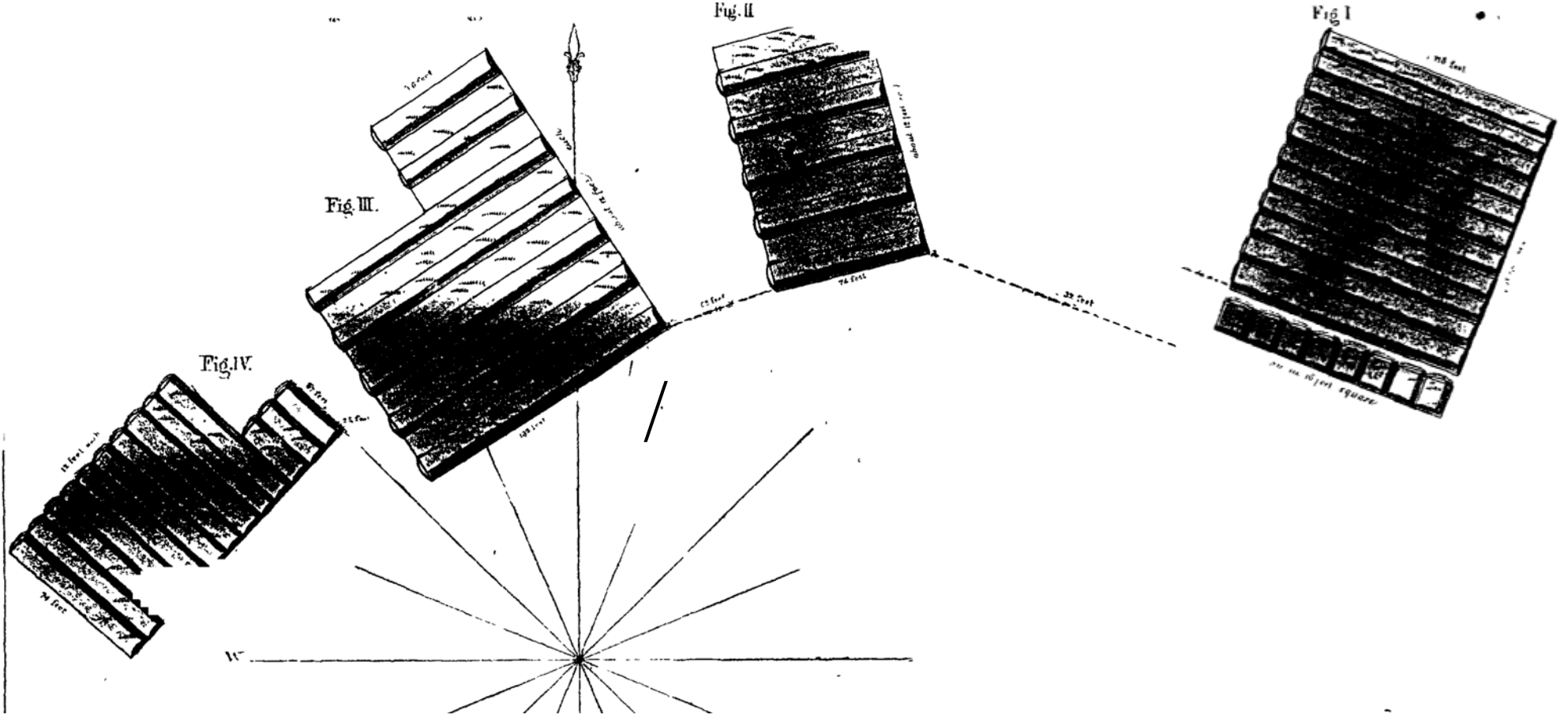
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# ANCIENT GARDEN-BEDS



## D. EVIDENCES OF A FIXED CULTIVATION AT AN ANTIQUE PERIOD.

### I. Prairie-fields.

### II. Remains of antique Garden-beds.

### III. Influence of the Cultivation of the Zea Maize.

### IV. Antiquities of the higher northern latitudes of the United States.

## I. PRAIRIE-FIELDS.

WHAT proportion of the prairies of the West may be assigned as falling under the inference of having been abandoned fields, may constitute a subject of general speculation. It appears to be clear that the great area of the prairies proper is independent of that cause. Fire is the evident cause of the denudation of trees and shrubs in a large part of the area between the Rocky and the Alleghany mountains. Water comes in for a share of the denudation in valleys and moist prairies, which may be supposed to be the result of a more recent emergence from its former influence. But there is a third and limited class of prairies, or openings, in the forest regions which may well be examined with a view to this question. Portions of the western valleys are clearly referable to this class.

We submit evidences of such former cultivation in a paper on the **antique garden beds**, as they have been called, in **Indiana** and **Michigan**, and some remarks on the origin and extent of the cultivation of the zea maize, as drawn from the Indian traditions.

## II. REMAINS OF ANTIQUE GARDEN-BEDS, AND EXTENSIVE FIELDS OF HORTICULTURAL LABOUR, IN THE PRIMITIVE PRAIRIES OF THE WEST.

The history of man, in his state of dispersion over the globe, is little more than a succession of advances and declensions, producing altered types of barbarism and civilization. In what particular grade of either of these types the Indian race were, on reaching the shores of this continent, is unknown, or to be judged of, chiefly, by their monuments and remains of ancient art and industry. That they, like most of the great Shemitic stock who peopled Asia, had undergone great transitions, rising and fitting in the scale of comparative civilization, as they developed themselves in the vast, and, as to their origin, indefinite area of land and ocean stretching between the banks of the Euphrates and the Mississippi, is apparent. They were found, at the discovery of America, as hunters.

With what actual state of knowledge they had reached this continent, or if as nomades or hunters, to what height of civilization any part of them had attained after reaching it, and before the discovery, are questions which would hardly have been asked with respect to tribes in the northern latitudes, had it not been for the **mounds, earth-works, and other monumental vestiges**, overgrown with forest, which were found on the **settlement of the Mississippi Valley**. Every disclosure in our antiquities which tends to shed light on this subject is important; and it is under this view that I submit the accompanying drawings (**Plates 6 and 7**) of some curious **antique garden-beds**, or **traces of ancient field-husbandry, which appear to denote an ancient period of fixed agriculture in the prairie regions of the West**. These vestiges of a state of industry which is far beyond any that is known to have existed among the ancestors of the present Indian tribes, exist chiefly, so far as is known, in the **south-western parts of Michigan**, and the adjoining districts of **Indiana**. They extend, so far as observed, over the level and fertile prairie-lands for about one hundred and fifty miles, ranging from the source of the **Wabash**, and of the west branch of the **Miami of the Lakes**, to the valleys of the **St. Joseph's, the Kalamazoo, and the Grand River of Michigan**. The Indians represent them to extend from the latter point, up the peninsula north to the vicinity of Michillimackinac. They are of various sizes, covering, generally, from twenty to one hundred acres. Some of them are reported to embrace even three hundred acres. As a general fact, they exist in the richest soil, as it is found in the prairies and burr oak plains. In the latter case, trees of the largest kind are scattered over them, but, in the greater number of cases, the preservation of their outlines is due to the prairie-grass, which forms a compact sod over them as firm and lasting as if they were impressed in rock; indeed, it is believed by those who have examined time grass which has preserved the western mounds and earth-works, that the compact prairie sod which covers them is more permanent in its qualities than even the firmest sandstones and limestones of the West, the latter of which are known to crumble and waste, with a marked rapidity, under the combined influence of rain, frost, and other atmospheric phenomena of the climate. As evidence of this, it is asserted that the numerous mounds, embankments, and other forms of western antiquities, are as perfect at this day, where they have not been disturbed by the plough or excavations, as they were on the earliest discovery of the country.

The annexed drawings (**Plates 6 & 7**) exhibit plans and sections of these antique beds, from the **Grand River and St. Joseph Valleys, of Michigan**. They were taken from undisturbed parts of the mixed forests and prairie lands near those primary streams. Those from Grand River, were taken near Thomas Station, in 1827; those frontier time St. Josephs, from a point near the village of Three Rivers, in 1837. They certainly offer new and unique traits in our antiquities, denoting a species of cultivation in elder times of an unusual kind, but which has been abandoned for centuries. They are called "**garden beds**," in common parlance, from the difficulty of assimilating them

to anything else; though it would be more proper, perhaps, to consider them as time vestiges of ancient field labor. **The areas are too large to admit the assumption of their being required for time purposes of ordinary horticulture.** Plats of land so extensive as some of these were, laid out for mere **gardens or pleasure-grounds**, would presuppose the existence, at the unknown period of their cultivation, of buildings and satrapies, or chieftaindoms of arbitrary authority over the masses, of which there is no other evidence. The other antiquarian proofs of the region are, indeed, of the simplest and least imposing kind; not embracing large mounds, or the remains of field fortifications unless we are to consider these horticultural labors of the table-prairie lands as having existed contemporaneously with, and as appendant settlements of, the principal ancient defenced towns and strong-holds of the Ohio Valley.

The principal points of inquiry are, by whom and at what period were these beds constructed and tilled, and whether by the ancestors of the existing race of Indians, by their predecessors, or by a people possessing a higher degree of fixed civilization? In most of the other antiquarian earth-works, or remains of human labors of the west, we observe no greater degree of art or skill than may be daily attributed to hunter races, who are infringed upon by neighboring tribes, and combine for the purpose of defence against hand-to-hand missiles, such as hill-tops surrounded with earthen walls and palisades. **But there is, in these enigmatical plats of variously shaped beds, generally consisting of rows, evidence of an amount of fixed industry applied to agriculture, which is entirely opposed to the theory that the laborers were nomades, or hunters.**

So far as my knowledge extends, **the area of country marked by these evidences of a horticultural population, covers the tract from the head waters of the Wabash and the Miami of the Lakes, to the eastern shores of Lake Michigan.** Similar beds are said to extend elsewhere. The beds are of various sizes. Nearly all the lines of each area or sub-area of beds, are rectangular and parallel. Others admit of half-circles, and variously curved beds with avenues, and are differently grouped and disposed. The mode of formation indicates two species of culture. The first consists of convex rows, whose arches spring from the same bases in opposite directions, as seen in **Figures 1 and 4, Plate 6.**

In the other kind, the bases of the convex rows are separated by a path, or plain, as shown in **figures 2 and 3, Plate 6.**

Both the plain and the convex beds are uniformly of the same width. If the space between the beds is to be viewed as a path, from which to weed or cultivate the convex bed, the idea is opposed by the comparative waste of land denoted by a perfect equality of width in the beds and paths. Besides, there are no such paths in the larger masses of rows, which are wholly convex, but are bounded by avenues or paths at considerable distances. The principal species of culture resembling this arrangement of beds, in modern horticulture, consists of **beans, potatoes, and rice**; that of **celery** requires, not a path separating the ridges, but a ditch.

**Indian corn** may have been cultivated in rows. The former and the present mode, as far as we know, was in hills. These antique corn-hills were usually large. They were, as the Iroquois informed me in 1845, three or four times the diameter of the modern hills; — a size which resulted from the want of a plough. In consequence of this want, the same hill was mellowed by the scapula or substitute for a hoe, or instrument used for planting, during a succession of years. Thus the corn-hill became large and distinct, and in fact a hillock. This is an explanation, given me while viewing the ancient corn-fields, near the Oneida stone,<sup>1</sup> which are now overgrown with forest trees.

These ancient garden-beds of the West may have derived their permanency from the same want of agricultural implements and of horses and cattle to plough the land, and from the practice of reforming and replanting them by hand, in the Indian manner, year after year. In this manner, we may account for one of their most surprising traits, namely, their capacity to have resisted both the action of the elements and the disturbing force of time power of vegetation.<sup>2</sup>

Rev. Isaac M'Coy cut down, in 1827, an oak tree, on one of the beds (**figured in Plate 6, Fig. 2**), which measured thirty-eight inches in diameter, at the height of twenty-six inches above the ground, and which denoted *three hundred and twenty-five cortical layers*. This would, agreeably to admitted principles in the progress of vegetation, give A. D. 1502 {1827-325}, as the date of the first annual circle, or cortical ring deposited by the tree. The continent was discovered ten years before this assumed date. Cabot ran down the north Atlantic coast, it is true, five years later, but did not land. Cartier first entered the Gulf of St. Lawrence in 1534. But he left no man in the country, during that or the next year, when he ascended the river; and the Indians of whom he inquired respecting the sources of the St. Lawrence, told him that these sources were very remote, that the waters expanded into several large lakes, and that no man had been heard of; who had ever gone to their source. Quebec was founded in 1625.<sup>3</sup> Sir Walter Raleigh sent his first colony to Virginia in 1584, although a colony was not permanently settled till 1610. The Holland States began their first exploratory efforts under Hudson, in the present area of New York, in 1609. Historians have fixed on 1608, as the date of the first effort of the French to colonize Canada. The English Pilgrim Fathers, from Holland, followed the track of Hudson, in 1620, intending, it appears, to enter the great river he had discovered, but landed at Plymouth.<sup>4</sup> From none of these sources could an agricultural population, whose labors appear to have terminated in Indiana and Michigan about 1300. have probably proceeded.

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<sup>1</sup> This stone, which I visited in 1845, is a boulder of syenite — one of the erratic block group.

<sup>2</sup> This force is far less in the temperate latitudes than under the equinoxes, where Mr. Stephens represents it as displacing stones in a wall.

<sup>3</sup> This was eleven years *after* the building of Fort Orange, at the present site of Albany, N. V.

<sup>4</sup> Foreign Historical Documents, State Department, Albany, NY.

Time Spanish element of early American population is equally inadequate, chronologically, to have furnished an off-shoot of population for labors prior to, or near the assumed date of these industrial monuments. Although Vespuccio discovered the coast of Paria in 1497, and the extended shores of Brazil and Paraguay in 1503, he landed not a soul on either coast. It was not till 1512 that De Leon discovered Florida. Orijaba first landed on the gulf coasts of Mexico in 1518. Cortez followed him in 1519. The mouth of the Mississippi was passed, in the coast explorations of the gulf, in 1527, late in the autumn; but it was not till 1539 that De Soto penetrated Florida, and reached an interior point on the Mississippi. All this while, we are to suppose, on the foreign hypothesis of the origin of these beds, that the horticultural and agricultural labors of the natives of Indiana and south-western Michigan, the vestiges of which are herein noticed, were carried on by a population which, according to one authority,<sup>1</sup> equalled that of Indiana at the period of the observation. Let it be borne in mind, at the same time, that the French from Canada did not penetrate the area of the great Lakes till 1632, when Sagard reached Lake Huron; nor go into upper Louisiana till 1673, when Marquette entered the Mississippi, at the mouth of the Wisconsin; that La Salle did not visit Illinois till 1678; that the settlement at Bolixi, on the Gulf, was not made till 1699; that Detroit was not founded till 1701, and New Orleans not till 1717. With these data in the mind, the idea of these antique agricultural labors being attributable to either of these modern elements of western population, will appear as quite untenable. Besides, both the Spanish and French population, when they first appeared at remote interior points west of the Alleghanies, did not come to undertake agricultural labors at those unsustained interior points, far less to plant **extensive gardens and pleasure-grounds**, like those whose vestiges we see in the **valleys of the Grand River, Kalamazoo, and Elkheart**. De Leon, Cortez, and De Soto came to seek new elements of commerce and trade, and to find treasures in the untilled portions of the continent, in its gold and silver, furs and dye-woods, medicinal plants, and other spontaneous productions of the American forests. **Agriculture became only an incident in these schemes for discovery and conquest; and was merely resorted to, in the end, to sustain life, and not as furnishing articles of export.** But what should induce foreigners to undertake labor on the remote interior **table-lands of Indiana and Michigan?** Furs and the fur-trade were the only leading source of easy commerce there, and this was not introduced till the first quarter of the sixteenth century.

**We are compelled to look to an earlier period for the origin of these agricultural vestiges.** It is more probable that they are the results of early cultivation, in some of the leading and more advanced indigenous races who possessed those midland regions between the Mississippi and the Lakes. It was a region which formerly abounded in game of various sorts; and while a part of the season was employed in

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*I* Vide letter of Mr. M'Coy.

hunting, a heavy population, such as the vestiges denote, provided breadstuffs by the culture of **corn, beans, pulse,** and various **esculent roots,** which are known to flourish in these latitudes.

That this people were not advanced beyond the state of semi-agriculturalists appears probable, from the want of any remaining evidences in architecture or temple-worship, such as marked the Mexican and Peruvian races; for, beyond the occurrence of mounds of the minor class, or small tumuli, there are no evidences of their attainment as constructors or builders. The garden-beds, and not the mounds, form, indeed, the most prominent, and by far the most striking and characteristic antiquarian monuments of this district of country. There would seem to have been some connection between these beds and the peculiar class of low imitative mounds, in the form of *animals*, which mark a very considerable area of the opposite side of Lake Michigan.

Lake Michigan is, indeed, remarkable for its protrusion from north to south, for its entire length, into the prairie regions of Indiana and Illinois. It occupies, in truth, a summit; and while its outlet is into Lake Huron north, and thus by the lake chain and the St. Lawrence into the north Atlantic, the Illinois runs south from its immediate head, and finds the ocean in the Gulf of Mexico. The **ancient garden-beds,** and the **animal-shaped mounds,** the latter of which may be supposed to have been erected to perpetuate the memory of great hunters, who bore the *names* of the animals imitated, occupy the same latitudes. They **constitute some of the best corn latitudes of Michigan and Wisconsin.** It is to be borne in mind that the waters of Lake Michigan alone separate these two classes of remains, and that the northern tribes, who are bold and expert canoe-men, find no difficulty in crossing from shore to shore in the calm summer months.

The French found the eastern and southern shores of Lake Michigan in the possession of the **Illinese,** some of whose descendants still survive in the Peorias and the Kaskaskias, south-west of the Mississippi. These "Illinese" tribes were of the generic stock of the **Algonquins,** and did not exceed the others in agricultural skill. None of the early writers speak of; or allude to the species of cultivation of which the **horticultural beds,** under consideration, are the vestiges. **The Ottowas, who still inhabit parts of the country, as at Gun Lake, Ottawa Colony, and other places dependent on Grand River, attribute these beds to a people whom they and the united Chippewas call the Mushcodainsug, or Little Prairie Indians.** But there is no evidence that this people possessed a higher degree of industry than themselves. The **Ottowas** did not enter Lake Michigan till after their defeat in the St. Lawrence Valley, **along with the other Algonquins,** about the middle of the sixteenth century. The trees growing on the beds throughout southern Michigan and Indiana denote clearly that, at that period, the cultivation had been long abandoned. **It was evidently of a prior period. It has been seen that it could not have been of European origin, if we confine our view to known or admitted periods of history.**

**It is more reasonable to attribute the labor to races of Indians of an early period, and of a more advanced grade of industry and manners, who were yet, however, to a certain extent, hunters. Are not these beds cotemporary vestiges of the epoch of the mound-builders, if not interior positions of the people themselves, who have so placed their fortified camps, or bill-seated outposts, as generally to defend their agricultural settlements from the approaches of enemies from the South?**

**The charm of mystery is so great, that men are apt to be carried away with it, and to seek in the development of unknown or improbable causes for the solution of phenomena which are often to be found in plainer and more obvious considerations. That this charm has thrown its spell, to some extent, around the topic of our western antiquities, cannot be denied.**

### **III. INFLUENCE OF THE CULTIVATION OF THE *ZEA MAIZE* ON THE CONDITION, HISTORY, AND MIGRATIONS OF THE INDIAN RACE.**

THE **influence of the cultivation of the *Zea Maize*** on the semi-civilization and history of the Indian race of this continent, has been very striking. It is impossible **to resist this conclusion, in** searching into the causes of their dispersion over the continent. We are everywhere met with the fact, that those tribes who **cultivated** corn, and lived in mild and temperate latitudes, reached a state of society which was denied to the mere hunters. The Indian race, who named the Mississippi Valley at the era of the first planting of the American colonies, were but corn-growers to a limited extent. It was only the labor of females, while the men were completely hunters and periodical nomades. They spent their summers at their corn-fields, and their winters in the wild forests, doing just what their forefathers had done; and the thought of their ancestors having had the skill or industry to raise mounds, or throw up defences on the apex of hills or at sharp defiles, never occurred to them till questioned on the subject by the whites. They were, it is true, cultivators of the *zea maize*, so far as has been shown, and also of the tobacco-plant, of certain vines, and of a species of bean,—arts which existed *pari passu* with the hunter state, and which they professed to have known from the remotest times. The tribes of the **Carolinas and Virginia, extending** along the Atlantic quite into New England, raised large quantities of the corn, or *zea maize*, and they all relied upon it as one of their fixed means of subsistence. The traditions of even the most northerly tribes traced this grain to the South. That it was of tropical, or of south-western origin; that it extended gradually, and by an ethnographical impulse, into the temperate and northern latitudes, is affirmed by early observation, and is a result which the phenomena of climate *a priora* determines. The Indian corn will not mature north of latitude 46° 30', —it is not a profitable crop north of 44° 30', and the tribes who

have, from the earliest times, cultivated it, have no traditions that either themselves or their grain had a northern origin. The first tribes, indeed, in passing north from the continental summit of the Mississippi, who look northwardly on the course of their origin, are the non-corn-raising tribes,—the great Athabasca group. These look to the Arctic latitudes, or the north-east coasts of America, by the Unjiga Pass of the Rocky Mountains, as their place of origin; some of them preserve the tradition of their having landed, amid snow and ice, on the bleak and frigid shores of the Arctic Ocean.

The Indian tribes of the United States, who formerly inhabited both sides of the Alleghany Mountains and the whole Mississippi Valley, extending north to the Great Lakes, and reaching south around the northern coasts of the Gulf of Mexico, all, so far as known, preserve traditions which point either south, south-west, or due west, as their starting point in the ethnographic chain. With the *zea maize* they brought and propagated northwardly the art of pottery. They made cooking pots, porringers, and vessels of coarse clay, tempered with silex. This art extended also quite into the northern parts of New England, and to the banks of Lake Superior, where it ceases. The Indian tribes of the broad, elevated summit of the Rocky Mountains, never raised corn, nor had they the art of pottery. Frémont found no traces of either, till he passed entirely through them, or went into the latitudes of California; —De Smet noticed neither, in his missionary journeys between the sources of the Missouri and the northern branch of the Columbia. The **Shoshonees, or Snake tribe**, who dwell in the arid valleys, about the area of Fort Hall, in the southern pass, boil their fish and the flesh of the few animals of those longitudes, in pots made of osiers, or small roots and fibres dug from the ground.<sup>1</sup> On the contrary, the history of the track of migration of all the known tribes of the low and swampy latitudes of the Mississippi Valley and of the Atlantic coasts, is distinctly traced by the fragments of pottery which mark the sites of their ancient villages. Nothing is, indeed, more characteristic of these village sites.

With these two elements, — the arts of raising corn and making pottery, in which they all agree, — our American Indians of the corn-yielding latitudes also brought with them the knowledge of the three species of mounds which particularly mark the western longitudes; namely, the tribal mound of augury or oracles, and of high annual oblations, the mound of sepulture, and the village mound of ordinary sacrifice. These were very different in their object and structure, but were sometimes mixed in application, as caprice or necessity might dictate, or time fortunes of war, which gave the conquering tribe the power, might determine. They all arose, and were founded on one fundamental principle and characteristic of the race; namely, their RELIGION, —in which the worship of the sun and moon and various planets stood as types of

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<sup>1</sup> Vide N.J. Wyeth, Esq. Doc. Ind. Off. Int. Dept.

divinity, and was, more or less, an element of union ; and this system of worship appears to have marked all the primordial or first emigrated tribes. It must be recollected, as one of the fundamental points in our antiquities, that the Indian tribes are of an age which is very antique, —that they have occupied various parts of the continent not only for centuries, but probably for scores of centuries. An observer, otherwise prone to great sobriety of conclusion, thinks they must have reached the continent soon after the dispersion of mankind.<sup>1</sup>

A people who require a pile of earth or stones in the shape of a mound, — a teocalli or House of God, as the Aztec word imports, though they be otherwise incapable of combined labor, except when religion impels them, may be supposed to have manual skill and means to raise either. The united hand-labor of many, devoted to such an object, would soon accomplish it. There is nothing, indeed, in the magnitude and structure of our western mounds, which a semi-hunter and semi-agricultural population, like that which may be ascribed to the ancestors or Indian predecessors of the existing race, could not have executed; whereas, the interior of these earthy pyramids, even the largest of them, has disclosed nothing beyond a rude state of the arts, or, at best, such arts of pottery and sculpture, shell-work and stone implements, as are acknowledged to belong to the hunter or semi-hunter period. It is these interred evidences of the actual state of the arts, found in the mounds, that denote the mounds themselves to be the work of the semi-hunter races, before they or their descendants had fallen into their lowest state of barbarism, or that type in which they were found by the colonists between 1584 and 1620. There is little to sustain a belief that these ancient works are due to tribes of more fixed and exalted traits of civilization, far less to a people of an expatriated type of civilization, of either an ASIATIC or EUROPEAN origin, as several popular writers have, very vaguely and with little severity of investigation, imagined.

**It is impossible to discuss,** on general principles, the vestiges of the **agricultural labors**, and curious “**garden-beds,**” in the forests and prairies of **Indiana** and **Michigan**, which have been taken up for examination in this paper, **without considering the subject of an antique period of semi-civilization in the West**, in all its bearings. Viewed in its true lights, there appears to be a unity of period and general character in the **mounds, the elevated and various earth-works, defences, hill-tops, ditches and embankments, remains of cultivated fields**, the peculiar and low state of the Mechanic arts, the ignorance of the use of metal, and the want of knowledge of the common principles of antique Military science, which are, more or less, evident and conspicuous at the various sites of western antiquities, but which yet stamp a certain character of unity upon all.

This coincidence in knowledge and want of knowledge, marking the type of the civilization, is to be traced in the antiquities of the whole area of country from the shores of the Gulf of Mexico, extending eastward to the cape of Florida, and northward, both along the Atlantic shores and up the valley of the Mississippi and its great tributaries, till the mingled evidences of it, from both leading tracks of migration, eventually meet, and are to be found in the wide area of the Lakes.

The **Aztecs** did not, according to their own records—the pictorial scrolls—reach the Valley of Mexico until A. D. 1090. There are no evidences to be relied on, **of inhabitants of earlier date in the Mississippi Valley**, who were more elevated in their character than mere roving hunters, and worshippers of geni. **Most of the western monuments denote the twelfth century as the period of their abandonment. This is the general period indicated by the growth of the larger forest trees, on mounds and works of art, in the Mississippi and Ohio Valleys, and in Florida.** The **Aztecs** do not trace their history farther back than to their point of landing on the Pacific; *i. e.*, **one hundred and eighty-six years**. They trace their migration directly from the north, which would have been correct, generally speaking, had they come, in this migratory movement of one hundred and eighty-six years, from the banks of the river Gila, or any part of the peninsula of California, or the gulf-coast of California, as starting points. They do not profess to have come from the *east* or *north-east*, which they must have done, had they reached Mexico from the Mississippi Valley, or the sea-coasts of Florida, Cuba, or the Antilles. It was a movement taking place, with every probability, in longitudes west of the arid spurs and elevations of the Rocky Mountains, and cannot be supposed to have extended over the wide deserts of sand, without game, grass, or water, intervening between those mountains and the sea-coast of Upper California. Such a migration, which was made with great deliberation, building towns and remaining for a series of years at a place, must have disturbed the relations of the Indian tribes, through whose territories they marched, and among whom they roamed, producing lateral migrations, not westwardly, which would bring them to the shores of the Pacific, whence the **Aztecs** moved, but towards the east. And when they gained strength enough to overturn the **Toltecs** and **their confederates**, still more extensive migratory movements must be supposed to have resulted. Some of these movements tended southward and south-eastward; reaching on one side towards the Pacific, and on the other into Central America and Yucatan, where both the lexicography and time style of building and mode of life denote ancient affiliations. Others would press northwardly and north-eastwardly, where temperate latitudes, and forests abounding with game of every species, would furnish strong means of temptation to men of migratory habits. It is most reasonable to suppose, that the ancient population of the Mississippi Valley, and thence, in process of time, of the Atlantic coast and plains south of the great lakes, was thus derived ; and if so derived, it would bring with it time *zea maize*, the **bean**

and **vine**, and **summer fruits**—a taste which is most remarkable with all our western Indians—and the **knowledge of making cooking vessels**, which all the **corn-planting tribes possessed**. It is certain that the **Aztecs**, who, in their pictorial scroll, preserved by Boturini, represent themselves as landing from an island, in a boat moved by paddles, did not travel east two thousand miles across the fruitless waste of the Rocky Mountains, to get into the Mississippi Valley, where some writers have located Aztlan, before they set out northwardly for Mexico, from this extraordinary position. Nor would they, in such a movement, — one more arduous, indeed, than that of the Israelites by Sinai,—have found, as they did, tropical fruits.

The fact that the **ancient Indian tribes of the Mississippi Valley** brought the *zea maize* with them, is almost demonstrative proof that they proceeded from southern or intertropical latitudes. **This grain was the element of Mexican civilization**. They could not have lived in large masses or towns without it; consequently, they could not, without such a fixed means of subsistence, have built the **pyramids of Cholula and Chialco**, and other like works. Erratic tribes, who once knew the value of this grain, would never relinquish it or forget its mode of culture, however far they migrated. Most of our tribes have invented myths, to denote it as the gift of the Deity to them, and as designed for their subsistence when game failed. The cultivation of large fields of corn would have enabled these tribes to band together, and thus to have it in their power to erect the **largest mounds in the West**. It is remarkable, indeed, that the most numerous as well as the **largest mounds are seated on fertile plains or in rich alluvial valleys, which are the best corn lands West of the Alleghanies**.

**Assuming, then, that tribes from the Mexican latitudes, in its widest ancient extent**, —which we may, for convenience, limit to either the Rio Bravo del Norte or even the banks of the Rio Rosco or Red River,—**furnished the element of the ancient population of the Mississippi Valley**,—that is, the **mound-builders** and real authors of the period of agricultural industry denoted by antiquarian evidences,—and we have no reason to question their ability or capacity, any more than their strong natural taste, founded on religious habit, to erect the mounds and defences which have been enigmas in those fertile latitudes for so long a period. That their predecessors in this valley were mere foresters, rovers after game, who had no fixed habitation, and dressed simply in the *azian*, we may observe from such naked wandering tribes being found by them in their migration through latitudes *west* of the mountains, where such men are depicted as prisoners, dragged along by the hair of the head, as shown by Boturini's map, to be sacrificed *by* their sanguinary priests.

A war between two Indian elements, so diverse of habits, a collision of interests and power between a semi-civilized and barbaric class of tribes,—would be the natural result. Temporary attacks, the conflict of whole tribes, and the dreadful retaliations of a people whose rites and practices in the treatment of prisoners were horrible, would in time embroil the

whole valley, in all its length and breadth, and bring general combinations of race against race. In this manner the feature of military defences, whose remains are now mostly overgrown by the forest, would arise. These defences are all very rude, but peculiar. They appear to have been a native development of the art of strategy. There is nothing of the old world's knowledge apparent here. Hostile tribes fortified time apex of a hill, or threw up rings of earth, or raised plateaus or small mounds in a plain. The ditch was generally within and not *without* the wall. It was, in fact, a shelter for men, or native magazine, from missiles. The Tiascalan gateway denotes an affinity of military knowledge with the tribes to whom we refer this particular kind of earthwork. Both the races seem to have contented themselves with making the entrance to a fort difficult, and giving the defenders of it the advantage in the use of missiles and forest arms. The small mounds were placed sometimes inside and sometimes outside of the gateways and openings. From these artificial hillocks a hand-to-hand fight, with arrows, spears, and clubs, could be advantageously maintained. The raised areas were evidently the site of more formidable works, and of what might be deemed the temple service of the priests; and these, which appear to be few, embrace the double objects of religion and defence. Such manifestly were the ancient sites of Marietta, Circleville, and Chuhicothe, which may be regarded as the chief points of the ancient power in the Ohio Valley.

That there were such general combinations between native tribes of northern and southern races, is denoted, not only by the extension of the art of mound-building over northern latitudes, but also by the traditions of the Iroquois' and the Lenawpes, who distinctly speak of them, and tell us that, after long struggles, the northern confederacy of tribes prevailed, and overcame or drove off the intruding tribes towards the south.'

#### **IV. ANTIQUITIES OF THE HIGHER NORTHERN LATITUDES OF THE UNITED STATES.**

Much caution is required in recording the traditions of time aborigines; and the difficulty is increased. by time extensive multiplication of tribes and bands, who have had the ambition to figure as original people or principals in their respective groups; the frequency with which they have crossed each other's track in the course of their leading migrations; and time often preposterous claims to tribal originality and supremacy which are set up. There are no records of any sort, beyond their

*1* Vide Notes on the Iroquois; also, Cusic.

*2* American Philosophical Transactions, Vol. I.

**rude monuments of earth** and stone implements; and even these disappear in proceeding north beyond a certain latitude. Few of the Indians are qualified, by habits of reflection, to state that which is known or has occurred among them in past years; and those who attempt to supply by invention what is wanting in fact, often make a miserable jumble of gross improbabilities. History cannot stoop to preserve this. It must be left as the peculiar province of allegory and mythology. Indeed, their imaginative legends furnish *by far* the most interesting branch of their oral traditions; and hence this development of time mind of the race will be noticed at large under that head.

In the highest latitudes occupied by the **Algonquins**, on and north of the **Lake Superior basin**, we search in vain for any striking objects of antiquity. In the actual basin of Lake Superior, the oldest and most impressive features are those arising from the upheaval of rocks by ancient volcanic forces, or from the extraordinary effects of lake action, operating upon large areas of the sedimentary rocks, which have been broken up by the waves, and re-deposited on the shore in the form of vast sand dunes. But these disturbing forces belong strictly to the consideration of its geological phenomena. The mining ruins are by far time most important, and will be noticed hereafter. (Vide G.)

**There are no artificial mounds, embankments, or harrows in this basin**, to denote that the country had been anciently inhabited; and when the inquiry is directed to that part of the continent which extends northward from its northern shores, this primitive character of the face of the country becomes still more striking. The scanty character of the forest growth, the diminished area of the soil, and the increased surface of bare and exposed rock, impart to the country an air of arid desolation. Ancient seas, of heavy and long-continued volume, appear to have dragged along, whether by the aid of ice-fields or not, vast boulders and abraded rocks, which are pitched confusedly into gulfs and depressions of the surface; while the more elevated and denuded portions of the rocks bear, in their polished or scratched superficies, indubitable evidence of this ancient action. The Indian, standing upon these heaps of rock-rubbish, and unable to reach the true causes of the disturbance, is prone to account for appearances as the work of some mythological personage. It is something to affirm that the mound-builders, whose works have filled the West with wonder,—quite unnecessary wonder,—had never extended their sway here. The country appears never to have been fought for, in ancient times, by a semi-civilized or even pseudo-barbaric race. There are but few darts or spear-heads. I have not traced remains of the incipient art of pottery, known to the Algonquin and other American stocks, beyond the Straits of Saint Mary, which connect Lakes Huron and Superior; and am inclined to believe that they do not extend, in that longitude, beyond the latitude of  $36^{\circ} 30'$ . There is a fresh magnificence in the ample area of Lake Superior, which appears to gainsay the former existence and exercise by man of any laws of mechanical or industrial power, beyond the canoe-frame and the war-club. And its storm-beaten and castellated rocks, however imposing, give no proofs that the dust of human antiquity, in its artificial phases, has ever rested on them.

## ANTIQUITIES.

By far the most striking object in the basin of Lake Superior, which had attracted the attention of the early inhabitants, was, evidently, the native copper, which, in the shape of detritus, exists so extensively in that quarter. This metal, which is found also in situ, as part of the product of veins in the trap rock, has been scattered abroad, by geological action, along with the erratic block and diluvial deposits. It is also found to exist, to an uncommon extent, in its original position along with the ores, spars, and vein stones, in both which locations the Indians, who call it Red Iron, explored it. They employed it in making various ornaments, implements, and instruments. It was used by them for arm and wrist bands, pyramidal tubes, or dress ornaments, chisels and axes, in all cases, however, having been wrought out exclusively by mere hammering, and brought to its required shapes without the use of the crucible, or the art of soldering. Such is the state of the manufactured article, as found in the gigantic Grave Creek Mound, and in the smaller mounds of time Scioto Valley, and wherever it has been scattered, in early days, through the medium of the ancient Indian exchanges. In every view which has been taken of the subject, the area of the basin of Lake Superior must be regarded as the chief or primary point of this intermediate traffic in native copper; and, so far as we know, it appears to have been in the hands of the Algonquin tribes: at least, those tribes were found here at the opening of the sixteenth century, when these portions, generally, of the (then) territories of New France were first visited.

Having found a latitude beyond which the architectural antiquities of the Mississippi Valley do not apparently reach, it is seen that such antiquities begin to meet the steps of the inquirer as soon as he passes south of this general boundary. They increase, both in frequency and importance, as he proceeds to the respective basins of Lakes Huron and Michigan, and over the plains and through the fertile valleys of the lake and prairie, and Western States, till they are found to extend to, and characterize the whole Mississippi Valley. They are also traced through all the states east and west of that valley, bordering on the Gulf of Mexico, and extending a limited distance from the Floridian peninsula, along time shores of the north Atlantic.

In exchange for time native copper of Lake Superior, and for the brown pipe-stone of the Chippewa River of the Upper Mississippi, and the blood-red pipe-stone of the Coteau des Prairies west of the St. Peters, they received certain admired species of the sea-shells of time Floridian coasts and West Indies, as well as some of the more elaborately and well-sculptured pipes of compact carbonate of lime, grauwacke, clay

slate, and serpentines, of which admirable specimens, in large quantities, have recently been found by researches made in the inverted-bowl-shaped, or sacrificial mounds of the Ohio Valley, and in the ossuaries of the Lakes. The makers of these may also be supposed to have spread, northwardly, the various ornamented and artistic burnt-clay pipes of ancient forms and ornaments; and the ovate and circular beads, heart-shaped pendants, and ornamented gorgets, made from the conch, which have received the false name of ivory, or fine bone and horn. The direction of this native exchange of articles appears to have taken a strong current down the line of the Great Lakes, through Lakes Erie and Ontario, along the coasts of the States of Ohio and *New York*, and into the *Ganadas*. Specimens of the blood-red pipe-stone, wrought as a neck ornament, and of the conch bead pendants and gorgets, and of the antique short clay pipes, occur, in the ancient Indian burial-grounds, as far east as Onondaga and Oswego, in *New York*, and to the high country which abounds in such extraordinary sepulchral deposits of human bones and Indian ornaments, about Beverly and the sources of the several small streams which pour their waters into Burlington Bay on the north shores of Lake Ontario. At the latter place I also obtained specimens of the *pyrola perversa* in an entire state. All these are deemed to be relics of the Ante-Cabotian period. It may be necessary, perhaps, hereafter, to except from this character the antique short ornamented clay pipes named. There are, at present, reasons for believing that however peculiar this species of pottery may appear to the mere American antiquary, its prototype existed, and may be found, as a relic, in France, Holland, or Germany. There is, indeed, something of an Etruscan cast of character about it. Copper axes, stone pestles, fleshing chisels, fragments of earthen kettles and vases, and mortars for pounding corn, and for breaking up the feldspathic and other materials used for tempering the clay of their earthen-ware, occur in almost every portion of the Algonquin and Chippewa territories. There have also been found specimens of the ancient bone needles used by the females in making some of their fabrics. Reference is made to the annexed plates, with descriptions for each of the objects of antiquarian art above mentioned, together with their names and uses, and the time and place of their discovery and disinterment.

In looking back to the ancient period of occupancy of the upper Lakes, there are one or two features in the earlier antiquarian period, which have not, so far as my knowledge extends, received the notice they appear to merit. The first consists of sepulchral trenches or ossuaries, in which the bones of entire villages, it would seem, have been carefully deposited, after the bodies had been previously scaffolded or otherwise disposed of, till the fleshy parts were entirely dissipated, and nothing left but the osteological frame. My attention was first arrested by a deposit of this kind, on one of the islands of Lake Huron, which had been broken into and exposed by action of the waves. This sepulchre had its direction from north to south, whereas all our existing Indian tribes are known to bury their dead east and west.

The thigh and leg bones were laid longitudinally. They were very clean and white, as if great care had been originally exercised in separating them from their integuments. The area of the bed may have been about four feet in width and depth, by twenty in length. The trench was not fully explored, but the entire number and quantity of bones of almost every part of the human frame, appeared to be such, that it must have embraced the accumulation of a community for a long time. The oldest Indians, at the neighboring island of Michillimackinac could give no account of it, though frequently interrogated. One of the elder men, who had long exercised the functions of a jossakeed, or Indian seer, suggested that they were probably sepulchres of the *MvsIil~odainsng*, or "Mascotins," as they have been called by the French ; —a tribe who are mentioned as having formerly occupied this quarter, and who had been at war with them. The term means Little Prairie Indians, and not, as some think, Fire-Indians.'

Recently, aboriginal remains of a very interesting character, including pictographic inscriptions, have been found in the islands of Lake Erie, which appear to throw light on the history of the Indian tribes who formerly inhabited that lake. These remains will be examined, and described in the next volume of this work.

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*I* The Chippewa word for Prairie has the radix for fire, *Slikoda*, in it. Perhaps prairies were anciently called *fire-plains*, from their periodical burnings.

Time Nipercineans, who are deemed the true Algonquins by ancient writers, lived at Lake Nepissing; the Odjibwas on the straits of St. Mary's and on the shores of Lake Superior.

Ottawa and Chippewa tradition represents these tribes at first as coming into hostile collision, as a nation, with a people who appear to have been their predecessors in the lakes. This collision we first hear of on the inner shores of the island of Portagunasee,' and on the narrow peninsula of Point Detour, Lake Huron, the latter being the western cape of the entrance into the straits of St. Mary's. They fought and defeated them at three several places, and drove them west. To this primitive people, who appeared to rule in the region about Michillimackinac, they gave the name of Mushkodains, or Little Prairie Indians. Chusco, an aged Ottawa of Michillimackinac, invariably used the word in its *dirnin~it~ve* and *plural* forms, namely, Mush-ko-dains-ug; that is to say, *People of the Little Prairie*. He spoke of them as time people whom the Algonquins drove off, and he invariably referred to them when questioned about ancient bones and caves, in the region of Michillimackinac. They had magicians for their leaders. Their war-captain escaped, the tradition says, under-ground, in the battle at Point Detour. They fled on this occasion up the coast to Michillimackinac, and so, by degrees, into Lake Michigan by its eastern shores, whence their traditions follow them as far south as the Washtenong, called Grand River by the French. These Mushkodams timey represent as powerful and subtle, and excelling themselves in arts and necromancy.' Timey deposited the human bones, he said, found in caves at Michillimackinac. They are the authors of the trenches filled with human bones on Menissing or Round Island, in Lake Huron. The Ottawas attribute to them the small mounds and the old garden-beds in Grand River Valley, and at other places, and, in short, they point to them for whatever in the antiquities of the country they cannot explain or account for. Who these Little Prairie, or Fire Indians were, is uncertain. Are we not to regard them as the lost *Mascotins* of the early French writers? Were they not cotemporary in the Lakes, with the Assigunaigs, or Bone Indians, spoken of by the western and Lake tribes?

No reasonable doubt can exist on this subject. They are names ever in the foreground of Algonquin history, and these people appear to have fought for the possession of the Lake country. By them the ancient ossuaries were probably constructed; and we have considered time fhcts in vain if they were not the nations who worked the ancient copper-mines on Lake Superior. They appear to have passed south by the present sites of Grand River and Chicago.

The similarity of the ground form of the names for "prairie" and fire may have

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*1* Latterly known as Drummond Island.

*2* My informer was a jossakeed, and laid niuch stress on the superiority which the art of necromancy imparted.

roof of the museum-vault below, came charged with a subtle white fluid, which, assuming tenuity at time point of contact with the atmospheric air, depended from time roof in white folds, which gave a truly sepulchral appearance to this vast, damp, and gloomy charnel-house. (Am. Eth. Trans., Vol. I.) A labor in the original construction of this tumulus, which was thus shared in, by time succeeding generations of a thousand years, and which had been gazed at for more than a century (since 1730), as too stupendous a task for savages to perform, thus lost, at once, its wonder as an antique monument. A similar process of accurate observation would doubtless disenchant other monuments of western aboriginal art, or forgotten labor.

It was, too, on the comparatively elevated and level summits of the Grave Creek flats, which present a mellow and fertile soil, that the natives had a suitable position for cultivating their favorite grain, the *zea* maize. The same remark may be made of the contiguity of the most fertile lands, at the sites of the principal western earth-works, in the valleys of the Mississippi and Ohio. By this means, the aboriginal population had a means of subsistence and fixity, which the mere labors of the chase fail to bestow.

In the discovery of an antique fort by Dr. John Lock, in 1838, on an elevation in Adams County, Ohio, the testimony, drawn from the cortical layers of trees found on it, denoted the 12th century as time period of its abandonment. In the antique garden-beds discovered in Michigan, in 1827, by markings in the surface of the soil, bearing detached trees, (Vide Vol. I., p. 54), time date of the abandonment of the peculiar species of cultivation is denoted by the same kind of testimony to have been 1502 — being ten years after the discovery of St. Domingo by Columbus — a period too early for any known or acknowledged European labor in that quarter — Virginia not having been discovered until eighty-two years later. Nor could these beds be attributed to stragglers from the expedition of Narvaez and De Soto, since these were of largely subsequent dates; i. e., 1527—1540.

The oldest inscription in America, other than time muzzin-abiks or rock-pictographs of the Indians, is one discovered in Onondaga County, New York, bearing the date of 1520 ; — an inscription, manifestly sepulchral, which appears to have been due to gold and silver hunters who accompanied the ill-fated and cimivalrous De Leon, (Vide Notes on Iroquois). But there are no indicia of this kind respecting the mound-period.

With regard to the platform mounds, it is the recorded tradition of the Muscogees and Appalachian tribes, that these were public works, laid out on the selection of a new site for a town, and engaged in immediately by the whole tribe, to serve as time official seat for their chief ruler, (Pickett's Hist. Alabama). But little absolute art was required to build a tumulus — a raised teocalhi platform or earth wall, such as that of Circleville, Ohio. The actual place in time heavens of the rising and setting of the suns, without marking its soistical changes, was sufficient to guide the native builder in determining, with general exactitude, the cardinal points. There is no evidence of

have paused in astonishment to behold them. Time subject appears destined to shed more light, indeed, on time aboriginal history, than even time mounds of the west; for mt denotes the application of a peculiar system of labor, which was never, in known periods, a characteristic of savage tribes, and in which, at time best, timey could only have been employed as auxiliaries.

True it is, that this ancient nmode of mining was altogether simple, and evinced a bestowal of incipient art in time department, sucim as is conformable to time ~arliest suggestions of ingenuity in regard to the sul.~ect. After the external masses had been removed, the metallic leads appear to have been pursued by building fires upon, or against the walis of the trap rock. After timis calcining process had been coimtinued to the desired point, water was poured on time heated rock, to render it friable. Mauls of hard stone were then applied to beat off the calcined rock. These mauls are abundantly found in the re-opened works. They are generally of quartz rock, or the sihicious parts of granite, or Azoic rocks. Stone and copper wedges are also found. When a deep trencim or gallery had been opened, which required a ladder to ascend and descend, a small tree or sapling was denuded of the outer part of its limbs, to answer time purpose of steps. The proof of this process of ancient mining as described by engineers, at present engaged in the re-opening of these old works, is depicted in the accompanying sketch, Plate 16, p. 116.

The opinion is general that these **labors of mining** are of a very ancient date, if not, indeed, the result of the occupation of the continent by an ancient people prior to the aborigines. If so, the works must have been prosecuted under the direction of European or Asiatic skill. Labors of so extensive a character could not have been carried on without considerable gangs of hands—to support whom it was essential that there should have been a **cotemporaneous agriculture**. No evidences of this appear to exist in the immediate neighborhood of these mining vestiges. **But there have been found some enigmatical ancient garden or field-beds, in the fertile prairie regions of Michigan and Illinois, which have excited much interest.** Drawings and descriptions of these antique evidences of an ancient agriculture, which is evidently not due to the Indian tribes, are given in **Vol. I., Plates 5 and 6, p. 54.** Nor can such assumptions of the existence of agricultural and mining labors be deemed unworthy of belief when it is considered that if we be not disposed, indeed, to regard as probable, the maritime enterprises of the Mediterranean nations in this direction, as Lord Kingsborough asserts, or those of Libya, as indicated by Jomard; still we have, on the basis of more recent and better vouched authorities, the respective traditions of the ancient Irish and British Celts, and that of the Scandinavians, the latter of which, rests on a body of literary data, which commends itself to men of letters and science. (Vide Archi. Amer.) A strong proof of this hypothesis may be drawn from the fact of such antique labors, and abandonment at an unknown period of history, is, that the Indian does not acknowledge them, and has no traditions respecting them. The entire class of facts

disclosed, is, on the contrary, in the state of remote antiquities. The ancient trenches and galleries have been filled up with clay, and soils, upon which there is a new forest growth. The tree-ladders, levers, and stone tools employed, are found buried beneath this formation. The very masses of rock used as mauls are found in these antique galleries. The work throughout this portion of the country, so productive at this time in metallic copper, appears to have been suddenly dropped, as if by the prevalence some political change, or revolution in Indian history, by which more barbarous tribes of men had prevailed.

One of the peculiar objects of art of the Indians, which have attracted notice at various periods, is their system of ideographic devices, or pictographic drawings, by means of which they aim to preserve the memory of names, events, and ideas. This was one of the earliest inscriptive arts of man in time other hemisphere, and is inseparable from the ancient rise of idolatry. The figures of the sun and moon were originally symbols of Deity. Baal was drawn with the head of a man, and the horns and ears of an ox. It was one of the earliest ideas of the oriental nations, that the spirit of divinity concealed itself in the form of some object of animated nature, or even in vegetable life. Hence the Nilotic nations placed the incarnation in an ibis, a crocodile, a cat, or calf, and even a leek, and the form was not long, with these tribes, in taking the place in their estimates of the substance, as figures of the turtle, bear, and wolf do here. That the Indian tribes should have covered the land from Massachusetts Bay to Oregon with similar gods, under similar ideas and similar deceptions, is not strange, and the fact becomes less an object of surprise, when it is perceived from their languages and cosmogony, that in these traits they possess time characteristics of very old nations. The exploits of warriors are often depicted in their representative symbols, on dressed buffalo skins, which are worn as state dresses. Plate 31.

While the tribes, by this symbol-worship, soon lost the true knowledge of the Deity, they applied the system of symbols as marks of notation, to convey to each other several kinds of forest information. By this species of note-craft, the hunter who had killed a deer, a bear, or a moose, denoted that fact by drawing the figure of the animal in a tree, a tabular piece of wood, or scroll of the *betula-papyracea*. He placed beside this device the figure of his forest arms, and crowned the inscription by drawing over it his *Totem*, or the device of his clan, or family name. His *meda*, or magician, informed him that he could disclose an art, by means of which the hunter might always rely in killing deer, bears, or moose. It was no other secret than to apply the art of magic of these figures, whereby he would possess the power of controlling the motions of these animals, and of bringing them into his path. Thus hunting was pursued by the art of necromancy; and the *meda*, or magician, increased his power and importance by the revelation of secret knowledge. The teacher of this art taught his pupils a song, which he was cautioned to sing with due tone, chorus, and genefluxions, while the arts of the incantation were being communicated or practised.