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A R T I C L E I.

AMERICAN ANTIQUITIES.

By Rev. John L. Taylor, Andover, Mass.

THE progress of historical and antiquarian research in our country, within the last half century, has brought to light a varied mass of facts in American archaeology, in regard to which we propose to offer some statements and suggestions in this Article.

From the time of Humboldt's explorations in different districts of South and North America, but especially in Mexico,¹ the interest which earlier discoveries had excited in the ruins and other monuments of the ancient races that occupied this continent, has been kept alive, in the world of letters, by a succession of publications, embodying new details of every kind, down to the brilliant enterprise of Stephens and Catherwood, in spreading before us the comparatively recent antiquity of Yucatan, and the still later surveys and sketches of Squier and Davis in the broader field of that extremely remote antiquity which throws its spell about us amid the monuments of our great western valley.

¹ His account was published at Paris in 1810, but in so costly a form that even the Baron himself, as Professor Agassiz informs us, never owned a copy of the work! see Prof. Agassiz's Letter to Hon. C. W. Upham, Chairman of the Committee on the Smithsonian Institution, 1854.

Under whatever form they may be found, the memorials of a population, differing in many important particulars from the tribes which roamed here, when, three centuries since, modern civilization was planting itself as a germ on this continent, yet, in other respects, bearing a marked affinity with these tribes, are found in great numbers throughout the whole length and across the entire breadth of the continent. They have been discovered in the extreme north-west, where they are, however, comparatively few and uninteresting, though apparently of great antiquity; around the western and southern shores of the great lakes they occur more frequently, and have been more carefully examined, as they seem worthy to be. Along the Californian gulf, and some of the rivers of that section, various ruins abound, so that in some places the country is covered with them for many leagues. From Wisconsin on the north, over all the broad valley of the Mississippi with its main tributaries, the Ohio and the Missouri, these antiquities exist in almost incredible numbers and magnitude. They were found by Lewis and Clarke a thousand miles from the mouth of the Missouri, toward its sources and near the banks of its various branches; they skirt the Ohio, and radiate from it to the north toward the lakes, and south in Kentucky and Tennessee; indeed, so far as the northern portion of the American continent is concerned, this valley of the Ohio and its immediate vicinity would appear to have been at one time, probably a thousand years or more since, the grand centre of power and population for this now extinct or dispersed people. A writer, who is high authority on this subject, expresses the opinion that the State of Ohio must have itself had a population of half a million or more within its area in that distant age.¹ The works of various kinds which they erected, and remains of which still exist, are evidence of immense resources for a rude age; far greater than exist in any other portion of the continent, except in what would seem to be another and much later centralization or development of the same people, in Mexico and contiguous districts around the great southern gulf. But while thus centralized along the Ohio and southward, this immense ancient population spread itself also, as its works show, to a considerable extent over the vast territory of Western New York, Pennsylvania, Virginia, the Carolinas, Georgia, Florida,

¹ Atwater in *Archaeologica Americana*, p. 222.

and Alabama, before the living wave swept around through Louisiana and Texas into Mexico, and mingled, as it probably there did, with other tides of emigration from along the western and north-western coast, or from the broad interior; for in all these regions the monuments of such an occupancy and transit have been discovered; yet they are such remains, both in number and locality, as suggest the conjecture that those who had long dwelt securely in the great central garden of the Mississippi valley, in a somewhat dense and partially civilized community, had subsequently dispersed in sections or tribes, and then, in successive migrations, roved more and more southward, as enemies behind may have compelled, or attractions beyond may have allure, leaving the era of their dwelling along the Ohio and its vicinity, to be remembered as their first golden age.

But, whether this theory harmonizes with the actual historic rise and progress of these ancient tribes or not, it is unquestionable that, after departing from such localities in the centre of our great West, we look in vain for any similar evidences of aggregate power, or of advancing civilization, in the vestiges of a past people, until we come to the immense monuments in and around the Mexican territory; whereas here, far more than the former greatness reappears. There is more variety, more science and skill, a higher style of art and ornament, much greater solidity, magnitude and method shown in the remains of antiquity here, than in the Mississippi valley. The evidences, too, of a more central and city life on the part of the population, are here very strongly marked, as if each city, among many hundreds, had been the stronghold of some separate clan; or the people in one mass had vied with each other in some sort of metropolitan zeal.

Yet, in very many points, the monuments here are so entirely homogeneous with the more northerly ruins, as clearly to refer them to a common origin; the handiwork, at different and distant intervals, of the same wide-spread people, in a new stage of their long history. And in this new golden age of their remarkable development, in numbers and resources, as shown in various classes of their works which survive them, both the theatre and the time of their brilliant achievements seem to have been comparatively limited. You cannot penetrate far to the west or south from the Gulf of Mexico, without finding evidences of less rather than greater advancement, in the ancient population.

The memorials of a past age are less numerous and imposing, and indicate a waning more than a growing civilization, wherever they occur beyond this centre, either along the Pacific coast westward and northward, or over the regions which stretch away southward to the Isthmus. And in South America, nothing has been discovered equal to these Mexican antiquities, or like them, as evidences of power and progress, excepting only the peculiar and apparently indigenous civilization of the Peruvian State, which bore, on all its features, more points of dissimilarity than of resemblance, to the Mexican, and cannot have had the same origin unless at some extremely remote period.

Over all these many degrees of latitude and longitude, but principally in this northern section of the continent, and here, chiefly, in the very fairest and richest portions of the vast area, are found the peculiar monuments of some peculiar but now unknown race, whose career and fate we can propound only in conjectures, where we are eager to reach facts.

Of the classes of these ancient works, with which our reasonings or hypotheses in these pages are designed to be connected, apparently the earliest, and by far the most rude and barbaric, are seen in the region about Lake Michigan, east and west, and around the southern shores of Lake Superior, and along the great Indian trail westward from this toward the Mississippi; these are the "*animal mounds*," as they have been termed, i. e. mounds of earth of various size, in the shape of the bear, the panther, the monkey, the turtle, the eagle, the human body. Mounds of this class are found ninety, one hundred, one hundred and twenty, and even one hundred and fifty feet in length, although they are generally much smaller; those resembling the human form are very frequent, and, in some instances, of colossal size, with the arms widely and disproportionately extended. One of this description has been examined which measures, from the head to the feet, one hundred and twenty-five feet; from hand to hand, one hundred and forty feet. Another still larger measures two hundred and seventy-nine feet by a hundred and sixty-eight feet.¹ A remarkable fact in regard to these mounds is, that they occur mainly in groups, to the number, in some cases, of a hundred or more, among which one is usually raised of a conical form, in a

¹ American Journal of Science, April, 1843. Article by C. Taylor.

central position, and so high as to overlook the entire cluster. In whatever form they are reared, they are generally supposed to have been burial mounds, and the conjecture has been made by one who has given great attention to them,¹ that "their forms were intended to designate the cemeteries of the respective tribes or families to which they belonged," as the Indians of later days are known to have named their tribe after some animal, such as the bear or the fox. In this view, they were the rude *heraldry* of their barbaric builders, as well as their cemeteries; the insignia of their clan — like the *totems* of some modern tribes as Mr. Schoolcraft suggests² — held for this reason, doubtless, peculiarly sacred. The extreme antiquity of these monuments may be inferred from the fact that, so far as is known, no existing tribe of Indians has ever erected any mound of such size and form, or has any knowledge of a tribe that ever did; and, again, from the fact that the skeletons found in them, unless in cases where the burial took place clearly long after the mound was erected, are in a very decayed state; and yet again, from the fact that no works of art are found buried with such human remains. Still, the number and in many instances the magnitude of these memorials of their many dead, shows that the living men who erected them must once have thronged these regions in great multitudes, leaving only these rude, fantastic heaps of earth to tell their history.

From these unique monuments, we naturally pass next, as we imagine the tribes who built them did, to the *conical mounds of sepulture*, in the Mississippi valley. In connection with tumuli of other classes, mounds of this description, generally in the form of a simple cone, but sometimes pear-shaped, and sometimes elliptical, are scattered over the whole country, from the Alleghanies to the Rocky Mountains, and from Lake Erie to the Gulf of Mexico. They are uniformly described as increasing generally in size from north to south; as being composed, ordinarily, of earth or stones from the localities in which they are found, but in some cases of clay or shells or other substances entirely different from anything to be found in their vicinity; as resting, in most instances, upon the remains of but one person, buried, generally, on a level with the natural surface of the earth in a rude sarcophagus of stones, or sometimes of mere bark and tim-

¹ R. C. Taylor, Esq. *American Journal of Science*, Vol. XXXIV.

² *History and Prospects of the Indian Tribes*, Vol. I. p. 52.

ber, over which are the remains of a fire, indicating the custom of a burnt sacrifice, or some similar usage, as a part of the rites of burial, and around and upon all which, as a nucleus, the mound was erected. Such tumuli are raised, too, not where they might be mistaken for natural hills, but on the open plains, and generally not in groups, although clusters do occur, as if the various members of a family had thus been gathered into contiguous tombs, it being always noticed that one in the group is much larger than the others, and somewhat central in position. In a few instances, two or more skeletons have been exhumed from these cemeteries, yet in no case do they appear to have been general burial places, but rather the tombs of distinguished chieftains or priests, or at most of the great families of the people; and no researches have as yet determined satisfactorily where or with what obsequies the dying thousands of the people, as a mass, were deposited. So far as can be inferred from the light we have here, it would appear that their dead were in some cases burned, and only their ashes preserved, and that this was done to such an extent that some of the smaller mounds of sepulture were composed principally of these ashes merely; while in other cases large fields were set apart as cemeteries, in which many thousands were deposited whose remains have not yet wholly crumbled away, as at Alexandria in Arkansas, and Augusta in Kentucky,¹ or at the localities on the Wabash, called "Big Bone Bank" and "Little Bone Bank," where the river annually washes away many remains of skeletons. But while, in nearly every instance, the burial mound inhumed only one corpse, some of the tumuli themselves were of great size. Their average height was from fifteen to twenty-five feet, with a base of from fifty to one hundred feet in diameter, while the great mound at Grave Creek, in Western Virginia, one of the largest that has been examined, is about seventy feet high, and over three hundred in diameter at the base. With the skeletons discovered in these tumuli — which are not ordinarily found, like those of most of our Indian tribes, in a sitting posture and facing the east, but in every variety of position — various simple and rude articles are often exhumed, such as ornaments of beads made of marine shells or the teeth of some animal, or laminæ of mica in some cases of such size as to indicate that they may

¹ See *Smithsonian Contributions*, Vol. II. Article, *Ancient Cemeteries*, p. 128.

have been used as mirrors; utensils of bone or stone, or pottery, and, in rare instances, small quantities of copper and of silver; but in no case has any relic been found which indicates more than the most primitive forms of savage art.

In later times, many of these mounds have manifestly been used, by tribes of Indians now known to us, as cemeteries for their dead, and in these graves other and more abundant relics of art occur; this circumstance has led to the mistake of regarding the mounds as originally general burial places, rather than monumental piles, and has originated the scepticism of some in regard to their great antiquity; but the graves of the true mound-builders are clearly distinguishable from these successors, and especially by this: the manifest presence of fire, as a part of the burial service over the corpse interred, and both the position and the extremely decayed state of the remains, every bone of which usually crumbles to dust at the slightest touch.

From the mounds of sepulture, the transition is natural for us, as it may have been for their builders, to the *sacrificial mounds*, which are mingled with them, and not always easily to be distinguished from them. In general, tumuli of this class are found within or near enclosures of some description; are comparatively small, being elevated, on an average, not more than from five to ten feet, with a very broad base; are composed of distinct strata, of sand, gravel, common earth, or pebbles, overlaying each other with marked regularity, all erected upon a low and slightly concaved altar of clay, which bears the marks of more or less use for sacrifices by fire, including, at least, human sacrifices, if not mainly for these; in the basin of this altar, intermixed with the ashes, are relics of pipes, pottery, arrow-heads of quartz, and sometimes figures of animals, or birds, or reptiles. This altar, which was the nucleus of the mound, was sometimes not more than two feet in length, sometimes ten or more, and, in one instance, upwards of fifty. In connection with these altars, an occasional fragment of *obsidian* occurs, of such size and form as to suggest its probable use, as in the case of the Aztec rites, for a sacrificial knife; the article itself being a purely volcanic product, and, therefore, coming in all probability from Mexico, after the wide dispersion of this ancient people southward, and yet surviving them as a historic link, to connect them in our mind with that distant country. In these tumuli, also, as in those of the preceding class, our later aborigines have in some cases

buried their dead, but always comparatively near the surface, and in such a way as clearly to show that the original mound has been disturbed. Adjacent to such sacrificial mounds, small mounds of sepulture often exist, in which, at the time, the remains of the victim sacrificed appear to have been buried; but the mounds of sacrifice were not themselves cemeteries.

The sacrificial mound may have suggested to its builders, as it does to us, the *temple mounds*, or high places of religious worship. .

These tumuli would seem to have had their origin in the preceding, as their natural out-growth, though differing in many points from them, and of a manifestly higher type. They occur, so far as is yet known, only in those central localities where, as we may suppose, the chief cities of the ancient race were built; as in the vicinity of Marietta, Chillicothe, Newark, Portsmouth, New Madrid, St. Louis, and at commanding points southward on the Mississippi and beyond. They are in general distinguished from the other classes chiefly by their great dimensions. One of the most remarkable, near Cahokia in Illinois, is seven hundred feet long by five hundred wide at its base, ninety feet high, and on the summit four hundred and fifty by two hundred feet; covering about eight acres of ground, and estimated to contain twenty millions of cubic feet. One at New Madrid in Missouri has a diameter, at its base, of three hundred and fifty feet; one in Clarke County, Tennessee, four hundred and fifty feet; one near Washington in Mississippi is forty feet in height, and has a proportionate base, six hundred feet by four hundred; another in this vicinity is circular, four hundred feet in diameter, at its base, and ninety feet high, with an area at the top of fifty feet in diameter; one in Woodford County, Kentucky, is in the form of an octagon, each side being one hundred and fifty feet; and in many parts of Alabama and Louisiana, as well as in Mississippi and further south, similar mounds of great size have been discovered; their magnitude in general being found to increase as we advance southward, and their form becoming more regularly circular or pyramidal. Indeed, in these lower latitudes, such tumuli are the chief feature in the relics of a past era, other mounds and ruins of various kinds being much less frequent and less remarkable than in the valley of the Ohio. Of this entire class of monuments, wherever found, it is to be specially noted, that they are quite frequently, though not always, built on some elevated pla-

team, or on a natural hill, the sides of which in some cases are hewn off, so as to conform to the shape intended; that the beginnings of the remarkable system of *terracing*, practised by the Mexicans or their predecessors in building the sites of their temples, are here seen, many of these mounds having one, and some of them two or more, terraces, regularly defined; that they are all constructed with great regularity, as to lines and angles, such as indicates a very considerable degree of progress in science and the arts; that they stand in such obvious relations to other mounds and ruins, as imply their own preëminence in the eye of their builders, being usually the central object within or near enclosures of some kind; that there are no indications of their having been connected with the burial rites of the people, as they contain no human remains; and that traces of fire are discovered upon or but little beneath the top, and, in a few instances, the ruins of smaller mounds and of parapets near the edge of the summit, which, especially when taken in connection with the remarkably similar structures in Mexico, seem to designate these immense piles as the great centres of religious worship for the people; that worship itself being probably in some form and with gorgeous rites that were not unworthy of these high places, the adoration of the sun, the one central and ever effulgent fire.

Yet another class of works in this grand series, of the same general type, remains to be here briefly noticed, viz. the *beacon mounds*, which dot the hill-tops along the borders of the valleys in many sections of the West. How far these were distinct from the other classes, and especially from the one last mentioned, it does not seem possible, without further researches, to determine; but that many were reared and used mainly as observatories, or alarm-posts, seems highly probable. Thus it is said:¹ "Between Chillicothe and Columbus, on the eastern border of the Scioto valley, not far from twenty may be selected, so placed in respect to each other, that it is believed, if the country were cleared of forests, signals of fire might be transmitted in a few minutes along the whole line. On a hill opposite Chillicothe, nearly six hundred feet in height, the loftiest in the entire region, one of these mounds is placed; after the fall of the leaves in autumn it is a conspicuous object from every work" that has been discovered as the remains of the ancient population

¹ *Smithsonian Contributions to Knowledge*, Vol. I. p. 181.

within a circle of twelve miles. In the Miami valley a similar feature is observed, and so, at intervals along the Wabash and Illinois rivers, and on the Ohio and the Mississippi. The mounds on these elevated sites, for whatever purpose erected, were not ordinarily more than fifteen or twenty feet in height; they were raised of various materials without special regard to exact regularity in form, and, on their lofty summits, in many an hour of peril, must have borne up the far-blazing signal-fire, just as centuries afterwards, the native warriors of Hispaniola, in their struggles with the Spanish invaders, kindled their beacon-flames on the mountain-peaks to which they fled.¹

The probability that these hill-mounds, like the cairns of the ancient Celts, were principally used as alarm-telegraphs in war, is greatly increased by the discovery of a system of fortifications in all these localities, to which it is in place now to advert. In the various classes of tumuli alone, to which we have referred, as they exist in such vast numbers scattered over so immense an area, we cannot fail to see that the ancient population here must have been very numerous and powerful; it must have required vast resources, and centuries, at least, to rear such works, from the first and rudest, to the latest and most complete. Yet even this unique array of monuments scarcely excites our wonder more than the magnitude of those enclosures of earth-work or stone, within or near which so many of them occur. These enclosures appear in many instances to have been connected with the religious rites of the people merely. Yet even these would in some cases serve as defences in war; but large numbers of them were obviously designed for this latter purpose only; and the skill with which their sites were chosen, as well as the vast extent of the works themselves, is surprising. Thus, around the plateau on the summit of a lofty hill near Bournville, Ohio, the remains of a rampart of stone-work are visible, enclosing an area of one hundred and forty acres; this wall appears not to have been laid up with much regularity except at a few points, but rather to have been loosely put together, or to have toppled outwards in its decay, scattering the stones far and wide; yet its course can be distinctly traced quite around the hill, in a circuit of more than two miles, while, at the point where this hill joins the neighboring

¹ Irving's Columbus, Vol. II. p. 442.

heights, the walls are deflected so as to form narrow gateways, through which the enclosure was to be entered, and at these, as well as at different points around the circuit, beacon mounds with the relics of the old signal fires are found.

Another of these primitive defences, of a remarkable character, occurs in the southern part of Highland County, Ohio, a few miles from Hillsborough. In this case, "Fort Hill," as it is called, a high and solitary bluff, with an area of about fifty acres on its summit, is surrounded on all sides just below its brow by an embankment of earth and stones, exterior to a deep fosse averaging nearly fifty feet in width, the excavation of which supplied the materials for the breast-work, through which were numerous gateways at points where the ascent of the precipitous heights was practicable.

Yet another of these mural remains, far more intricate and extended, has received the name of "Fort Ancient," on the Little Miami river, about thirty-five miles north-east of Cincinnati. In this work, marked by the same general features with the preceding, the line of the embankment is so irregular that it required ninety-six stations to complete the survey which Prof. Locke made of it with the greatest care, as detailed by him, in 1843.¹ This earth-wall, in some places twenty feet high, is composed of a tough clay, mainly dug from pits within the enclosure, and retaining still in a good degree its original form. The area within the fortress is principally at the two ends of the ridge, which are connected by a narrow neck, making the form of the whole somewhat like an hour-glass or a dumb-bell; and the fortification is strengthened by a wall directly across this passage, and by two large mounds near one end of it.

These are cited as examples of a class of forts or defensive works which, in every variety of shape and dimension, occur in great numbers in the broad valley of the West, but which appear to be far more common in Ohio than elsewhere. The late President Harrison, in an Address before the Historical Society of Ohio many years since, characterizes one of these works as a citadel more elevated than the Acropolis at Athens, admirably designed for defence, and evincing extraordinary military skill. Within the strongholds, thus selected and fortified, were usually natural or artificial reservoirs of water in abundance, while some

¹ See *Smithsonian Contributions*, Vol. I. p. 19.

of them were so constructed as to afford a ready communication, from their elevated sites, with the rivers in the plain below; and, as bearing upon the question of their comparative antiquity, as well as of their uses, it should be here stated, that, in northern Ohio, and in the adjacent sections of Pennsylvania, and western New York, works of this class are very much smaller than they are further south, though bearing sufficient marks of affinity with them, to warrant us in regarding them as belonging to the same people.

In addition to the classes of works already enumerated, there was one other, which can be best described in connection with the last-named; this is the *sacred enclosures* of those ancient tribes. These can easily be distinguished from their military defences; they are found on the lower lands near river-beds, are laid out in regular circles or squares, or figures of other forms, are raised but a few feet above the natural surface of the region, and are interlinked with each other in extended chains, or in compact groups, of which good drawings only can give a clear idea; a single congeries of them, in some cases, covering several square miles. It is very common to find in these works an exact square and a circle in juxtaposition, connected by a narrow and short passage, or a square and two or more circular figures linked with it. In some cases, the main figures of the enclosure are connected with some distant point near a river, perhaps where the river-bed once was, or with some similar enclosure, it may be many miles distant, by parallel walls, a hundred or a hundred and fifty feet apart. The area enclosed by one of these squares or circles is ordinarily from fifteen to twenty acres, not often less, and sometimes much greater. A large and exceedingly interesting portion of the treatise of Messrs. Squier and Davis, in the first volume of the Smithsonian Contributions,¹ is occupied with plans and descriptions of this class of works, of which it were useless to attempt any summary. It may give our readers some idea of the extent of this system of enclosures when we state that over twenty plates of the size of a common folio page are here devoted to these plans, embracing probably more than a hundred figures; yet all of these are sketches of works in southern Ohio alone, or in its immediate vicinity. It is within such enclosures that the altar-mounds and the high places

¹ See p. 47 et seqq.

of worship are more commonly found; and the supposition that they were directly connected with the sacred religious rites of the people, as was the case in the somewhat similar sacred enclosures of Peru and Mexico, is the only one which appears to accord well with all the facts that are thus far known in regard to them.

It is in this class of remains, more than in any other here, that the ancient people of the region, or their priesthood, are seen to have made no inconsiderable advances in science. In examining the drawings and field-notes of the surveys which have been made of them, one is surprised to find with what careful accuracy their lines and angles were described; that general regard for symmetry which appears in the conical and pyramidal mounds being here shown in the minutest curve, so that the simple ground-plan of a group, as now traced, notwithstanding all the disturbances which time may have caused in the structures, is exceedingly picturesque.

And when, in view of such indications of attainments in science as are furnished either in this or in any other class of their works, we turn to the kindred point of their progress in the useful or ornamental arts, as shown in various relics, we still seem to be in the presence not so much of a savage, as of a partially civilized, people.

Of the great quantities of arrow-heads, beads, coarse vessels of pottery, knives of flint, stone axes, and other implements found, we cannot in all cases be confident which belong to the mound-builders, and which to later tribes; nor should we speak of these as showing much skill in the arts; but when we discover, as we do, the sculptured figures of birds and animals, in great variety, many of which are executed with much skill; and when with these we exhume well-chiseled likenesses of the human head in considerable numbers, tablets of hieroglyphics, fancifully carved pipe-heads, copper bracelets and axes,¹ and scan various proofs of extended excavations in the very mines from which the copper was obtained,² and also traces of the manufacture of salt from salt-springs in different localities,³ we cannot resist the

¹ Smithsonian Contributions, Vol. I. pp. 186-275.

² See Note, p. 280, Smithsonian Contributions, Vol. I. See also Schoolcraft's History and Prospects of the Indian Tribes, Vol. I. p. 100 et seq.; also Vol. IV. p. 143.

³ Bradford's American Antiquities, pp. 28, 29.

conclusion that, in the arts, as well as in science, here was once a people of no mean attainments; far in advance of any of the modern aboriginal tribes. And the very fact that such a conclusion is the result of strictly antiquarian researches, rather than of historical or traditional testimony, serves, with the unique character and the immense number and magnitude of their works, to show that the race once dwelling here must have not only entered upon their career in the great valley, but ended it at some very remote era. Let our theory with regard to them be what it may, we must allow, in our conjectures, time enough for all their wide-spread development on this theatre of their labors, as indicated by the entire mass of these gigantic memorials; and then time enough for their decay or dispersion; and then, again, time enough for all memory of them to pass from the minds of succeeding tribes, and for their works to be hidden beneath a forest-growth of many centuries, and for the beds of lakes and rivers adjoining them in some cases to recede from them or become entirely dry. Our hypothesis, moreover, must be adjusted to the fact, so often referred to in what we have thus far stated, of the strongly marked southward drift of their accumulating strength. Did this proud race, then, after such a career, melt away and become soon extinct? Or did it break up into dissimilar and contending clans, and so degenerate into our modern aboriginal hordes of hunters and warriors, without materially departing from its ancient seats of empire? Or did it retain its science, and arts, and religion, bearing them onward toward the ever-inviting south, and developing them in higher types, in the striking civilization of the Mexican valley, as it was revealed to the wondering Cortez and his followers? We have already implied our belief that the last of these conjectures spreads out a true, though dim, chart of their history; and we will endeavor briefly to indicate the grounds upon which we rest our conviction.

The very advanced stage which the Mexicans had reached in their civilization, at the era of the Spanish conquest, should not here pass unnoticed. When Cortez entered their capital, he beheld on every hand, with astonishment and delight, such evidences of wealth, power, art, taste and luxury, as prompted him often to say that nothing in the cities of Spain itself surpassed the spectacle. There were immense public and private edifices built of quarried stone, among which the stately temples were conspicuous. The island city was connected with the main land

by immense causeways, and was intersected in all parts, like Venice, by numerous canals, across the openings in which massive draw-bridges were thrown; the streets were substantially paved; an extended commerce was carried on, having for its natural centre the great market, where the productions of every adjacent region were exhibited; there was a vigilant police, and under its direction an efficient system of watering and sweeping the streets; there were aqueducts, fountains, baths, pleasure-gardens, menageries, aviaries, rich cloths, curious fabrics of feather-work, exquisitely wrought golden ornaments and vessels of curious device and massive weight; there were charts of the adjacent coast, and hieroglyphical maps, and relays of swift-footed messengers from the coast to the capital; no court etiquette was ever more exact than that of the Aztec emperor, around whom was gathered a brilliant nobility; and, apart from the deep stain of human blood, no religious ceremonial was ever more impressive and grand than the Aztec worship conducted by the priests upon the lofty summits of their glittering Teocallis.

Still, the civilization indicated by all these and numberless similar facts, was, like their religious rites, tinged with semi-barbarism. It was plainly a recent development, not yet beyond the deep shadow of that darkness from which it had emerged, although in many points so far in advance of the type of civilization indicated by the monuments of the Mississippi valley. Now, for any people to have reached the Mexican stage in human progress, starting from the highest point of civilization indicated by the monuments along the Mississippi, must have been the work of many generations, even had their progress been nowhere delayed or suspended. That they should have attained such a point, without any such prior history in some form, either in our great West or elsewhere, is incredible; and the type of their civilization, as well as its very advanced stage, points to this northward centre as its source. Here, in the great southern theatre as in the northern, are the mounds; built in strata of more enduring materials, terraced now with more care, and crowned with temples instead of altars; not built by the Aztecs of the time of the conquest, it is to be observed, nor by their fathers, but preserved and adorned as reliques left to them when they were the conquerors of earlier tribes in the field.¹ Here, at last, we find, in ma-

¹ *Archaeologica Americana*, Vol. I. p. 253.

tured form, that sun-worship, of which in the far north we discern the beginnings; and here, the sacrifice of human victims, which appears not to have been frequent at the north, is a daily spectacle. Here, burns now the perpetual fire on their temple summits, like the vestal flame at Rome, the fitting out-growth of the occasional burnt-sacrifices and other uses of fire in the northern sacred rites. And here, in full harmony with all such palpable facts, we strike at last the veins of popular tradition and of authentic history in the annals of the region, which yield only the more abundant confirmation of our hypothesis, the more they are worked.

The chroniclers of the Aztecs, whom the Spaniards find ruling with a rod of iron here, and holding the adjacent tribes as unwilling tributaries, tell us that but three centuries before they came from the north-west and expelled the Toltecs. The Toltecs have a similar tradition that they also came from the far north, whence they had been driven four centuries previous.¹ In prosecuting his interesting researches in Yucatan, Mr. Stephens often met this tradition, and even discovered a remarkable manuscript purporting to give an account of the successive stages of this ancestral Toltec exodus from the northern home;² after exploring, with rare facilities and great enthusiasm, the ruins of more than forty ancient cities in Yucatan, and of many others in different localities around the great gulf, he expresses the opinion that this people, the dispersed remnants of the old Toltecs, were the originators of the peculiar style of architecture found in the ruins of these regions, and were the builders of those great cities, after their subjugation or expulsion by the Aztecs. Yet here, too, the grand central feature of the ruins is, the mounds with terraced sides, and temples on their summits, as in Mexico; and with the further peculiarity of a style of architectural ornament far more elaborate than in any other American ruins. The tablets and other hieroglyphics yet remaining here, upon or around the crumbling edifices, copies of which adorn the pages

¹ Stephens's *Incidents of Travels in Yucatan*, Vol. II. p. 453. See also Prescott's *Conquest of Mexico*, Vol. III. Appendix, p. 397 et seq.

² *Incidents of Travel in Yucatan*, Vol. II. Appendix. See also in the *American Journal of Science*, April, 1843, an Article by C. Taylor, in which the probable or possible discovery of the old centre from which these emigrations radiated is referred to, in his sketch of certain ruins purporting to be traces of the traditional *Artlan*.

of Mr. Stephens's narrative, show a very high degree of skill in the art of sculpture, which must here have been very general, and which he is constrained to infer cannot have been long disused when the Spanish conquerors came. Thus, besides clearly tracing a connection between this people and the old races of the Mississippi valley, we find them not only far more advanced in civilization, but brought down to a comparatively modern period; though yet of considerable antiquity. We find them, too, in just the circumstances to facilitate their decay as a race. They are disintegrated by frequent dispersions and migrations, and crushed by stern oppressors; and now the white man comes to overwhelm them and their stately works in a final ruin.

The researches of Mr. Squier and others, yet further south, in Nicaragua and elsewhere, have brought to light some interesting ruins, bearing strong points of resemblance to those of Ciaphas and Yucatan, and authorizing the opinion that off-shoots from this old race of mound-builders penetrated even those remote regions; but it appears evidently to have been not till after they had begun to wane in enterprise and power; and the attempt to trace a historic connection of the Mexicans with the Peruvians, through these monuments, to the Isthmus and thence along the north-western coast of South America, has thus far, we think, entirely failed. No traditions, either in Peru or Mexico, at their conquest by the Spanish, pointed to any such connection. It is not certain even that either nation had any distinct knowledge of the existence of the other; nor were there any such characteristics in common between the two, whether civil or religious, except the single one of sun-worship, as would lead us to infer a historic identity. The Peruvian practice of mound-burial cannot be cited as in any special analogy with Mexican or more northern modes of sepulture; for their mounds were very irregular,¹ were usually penetrated by galleries in every direction, and were filled with their dead, like the mummies of the Egyptian catacombs, preserved by the rarefied nitrous atmosphere of the country or by some species of embalming; and with the dead were often deposited immense treasures of silver and gold. So the occasional sacrifice of human victims by the Peruvians, usually a child of tender age or a fair maiden,² is too slight a link to

¹ Prescott's Conquest of Peru, Vol. I. p. 90.

² Ib. p. 105; see also Tschudi, *Peruvian Antiquities*, p. 195.

connect them with the gory and cannibal Aztec; and even the point in which the one most nearly resembled the other—the worship of the sun—there was in Peru a splendor, shining out in sharp contrast, rather than in even the remotest unison, with the imposing Mexican ritual. The great national temple of the sun at Cuzco, enshrining within its sacred precincts the long line of deceased Incas and Coyas, all embalmed and apparelled, sitting, as in life, in their royal chairs,¹ bearing their imperial insignia, the sceptre and crown, and gleaming as it did, at every point, with massive ornaments and utensils of solid gold, was a fair index of the lavish splendor with which they worshipped their deity in all the realm.

In temples after this pattern, and little inferior to it in their principal cities; and besides these, in similar temples dedicated to the moon,² the stars, the rainbow, and other heavenly objects, they paid their homage; in all of which, to an extent which seems scarcely credible, the plate, censers, vases, and every similar sacred implement used, as well as the profuse adornments of the edifices themselves, were of pure silver or gold; and, from the skill with which these precious metals were wrought into various imitations of birds, fountains, flowers, ears of corn, the fleece of the sacred Llama, and other familiar objects, as well as from the vast quantities of them in use—quantities so great that the captured Inca, Atahualpa, offered, as his ransom, to fill a room for Pizarro twenty-two feet long by seventeen wide, to the height of nine feet, with pure golden vessels and plate, and two smaller rooms with silver—we infer a degree of artistic refinement, beyond even the highest reach of Mexican progress. In their towering fortresses and other warlike defences; their skilful modes of agriculture; their royal roads and immense aqueducts, both cut in many places through the living rocks of porphyry and granite, and carried across rapid streams and immense chasms in the mountains; and in their suspension bridges, scarcely inferior to those of our modern engineers, we see evidences of power unequalled by any Mexican achievement.³ So in other particulars, too numerous to be here cited, the Peruvian civilization, instead of appearing like an off-shoot from the Mexican, or an improvement upon it, seems to run in a kind of parallelism

¹ Tschudi, *Peruvian Antiquities*, p. 165; also Prescott's *Conquest of Peru*, Vol. I. p. 95 et seq., also p. 33.

² Prescott's *Conquest of Peru*, Vol. I. p. 95 et seq.

³ Ib. pp. 63, 64, 132, etc.

with it, surpassing it often by a self-sustained impulse, as in other points falling below it through weaknesses of its own.¹ Instead, therefore, of admitting a relationship between the two — unless it be one of the remotest kind — we are plainly left to follow the clue given us in the Peruvian annals, and rest in the conclusion that under the Incas, for successive generations, and upon the basis of that progress which, for three or four centuries, previous races here had made, this peculiar type of civilization was spontaneously developed in such maturity, having its origin and growth, as well as its vital centre, within this ample theatre of its triumphs and decay.

To account satisfactorily for the occasional points of resemblance between the two nations, as the grand centres of civilization in either, to some common or kindred origin of the people themselves; and, at the point which we have now reached in our inquiries, we naturally ask, whence came these wonderful races? Allowing them to have been unconnected, as historically developed here, from what common or contiguous regions did they drift to these shores?

If the links by which a connection seems to be traced between the Mexicans and the mound-builders of our great western valley, as these came down from the north-west, are not all fictions rather than facts, this great aboriginal family would seem to have come originally from north-eastern Asia, by crossing over, intentionally or otherwise, from that continent to ours, probably in a high northern latitude. Out of an immense mass of facts, we have culled enough, as we think, to show at least the very strong probability of such an origin to this people, at some extremely remote era; apart from any indications of their relationship with eastern or north-eastern Asiatics, we should conclude, from a general survey of their monuments, that this ancient race began its long career in the far north-western portions of our hemisphere; and the natural inference that they must have come from the neighboring coasts of Asia, is confirmed not only by their pictorial chronicles, relative to the event,² but by much that we discover in their traditions, their science, their religious rites, and their civil polity.

There are, in these respects, points not merely of general anal-

¹ Prescott's Conquest of Peru, Vol. I. pp. 161-164.

² Schoolcraft's History and Prospects of the Indian Tribes, Vol. I. pp. 20-25.

ogy, but of very marked identity almost, between the Mexicans and various eastern Asiatic communities, which show that, earlier or later, there must have been some connection between them.

Thus, we find distinct traditions relating to the deluge, the tower of Babel, the temptation of Eve by the serpent, and other events mentioned in the Scriptures; so we discover rites analogous to our Christian baptism and the eucharist, and sacerdotal institutions, and marriage ceremonies, and burial usages, all reminding us of eastern Asia;¹ and the analogies between the science of the Mexicans and Mongolians were not less remarkable; their chronological cycles, their use of hieroglyphics in their calendar, their systems of intercalation, could scarcely have been so much alike, without a common origin;² while the stately and ceremonious pomp of Montezuma's court is in the very style of an oriental prince, with scarce differences enough to remind us that it is a Mexican, rather than an Asiatic, spectacle. And with all this the maritime habits of such nations as the Japanese, the Malays and Chinese, and their well-attested traditions of maritime enterprise, agree; their charts and maps giving indications, as they claim, of voyages to north-western America, under the name of Foosang, as far back as the seventh century.³ Yet, when we compare the *languages* of the two regions, we discern scarce a trace of resemblance, however remote; whereas, if there had been any *recent* connection between them, this would have been the strongest point of analogy. One remarkable peculiarity in the structure of the aboriginal languages here, in all their hundreds of dialects, distinguishes them from all oriental tongues. The researches of Mr. Du Ponceau, followed by the still more extended investigations of Mr. Gallatin, show that these occidental dialects are all, as they term it, *polysynthetic*, i. e. they are characterized by peculiar complex forms, or compound words, into which several ideas, as many as possible apparently, are compressed.⁴ Other writers on the subject, prefer to designate this peculiarity by the term *holophrastic* — all-expressive —

¹ Prescott's Conquest of Mexico, Vol. III. Appendix, p. 378 et seq.

² See Humboldt, *Vues de Cordilleras*, pp. 123-194; also Prescott, Conquest of Mexico, Vol. III. p. 391 et seq.

³ Bradford's American Antiquities, pp. 232, 233.

⁴ See Gallatin's Essay. *Archaeologica Americana*, Vol. II. pp. 164, 165. See also Prescott, Conquest of Mexico, Vol. III. p. 395, where he gives as an example the word "amatlaclolitquitlaxtlahuitli;" the reward given to a messenger who bears a hieroglyphical map conveying intelligence.

as better indicating what Humboldt called bunch-words, the fitting formulae of expression for cluster-thoughts.¹

In this linguistic feature, which must have been the result of ages of development, found as it is, not merely in one section nor in one tribe only, but throughout the continent, there would seem to be evidence that the relationship of the Mexican and the Asiatic is to be referred to a period of very high antiquity, leaving ample time and scope since for the development of that indigenous civilization which is now our study.

And, when we turn from Mexico to Peru, similar evidences of a remote connection between the new world and the old are not wanting, although they converge, apparently, to a somewhat different point. So far as we are in a condition to judge, from the imperfect light and scanty materials which we have, we are led to conclude that the great southern family of the American aborigines, like the northern, came hither also from eastern Asia, but from lower latitudes, and probably at a considerably later date. Many of their traditions and usages would authorize us to infer that they came from China, as is said to be implied in portions of the Chinese Chronicles;² this is particularly true of some of their views and practices in relation to the worship of the sun. The Incas and Inca nobles³ styled themselves the children of the sun; not simply as the devotees but as in some mystic sense the descendants of this deity; the priests and virgins, and temples and offerings, connected with their ritual, were sacred to the sun; as were also large estates of land in all portions of the empire, amounting probably to one third of the entire territory;⁴ blasphemy against the sun, or the Inca as the child of the sun, was punished with death;⁵ their gold they called the "tears wept by the sun;" and in numberless other particulars they so interwove references to this deity with their whole polity and life, as to remind one, at every step, of the eastern celestials, or of nations contiguous to them in south-eastern Asia; nations differing, in important points, from the more northerly Asiatic tribes, as widely as the Peruvian differs from the Mexican. Yet, on the theory of such an origin, we find no difficulty in accounting for the resemblances which characterize the two, as well as for their discrepancies. They

¹ Schoolcraft's History and Prospects of the Indian Tribes, Vol. II. pp. 346-349.

² Tschudi, Peruvian Antiquities, pp. 16, 17; see also Bradford's American Antiquities, pp. 283-286; also pp. 406-416.

³ Prescott's Conquest of Peru, Vol. I. p. 35. ⁴ Ib. p. 47. ⁵ Ib. p. 44.

brought over, at their respective eras, and developed here in their distinctive, independent histories, such traditions drawn from the Scriptures as had been current in their respective fatherlands, such germs of progress or tendencies toward progress and civilization as had sprung up in those oriental homes; the progress of the one, or the other, or of both, may have been occasionally accelerated or retarded, especially in their early history here, by the coming of some new band from the same regions. With chains of islands not far remote from each other, stretching across the broad Pacific from continent to continent; with the waves and winds setting often for weeks toward our shores; with wars to make men flee, and curiosity or cupidity to make them rove, and casualties to launch them forth on voyages of which they wist not, why need we question not only that there may have been one such germ of population wasted to our continent from Asia, at some very distant era, but others afterwards?¹ It is a

¹ To corroborate the view at which we have hinted, as well as on account of the intrinsic value of the facts cited, we here subjoin an interesting extract from Mr. Bradford's work. "Colonies," he says. "may easily have reached our shores by the accidental drifting of canoes and other vessels. This opinion is abundantly supported by many well-authenticated instances, most of which have been recorded since this subject has attracted attention. Diodorus relates that a Greek merchant, trading to Arabia, was seized by the Ethiopians, and having been placed in a boat and turned out to sea, was carried by the winds to Taprobane or Ceylon. In the time of Eudoxus of Cyzicus, B. C. 146, an Indian was found in a boat on the Red Sea, who, upon learning the Greek language, stated that he had sailed from India and had been driven to that distance by the wind. Pliny narrates that in the days of Quintus Metellus, some strange and savage people were driven upon the German coast, and sent by the Suevi to that general. The discovery of America by the Northmen was accidental; and Iceland was discovered A. D. 862 by some mariners who were bound for the Feroe islands but were thrown out of their course by tempests. In 1684, several Esquimaux, driven out to sea in their canoes, were drifted, after a long continuance of boisterous weather, upon the Orkneys. It is related that a small vessel, destined from one of the Canary islands to Teneriffe, was forced out of her way by contrary winds to within a short distance of Caraccas, where, meeting an English ship, she was directed to one of the South American ports. In 1731, another bark, sailing from Teneriffe to one of the neighboring isles, drifted from her course, and was finally brought to at Trinidad. Cabral, the commander of a Portuguese fleet sent out in the year 1500 to the East Indies, whilst prosecuting the voyage, departed so far from the African coast as to encounter the western continent, and thus the discovery of Brazil was entirely accidental. In 1745, some vessels navigated by the natives were forced out to sea from Kamtschatka to one of the Aleutian islands, a distance of several hundred miles. In 1789, Captain Bligh, his crew having mutinied and seized his ship whilst in the Pacific

favorite theory with some writers,¹ that Manco Capac in Peru

ocean, was placed with eighteen men in a boat, provided only with a small quantity of provisions, and, having traversed four thousand miles in forty-six days, succeeded, finally, in landing at Tima in the East Indies.

"In 1797, twelve negroes, escaping from an African slave-ship upon that coast, took a boat, and, after five weeks, three of the number who had survived, were drifted ashore at Barbadoes. In 1799, three men were driven out to sea by stress of weather from St. Helena, in a small boat, and two of them reached the coast of South America in a month, one having perished on the voyage. In 1820, one hundred and fifty inhabitants of Anaa or Chain Island, situated three hundred miles east of Otaheite, having embarked in three canoes, encountered the monsoon; two of the vessels were lost, but the occupants of the third, after being driven from island to island and obtaining a scanty subsistence, were found six hundred miles from their point of departure. Three natives of Otaheite have been met on the island of Wateo, whither they had drifted in a canoe, over five hundred miles. In 1782, Captain Inglefield of the *Centaur*, and eleven men, sailed upon the Atlantic ocean three hundred leagues in an open pinnace, without compass, chart or sail, and were ultimately landed on Fayal. A native of Ulea has been found on one of the Coral isles of Radack, where he arrived with two companions, after a long and boisterous voyage of eight months, during which period they had been driven by wind and storms to the amazing distance of fifteen hundred miles. In 1686, several natives of the Caroline islands were carried by the winds and currents to the Philippine islands, by which means that group first became known to the Europeans. The Japanese are often accidentally thrown upon the Philippine islands. In the year 1542, three Portuguese sailed from Siam in a junk, and were driven out of their course to within sight of Japan. In 1883, a Japanese junk was cast away on the American coast at Cape Flattery, and of seventeen men only three were saved. In the same year eleven of the same nation were drifted to one of the Sandwich islands." . . .

"Multitudes of these occurrences must have preceded the progress of modern discovery in the Atlantic and Pacific oceans, and consequently have happened without leaving any record or trace. Accumulated cases of this kind should be taken in connection with the fact that excepting Spitzbergen and Nova Zembla to the north, Falkland and Kerqueland's land to the south, whose inhospitable climes forbid permanent habitation and subsistence, no considerable extent of land has been found uninhabited. . . . It is impossible to attribute this extensive distribution — this tide of population flowing from island to island and from continent to continent — entirely to the maritime abilities of former ages, and equally impossible in many cases to suppose a former land connection, as a means of solving the difficulty. Experience affords the only clue to this problem, and shows that by those adventitious causes which have been always in action from the beginning, man has found his way wherever his Maker had prepared him an abode, and that, in the language of a distinguished scientific author, were the whole of mankind destroyed, with the exception of one family, inhabiting an islet of the Pacific, their descendants, though never more enlightened than the South Sea Islanders, or the Esquimaux, would in the course of ages be diffused over the whole earth." — Bradford's *American Antiquities*, pp. 236-237.

¹ Tschudi, p. 17. See also his citation from Humboldt on the same page.

and Quetzalcoatl in Mexico were Buddhist missionaries who came to these shores a thousand years perhaps subsequent to the Christian era, to reform and elevate the natives; as if this were the first and only communication between the two continents; but if this were proved true of them, it leaves us to ask whence the natives came before them, and why they only ever came to blend with these natives, or to supersede them. And we see no objection to the hypothesis that, as our continent was obviously peopled at different points in ancient times from Asia, so it was occupied at distinct and even widely separated periods, yet in none so recent as materially to interfere with the normal development of those types of civilization which were at last matured here.

Upon the supposition that such views as we have now stated give a sufficiently satisfactory conjectural solution of the problem before us, in regard to the remote origin of those races whose monuments in North and South America form the chief feature in our American archaeology, we have yet to inquire whether the aborigines of our eastern coasts, and the kindred tribes further west, were descendants, also, of the mound-builders, directly or collaterally, or were the relics of a totally different people. In discussing this question, we are to bear in mind the fact that, as found by the explorers and colonists of modern days, these Indian tribes, though so widely dispersed and often hostile to each other, were plainly characterized by many affinities. The structure of their dialects, their modes of life, their religious beliefs and ceremonies, their war-customs, their traditions and mythology, and numerous other characters which distinguish them, were remarkably similar. We must not overlook the fact, also, that in some of these particulars they bore a resemblance to the race of the mound-builders; as, for example, in their poly-synthetic forms of speech, and in the singular custom of imprinting the mystic Red Hand upon sacred edifices and other structures connected with their religious rites,¹ and in their practice of tracing rude sculptures upon the native rocks,² supposed to be hieroglyphical records of great events in their annals. Still, such

¹ Stephens, *Incidents of Travel in Yucatan*, Vol. I. p. 177; also Vol. II. p. 47, and Appendix, pp. 476-478.

² E. G. Squier, *Nicaragua, its Monuments, etc.*, Vol. II. p. 24 et seq.; also Techadi, *Peruvian Antiquities*, p. 196 et seq.; also *Smithsonian Contributions*, Vol. I. pp. 298-300.

analogies are too slight and too few in number to sustain the hypothesis that these tribes are mainly the descendants of the mound-builders; and the objections to such a theory, as well as the facts which support another, are of much weight.

Recurring here to our statements in regard to the fortifications of the mound-builders, it deserves to be specially noticed that these defensive works were principally in the northerly portion of the great area occupied by that race; as if they had been obliged in this way to resist an enemy or rival from the east and north-east; and the traditions of ancient contests in these localities between tribes of Indians known to us and a race of Alle-gans, to which Mr. Schoolcraft and Mr. Bradford refer in support of another theory, seem rather to support this hypothesis of ours.¹ The evidence derived from the exhumed crania and skeletons of the early and later races in the Mississippi valley, appears also to show some marked points of dissimilarity, rather than of identity, between them,² the later race being of a larger and hardier type, befitting warriors and hunters; there is an entire absence, also, of traditions implying a connection, the modern Indian being as ignorant of the mound-builders as of the antediluvians; it is hardly credible, moreover, that these modern tribes, if they are lineal descendants of a race who, a thousand years or more previous, erected works of such magnitude and indicative of so much progress in science and art, should have become so thoroughly barbarous; falling in many things behind their ancient predecessors, instead of surpassing them, whereas, in tracing the mound-builders in every direction southward, the later generations appear to excel the earlier.

Mr. Schoolcraft,³ we are well aware, discredits all statements and reasonings of this kind, which tend to support the hypothesis that the mound-builders were not the progenitors of our modern Indian tribes; it being his belief that the mound-builders themselves came from Mexico as swarms from the parent-hive, and spent their waning strength as they roamed northward, until they dissolved into the fragmentary and fierce rival clans, whose history has been so large a part of the study of his life. But,

¹ History and Prospects of the Indian Tribes, Vol. IV. pp. 136, 137. Bradford's American Antiquities, pp. 205, 206.

² Archaeologica Americana, Vol. I. p. 209.

³ History and Prospects of the Indian Tribes, Vol. I. p. 20 et seq.; also Vol. IV. p. 147 et seq.

while such a theory as his has some strong claims to our consideration, and may yet be proved the true one, rather than the totally opposite hypothesis to which we at present incline, we are not able to see that it is materially supported by anything in his researches, except the weight of his name. The traditions of a southern origin, which he appears to find current among some few of our tribes, are exceedingly vague, and need to be well corroborated, not to say understood, before they can be credited, any more than the various legends of which he has given us so many specimens; even if these should be more fully authenticated, it would be necessary for us to adjust them in some way to the reliable traditions of the Aztecs and Toltecs, in relation to their northern origin, and this Mr. Schoolcraft does not at all assist us to do, nor does he aid us in explaining the silence of tradition in these great southern centres, with respect to any such migrations of the population thence northward. Moreover, though his hypothesis may not necessarily conflict with the fact that the mounds are larger and more elaborate in the southern than in the northern portions of the Mississippi valley, it does apparently fail to account for their relative antiquity when compared with each other, or with the mounds in Mexico; the more northerly in any case being evidently the earlier, whether judged by its own form and dimensions, or by its contents. This hypothesis fails also to give any satisfactory reason, philosophical or conjectural, for the location of the military works of the mound-builders, and, indeed, for the existence of any such works. Why need a colony from Mexico, roaming into this broad valley, erect forts and other defences against an enemy, if there were no race but theirs near? and why build a cordon of such fortifications on their outermost northern limit, as well as strongholds at important points within their territory, when nothing but uninhabited regions lay beyond?

We must urge similar objections, also, to the views of Mr. Bradford, in his treatise.¹ Unlike Mr. Schoolcraft, this writer, after an evidently careful and extended examination, maintains that the mounds, mural remains, and other antiquarian vestiges of the Mississippi valley, are the work of nations far more cultivated than any of our later aborigines; hence his theory, that from Mexico as the original seat of civilization, the ancient popu-

¹ *American Antiquities and Researches into the Origin and History of the Red Race (1841).*

lation spread itself and its works northward, deteriorating and becoming enfeebled in proportion as it dispersed, until it became wholly barbarous and withal dissolved into fragments, when the tide at length turned and rolled backward over the same tracts, gathering strength on its way, and finally culminating in the power and grandeur of that later civilization which the Spanish so much admired and so soon obliterated. Such an hypothesis seems to us as superfluous as it is complex and unsatisfactory. If, as all authentic tradition intimates and Mr. Bradford himself claims, this Aztec dynasty was developed from rude northern germs, in successive stages of progress toward the Mexican valley, what need is there of supposing any prior process of degeneracy? why may not a savage horde from Asia have begun to ascend the scale of civilization here as well as new-made barbarians of Mexican lineage? and why should these tribes degenerate only when roaming northward, and not also when returning southward? Moreover, what facts, traditions, or other data, except pure hypotheses, are cited to corroborate the idea of such a useless tentative process?

These difficulties appear to us to press this theory, together with others which weigh against it, in common with Mr. Schoolcraft's. Nor can we see, that Mr. Bradford is any more successful in his attempts to trace the origin of all our modern aboriginal tribes to this single prolific centre in Mexico. The theory is quite too rigid and narrow for the facts so copiously cited by him, in regard to the disintegration and dispersion of communities in every section of the globe. He has abundantly proved that parties may have reached this continent in any number, from any quarter; indeed, has shown it to be in the highest degree probable, that such would be the case, and yet assumes that but one such germ was actually planted here!

As, therefore, from fragments of evidence scattered in every direction, we have ventured to infer that the races who once occupied the western sections of our continent, came originally from different regions of eastern Asia, and at distinct epochs, instead of assenting to the hypothesis that these races sprang from one central ancestry here, and were identical with our modern Indian tribes; so, while we incline, on various grounds, to the opinion that, at a much later date, the germs of several prominent modern tribes, such as the Algonquins and the Iroquois, may be traced to a similar Asiatic origin, from yet higher latitudes and

a more fiercely barbarous ancestry,¹ we allow ourselves also to conjecture that a portion, perhaps the majority, of the ancestors of our more eastern aborigines came hither by some mode of transit from northern Europe; these two great tides of population, finally meeting each other and in some degree commingling, as each flowed into the valley of the Ohio. For, while there is so little to indicate a common origin, and not a little which implies dissimilarity and even antagonism between these grand divisions of the aboriginal population — the earlier and the later — there are not wanting facts which strongly favor the hypothesis of such a widely different origin as the one at which we here hint.

Thus, it has long been vaguely intimated and as vaguely believed, that, centuries prior to the discovery of the new world by Columbus, the Northmen from Iceland explored our coast from Greenland many degrees southward, repeatedly visited these discovered territories, planted colonies at different points here, and held possession for an indefinite period, until they fell at last a prey to the jealousy or the ferocity of the natives; these exciting hints have within a few years been so far substantiated as to be now accepted as authentic history.² The Royal Society of Northern Antiquaries at Copenhagen, in their work published in 1837, and devoted to these and kindred topics, have brought to light several original documents on which this conclusion rests. It appears from this testimony, that, from the year 986 to 1290, there was frequent communication between Iceland and our coast from Newfoundland to Rhode Island by formal expeditions, of which accounts were then or soon after written; Greenland being meanwhile colonized from the same source, and to some extent Christianized, and enterprises for trade and discovery being undertaken from this point as well as from Iceland. It is the opinion of these zealous antiquarians that the celebrated hieroglyphics on Dighton Rock are the work of these Northmen, and a record of their discoveries and conquests; an opinion, however, which Mr. Schoolcraft, after studying the aboriginal pictography for many years, and with far greater advantages than they could have in deciphering and interpreting these sym-

¹ Bradford's *American Antiquities*, p. 205 et seq.; also p. 287 et seq.; and pp. 398-405.

² See Tschudi, *Peruvian Antiquities*, pp. 3-7; also *Biblical Repository*, Second Series, Vol. I. pp. 431-435; also *Edinburgh Cabinet Library, History of Iceland, Greenland, and the Faroe Islands*, pp. 254-276.

bols, strenuously combats, in the belief that the inscription, like hundreds of others on our rocks, is mainly the work of some aboriginal hand; and but a small portion of it, if any, Scandinavian.¹ Is there, then, such a similarity or affinity between the hieroglyphic symbols of the Indian and the Scandinavian, that the one cannot readily be distinguished from the other; so that here, on the wave-worn rock, whoever may have traced the characters and whatever interpretations may now be given of them, the genesis of our present aborigines may be guessed? Adepts as they are in the art of deciphering such Pictographs, the Swedish antiquarians make the inscription a page of the Northmen's history, while Mr. Schoolcraft, with the aid of his expert Algonquin Cacique, identifies a large part of the very same hieroglyphics as pure Indian characters. It seems, therefore, less a conjecture than an inference, that we may prove to have found here a clue to some ethnographic connection of the Indian with the Northmen, or rather with previous Scandinavian adventurers or marauders from the same regions. For, besides the evidence furnished of the successive premeditated visits of the Icelanders to our north-eastern shores, these researches have brought to light accounts — perhaps we should rather say rumors, legends, hints merely — of other and more casual wanderers, at earlier dates, from northern Europe to this continent, who planted themselves still further south than the Icelandic Vinland, in the Carolinas and Florida, under the name of Huitramanaland.² Mr. Schoolcraft, also, has fallen upon traces of what may prove to be the same events, in the tradition of the Tuscaroras, respecting the wreck of a vessel on the Atlantic coast, far to the south, and also in the tradition of the Shawanoes, who had roamed northward from Florida to Lake Superior, and report that their ancestors crossed the sea. And these or similar occurrences may possibly have given currency to the rumor which Mr. Irving narrates, but does not credit, of an early Venetian discovery and occupancy of some region here, or at least commerce with it, called Estotiland.³

¹ Biblical Repository, Second Series, Vol. I. p. 435 et seq.; also History and Prospects of the Indian Tribes, Vol. I. pp. 107-120; and p. 333 et seq. Dissertation on Indian Pictography; also Vol. IV. pp. 119-121.

² Tschudi, pp. 5-7.

³ History and Prospects of the Indian Tribes, Vol. I. pp. 125 and 19; also Vol. IV. pp. 116-121; Irving's Columbus, Vol. III. pp. 357-361.

Yet the knowledge of all these expeditions and settlements, actual or fabulous, was subsequently lost; and this, too, so early after the events that, though Columbus is said, when on a visit to Iceland in 1477,¹ to have heard some hint of these early discoveries and ever afterwards to have cherished it, the great world of commerce, and the world of letters, were alike sceptical in regard to it; just as the existence of the Canaries, the Fortunate islands of ancient geography, though less remote from Europe, had been for centuries forgotten, after Ptolemy had computed longitude from their meridian, until they were rediscovered in the fourteenth century.² Now, if such explorations and occupancies by successive generations from Europe for a period of two or three hundred years, could so entirely cease, and be so obliterated from the very memory of men, their own countrymen and kindred as well as others, why may we not with reason maintain the probability that the natives found here by the Northmen — the fierce Skroellings who gave them no rest except in death — were the descendants of prior adventurers from the same regions, who in like manner may have been or may not have been forgotten? It is well known that the ancient Scandinavians, and the primitive Finns and Laplanders before them, were for centuries mere hordes of freebooters, celebrated especially for their enterprises and prowess on the seas; and that, prior to their discovery of Iceland, which they reached rather by accident than design,³ they were everywhere roving boldly in quest of new enemies in the islands or headlands of the continent already known to them, or in the hope of reaching and ravaging new regions yet more remote. Historical or ancestral traditions, therefore, as well as their national genius, may have given zest, and to some extent direction also, to their numberless piratical excursions, especially whenever they turned their adventurous prows westward into the great open sea.⁴ For, we have here to ask, whence came that impetus toward this continent which brought the first Northmen hither? Was it not some tradition of a world far away to which others had sailed? Or

¹ Biblical Repository, Second Series, Vol. I. p. 431; R. L. Historical Collections, Vol. IV. p. 180; Irving's Columbus, Vol. I. p. 59.

² Irving's Columbus, Vol. I. p. 34; also Vol. III. pp. 411-415.

³ Edinburgh Cabinet Library. Iceland, Greenland, and the Faroe Islands, pp. 90, 91.

⁴ Edinburgh Cabinet Library. Scandinavia, Vol. I. pp. 161-166.

was it rather some original instinct of the genius of discovery such as fired the breast of Columbus afterwards? Surely, the latter is the less probable suggestion. And, besides the greater intrinsic probability of the hypothesis that there may have been communications between northern Europe and our shores prior to the era of their discovery by the Northmen, various dim vestiges of such a connection, as it would seem, are occasionally encountered; as, for example, in some features of the Indian forts and other mural remains south of Lake Ontario in New York, which appeared to the acute and sagacious De Witt Clinton to be of Danish type;¹ and in some of the magic rites of different tribes of our aborigines, which are pronounced by Mr. Schoolcraft remarkably coincident with the ceremonies and arts of the ancient Lapland soothsayers as described by Professor Scheffer of Upsal in the latter part of the seventeenth century.²

In the absence, therefore, of historical documents and other data which might determine the question before us conclusively, and thrown upon the merest twilight of such evidence as warrants us to conjecture where we cannot demonstrate, we incline to the opinion that many, and indeed most, of the aboriginal tribes of our eastern and north-eastern coast, are of northern European descent, as the mound-builders were of northern Asiatic; and we imagine that their origin here must have been at a much later epoch than that of the more interesting western race, inasmuch as we find among them no evidences of a career or a civilization to be compared with their great rivals. If it is urged as an objection to this view, that these aborigines are of Asiatic type, as a race, and in some other respects give evidence of an Asiatic origin, rather than a European, we shall ask the objector to reflect that Asiatic peculiarities can be as easily preserved and transported hither in migrations across northern Europe and the Atlantic, as in wanderings from island to island, or otherwise, across the Pacific. These old Scandinavians, it is claimed, were originally a colony of Goths from Scythia and the regions beyond;³ why then should not their descendants bear with them in every direction traces of their oriental lineage as well as of their fierce and clanish temper?

¹ *Archaeologica Americana*, Vol. I. p. 341.

² *History and Prospects of the Indian Tribes*, 1851, Vol. I. p. 425.

³ *Edinburgh Cabinet Library*. *Scandinavia*, Vol. I. p. 58.

There are many points pertaining to the history of these tribes, which possess great interest to the antiquarian, especially in their legends, their allegories, their pictographs, their mythology, and their resemblances, in many respects, to the ancient Hebrews; resemblances so marked as to have led many writers to maintain strenuously, and with a labored induction of facts, that they must be the relics of dispersed Israel; just as this same lost Israel has everywhere else been sought after, and proved to exist, in support of favorite theories in ethnology; but of these later antiquities we do not propose to treat. It is our earlier archaeology which has for many years excited in our own mind, as it has in others, the most eager inquiry and attention; and, in this sketch of the topics which it presents for consideration, we have sought out facts of every kind from all available sources, and endeavored so to arrange and compact them as to give some just idea of their scope, interlinking all with such trains of reasoning or conjecture as are common with writers on the subject, or such others as have occurred to us as not unworthy of being weighed; our object being to incite, if we may, to further study here, as well as to embody the results of previous study. And it only remains now for us, as due alike to our subject and those who have done so much to illustrate it, to speak of some of the authorities to which we are most indebted for what we have written, and which will best repay the scholar's careful study.

The highest credit is here due to the American Antiquarian Society at Worcester, and especially to its chief originator and first president, Isaiah Thomas. This Society was incorporated in 1812, and, besides all that it has done by its publications and in the collection of its invaluable library, it has given a marked impulse to historical and antiquarian researches throughout our whole country. The era of its formation especially, including a few years prior and subsequent, was a notable epoch in the progress of archaeological research. What Dr. Stiles and other scholars in our country had communicated, in respect to various discoveries here, together with the explorations of Humboldt, Lord Kingsborough and others in Mexico, had stimulated the spirit of inquiry to an unwonted degree in this direction; and the Society at Worcester, with Dr. Thomas for its animating spirit, became at once the chief centre to which and from which the reports of new discoveries of every description flowed. Having laid the foundation of the Society by the gift of his rare collection

of books, Mr. Thomas not only continued to enrich this library by frequent purchases and donations, but published the first volume of the Society's Transactions entirely at his own expense, erected a spacious edifice for the library and cabinet of curiosities, and at his death bequeathed a large fund to the Society in further aid of its objects. It was mainly through his encouragement, and wholly at his expense, that Mr. Caleb Atwater made the extended explorations of the mounds and other earth-works in Ohio, the full and graphic accounts of which he published through this Society to the world, occupying a large portion of the first volume of its Transactions already referred to as printed at Mr. Thomas's expense. This work of Mr. Atwater, published in 1820 under such auspices, excited the liveliest interest at the time, and, notwithstanding all that has been written since, is still one of the most exciting and instructive books on the subject, deserving a careful perusal. A copy was sent by Mr. Du Ponceau to that zealous antiquarian, Dr. Adam Clarke, whose letter acknowledging the favor indicates the enthusiasm with which he had read it, and been borne away by the conjectures to which it had given rise in his mind.¹ In this communication he states that mounds, cairns, forts, and other earth-works, analogous to those of the Ohio valley, had been repeatedly discovered by him in England and Scotland, and especially in Ireland, from which he infers a connection between our mound-builders and the ancient Celts; elsewhere² he speaks of finding similar works in Russia and Tartary; and in this letter he intimates his opinion that both Celts and mound-builders were originally of Hindoo origin, as Dr. Pritchard and other English antiquarians have also endeavored to demonstrate.³ Great, however, as was the interest excited by Mr. Atwater's volume, and much as it stimulated and assisted others in their researches, he was only a pioneer in the field; and, writing under the disadvantage of too limited a survey for an accurate classification of his facts, or for safe generalizations from them, as well as under the exciting impulse of fresh and surprising discoveries, his conjectures and deductions are less satisfactory than his descriptions. Still, so great a work had he done, in connection with his ever to be honored patron and coworker, and so well had he done it, that a whole

¹ *Archaeologica Americana*, Vol. II. p. 553.

² *Travels, etc.*, Vol. I.

³ Bradford's *American Antiquities*, pp. 365, 366.

generation nearly had passed away, before anything better, anything more exact, full, clear and reliable was achieved. Subsequent to his labors and in close connection with them, the Hon. Albert Gallatin prepared and published, through the same channel, his learned Treatise on the Languages of the Aborigines, which forms the chief value of the second volume of the Worcester Society's Transactions. In the preparation of this elaborate essay, he enjoyed the benefit of valuable labors in the same field by Mr. Pickering and Mr. Du Ponceau, whose accurate learning with his own has contributed to give the highest authority to his conclusions. Meanwhile, men of letters and of leisure, at different localities in the West, amid the wonderful monuments of the ancient race, have observed, explored, measured, described in various detail one and another of these unique works, thus both stimulating and materially aiding the spirit of research in all congenial minds. Mr. Bradford, availing himself of their labors, together with whatever was accessible to him from other sources, has digested a valuable Treatise, in which, however, he has the merit of aiding us more by the facts and authorities which he cites, than by the method or the results of his reasonings. Mr. Schoolcraft, connected with the aborigines by marriage, and long a resident with them, has studied their history as the chief work of his life, and from time to time published the miscellaneous fruits of his labor; embodying the whole, finally, in the ponderous tomes recently published under the direction of the Superintendent of Indian Affairs at Washington; volumes which, we must think, ought, for the credit of the compiler and the government, to have been less repetitious, and more scientific. Mr. Prescott, *facile princeps*, has written as none but he could write upon the Aztec and the Peruvian Civilization, interweaving with his fascinating histories invaluable facts and suggestions in archaeology. Mr. Stephens has instructed and delighted the world by his characteristic descriptions of the Ruins of Ciaphas and Yucatan, particularly the latter country; not the least valuable feature of his brilliant pages being the facsimiles of these ruins, which the daguerreotype enabled him to present. Dr. Hawks has translated the joint work of Rivero and Tschudi on Peruvian Antiquities, in which we have the promise of a more full and elaborate work on American Antiquities in general, from the pen of the learned translator. And, to crown all, the Smithsonian Institution, in the first volume of its

Contributions, on the recommendation of some of our most zealous modern archaeologists, has published, in a style worthy of itself and the subject, the comprehensive treatise of Messrs. Squier and Davis on the mounds and various mural remains of the Mississippi valley. This work is both a resumè of previously known facts in relation to the mounds and their kindred monuments, and a digest of many new surveys and descriptions by other laborers in the field, while it embodies a large mass of new material discovered by the authors in their extended personal explorations. In our sketch of the mounds and other earth-works at the West, we have followed, in most respects, their classification, as the best, even when the facts cited by us have been gathered from other sources; and, with the aid of costly plates, the various monuments of our ancient people in their palmy days, stand out before us on these pages in life-like and imposing array, worthy to be classed with the proudest memorials of fallen Thebes or buried Nineveh.

ARTICLE II.

MILLENIANISM.

By E. D. Sanborn, Professor in Dartmouth College.

"*Herr,*" said a student to Casaubon, as they entered the old Hall of the Sorbonne, "is a building in which men have disputed for four hundred years." "And," asked Casaubon, "what has been settled?" How does it happen that the labors of learned men so often prove utterly worthless, and rather encumber than aid the honest inquirer after truth? It is simply because they mistake the proper objects of human inquiry, and exceed the limits which God has set to the understanding of man. They investigate subjects that cannot be known, and attempt to solve questions that cannot be answered. It is probable that one-half, at least, of the works of philosophers and theologians might be annihilated, in a moment, without abridging the means