

Technical and Bibliographic Notes/Notes techniques et bibliographiques

The Institute has attempted to obtain the best original copy available for filming. Features of this copy which may be bibliographically unique, which may alter any of the images in the reproduction, or which may significantly change the usual method of filming, are checked below.

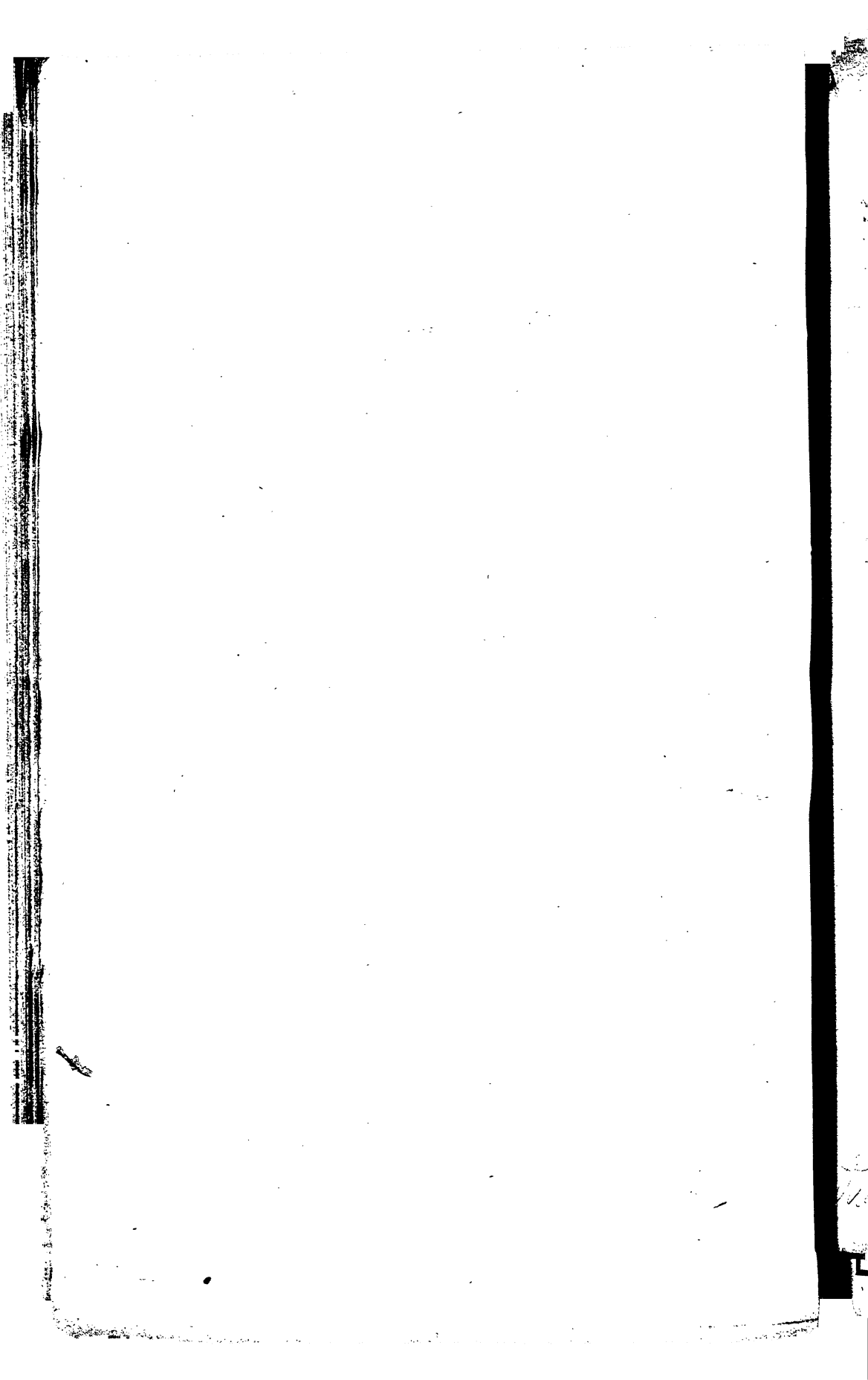
L'Institut a microfilmé le meilleur exemplaire qu'il lui a été possible de se procurer. Les détails de cet exemplaire qui sont peut-être uniques du point de vue bibliographique, qui peuvent modifier une image reproduite, ou qui peuvent exiger une modification dans la méthode normale de filmage sont indiqués ci-dessous.

- Coloured covers/
Couverture de couleur
- Covers damaged/
Couverture endommagée
- Covers restored and/or laminated/
Couverture restaurée et/ou pelliculée
- Cover title missing/
Le titre de couverture manque
- Coloured maps/
Cartes géographiques en couleur
- Coloured ink (i.e. other than blue or black)/
Encre de couleur (i.e. autre que bleue ou noire)
- Coloured plates and/or illustrations/
Planches et/ou illustrations en couleur
- Bound with other material/
Relié avec d'autres documents
- Tight binding may cause shadows or distortion along interior margin/
La reliure serrée peut causer de l'ombre ou de la distortion le long de la marge intérieure
- Blank leaves added during restoration may appear within the text. Whenever possible, these have been omitted from filming/
Il se peut que certaines pages blanches ajoutées lors d'une restauration apparaissent dans le texte, mais, lorsque cela était possible, ces pages n'ont pas été filmées.
- Additional comments:/
Commentaires supplémentaires:

- Coloured pages/
Pages de couleur
- Pages damaged/
Pages endommagées
- Pages restored and/or laminated/
Pages restaurées et/ou pelliculées
- Pages discoloured, stained or foxed/
Pages décolorées, tachetées ou piquées
- Pages detached/
Pages détachées
- Showthrough/
Transparence
- Quality of print varies/
Qualité inégale de l'impression
- Includes supplementary material/
Comprend du matériel supplémentaire
- Only edition available/
Seule édition disponible
- Pages wholly or partially obscured by errata slips, tissues, etc., have been refilmed to ensure the best possible image/
Les pages totalement ou partiellement obscurcies par un feuillet d'errata, une pelure, etc., ont été filmées à nouveau de façon à obtenir la meilleure image possible.

This item is filmed at the reduction ratio checked below/
Ce document est filmé au taux de réduction indiqué ci-dessous.

10X	12X	14X	16X	18X	20X	22X	24X	26X	28X	30X	32X
						✓					



5

[FROM THE PROCEEDINGS OF THE AMERICAN ETHNOLOGICAL SOCIETY.]

MEMOIR

ON THE

EUROPEAN COLONIZATION OF AMERICA,

IN

ANTE-HISTORIC TIMES,

BY DR. C. A. ADOLPH ZESTERMANN,

OF LEIPSIK:

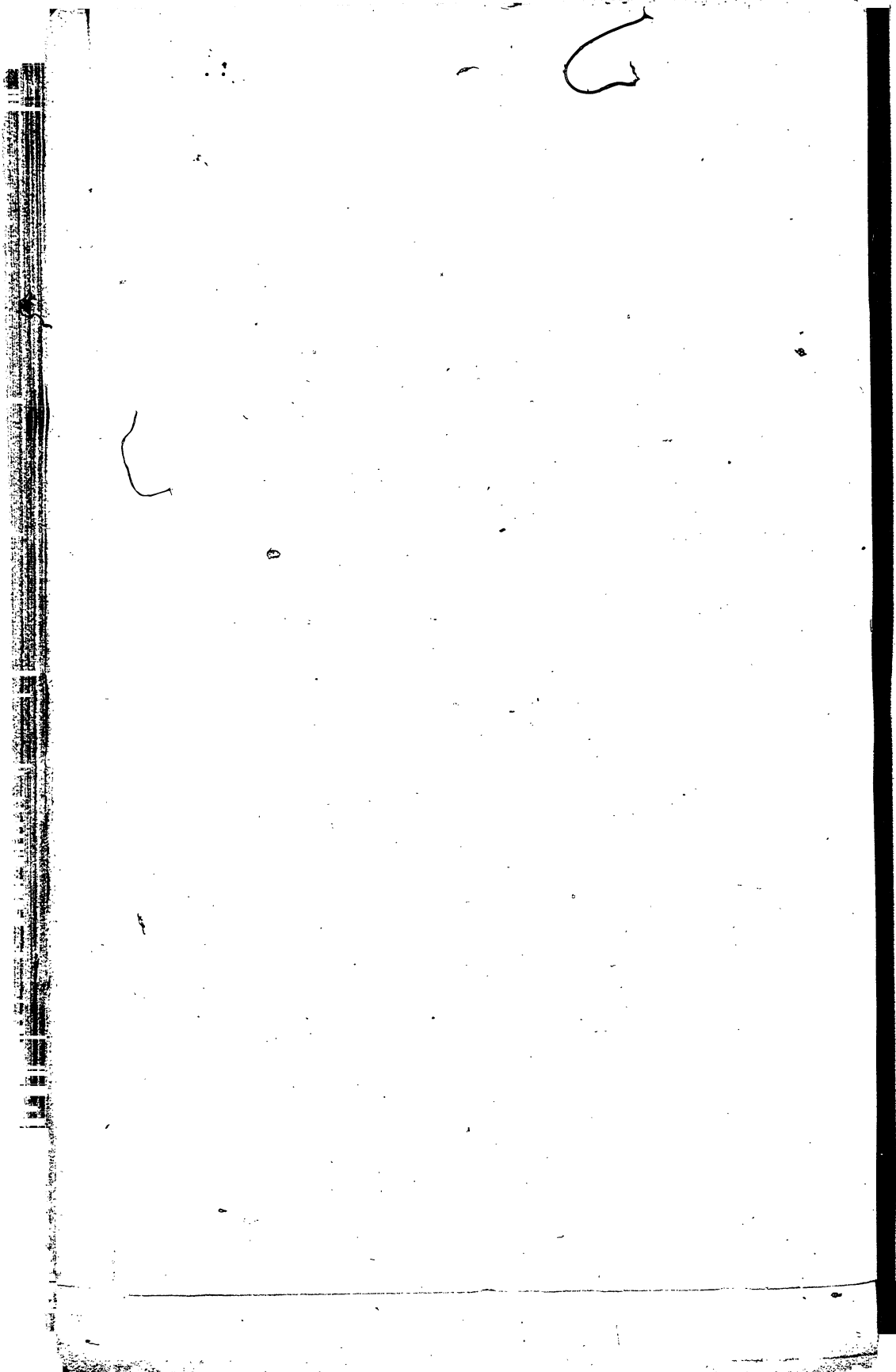
WITH CRITICAL OBSERVATIONS THEREON,

BY E. G. SQUIER, Esq.

APRIL; MDCCCLI.

1851

100 100 100



AMERICAN ETHNOLOGICAL SOCIETY,

APRIL, 1851.

The Colonization of America in Anti-Historic Times, by Northwestern Europeans. By DR. CHRISTIAN AUG. ADOLPH ZESTERMANN, of Leipsic. Translated by Prof. W. W. TURNER.

PREFATORY NOTE.

In the following pages, I venture to present for the consideration of Archæologists and Ethnographers, some views respecting the Colonization of America in Ante-Historic Times, by natives of the Northwest of Europe, with the request that they may be subjected to a thorough examination. Perhaps the attention of scholars will thus be drawn to a subject which appears to me of great importance; and perhaps they may be stimulated to the collection of scientific materials, by the use of which the question may be brought nearer to a satisfactory solution. This is the chief aim I have in view in making public the following memoir, the defects of which are sufficiently accounted for by the comparatively limited extent of the literary apparatus on which it is based, and are by no means unknown to myself. If, notwithstanding, I propound my views with confidence, the reason lies in the power exerted over us by a belief in the correctness of the results of our investigations, and it will not, I trust, be imputed to presumption. I shall consider myself sufficiently rewarded, if men more capable will bring the mooted question to a decision. Science requires only that truth be promoted; who it is that promotes it, is a matter of indifference.

THE AUTHOR.

THE striking similarity that exists between the primitive earth-works, burial places, and utensils of North America and North Western Europe, long ago gave rise to the conjecture that these objects owed their origin to the same people.¹ Keferstein, guided by the trustworthy account that Ari Marsson, an Irish Chieftain, was driven in

1: Keferstein, Ansichten über die keltischen Alterthümer, Halle, 1846. I. p. 245.

the year 983 on the coast of a country in North America, which was then called *Hvitra Mannaland*, advanced the opinion that these inhabitants of the American country, designated as white men, were Irish Celts, who, as is shown by the conversion of Florida to Christianity, before the arrival of the Icelandic Missionaries,² had kept up a constant intercourse with Europe. Although we are not yet so far advanced in the elucidation of this point, as to be able to specify the name of the colonizing people, still the materials which go to prove a primitive colonization of America from the North-west of Europe, have lately been augmented to such a degree, that doubts of the fact are constantly diminishing, and even the period may be determined in general terms, before which the colonization must have taken place.

These materials are furnished us in the "ANCIENT MONUMENTS OF THE MISSISSIPPI VALLEY; comprising the results of extensive Original Surveys and Explorations, by E. G. SQUIER, A.M.," forming Volume I. of the "Smithsonian Contributions to Knowledge," Washington, 1848. This learned and excellent work shows that, extending from the State of New York down the valley of the Ohio and Mississippi, to the shores of the Gulf of Mexico, and onward through Mexico and Central America to Peru, and lastly to various localities to the east and south of the Alleghanies, as also west of the Rocky Mountains as far as California, there are found an immense number of primitive earth-works, stone-works, and mounds of sepulture. It then exhibits to us a great number of utensils of stone, clay, and metal, taken from the earth-works. And, lastly, we are shown a number of skulls, masks, and busts of the ancient inhabitants. If now we compare the drawings and descriptions which the author furnishes of the American structures and implements with the antiquities of this kind found in North-western Europe, that is to say, in the countries bordering on the German Ocean and the Baltic Sea, we find in some a complete coincidence, and in others a surprising similarity, (at least if we except the elevations of earth in the form of animals found in Wisconsin,) but in none a specific difference. This it is intended to demonstrate in the following pages, by considering in succession the walls and ditches, the mounds and graves, and, lastly, the implements of the primitive Americans, as compared with those of ancient Europeans, and by showing the affinity they bear to each other. We shall speak also of the intercourse of the ancient Americans with Europe, and of their physical characteristics; and will close with presenting our views as to the nation to which the primitive colonists of America belonged, as also respecting the period at which the colonization took place, and the causes that produced it.

2. *Antiquitates Americanae, sive Scriptores Septentrionales rerum ante Columbianarum in America. Sect. 14*

If all this be accomplished in a limited, and consequently unsatisfactory manner, I hope to find my excuse in the defective nature of the materials on which my investigations and conclusions are based : for here, unhappily, one principal source of the knowledge of former times—a literature of those times—is wanting.

As to the *enclosures*, some of them surround isolated natural hillocks, while others are carried around the edges of the elevated peninsulas formed by the junction of two streams, and resemble the fortified places in Germany mentioned by Preusker,³ Kalina von Jathenstein⁴ and Keferstein.⁵ They consist of a wall⁶ combined with a ditch,⁷ and sometimes of two walls. This last kind of fortification also has its German counterparts in Grotenburg, near Detmold, in Steinburg, near Römheld, in the duchy of Meiningen-Hildburghausen, &c. The shape of these enclosures is for the most part determined by the nature of the locality, and consequently is very various. Where freedom of choice is left, they usually form figures with obtuse angles, and resemble the stone walls on the Schaafberg, near Löbau, in the kingdom of Saxony, and the wall near Buckowitz, in Bohemia.⁸ In America, the round and angular enclosures are very often found in connexion with long walls.⁹ It is well known that such works are still seen in Germany,¹⁰ and often long walls with ditches (*Landwehren*)¹¹ without enclosed works. If works of this sort are now less frequently met with in Germany, it is probably to be attributed for the most part to the destruction necessarily caused by agriculture.

In America are found a multitude of circular works, consisting of a wall with a ditch on the inside ; sometimes one wall includes another.¹² A corresponding structure presents itself in the fourfold wall in the vicinity of Nienberg, on the Saale, in the duchy of Anhalt.¹³ Single walls of this kind are seen in Reideburg, near Halle, in Shölen, near Lützen; and both are found in the province of Sachsen, in the kingdom of Prussia.¹⁴ The Reideburg walls resemble those of America in so far that they formerly enclosed artificial mounds like the circular embankment in Greenup county, Kentucky.¹⁵ The hills surrounded by water-trenches, near Skeu-

3. Preusker, *Blicke in die waterländische Vorzeit*, I. p. 107 sqq. II. p. 211. sqq.

4. Kalina v. Jathenstein, *Böhmens heidnische Opferplätze, Gräber, und Altherthümer*, p. 135 et sæpe.

5. Keferstein, *Ansichten über keltische Alterthümer*, p. 116, 399 et seq.

6. Squier, *Anc. Monuments of the M. Valley*, Pl. V.—IX.

7. Squier, *Anc. Mon.*, Pl. XI.

8. Preusker, *Blicke*, I. Pl. 1, 13a, and 16.

9. Squier, *Anc. Mon. Pl. XVI.* sqq.

10. Keferstein, *Ansichten*, pp. 116, 128, 134.

11. Preusker, *Blicke*, I. Pl. I., 11. Keferstein, *Ansichten*, p. 112.

12. Squier *Anc. Mon. Pl. XXV.—XXVIII.*

13. Keferstein, *Ansichten*, p. 4.

14. Keferstein, *Ansichten*, p. 20.

15. Squier, *Anc. Mon. Pl. XXVI.—XXVIII.* and Fig. 19.

ditz, in the province of Sachsen, kingdom of Prussia, may also be likened to the American circular structures.—Lastly, there are found in America many semi-circular embankments with a ditch on the inside.¹⁶ They resemble the earth-works known in Germany by the name of Pagan Forts (Heidenschanzen), and are of very frequent occurrence ; they differ from the latter, however, in having no artificially or naturally elevated base, but rise above the surrounding plain only to the height of the embankment. Mounds in the form of the Heidenschanzen have not yet been found in America.

Along with the larger circles there occur in America a multitude of *small circles formed of low embankments*.¹⁷ They are regarded as the foundations of dwellings of the people who constructed the earth works, and by some, less correctly, as the bases of unfinished mounds—a supposition which is contradicted by their number and the regularity of their forms. These circles have their counterparts in the circular hollows surrounded by low walls of earth, frequently met with in the basin of the Baltic and German Ocean, usually from ten to twelve feet, and sometimes one hundred feet in diameter, and from three to four feet deep, which are supposed to be the foundations of dwellings such as the natives of Eastern Siberia still make use of in the winter. They are met with in many parts of Germany, France, and England ; and are called in France, mardelles or margelles, and in England, pen-pits.¹⁸

We pass over the other American earth-works in the form of animals, described by Squier as existing in Wisconsin ; because one like them are found in Europe.

The material of which these embankments are constructed is taken for the most part from the surface of the ground on which they stand ; accordingly it consists chiefly of earth, but sometimes also of stone in masses of various size.

The *artificial mounds* occurring in America, as well as those in Europe, are found to have been erected, some as look-outs or watch-posts,¹⁹ and some as sepulchral tumuli. The watch-posts are mounds thrown up singly on elevated points and also in the midst of enclosures ; in both hemispheres they contain nothing peculiar, and from their nature are of course very similar. It is otherwise with the mounds of sepulture ; on the peculiar construction of which the religion, manners, and customs of the people must necessarily have exercised a great influence. Hence while the agreement in the form and position of the mounds of observation in different countries is a matter of no importance, the similarity and even identity of the

16. Squier, Anc. Mon. Pl. XXXIV. et sæpe.

17. Squier, Anc. Mon. Pl. XVI. and XXIV.

18. Keferstein, Ansichten, pp. 51, 134, 143, 192, sqq. 203.

19. Squier, Anc. Monum, Chap. VI., sqq.

burial-mounds of different countries, naturally leads us to infer the similarity or identity of the builders of these tombs.

The burial-mounds of America are of two kinds. The first kind contain a skeleton on a level with the base of the mound, placed usually in the middle of it, either on a layer of bark or on mats in the naked earth, or in a square chest formed of unhewn logs or of stones, laid one above the other. These mounds consist of earth taken from the vicinity of the place where they are erected, some of them being based on a course of stone, and others being covered with a layer of gravel. They bear the most unmistakable similarity to the barrows of the Orkney islands,²⁰ in which the skeletons are likewise deposited in chests; and to the graves of Germany, in which, as at Nienburg on the Saale in the dutchy of Anhalt, stone chambers are found.

The second kind of burial-mounds contain in the centre, and resting on the original surface of the ground, a hollowed, trough-shaped hearth of clay or stones of various dimensions and height. In these mounds are found urns with the remains of burnt corpses.²¹ These burial-mounds likewise consist of the earth of the vicinity, but are so constructed that two or three layers of sand half-an-inch thick alternate with thick layers of earth, and the surface is covered with a coating of gravel. Mounds of sepulture of this kind are also found in Europe, with perhaps the sole exception of the layers of sand, which have not to my knowledge been met with. In Altranstadt, in the province of Sachsen, Kingdom of Prussia, a tumulus of this kind was dug open in the year 1849. It consisted of earth from the vicinity, had resting on the original surface a hearth of clay, which material is not found in the neighbourhood, and consequently must have been brought from a distance; and, concealed about a foot below the surface, an urn of excellent workmanship, a glass with a long foot, the remains of a knife and of a comb, and the ashes of the dead.

These sepulchral tumuli are sometimes placed so close together that two circular mounds have become a single egg-shaped one, in which case there is, perhaps, a union of one mound with another more ancient.²² This combination of two or more mounds into one is also met with in Europe.²³ The height of these mounds varies in America as in Europe from five to fifty feet and over, although usually as in Europe they do not exceed from twelve to sixteen feet.

The mound builders of America observed the same custom as those of Europe in the burial of their dead; they placed in the grave along

20. Bilderatlas zum Conversations-Lexikon, Abtheil. VII. Pl. 203, Text, p. 82. Comp. Squier, Anc. Mon. p. 162, Fig. 50 and 51; and p. 169, Fig. 55.

21. Squier, Anc. Mon. p. 143, sqq.
22. Squier, Anc. Mon. pp. 149, 155, 178.

23. Bilderatlas zum Conversations-Lexikon. VII. Abtheil, Text, p. 81.

with the corpse his weapons, utensils, and ornaments in great profusion; and the treasures of our museums consist for the most part of the spoils obtained by the opening of these ancient tombs.

After what has been said it will scarcely be disputed that the ancient earthworks of America and Europe exhibit the closest similarity, and in most cases even a positive identity. An equally remarkable identity is displayed by the utensils which have been taken from the ancient graves of both Continents; I mean the *urns*, the implements of stone and metal, and the articles of ornament. From New York to Peru, as well as on the shores of the Baltic and of the German Ocean, there are found in the graves a great number of urns and fragments of urns. The ancient pottery of Europe is essentially distinguished from that of modern times by the fact that the clay is mixed with pretty coarse sand and mica. The older they are, the less thoroughly the clay is worked, and the thicker are the walls of the vessel. On the outside they are usually coloured with black-lead, or they have their natural colour and are decorated with lines which form a pattern. The lines are cut into the soft clay as with a knife. Frequently, raised or sunken ornaments are observed.²⁴ The forms of the vessel are very various, and fluctuate between the shape of a flat saucer, and that of a flask.²⁵ The American pottery is likewise made of clay, quartz-sand, and mica,²⁶ and accordingly differs in like manner from modern pottery, while on the other hand it frequently agrees in material with the ancient vessels of the basin of the Baltic and the German Ocean.

Great diversity is to be expected in the shaping of a soft mass like clay, which leaves so free a scope to the whims of the artificer; nevertheless, the forms of the European vases, as exhibited in our museums,²⁷ and those of the American as portrayed by Squier, *Ancient Monuments*, Plate XLVI. and pp. 191, 192, are evidently of the same character.

The implements found in the American graves agree in form, and partly also in material, with those found in Northern Europe, in a manner so striking, that it can hardly be owing to mere chance. The arrow and spear heads of Europe and America differ not at all, or very slightly, and consist, here as well as there, of the sharp-edged stones furnished by the country—flint, quartz, and obsidian.²⁸ The American stone daggers differ from the European only in so far as

24. Klemm, *Handbuch, der germanischen Alterthumskunde*, § 51.

25. Klemm, *german. Alterthumskunde*, Pl. viii.

26. Squier, *Anc. Monum.* p. 188, at the bottom.

27. Klemm, *german. Alterthumskunde*, Pl. 12. Kalina v. Juthen-

stein, *Böhmens heidn. Opferplätze*. Pl. xxv. sqq. and elsewhere.

28. Squier, *Anc. Mon.* p. 212. Comp. Preusker, *Blicke*, i. Pl. 2. Worsaae, *Dänemarks Vorzeit*, p. 14. *Leitfaden zur nordischen Alterthumskunde*, p. 36, sqq.

they seem intended to receive a wood or bone handle, whereas in ours the handle is formed of the same piece of stone.²⁹ The knives of flint and obsidian found in Europe and America, are perfectly identical, as is shown in the "Ancient Monuments," p. 215. Moreover, the wedge-shaped knives,³⁰ *i.e.*, the implements which have hitherto gone by the name of imperforated wedges or hand-axes, and, when only an inch and a-half or two inches long, by that of amulets, are so completely alike in America and Europe, that one is tempted to believe that the representations in the "Ancient Monuments," p. 215, sqq. were prepared from European originals. The American stone axes also present, unmistakably, the same character as the European, although their form is somewhat more artistic. Still that portrayed in the "Ancient Monuments," p. 218, Fig. 114. No. 5, resembles one depicted by Worsaae, p. 12; and that in the "Ancient Monuments," Fig. 114, No. 6, is not unlike one in the collection of the German Society of Leipsic.

The enigmatical stones with a hole in the centre, found in Scandinavia,³¹ are also met with in the graves of America.

In America, also, as in Europe, bones and horns are fashioned into implements, the uses of which are readily suggested by the form and nature of the materials.

Along with the stone utensils are found implements of copper. Of these some are mere imitations of the stone implements, such as the wedge-shaped knives³³ and the lance points.³⁴ The resemblance which a copper knife found in America³⁵ bears to a bronze knife in Bohemia,³⁶ appears to be accidental.

Lastly, among the articles from the graves are to be mentioned copper armlets, which have precisely the form of some found in Europe, and accordingly indicate a common taste in the shape of ornaments.³⁷

29. Squier, Anc. Mon. p. 211. Worsaae, p. 12. Klemm, german. Alterthumskunde. Pl. x.

30. In a lecture before the German Society of Leipsic, I have shown that these implements are knives, a fact of which any one can convince himself by grasping one with his whole hand, or, if it be a small one, by taking it between the three first fingers in such a manner that the forefinger will lie over the back of the knife. That corner of the edge which is most rubbed down must be turned towards the wrist. By using a little strength, patience, and dexterity, one can succeed, as I have done, in cutting even leather, especially if laid on a stone. When the edge becomes dull, it can

be sharpened again by grinding on stones, which are also found in the graves of Germany.

31. Leitfaden zur nord. Alterthumskunde, p. 39, 13.

32. Squier, Anc. Monum, p. 221.

33. Squier, Anc. Monum, p. 197.

34. Squier, Anc. Monum, p. 201. Fig. 86, 1; comp. p. 212. Fig. 103, 2, 3, 4, 6; and p. 201. Fig. 87, 1, 2; comp. p. 211. Fig. 99.

35. Squier, Anc. Mon, p. 201. Fig. 86, 2.

36. Kalina v. Juthenstein, Böhmens heidn. Opferplätze, Pl. vi. 3.

37. Squier, Anc. Mon. p. 204; comp. Klemm, german. Alterthumskunde, Pl. iv.

The undeniable coincidence in the cases above enumerated, naturally leads us to inquire into the causes of this coincidence. Were these objects of such a kind that their form must necessarily be determined by the common nature of man, the coincidence would not surprise us. But the specific forms of the earthworks, the mode of burying the dead, the composition and workmanship of the pottery, the manner of shaping stone into implements, all point to an individual cultivation of a portion of the human race; an indication which is strengthened by the fact that we meet with the traces of this cultivation only in a line which, starting from the north-east of Asia, passes through Central Europe in a South Westerly direction, recommences in North America, and continuing from there through Central America to Peru, appears to reach its termination in the South Sea Islands. For we find in Southern Siberia, in Asia Minor, and in the steppes of Southern Russia in Europe, in Central Europe, between the Alps and Pyrenees on the one hand, and the Frigid Zone on the other, and in America, in the localities pointed out by Mr. Squier, earthworks and graves of the same character and essentially the same contents, only with this remarkable difference, that both form and contents manifest a constant improvement in proportion as we advance towards the West. To the Siberian mounds are joined in Europe earthen enclosures; the irregular embankments of Europe are converted in America into regular forms; and the round tumuli of North America become regular terraced structures in the South and in Mexico, and receive their highest development in the Mexican teocalli. The rude ornaments of the European barrows, consisting of earthenware beads and the teeth of wild beasts, are exchanged in America for polished stones of regular shape; and the ruder forms of the vases receive their finest development in Peru. These phenomena, in my opinion, point to an intimate internal connexion, for which I can find no other explanation than a gradual migration of a portion of the human family from one part of the world to another—from one hemisphere to the other. In short, I see in it a colonization of America, by means of an immigration from Europe.

This supposition is further strengthened by the consideration that a *mutual intercourse between America and Europe* must have existed in the primitive times. In Osnabruck, in the Kingdom of Hanover, and in the Dutchy of Holstein, there have been found, in certain mounds of sepulture, urns, battle-axes, flint knives, and *small clay pipes*. These are five or six inches in length, and ornamented; the orifice is cut off obliquely, and bears evident marks of having been smoked from.³⁸ The American graves are also very frequently found

³⁸. Wachter, in the *Hannoversche Magazin* for 1841. Art. 26, p. 675. Art. 27, p. 685.

to contain pipes of clay and stone ; the clay pipes seem to possess the primitive forms of our small clay pipes, and to be entirely similar to those found in Hanover and Holstein.³⁹ It necessarily follows from this, that the practice of smoking belonged to the people who constructed the graves in America ; but it is also equally indisputable, that men who smoked were buried in Europe. That the custom of smoking was not common to all the Europeans to whom the graves owe their origin, is evident from the fact that in but comparatively few graves have pipes been found. It is, therefore, to be presumed that in such graves either strangers were buried, or men who had had intercourse with strangers, and that consequently the practice of smoking was introduced from abroad. This practice can be shown to have existed first of all in China and America ; and from one or the other of those countries it must have been brought, in the ancient time, to Europe. When we reflect that in the graves of the eastern parts as also in the interior of Europe no pipes are found, and that they occur only in the countries bordering on the German Ocean, we can hardly doubt that smoking must have been introduced into Europe by means of intercourse with America. It may be objected that Europeans may have taken to smoking of their own accord, as well as Americans. But in that case it would be necessary to assume that there existed in the vegetable productions or in the nature of the country a special incitement thereto ; and supposing this incitement to have continued, it is perfectly inexplicable that a habit which is not acquired in the first place without considerable effort, and is afterwards very difficult to lay aside, should have so completely disappeared as to be introduced again, as entirely new, after the discovery of America by Columbus. Since then, the practice of smoking was not unknown to the people who buried implements of stone along with their dead, it can scarcely be denied that an intercourse with America must have existed in those primitive times.

The supposition of an intercourse between America and Europe, appears also to receive confirmation from the fact that figures of American palm-leaves have been found on some *dolmens* at Lok-mariaker in Brittany.⁴⁰ A support for the opinion that America was known to the ancients, has been sought in the Atlantis of Plato and Strabo, Atlantis⁴¹ being supposed to be America. But whoever accurately examines the passages referred to in the writings of the ancients, will find, that from these fabulous materials, which no doubt owe their origin to various misunderstood accounts of discoveries lying nearer home, it is impossible to deduce a historical foundation for the belief that the Greeks were acquainted with

39. Squier, Anc. Mon., p. 194. Fig. 80.

Antiq. a Copenhague, xvii. p. 19, Introduction.

40. Mémoires de la Société des

41. Platon. Tim. 24. Strabo ii. 102.

America. After stripping off all that bears a fictitious character from these relations, what is left will hardly lead us further than the western coast of Africa and the adjacent islands.

If, now, the facts we have discussed compel us to the conclusion that at an unknown epoch of the past an emigration must have taken place from Europe to America, the questions inevitably present themselves,—Who were this emigrating people? When did the emigration take place? What were their means for passing from one continent to the other? And what induced them to do so?

Unfortunately we possess not a fragment of literary evidence to aid us in answering these questions; for hitherto no written characters have been discovered in the graves of America. But we have a few skulls of the mound-builders, and representations of their heads on stone pipes, masks, and reliefs, from which conclusions may be drawn as to the race to which the people belonged; and we still find traditions and remains of populations in America which confirm these conclusions.

Mr. Squier gives us, in the "Ancient Monuments," in Plate XLVII. a side view, and in Plate XLVIII. a front and vertical view, of a skull found in an ancient American grave. It has a tolerably high forehead, an aquiline nasal bone, a tolerably high upper jaw with strong teeth, and cheek bones which, as compared with the vertex, have only that degree of prominence which is customary in Caucasian crania. A Caucasian skull, which was taken from an ancient grave at Altranstädt, in the province of Sachsen, kingdom of Prussia, agrees in its proportions with the American skull, excepting that it has a very inconsiderably larger facial angle.

These proportions lead to the conclusion that the American skull, when living and clothed with flesh, had a prominent aquiline nose and a broad upper lip, and that its cheeks could not have been strikingly prominent. Dr. Morton, in his "Crania Americana," Philadelphia, 1839, has described this skull; and he states with respect to the ancient American skulls in general, that they are larger than those of the present Indians, and that they have a greater vertical and frontal diameter, a greater facial angle, and a greater internal capacity (from 85 to 90 cubic inches). When we consider that the Caucasian race has taken on an average, a lofty cranium, a prominent and high forehead (oval-shaped face), a prominent nose, moderate-sized cheek bones, a high upper jaw, and a mean internal capacity of 87 cubic inches, and that the American race has in general a low and strongly receding forehead, a stumpy nose, very prominent cheek-bones, a rather broad face, and a mean internal capacity of 82 cubic inches, we can hardly be deceived in attributing this skull to the Caucasian rather than the American race. The learned Dr. Morton, it is true, has ascribed it to the Toltecan family; to those skulls it approaches the nearest, among the present Ameri-

can tribes—but he was perhaps led to do so only because this previous appearance of the Caucasians in America seemed to him impossible.

This same Caucasian feature which we were obliged to assume in the skull just described, and presented to us again in quite a striking manner on the pipe-heads pictured in "Ancient Monuments," p. 245, etc., and in the masks delineated in the same work pp. 250, 251. We behold in them the oval style of face, the lofty forehead, the regular, somewhat sharp and prominent nose, the straight-set eyes, and high upper lip; but the low forehead, the long and narrow eyes inclined upward in an oblique direction, the prominent cheek-bones, the stumpy nose, the broad face, and the retreating frontal bone of the American race, as described to us by ethnologists, we cannot find. The same cast of features differing from that of the present Americans was found by Alexander von Humboldt,⁴² in the earthen masks discovered among the wild Indians on the Mosquito Coast, in the effigies of the palace of Mitla, at Oaxaca, in New Spain, on the reliefs at Palenque in Chiapas, and in the Aztec paintings.

We find ourselves compelled by these testimonies to regard the people who constructed the mounds, and who were doubtless not less accurate in their representations of themselves than we see them to have been in those of animals, as belonging to the Caucasian race. And in fact this conclusion is further strengthened by evident traces that present themselves of a white population in America before the arrival of the Northmen.

Ari Marsson, in the year 983, was driven on the shores of an American country, to which he gives the names of *Hvitra manna land*, White Men's Land, and *Irland it Mikla*, or Great Ireland.⁴³ The former name shows that the inhabitants of that country had white skins, and the latter that they came from Ireland. Even if this account cannot go to prove that the people here mentioned belonged to the primitive colony which I have assumed, because, at the remote period fixed upon by me, the name Ireland (if it be not perhaps a translation by Ari Marsson of another name of the same island), can hardly have existed, still it shows that numerous emigrations from Europe to America may have taken place before that of the Northmen.

Of more importance, however, are the traditions and belief of the Mexicans and Peruvians, which lead us to infer an immigration of white men. Such traditions which have become an integral part of the popular belief, always point to a fact as the source from which they have sprung. Remarkable in this respect is the belief of the ancient Mexicans, that the God of the air, Quetzalcoatli, a being of

42. A. v. Humboldt, Anisichten der Natur, im Auszuge. Morgenblatt, 1849. No. 248. v. 901.

43. Antiquitates Americanae, vi.

lofty stature, with a *white skin*, long dark hair, and a *flowing beard*, in consequence of the enmity of a higher God, took leave of his followers on the shores of the Atlantic Ocean, on which he embarked, promising to revisit them along with his descendants, and resume his kingdom.⁴⁴ The germ of this tradition is doubtless that a white man, who by reason of his superior qualifications attained to royal rank among the ancient inhabitants of Mexico, was compelled to yield to one more powerful than himself, and withdrew to the eastern home of his race, where he could most naturally hope for assistance to re-conquer his kingdom. It is impossible that so exact and detailed a picture could be drawn of a being by those who had never beheld one of a similar kind. Now, a white skin and a flowing beard are so entirely foreign to the American tribes of the present day, that they certainly would never have imagined a being possessing *these characteristics* had they not seen men who bore them. Moreover, Montezuma, the last King of the Aztecs, who claimed a descent from Quetzalcoatl, is known to have been of a lighter color than the other Mexicans.⁴⁵ That in several parts of America there existed a white population before Columbus, has been proved by Aubin in the most convincing manner by extracts from ancient writings in Mexico, transmitted by him to the Royal Society for Northern Antiquities in Copenhagen.⁴⁶ A tradition was also current in Peru, that *white, bearded* men had come to that country a long while ago, and diffused civilization. The nobility of Peru, the Incas, passed for children of the Sun, by which was no doubt meant the East; they had a higher, more prominent forehead,⁴⁷ and a whiter skin than the other Peruvians. Even in recent times the lighter-colored race was not yet quite extinct. Thus Marchand found on the Northwest Coast of America, between the 54th and 58th degrees of latitude, people with large eyes and a light complexion, whom Alex. von Humboldt supposed to be descended from the Usüm, an Alano-gothic race,⁴⁸ i. e., Caucasian stock. It appears that even among the Mexicans, at the period of the Spanish conquest, the Caucasian type had not been quite obliterated; for one of the ambassadors sent by Montezuma to Cortes, so resembled that European, that he was called by the Spaniards, "the Mexican Cortes."⁴⁹

After what has been presented, it seems beyond a doubt that in

44. Prescott, History of the Conquest of Mexico, I., p. 60, 312 sq.

45. Prescott, Conquest of Mexico, I., p. 74.

46. Die Königl. Gesellschaft für nord. Alterthumsforschung Jahresversammlung, 1840, p. 2, line 22nd from the bottom, and p. 8.

47. Prescott, Conquest of Peru, I. p. 10; also p. 8, 39.

48. A. v. Humboldt, Ansichten der Natur, im Auszuge. Morgenblatt, 1849, No. 248, p. 991.

49. Prescott, Conquest of Mexico, I. p. 319.

primitive times Caucasians emigrated into America, and there called forth a civilization, which was afterwards destroyed, either by a rising against them on the part of the aborigines, or by a later barbarian immigration, perhaps from the North-west, and proceeding from Asia, just as it fared with the high, and until recently, unknown civilization on the upper Euphrates and Tigris, with the civilization of the ancient Egyptians, and with that of the Greeks and Romans. For, even supposing that Caucasian immigrants extended their influence by degrees from New York to Peru, and founded flourishing and peaceful kingdoms, in which a commerce was carried on that reached from the plateaus of Mexico and the shores of the Mexican Gulf to the Alleghany Mountains, as is evinced by the obsidian and the sea-shells which are frequently discovered in the graves of the Northern Union,⁵⁰ still we could hardly be justified in concluding that America was uninhabited before their arrival. On the contrary, several of the pipe-heads figured by Squier in the "Ancient Monuments," as in p. 244 Fig. 143, and p. 249, Fig. 149, appear to me to represent the features of the Aborigines, over whom the Caucasians ruled for a time, and by whom, as the least numerous race, and after becoming gradually enervated, they were in turn subdued and partially annihilated. At all events, the disappearance of the Caucasians argues nothing against their former existence, even if the instances above adduced of remnants of a European population, probably somewhat changed by intermixture, be not regarded as valid. How many nations can be proved historically to have lived, who yet have vanished without leaving a trace behind them! Where are the Vandals, before whom Rome trembled? Where are the Goths, who gave laws to half a continent? Where are the Franks, who founded kingdoms still existing? Where are the Caribs? Where the Redskins who but a few centuries ago filled with terror the European colonists on this side the Alleghanies? It seems ordained by destiny that one race of mankind should supplant another; and who can assure us that the high civilization of the Caucasians of the present day will not, sooner or later, be trampled under foot by barbarian hordes?

If then we may regard the fact of the colonization of America by Europeans as established, our next inquiries are involuntarily directed to the possibility, the period, and the occasion of so far-reaching an undertaking.

The abundant appliances by the aid of which our navigation is now conducted, cause us to regard it as impossible that a people who had no knowledge of the compass, whose vessels were small and of frail construction, and who were destitute of the nautical science of modern times, could undertake such distant and perilous voyages.

50. Squier, Anc. Mon., Chap. XIX.

But it is well known that the ancient navigators directed their course with great skilfulness by the stars, and that they took with them ravens and other land birds, which, when they had lost their way or were in search of land, were let fly, and thus served as guides. These were the compasses of the bold sea-farers. But was it necessary that they should sail in a straight line from Ireland or Norway to America? May they not, like the Northmen, have sailed from one island to another of the Northern Ocean, until at length, perhaps, after decades of years, they found the way to America as the Northman did in later times? Can it be correctly maintained that to the ancient people that was impossible which was possible to the Northmen, as is shown by the accounts of their sea adventures, and furthermore by their structures in America?⁵¹ Can it be doubted that an evidently more cultivated people, like the makers of the stone weapons, could as easily reach America as the Esquimaux of the American Polar region, who are now acknowledged to belong to the same race with the Laplanders of the Polar regions of Europe? The fact of the immigration may be received as a sufficient proof of its possibility. The ashes which Hecla sends from time to time to the Faroe isles, the drift-wood and other things which the sea brings from the west to Europe, were the messengers that called the ancient colonists to America; distress at home gave the impulse that caused these messengers to be obeyed; and skill, courage, and perseverance, were the guides that brought them to its shores.

It is far less difficult to show the possibility of reaching America, than it is to determine the period at which colonization began. We can only say, that it must have taken place before the introduction of bronze into North-western Europe.

Many utensils of copper have been discovered in the American graves, but not a single one of bronze. This copper was worked in a cold state, as is shown by pieces of metal found about the works of the North-west Mining Company.⁵² It is very evident from an examination of these masses, that portions have been separated from them for the purpose of being worked up. Bronze, however, is so much superior to pure copper in hardness and brilliancy, that no one after using it would return to the latter. Hence we may conclude with certainty that the people who emigrated from Europe to America, must have left their homes before bronze was known there. Had such not been the case, bronze would have been transplanted along with them to America.—This conclusion is also strengthened by the fact that the American copper implements are imitations, not of the bronze implements of Europe, but of those of stone.

51. Die königl. Gesellschaft für nordische Alterthumsforschung Jahresversammlung, 1840; with a repre-

sentation of the Norman Baptistery in America.

52. Squier, Anc. Mon., p. 202 sq., and p. 279, at bottom.

The question now arises—When did bronze become known in North-western Europe? This, also, cannot be answered with certainty. Only thus much we know: the arms of Theseus were of bronze; the armour, weapons, axes, and knives of the heroes of the Trojan War were of bronze;⁵⁴ the anchors of the Hegelingen were of bronze;⁵⁵ and the weapons of the Teutones, who, in the year 113 before Christ, made their appearance in the Roman territory, were likewise of bronze.⁵⁶—Hence we see that bronze was already known in North-western Europe 2,000 years ago. But we may assume that it became known there at least 1,100 years earlier, by means of the Phœnicians. It is true that the first voyages of the Phœnicians through the Straits of Gibraltar to the Amber Coast are commonly placed in the year 1,100 before Christ; but they must have procured amber already for some considerable time before the Trojan War, which is placed, according to the lowest computation, in the year 1184 before Christ; for in the heroic age of the Greeks, amber was one of the most favorite materials for ornamenting apartments;⁵⁷ and the Phœnicians already manufactured of gold and amber the splendid chains that charmed the Grecian women.⁵⁸ Accordingly, at the period of the Trojan War, a great deal of amber must already have been brought from the Amber Coast. Now, the trade of those days, as is always the case with rude nations, was one of barter. Without doubt they offered to the inhabitants of the North such articles as they most coveted; among which, weapons, especially if made of bronze, and glittering like gold, would be sure to hold the highest rank. We may therefore assume with certainty, that many of the bronze weapons of classical origin, which were afterwards found in the countries bordering on the German Ocean and the Baltic Sea,⁵⁹ were bought and sold there as early as 1,200 years before our era. The acquaintance, then, of the inhabitants of the coasts of the German Ocean and the Baltic with bronze, cannot be fixed at a lower date than the year 1200 before Christ.

But it is still more probable that even before this period the inhabitants of modern Germany, France, and of the countries of Western Europe bordering on the Ocean, as far North as the Polar Zone, were acquainted with bronze. Many things go to show that among the Altai Mountains, so rich in metals, the first bronze was made,

53. Plutarch. Theseus, c. 36.

54. Homeri Iliad. VI. 199. 318. 321. IV. 326. XI. 640. XIII. 439. sq. 612, 650, 662. Odyss. VIII., 403. XII., 173. XV., 418, et seq.

55. Kutrún, I., 109, (4,426—4,456.)

56. Virgílii Æn. vii., 743—745.

57. Homeri Odyss. iv., 73.

58. Homeri Odyss. xv., 459 (460).

59. Bulletin de l'Académie roy. de Belgique. Vol. xiv. Part 2, p. 268, 2, and the Plate belonging to it, Fig. 17; comp. E. Gerhard's Denkmäler und Forschungen, Pl. xii. Also Worsaae, Dänemarks Vorzeit, p. 24, a sword of bronze; comp. E. Gerhard's Denkmäler Forsch. 1849, Pl. ii., Fig. 2.

and that from there it was brought with the migrating nations to the West. For there, in the earliest times, the most extensive mining operations were carried on ; and in the graves and abandoned works of that region, utensils of the most varied description have been found made of the finest hardened bronze.⁶⁰ From there this bronze, together with the other products of the Siberian mines (beryllus, amaragdus Scythicus, &c.,) was carried westward along with the people as they migrated to Europe. The Massagetæ, who, according to Jacob Grimm (*Geschichte der Deutschen Sprache*), are identical with the Goths, who afterwards made their appearance on the Danube, had corselets, lances, arrows, and battle-axes of bronze.⁶¹ In various parts of Germany, widely separated from each other, utensils for casting articles of bronze have been discovered.⁶² If now we consider that the population of Northern and Central Europe immigrated to the North of the Caucasus from those regions in which bronze was first produced, or from countries situated very near the place of its production, we will find it more reasonable to assume that the bronze-workers of Central Germany brought their art with them at the period of the immigration of their people, than that they learnt it from the Phœnicians, who can hardly have penetrated beyond the coast to any distance into the interior of the country, or from the Romans, who had iron weapons long before the days of Marius and Julius Cæsar. This supposition receives confirmation from the fact that the mysterious implement called a "celt," "hache gauloise," "palstaff," battle-chisel," etc.,⁶³ is found chiefly in the countries of Central and Northern Europe ; for which reason it is plainly to be regarded as a production peculiar to those regions, and consequently as evidence of a native, original branch of industry.⁶⁴ That along with these native productions in bronze, more finely wrought articles in the same metal, of classical origin, should have been introduced, as we have assumed above, need appear no more surprising than the fact that a good deal of English cutlery is now sold in Germany along with the many useful articles of native manufacture. In the

60. Ritter, *Erdkunde*, Vol iii.

61. Herodot. i., 215.

62. Smelting pots with molten bronze and lumps of the same metal, and even entire foundries with moulds and the articles cast in them, have been discovered at Demmin in Mecklenburg, Gross Jena in Thuringen, Braunfels in Hessen, and Zurich in Switzerland. Keferstein, *Ansichten, über die Keltischen Alterthümer*, i. 432.

63. In a paper read before the German Society of Leipsic, I have shown that as these implements are by no

means of a suitable form for weapons, and cannot be supposed to have been used as such, along with the lances and swords of bronze, and as we can show no other agricultural implement of the ancient inhabitants of Germany, they must have been designed for tilling the soil, and were in fact a sort of spade.

64. I find the same opinion expressed in the *Leitfaden zur nord. Alterthumsk.* Copenhagen, 1837. p. 69.

absence then of any weighty argument to the contrary, we are justified in assuming that long before the arrival of the Phœnicians, the dwellers about the German Ocean and the Baltic were acquainted with bronze. Accordingly the immigration of the people to whom bronze was as yet unknown, must be referred back to an indefinite period, reaching at least to over 1,200 years before the birth of Christ.

Respecting the cause which produced this emigration to America, I have but a few conjectures to offer, and to these no great value will probably be attached. It can scarcely be doubted that a people who in both hemispheres successively raised such prodigious earthworks, cannot have been in Europe a mere pastoral, hunting, or fishing people, but must have been, as they afterwards were in America,⁶⁵ a population who practiced the art of agriculture. Such works can be erected only during a long continued abode in the place where they are situated; and the motive for erecting them must have been the protection of territory which it would have been a severe loss to resign. Consequently, the builders of these works must have been agriculturists. But a people who practice the art of agriculture do not quit their home without a pressing necessity, least of all by the tedious and perilous route of the ocean.

This necessity cannot have been produced by any accidents of the elements; for man braves the elements on land with great endurance, and least of all would he betake himself to the sea in order to escape from storms or floods, which only partially assail the land. Revolutions of the earth, since the construction of the graves in Central Europe, have certainly not taken place. It is, therefore, only a war with a people pressing upon them that can have produced the necessity for emigrating to America. Perhaps, we would not err, were we assume that the people with bronze weapons, as the superior one, conquered the people with stone weapons, and forced them to emigrate. We may form some idea of how this took place, if we assume that the Aborigines were gradually driven by their enemies from the Continent to the British Islands, and from there to the smaller islands, constantly further to the West; and that probably, only the more powerful and wealthy of the Aborigines, together with their followers, retreated and emigrated rather than become the vassals of the new comers. After the expulsion of the princes, the new comers took possession of the land and of those subjects of the expelled who had not emigrated; while those who had thus been driven from their former homes, got for themselves a new country and new subjects in America. We would thus have an explanation of the fact, that while relics of the stone-weapon people remain in Europe, stone weapons also occur in the graves along with those of

65. Squier, *Anc. Mon.*, p. 186, and chap. xix.

bronze. Thus we are not compelled to attribute stone weapons and bronze weapons to one and the same people ; although it may be admitted that, in consequence of the greater value of bronze in Europe, the poorer individuals of the bronze-weapon people may have had recourse to stone implements, the use of which they may have adopted from the Aborigines.

To complete the proof of the foreign origin of the American antiquities, it would be necessary to show that they cannot be ascribed to any primitive American people. To carry out this proof, is for me impossible, in consequence of the utter lack of materials. But I may be allowed to say, that they cannot be attributed to the savage red men of the present day ; because these, as far as I know, have not erected or used any such structures ; and they certainly stand at a lower point in the social scale than the builders of the ancient earth-works, if we deduct the results of modern European culture.

Observations on the Memoir of Dr. Zestermann, relating to the Colonization of America in Pre-Historic Times. By E. G. SQUIER.

THE hypothesis of the Discovery of America by adventurers from the North of Europe, prior to the epoch of Columbus, has found many and able supporters among the learned men of both the Old and New Worlds ; and it has now come to be generally admitted that the Northmen, subsequent to the discovery and partial colonization of Greenland in the Xth Century, penetrated to the American continent somewhere upon the coast of Labrador. The evidence upon this point, drawn from Sagas which have all the simplicity and directness of truth, seem conclusive, and probably will not be called in question. But it has been claimed further, that these adventurers coasted along the Continent as far South as Rhode Island and Narragansett Bay, and actually made temporary establishments, and left traces of their occupancy there. This claim, however, is not so well supported. It rests upon casual expressions, of doubtful meaning, contained in the Sagas, and upon a few rude monuments which are clearly referable to other eras and origins. The evidence which has been put forward in support of this claim, by the Antiquaries of Copenhagen, it seems to me is incapable of supporting a critical analysis ; and the stress which has been laid upon it has contributed to weaken, rather than to sustain, the original proposition.

The Dighton Rock has its almost exact counterparts in various parts of our country, which are well known to be of Indian origin : the Fall River Skeleton, in its mode of burial, cranial characteristics, and in the ornaments found with it, is clearly that of an Indian ; and

the "Old Tower" at Newport, it is now demonstrable, has an antiquity of not more than two hundred years.

The claim, or rather hypothesis, which is submitted in the paper just read, varies materially from that to which I have alluded; and although not new, is more ingeniously supported by Dr. Zestermann than it has been by any of its previous advocates; and as it is put forward in an inquiring spirit, suggestively and not dogmatically, and with an evident desire to arrive at the truth, it is entitled to the most respectful consideration. It is substantially this: that in remote, ante-Columbian times, the American Continent was not only discovered, but widely occupied by people from the North of Europe; which conclusion is supposed to be sustained—*First*, by a general resemblance in the primitive monuments both of Northern Europe and Northern America—*Secondly*, by the existence of vague traditions among the nations of the North of Europe, of a migration or colonization far to the westward; and, *Third*—By the prevalence among the semi-civilized nations of America of the tradition of an arrival among them, in remote times, of extraordinary personages of mysterious origin, who were their instructors in religion and the arts.

The evidence drawn from the monuments is that which is chiefly relied upon by Dr. Zestermann, and is entitled to the first and fullest consideration. That a wonderful resemblance exists among the early monuments of all primitive nations, is a fact which early impresses itself upon the mind of every person who attempts their investigation.—Hence it has been hastily inferred that, because certain monuments and aboriginal relics of the United States, such as entrenched hills, tumuli, and instruments and ornaments of stone and copper, sustain analogies, in some instances almost amounting to identities, with those occurring in the British Islands, in the North of Europe, and on the Steppes of Russia, that relations must necessarily have existed between the builders, or that they had a common origin. These resemblances are, nevertheless, the inevitable results of similar conditions; and the ancient Celts and Scythians, the American Indians, and the natives of Australia, built their hill forts, and fashioned their flint arrow-points and stone axes, in like manner, because they thus accomplished common objects in the simplest and most obvious mode. Human development must always be, if not in precisely the same channels, in the same direction, and must pass through the same stages.—We cannot be surprised, therefore, that the earlier (as in fact the later) monuments of every people, exhibit resemblances more or less striking. What is thus true physically, or rather *monumentally*, is not less so in respect to intellectual and moral development. And it is not to be denied, that the want of a sufficient allowance for natural and inevitable coincidences, resulting from these causes, has led to many errors in tracing the origins and affinities of nations.

This is admitted by Dr. Zestermann, who, however, contends that there are specific resemblances, not to say identities, between the primitive monuments of the North of Europe, and of the United States, sufficiently numerous and complete to warrant the conclusion that they were built by people of the same stock, who, previous to their separation, had acquired common practices, in respect not only to religion but to their modes of defence and burial.

The belief in a Supreme Power and in a future existence, seems to be intuitive and inherent in the human mind. At any event, it is found to exist, in a clear or obscure form, amongst all peoples. The alleged exceptions among certain debased African tribes are not yet to be received as facts. A certain degree of affection for the living, and consequent regard for the dead, are equally common to humanity, and are shared, to a degree, by the higher orders of the brute creation. This universal belief in a future existence, and regard or reverence for the dead, are competent to explain the common features which are exhibited in the early burial rites and burial monuments of all nations. The primitive man accomplishes his purposes in the simplest mode; and the simplest and most durable method of preserving the memory of the departed, is by raising a mound of earth or a heap of stones above his remains. Accordingly, we find instances of this mode of interment in almost all countries of the globe. The development of this rude monument, in after ages, is to be seen in the pyramids, which may, not unphilosophically, be regarded as perfected tumuli. The enclosure of the corpse in a cist, or chamber of wood or stone, to protect it from the rude contact of the materials of which the monument might be composed, is a step which the same feeling that led to the erection of the monument itself would naturally dictate. The deposition of articles of use and ornament with the dead, originated in the common primitive belief that they would be required by their owner in his future existence.

To the same ideas may be traced the origin of the immolations and sacrifices made at the tombs or on the pyres of the dead; the wife and the faithful servant sought to accompany their lord in his future life; and a numerous retinue was slain at the tomb of the Scythian King and the Peruvian Inca, that they might appear in a future state with a dignity and pomp proportioned to their earthly greatness. The Mexicans killed the *techichi* at the grave of the dead, that his soul might have a companion in its journey along the dreary, terror-infested pathway, which, according to their superstitions, intervened between the earth and the "blessed mansions of the sun." So, too, was the faithful dog of the Indian hunter placed beside him in the grave, that, in the blissful "hunting grounds of the West," he might "bear him company." The warlike Scandinavian had his horse sacrificed on his funeral pyre, and his weapons buried with him, so that, full-armed and mounted, he might, with becoming

state, approach the halls of Odin. In the almost universal belief that the soul of the dead, for a longer or shorter period, lingered around the ashes from which it was separated, we may discover the reason why food and offerings were deposited at the grave; why it was carefully preserved, and why, at stated intervals, the surviving relatives of the deceased decked it with flowers and performed games around it. In some of these ceremonies, it was believed the departed spirit silently participated, and with all it was supposed to be pleased and gratified.

Upon general principles, therefore, so far as Dr. Zestermann's hypothesis depends upon the fact of the existence of burial mounds in the United States, and that they display common features with those of the North of Europe, it is not well sustained.

I may observe here, that Dr. Zestermann has fallen into an error in supposing that the mounds which, in my various publications on these subjects, I have classified as "Sacrificial or Altar Mounds," are of sepulchral origin. It doubtless is true that mounds possessing features somewhat similar to these are found in Europe, which were devoted to burials by fire. But the fact that the burned basins or platforms, in the western mounds, seldom contain human remains of any kind, but, instead of these, deposits of articles of use or ornament, such as we know were often surrendered as offerings by the American aborigines, weighs conclusively against the hypothesis that they were places of sepulture. The further circumstance, that many of them exhibit unequivocal evidences of having been used for long periods, and as having been several times recast or moulded, also tends to the same conclusion. I have made this variety of mounds the subject of a special note (Note J to Chapter iv.) in my recently published work on "The Serpent Symbol, and the Worship of the the Reciprocal Principles of Nature in America," to which I would respectfully refer those who seek for further information upon this point.

The resemblances which Dr. Zestermann has pointed out in the relics of art found in the mounds of Europe and America, it seems to me, fall within the same category with the general features of resemblance in the structures themselves. The fact that the composition of the articles of pottery found in both hemispheres is similar, is also of easy explanation. The mixture of sand, mica, or pulverized quartz with clay is indispensable to prevent shrinkage, and to enable the vessel to withstand the action of fire. A very few experiments on the part of men as widely separated as the poles, would lead them both to hit upon this expedient for the attainment of a necessary purpose.

The manufacture of pottery is the simplest of arts, and its practice in different localities affords no evidence whatever of derivative character. It would naturally be suggested by the impressions made

in the moist clay or soil by the hands or feet, and would first be practiced where the proper materials most abound, as in the valleys of great rivers. This suggestion is corroborated by our finding the earliest fictile establishments in the neighbourhood of rivers more or less subject to periodical inundations; the Babylonians, the Egyptians, and Etrurians, became potters from their vicinity to the Euphrates, the Nile, and the rivers of Northern Italy. In their shape, the vessels of the primitive manufacturer would be most apt to take the form of the natural models he might observe about him. The type of the earliest and rudest productions was the shell of a nut or the rind of some of the pumpkin or calabash tribe; and this to such an extent, that those acquainted with the vegetable productions of different countries, are often able, at a glance, to identify their productions in pottery. "Those who have examined the collection in the Museum of Sevres," says an intelligent observer, "will perceive that the distinctive characters of Asia, Africa, and America, are marked on the potteries of their less civilized inhabitants." It is under this view that a careful attention to the fictile arts of various nations may, to a certain extent, be made to contribute to archæological and ethnological results; for a migratory or colonizing people would be apt to carry with them from one place to another, the models which, from the suggestions of nature or from necessity, they had before fixed upon.

The second type which is to be observed in the early potteries, and one which marks considerable progress, is the female bust, with sometimes an attempt to preserve its character as symbolic of fecundity and abundance. This graceful type was carried to a voluptuous excess by the Greeks. Other subordinate types of form, suggested by eggs, shells, etc., might be noticed. Sufficient has been said, however, to enforce the remark made at the commencement of this paragraph, and to show how unsafe would be the attempt to deduce dependence or connections, upon the basis of simple coincidence in the potteries of detached nations, unless under the conditions which I have indicated.

The stone discs, with a hole in the centre, to which Dr. Zestermann refers, are not "enigmatical." The purposes for which they were made are well known, and are explained in *Anct. Mon.*, note to page 223. They were often fashioned by the modern Indians, and used in a game called *Chung-ke*.

Stone axes and flint knives, and arrow and spear heads are to be found in all parts of the globe; I have seen specimens from Scandinavia, Siberia, and Japan; from the plains of Marathon, Mount Sinai, Egypt, Southern Africa, and Asia; the Islands of the Pacific, and from all parts of North and South America, undistinguishable from each other in shape, and differing but slightly in materials,—for certain stones, being better adapted to specific uses than others,

would naturally be everywhere selected for them. The discovery of pipes in the barrows of Holstein is certainly a curious fact, but unimportant, unless it is shown that the practice of smoking was unknown in ancient times in Europe. And even if it is assumed that the practice was derivative, (and I see no reason why it should be so regarded), would it not be more rational and philosophical to derive it from Asia, whence many of the northern families migrated, and where the practice existed from the earliest periods? The transmission of customs and of arts in the old world, as also the course of migration, has always been from East to West. But admitting that such a supposition, instead of being highly probable, is impossible, and that it is not to be supposed that the people of the North of Europe had, of themselves, hit upon the practice of smoking, even then the single fact of the finding of pipes in Holstein will not, on any principle of evidence, justify the hypothesis of a connection and correspondence between the nations of the Old and New Worlds. A concurrence of facts, of different kinds and striking character, is necessary to give so much as *plausibility* to conclusions of this gravity and importance.

But there are some other considerations to be regarded in connection with these supposed pipes. *Are they in fact pipes?* May they not be instruments, resembling pipes in shape, but devoted to other and forgotten uses? May they not be of recent date? If our own mounds we frequently find articles of European origin which have been buried there by the later Indian tribes. (*See Anct. Mon.*, pp. 146, 147, 149, and *Monuments of New York*, p. 118). But if obtained from America, if the wide intercourse between Europe and America, claimed by Dr. Z. existed, how comes it that these articles are found in a single locality, and not generally in the barrows of Holstein and Germany? Dr. Z. has hypothetically answered this question by assuming that they were introduced by strangers; but then the extensive "*mutual intercourse*" between the two worlds, which his primary hypothesis involves, and which he directly claims, is invalidated by the rarity of these remains; which, it should be remarked are the *only ones* adduced to show that America had intercourse with, or re-acted on Europe.

There is one variety of ancient earth-works in the United States which have their almost exact counterparts throughout the world, and which cannot be taken, in archæological speculations, as indicating the slightest degree of relationship among their builders.—These are fortified hills or headlands, or positions possessing natural capabilities of defence, improved by art. In respect to these it is only necessary to observe, that the natural instincts of man without calling his reason into requisition, would, in case of necessity, lead him to select and occupy them for purposes of protection. They must, therefore, everywhere sustain a certain likeness, and will differ only in the degree of skill displayed by their builders.

They are, therefore, to be found in North and South America, in the Pacific Islands, in Australia, and even in Africa. (*Cook's Second Voyage* ; *Ellis's Polynesian Res.* vol. i, p. 313 ; *Pollock's New Zealand*, vol. ii., p. 26 ; *Laing's Polynesian Nations*, p. 108 ; *Southey's History of Brazil*, vol. ii., pp. 162, 189 ; *Charlevoix's Paraguay*, vol. i., p. 156 ; *Davis's History of Barbadoes*, p. 325, etc. etc).

There is, however, another class of structures, which have a higher archæological value ; I allude to those which I have, in my works on our ancient monuments, denominated "SACRED ENCLOSURES." None can be more ready than myself to admit the general correspondence which exists between these and many of the primitive monuments of the British Islands and the North of Europe. I have elsewhere (Appendix to "Aboriginal Monuments of New York") pointed out, in detail, the features common to both, and attempted an explanation of the principles upon which they were probably constructed. The hypothesis which I have there advanced, and which is deduced from the consideration of a large number of facts, is that the forms of all primitive sacred structures were more or less determined by the religious ideas and conceptions of their builders ; in other words, that they were symbolical, not only as wholes, but in their parts, and in the relations of those parts to each other. The undeniable resemblances which they sustain to each other, in various parts of the world, are not, therefore, the result of contact or relationship, but of a certain uniformity in man's primitive or elementary beliefs and conceptions, of which, in one form, they may be regarded as expressions or indices ; and which beliefs and conceptions are themselves the result of a uniformity in the mental and moral constitutions of men, subjected to like influences, and surrounded by the suggestive phenomena of nature, which are everywhere very nearly the same. What has been very vaguely termed "Sun Worship," or what might better be called the worship of the Powers of Nature, seems to have been the earliest and most widely diffused form of human superstition. In this system, the Sun, as the emblem of the active and most efficient Principle or Power of Nature, has the first place, and is itself symbolized by the circle. The primitive temples dedicated to this luminary, or to the power which was supposed to dwell in it, the active, vivifying energy of Nature, were, therefore, circular. The early and generally received doctrine that the gods made temples and sacred structures their places of constant abode, and in some instances actually animated their shrines, it will readily be understood would naturally suggest and perpetuate certain forms in those structures as best befitting the deity to whom they were dedicated, and most likely to secure his literal presence. This idea seems to be referred to by Sallust, in his treatise on the Gods and the World. He says that "A certain habitude and fitness is all that is necessary in order to

receive the beneficent communications of the Gods: and as all habitude is produced through imitation and similitude, therefore temples imitate the heavens, and altars the earth," etc. We are assured by Pliny that the Pantheon was symbolical in form; and both Plutarch and Ovid concur in representing the temple of Vesta, originally built by Numa, on the banks of the Tiber, as also symbolical. "The figure of the temple, in almost every religion," says a learned and pious author, "is the hierogram of its God. The hierogram of the Sun is always a circle; the temples of the Sun are circular; the Ophites worshipped a serpent deity, and their temples assumed the form of a serpent; and, to come home to our own times and feelings, the Christian conforms to the same idea, when he builds his temples in the form of a cross—the cross being at once the symbol of his creed and the hierogram of his God." (Rev. J. B. Deane, *British Archæologia*, vol. xxv., p. 191.) "On every review," observes another author, "and from every direction accumulated proofs arise, how much more extensively than is generally supposed, the designs of the ancients in architecture were affected by their speculations in astronomy, and their mythological reveries." (Maurice, *Ind. Antq.*, vol. iii., p. 199.) And it is the fact that the religious conceptions, the philosophy and physical speculations of the ancients, exerted a controlling influence upon the forms and construction of their sacred edifices, which invests these monuments with interest, not only as works of art, but as illustrations of man's primitive belief, his notions of cosmogony, and his philosophy of the Earth and Heavens.

The objects of the Drudical worship were identical with those of the followers of Baal; it was Sun Worship, or Sabianism, under one of its simplest and commonest forms; and we have abundant direct evidence that the circular, as well as the serpentine and other predominant forms of the primitive temples of Europe were symbolical. Finding in our own country similar structures, obviously built in accordance with a general plan, founded upon certain definite principles, analogy would justify us in the inference that their builders were devoted to a similar religion. And when we inquire further, and find that Sun Worship greatly predominated, if, indeed, it was not of universal prevalence throughout the continent, the inference so well sustained by analogy, rises into the dignity of a well-supported hypothesis. This worship existed from Labrador to Patagonia, and was attended by the same rites and illustrated by the same symbols, which were common to it in the Old World. There is no reason for supposing that this form of worship, or this system of Natural Religion, is derivative; for, as I have said, it seems to have been nearly universal, antedating all history and tradition, and going back, probably, of all monumental records. I do not, therefore, attach much importance to the coincidences pointed out by Dr. Zestermann and

others, between this large and interesting class of structures in the United States and similar structures in the North of Europe, as evidences of connections, recent or remote, between the two continents.

But if convinced that these coincidences were not to be accounted for on the natural principles which I have so briefly indicated, still I should not look to Europe for their explanation. The monuments of the United States are identical in their elements of construction with those of Mexico and Central America, and all of these sustain a closer relationship to those of India, than to those of any other quarter of the globe. The terraced pyramidal structures of America, surmounted by chapels and ornamented with significant sculptures were, it is capable of demonstration, built not only in conformity with the same general principles with those of India, but the detailed and specific ideas which they illustrate were, in many instances, the same. The Buddhist Temples of Southern India, have almost their exact counterparts in Central America and Mexico. I have made their relationship a subject of extended remark in the work entitled "The Serpent Symbol and the Worship of the Reciprocal Principles in America."

I am, therefore, of the decided opinion that the proposition advanced by Dr. Zestermann derives no support from the monuments of America. Besides, the American race, above all others in the world, seems most averse to everything like assimilation with other races. It is, we may say, almost entirely unimpressible. If the Indians constructed these monuments, this admitted fact is *prima facie* evidence against the hypothesis which ascribes not only the introduction of the practice of erecting them, but of the ideas which they illustrate, to a foreign people. Europe has poured its populations in an unbroken flood for three centuries on America, yet the Indian is little changed. An emigration sufficiently large to have moulded this obstinate race, in the earlier and ruder ages of Northern Europe, is a hypothesis too startling to be admitted; but not more so than that which involves a migration sufficiently great to have diffused itself over the continent, and to have erected in the Mississippi Valley alone a series of monuments quadrupling in number and magnitude all the primitive monuments of Europe. But this latter hypothesis is invalidated by the established fact that the Indians of Mexico and Central America, at the time of the Discovery, built precisely such structures as, under this supposition, must be referred to an utterly extinct, exotic people.

Dr. Zestermann quotes the skull which I obtained from a mound in Ohio (and which is figured in plates xlii. and xliii. of the "Ancient Monuments of the Mississippi Valley,") as possessing Caucasian characteristics. He, however, confounds it with another obtained from the Grave Creek Mound in Virginia, and figured in Dr. Morton's "Crania Americana." Dr. Zestermann is mistaken in

supposing that a "stumpy nose" is a characteristic feature of the American race. The very reverse is the fact: no people have more salient noses than our Indians. The particular skull in question, so far from betraying a Caucasian origin, is regarded by Dr. Morton and other craniological investigators as nearly a perfect type of the American head. Upon this point I cannot do better than quote a passage from a letter from Dr. Morton, to whom I sent this skull. "Nothing of the kind," he observes, "can be more entirely characteristic than this relic, and you may distribute casts of it as a *perfect type* of the race to which it belongs; that race which, in all its numberless localities, conforms with more or less precision, and for the most part with amazing exactness, in its cranial proportions, to the skull you have now discovered. What are the characteristics of the aboriginal American skull? Are they not, as I have so often pointed out, the vertical occiput, the prominent vertex, the great inter-parietal diameter, the inequilateral form, the large facial bones, *the long and salient nose, the prominent maxilla*? Look into the *Crania Americana*, and observe the Peruvian heads there figured, and how admirably they correspond with this skull, which has, however, a less receding forehead than usual. Every new observation on this subject goes to confirm my previous conclusions, that our Indian populations, of all epochs, have belonged to a single homogeneous race. There have no doubt been colonial or accidental mixtures in California and elsewhere, but they have been too inconsiderable to effect any other than very local variations from the primitive type. The type, I grant, has its varieties; but these may be referred, in a great measure, to a plurality of centres or origins, all of which, however, point to that primitive organization of which you have now so fine an example."

In respect to the sculptures of the human head and the masks of the human face obtained from the mounds, little need be said, except that the deductions from them differ as widely as the preconceived notions of investigators. Some have pronounced them "thoroughly Indian," others eminently "Caucasian." Upon my own mind they have produced no decided impression one way or the other. From the circumstance that the sculptures of animals found with them are surprisingly accurate, we are justified in assuming that the sculptures of the human head are equally faithful representations of the predominant features of the people who made them.

The traditions of Ari Marsson, like those relating to the ancient Atlantis, are far too vague to enter as elements into any philosophical discussion of the question of the Colonization of America from the East.

The traditionary Quetzalcoatl of Mexico is referred to by Dr. Zestermann, as probably a personage of Caucasian stock, who by some means penetrated to Mexico, and subsequently left it for another land. He was represented as bearded and of a fair com-

plexion, and these are the only features by which he is identified as of another race. Now it should be observed, that all the gods and demi-gods of Mexico were individualized by certain characteristics of form and feature. The god and goddess of water were of a light blue; the goddess of flowers of a fair and rosy complexion; the supreme god Tezcatlipoca was often painted black. But what is meant by "fair complexion" in the Spanish accounts of Quetzalcoatl, written by men who were bent on identifying him with St. Thomas, and who even found etymological proof in his name, that he was the same with the apostle, "whose surname was Didymus?" Against these traditional accounts, correct enough in their general outlines, but received at second-hand and often interpolated in their details, we may place the irrefragible evidence of the paintings, in which Quetzalcoatl is neither represented as bearded nor of a fair complexion. On the contrary, we are expressly assured by Sahagun, who is the best authority in matters of this kind, that his face was painted dark. "La cara tenia teñida de negro," are the precise words of this authority.

But admitting the full force of the tradition, I fail to perceive that it has any real bearing upon the hypothesis advanced by Dr. Zester-mann. Quetzalcoatl is the Mexican name for that intermediate great teacher and demi-god, which may be traced in every primitive mythology, as I think I have fully shown in Chapter vii. of my work on Serpent Worship. He is an incarnation of the principal God of the Mexican Pantheon, Son of the Sun, by a virgin mother, and in his origin, character, and attributes, coincides with Buddha, Codom, Fohi, Schaka, Zoroaster, Osiris, Taut, Hermes, and Odin, in the old world, and with Bochica, Votan, Cuculcan, Manco Capac, Payzume, Wasi, Manabozho, etc., etc., in the new. I conceive him to be a strictly mythological character; a being, half human, half divine, such as primitive nations in their religious speculations and refinements have thought necessary to place intermediately between man and divinity—as their intercessors near the latter, the medium of the transmission of his will, and the representative of his goodness, wisdom, and power. Knowledge in religion, government, agriculture, and the arts, in the primitive systems, was supposed to proceed from above, through this chosen channel. Thus, Quetzalcoatl, like Bochica, established religion and laws, and taught ignorant and helpless men agriculture and the useful arts. His mission fulfilled, he disappeared mysteriously, with a promise that he would one day return with new gifts, to introduce a new era, when "peace and good will" should prevail, and the world enter upon a new and millennial age. Quetzalcoatl belongs to the mythic realm; he is an impersonation of an idea, not a historical character, and cannot be admitted as such in these investigations, under that or any other of his numerous names.

It appears to me that if we are to attach any importance to the traditions of strangers, singularly dressed, and of extraordinary aspect, who penetrated into Mexico, Central America, or Peru, we may look rather to Asia, to China, or India, for the place of their origin, than to Northern Europe. So far as we may infer the doctrines of these traditional teachers, from the traces of them which remain to us, they were essentially those of Buddhism; and if so grave a conclusion as a migration to America, however small, may be based upon traditions or vague ancient records, it is better supported by the Chinese accounts of the distant country of Fu-Sang, than by any others with which I am acquainted. These accounts refer to great nations, already possessing civil and religious organizations, and, if admitted to their fullest extent, leave the question of the origin of the American race, of American monuments, and of American civilization unaffected.

If I have attached their true value to the evidences submitted by Dr. Zestermann, in support of his proposition, it cannot be entertained; and consequently, the conjectural suggestions as to *how* and *when* the hypothetical migration took place need not occupy our attention.

Our learned correspondent, however, very justly observes, in the concluding paragraph of his memoir, that his evidence is fatally incomplete, unless it is shown that the American Monuments cannot be ascribed to any American people. To show that a portion, if not all of them, are of aboriginal American origin, it appears to me, is not a difficult undertaking. I have said elsewhere that the principles of construction in the earth-works of the United States, are the same with those of the monuments of Mexico and Central America; that the latter are, in fact, the more developed types of the former. A comparison of the structures at Cahokia, Illinois, at Marietta, Ohio, at Williams's Bayou, in Mississippi, in Madison Parish, Louisiana, and at numerous other places in the Mississippi Valley, with the plans of those of Yucatan, presented by Messrs. Stephens and Catherwood, and of Mexico by Du Paix, is alone necessary to the substantiation of this remark. The ability to construct the latter involves the ability to erect the former; and we have direct evidence that the people of Yucatan, equally with those of Mexico, built such structures, at the period of the Conquest. The history of the building of the great Temple of Mexico, by the first Montezuma, is not only preserved traditionally, but is recorded in the paintings. The construction of the great symbolical temple of nine stages, by Nezahualcoyotl, King of Tezcuco, also falls within what may be called the historical period. The paintings record the constructions of sacred edifices in the course of the migrations to which they refer; and their names and the places where their ruins exist, may even now be ascertained without difficulty. The building of

Uxmal and Mayapan are events referred to with great exactness in the traditions of Yucatan; and the fact that many of the structures of that country are of comparatively recent origin is sufficiently evident from their investigation, in themselves, apart from traditional or historical aids. The constructions of mounds occasionally by our Northern savage Indian tribes, often by the partially civilized Floridians, and generally by the Peruvians and Auracians, is sufficiently shown by the facts which I have brought together in the Appendix to my work upon the Aboriginal Monuments of New York. I have there also shown that a portion of the earth-works in Northern Ohio and New York, which, misled by erroneous representations as to their true character, I had classified (in the work to which Dr. Zestermann so often refers) as of the same system with those of the Mississippi Valley, are of a different origin and later date, and were actually built by the tribes found in occupation of the country at the time of the discovery by Europeans in the 15th century.

The fatal deficiency, the effect of which Dr. Zestermann so well comprehends, does therefore exist. A portion certainly, and probably all, of the monuments of America, were constructed by nations belonging to the great American family—that race which, under all of its aspects, in language, religion, and in physical traits, betrays conclusive evidences of unity, and radical separation from all the other great families of men. How far casual and partial migrations or intermixtures from abroad have introduced new elements into the religions, new features into the civil and social organizations, new forms into the monuments, or new traits into the physical constitution of this race, it is of course, difficult, if not impossible, to say; it may, nevertheless, be claimed, that if such migrations and intermixtures have occurred, they have been without any extended or decided, not to say without any perceptible, effect.

ss
3-
y
al
py
ed
is
ne
w
s
3-
o
h
er
of
h
ll
s
ll
rs
e
s
e
7
-
it
-
,

