

CHAPTER VII.

The Civilization of Ancient America Neither Jareditic nor Nephitic—The Origin of American Civilization—The Antiquity of American Civilization—Certain Features of American Civilization Which Plainly Oppose the Book of Mormon.

America presents a broad and fertile field of research to the archæologist. Indeed, nowhere else in the entire world can be found remains which furnish more material for study than do those on the western continent. In the Mississippi Valley we have the interesting memorials of the Mound Builders; in the southwestern part of the United States are to be seen the deserted habitations of the Cliff Dwellers; in Mexico and Central America are found the ruined temples of the Nahuas and Mayas; and in Peru loom up before the traveler and explorer the crumbling edifices of the Incas and their predecessors. Hundreds of the works in these sections have been explored and have been described in books on American archæology, yet much of the mystery which has shrouded them remains, and, so far as we can see, ever will remain.

The origin of the civilization, or civilizations, that built the prehistoric American cities is a question that has provoked much discussion among Americanists. Its simplest answer has generally been rejected, and in its place have been substituted the wildest and most unreasonable hypotheses. It has seemed very much easier for most reasoners to attribute the origin of aboriginal culture to a foreign source than to conceive of its native development. In later years, however, views on this question have been changing, until to-day antiquarians

are coming to look upon it in its true light as an indigenous product; and, I venture to say, few now believe that any of the works of aboriginal art were above the ability of the more-advanced tribes, the Aztecs, Mayas and Peruvians, who dwelt in the regions where these antiquities abound at the time of the Discovery.

When speaking of the ancient inhabitants of Mexico, Central America and Peru as being "civilized," let it be understood that this term is employed in a relative and not in an absolute sense; for, strictly speaking, no nation in America had ever progressed beyond the middle status of barbarism, the smelting of iron ore being wholly unknown to them.¹ When compared with the savage tribes around them, however, they may be said to have attained to a certain degree of civilization, their works indicating a stage of culture at least one step in advance of the tribes of the other parts of the continent.

Throughout the New World the people were fetich and sun worshipers, animists and polytheists. In Peru and Tezcuco it is claimed, however, some of the more intelligent of the natives broke away from the prevailing sun-worship and adored an incorporeal deity. The original words for God in the American tongues do not express the idea of personality, but, simply, the supernatural in general, the mysterious and unknown. The practice of offering human sacrifices was observed among all the civilized nations, though to a very limited extent in Peru. In both Mexico and Central America such sacrifices were often devoured in religious feasts. The number four was to all American religions what the number seven is to the Jewish. The gentile system prevailed and most of the tribes reckoned descent in the

¹ Morgan's "Ancient Society," pp. 9-12.

female line. Practically all forms of primitive government were to be found, from the most absolute despotism to the lowest form of democracy. The Isthmus of Panama divided the continent into two grand divisions in respect to its native architecture: north of the Isthmus the habit prevailed of erecting large structures on pyramidal bases; south of the Isthmus the pyramid as a foundation for buildings is seldom, if ever, seen. The Mound Builders used no cement or cut stone; the Peruvians, Mayas, Mexicans and Cliff Dwellers employed both. But little sculpturing was done in Peru; it appears in profusion on the mural remains of Central America; the sculpture work of the Mound Builders consisted in the manufacture of pipes into imitations of birds, beasts and the human figure and the carving of slate and shells. In hieroglyphical writing the Mayas took the lead, followed by the Mexicans; the hieroglyphics of the Mound Builders, Cliff Dwellers and Peruvians were only pictographs, while among the last-named communications were carried on by means of variously-colored and knotted cords called *quipos*. All of the American nations manufactured pottery, and in some sections the art was carried to a high point of excellence. Iron was unknown among the tribes except in its crude state, in which it was made into ornaments by a process of grinding and rubbing. Bronze was manufactured by the Mexicans and Peruvians, but was unknown to the Mayas. In Mexico and Central America the volcanic glass, obsidian, was made into cutting tools. Gold, silver and copper were worked into ornaments of a high grade of finish in Mexico, Central America and Peru, where the art of smelting was understood; the Cliff Dwellers and Mound Builders worked these metals in their cold state. Cloth, in Peru, was made from cotton and the wool of the llama and

vicuna; in Mexico and Central America from cotton, and in North America from cotton, hemp, hair and bird feathers. In all parts maize was the staple article of food, taking the place in the New World that rice fills among the inhabitants of eastern Asia. In different parts of the continent tobacco, melons, squashes, beans, peppers and potatoes were grown. The Cliff Dwellers, Mexicans and Peruvians irrigated their fields with artificial ditches. The less-advanced tribes reckoned, as do all savage people, by moons, seasons and years, but among the Mexicans, Central Americans, Muyscas and Peruvians we find artificial calendar systems. Mummification, by different methods, was practiced in some parts, though the bodies found, in most instances, were preserved by the antiseptic properties in the soil or by the coldness and dryness of the climate. Throughout North America the tribes used the frail canoe, but the Mayas made boats that were seaworthy and would carry as many as fifty persons and kept up a commerce with neighboring tribes. The languages of America are multitudinous, there being 180 linguistic stocks on the continent. In structure, with a possible exception or two, they are polysynthetic and possess certain features by which they are distinguished from the tongues of all the rest of the world. The Americans had no domestic animals but a wolfish kind of dog, and, among the Peruvians, the llama, which was highly prized for its hair, for food and for carrying burdens. This sums up, in brief, the things of which the more advanced of the ancient Americans were capable.

Just how far the culture of each of the sections mentioned influenced the culture of the others is hard to say. It seems certain that the Peruvians and Central Americans exerted no influence upon each other after they began to build those monuments which still remain;

what contact they had before none can tell. On Peruvian architecture and the features in which it differed from that of the Mayas and Mexicans, Brinton says:

"Peruvian architecture was peculiar and imposing. It showed no trace of an inspiration from Yucatan or Mexico. Its special features were cyclopean walls of huge stones fitted together without mortar; structures of several stories in height, not erected upon tumuli, or pyramids; the doors narrowing in breadth toward the top; the absence of pillars or arches; the avoidance of exterior and mural decoration; the artistic disposition of niches in the walls, and the extreme solidity of the foundations. These points show that Inca architecture was not derived from that north of the Isthmus of Panama. In the decorative effects of the art they were deficient; neither their sculpture in stone nor their mural paintings at all equaled those of Yucatan."—*The American Race*, p. 213.

These points of dissimilarity will also apply with equal force against the contention that the civilization of Central America came from Peru.

In South America the culture of but one nation, the Muyscas, bore any marked affinities to that of the people on or north of the Isthmus. Affinities in art work have been traced between this people and the Chiriquians dwelling on the Isthmus, and consist in certain like features in articles of stone, pottery and gold. Brinton remarks: "Very slight connection has been shown between the civilization of North and South America, and that only near the Isthmus of Panama."—*Myths of the New World*, p. 43.

In North America the evidences of contact between the various civilized tribes are most marked. The Mayas and Nahuas, and the Zapotecs who dwelt between them,

erected colossal buildings upon pyramidal foundations, and the pyramid, as a basis for such structures, is traceable northward into the Mississippi Valley. Hence it is probable that the art germ in all these sections had a common source which is to be sought for somewhere in North America. As the traditions of the Mayas, Nahuas and Zapotecs, as well as those of the mound-building tribes of the Mississippi Valley, pointed to the north or west as the directions from which they originally came, it makes it certain that we must look to some locality between the Great Lakes and the Pacific as the point where they received their first impressions of that culture which they developed in those regions where they afterwards dwelt. The point of divergence for all these races Brinton would locate south of the receding glacial ice-sheet, north of the Gulf of Mexico and east of the Rocky Mountains; while Gibbs looked upon the region between the Puget Sound and Cape Spencer as an area from which human swarms might have issued forth;¹ but the exact locality will undoubtedly always remain unknown.

With these introductory remarks I pass on to show that the civilization of ancient America differed both in kind and in degree from that described in the Book of Mormon.

THE ORIGIN OF ABORIGINAL AMERICAN CIVILIZATION.

With respect to the origin of ancient American civilization, the Book of Mormon teaches that it came from two countries, at two consecutive times, and was derived from three nations or peoples. That of the Jaredites, which Apostle Kelley asserts was Cushite civilization,² was brought from Babel; while that of the Nephites,

¹ "Third Rept. Bu. Am. Ethno.," p. 151.

² "Presidency and Priesthood," Chapter XI.

which all Mormons contend was Jewish with a few Egyptian features intermingled, was brought from Jerusalem.

1. *Did ancient American civilization come from the Tower of Babel?*

As proof that the first civilized people came from the Tower of Babel, we are referred to the flood myths that are so common among American tribes. "The Book of Mormon statement that a colony came from the Tower of Babel," says Elder Phillips, "not only agrees with Gen. 11:9, but also with the traditions had by the American aborigines."—*Book of Mormon Verified*, p. 2. And Apostle Kelley declares that "this position is supported by the scientific findings made in Central America, revealing traditions of Noah, the flood, the ark and the creation of the world."—*Presidency and Priesthood*, p. 268.

The following flood and migration myths, taken from Short's "North Americans of Antiquity," are given by Elder Etzenhouser in his "Book Unsealed," pp. 4-7, to prove this theory:

"Adair, the expert, and Emanuel De Moraes agree that the Quiches by tradition affirm that they made a long journey by land and crossed the sea from the east. The tradition of their origin states that they came from the far east across immense tracts of land and water."

"He"—De la Vega—"fails to give any definite information from the document"—one of the old books of Central America—"except the most general statements with reference to Votan's place in the calendar, and his having seen the Tower of Babel, at which each people was given a new language."

"It is found in the history of the Toltecs that this age and first world, as they call it, lasted 1,716 years;

that men were destroyed by tremendous rains and lightnings from the sky, and even all the land, without the exception of anything, and the highest mountains, were covered up and submerged in water . . . fifteen cubits . . . and how after men multiplied they erected a very high . . . tower . . . in order to take refuge in it, should the second world (age) be destroyed. Presently the language was confused, and, not able to understand each other, they went to different parts of the earth. The Toltecs, consisting of seven friends and their wives, who understood the same language, came to these parts, . . . 520 years after the flood."

"That all the natives"—of Mexico—"came from seven caves, and that these seven caves are the seven ships or galleys in which the first populators of the land came. This people came in quest of the terrestrial paradise, and were known by the name of Tamoanchan, by which they mean, 'We seek our home.'" This tradition is made to harmonize with the coming of the Jaredites by the supposition that they came to the New World in seven of their eight barges, the remaining one carrying their stores and provisions

After giving these, and several other like accounts, Mr. Etzenhouser remarks: "All of the above citations are very confirmatory of the account cited in the Book of Mormon, respecting the migration of the Jaredites to the western continent."

But the migration of the Jaredites from Babel is not proved by the American flood myths for at least three important reasons. In the first place, those which more closely agree with the account in Genesis are known to be either partly or wholly spurious, the work of the early missionaries or native converts, who seemed to think it their bounden duty to make the mythology of the Ameri-

can tribes to conform to their own religious opinions. In the second place, it is impossible to determine whether those flood myths, about whose authenticity there can be no doubt, relate to a universal flood, or to a flood, or floods, purely local (but universal so far as the knowledge of the tribes possessing them went), or to any real flood at all. And, in the third place, all these flood myths, with probably not an exception, make the tribes who dwelt here in the sixteenth century the direct descendants of those who escaped the cataclysm instead of the descendants of a later colony as the Book of Mormon declares.

The deluge legends of America, with many another of the myths ascribed to the early inhabitants, should be cautiously received. Many of them have come down to us through the hands of men who have not scrupled to tamper with them to make them agree with the Catholic faith. Thus we have in the mythology of Central America and Mexico not only traditions of a deluge, a Tower of Babel and a scattering of tribes similar, even in detail, to the account of Moses in the Book of Genesis, but we also have such features of the Christian faith as the birth, sufferings, death, detention and ascension of Christ in the experiences of some of the gods of those countries. A careful study of these myths has revealed the fact that these analogies to the Christian religion are either false deductions from the myths themselves, or else they are interpolations. Bancroft says on the flood myths of Central America and Mexico: "This I may say first, however; some of them are doubtless spurious, and few have escaped the renovating touch of the Spanish priests and chroniclers, who throughout their writings seem to think it their bounden duty to make the ideas and history of the New World correspond to those of the Old."—*Native Races*, Vol. V., p. 12.

As an example of this, we may take the Toltec myth given above. This myth can be traced no further back than to the time of Ixtlilxochitl, a native convert to the Catholic faith. Inspired with his new religion he sought zealously to make that of his fathers conform to it, with the consequence that he took with native mythology certain inexcusable liberties. The reader will only have to compare his with the flood myths about whose authenticity there is no doubt, to detect that the depth of the water, the erection of the tower and the confusion of tongues are all fabrications from the Book of Genesis.¹

Even the commonly-received flood myths of Mexico are of doubtful authenticity. According to one of them, the only persons who escaped the deluge were Coxcox and his wife Xochiquetzal. These saved themselves in the hollow trunk of a bald cypress. When the waters had assuaged they grounded their ark upon the summit of Mount Colhuacan. Here they increased and multiplied, but their children were all born dumb, and remained so until they were taught innumerable languages by a dove. Fifteen of these children, who understood the same language, or related languages, were the ancestors of the Toltecs, Aztecs and Alcolhuas.

Bancroft says of this myth: "A careful comparison of the passages given above will show that this whole story of the escape of Coxcox and his wife in a boat from a great deluge, and of the distribution by a bird of different languages to their descendants, rests on the interpretation of certain Aztec paintings, containing supposed pictures of a flood, of Coxcox and his wife, of a canoe or rude vessel of some kind, of the mountain Culhuacan, which was the Mexican Ararat, and of a bird

¹ "Prehistoric America," pp. 272, 273.

distributing languages to a number of men. Not one of the earliest writers on Mexican mythology, none of those personally familiar with the natives and with their oral traditions as existing at the time of or immediately after the Conquest, seems to have known this legend; Olmos, Sahagun, Motolinia, Mendieta, Ixtlilxochitl and Camargo are all of them silent with regard to it. These facts must give rise to grave suspicions with regard to the accuracy of the commonly accepted version, notwithstanding its apparently implicit reception up to this time by the most critical historians. These suspicions will not be lessened by the result of the researches of Don Jose Fernando Ramirez, conservator of the Mexican National Museum, a gentleman not less remarkable for his familiarity with the language and antiquities of Mexico than for the moderation and calmness of his critical judgments, so far as these are known."—*Native Races*, Vol. III., p. 68.

Following this statement, Bancroft gives this gentleman's discussion and interpretation of these paintings, according to which, instead of recording a history of the escape of a people from an universal deluge, they simply describe, pictographically, the wanderings of the Mexican tribes among the lakes of their country, their journey beginning at a place "not more than nine miles from the gutters of Mexico!"¹

Similar to the account of the escape of Coxcox and his wife is that of the escape of Tezpi, given in a tradition from Michoacan. This character is represented as saving himself, his wife and children and a number of animals in a spacious vessel. When the waters began to go down he sent out from his ark a vulture, who fed on the carcasses of the dead and did not return. He then

¹ "Myths of the New World," pp. 240, 241.

sent out a humming-bird, which returned bringing a number of green leaves, by which Tezpi knew that the waters had begun to subside. He, too, landed his ark on the summit of Mount Colhuacan. Bancroft says on this legend: "We have also read the reputed Tarasco legend of Tezpi, which so closely resembles the Biblical legend of the deluge that it can not be discussed as a native tradition at all, but must be regarded simply as the invention of some Spanish writer who thought it his mission to show that the Hebrew traditions were familiar to the Americans."—*Native Races*, Vol. V., p. 13.

But there are certain American flood myths about whose authenticity there can be no question. They are found among the Athapascas, Algonkins, Iroquois, Cherokees, Chickasaws, Caddoes, Natchez, Dakotas, Pueblos, Aztecs, Miztecs, Muyscas, Mayas, Quiches, Quichuas and many other tribes.¹ These flood myths are distinguished, however, by characteristics so peculiar and features so unique as to make it wholly uncertain whether they refer to the flood, a flood or to any real flood at all. It should not surprise us if they are proved to be purely mythical, or, at best, if they refer only to local occurrences. The uncertainty as to what conclusion we are to draw from them will be seen in the following myths.

According to a Peruvian myth, a shepherd was one day tending his flock of llamas. Noticing that their countenances were sad, and that they spent the night in watching the stars, he questioned them concerning the cause of the same. They replied that they had seen six stars massed together in the heavens, and that this was the sign of a universal flood, which was about to

¹ "Nineteenth Rept. Bu. Am. Ethno.," p. 445.

occur, and advised him, in order to escape, to take refuge on some high mountain. Taking their advice, he gathered his flocks and family together and proceeded to the summit of Mount Ancasmarca, where, when the flood came, he was safe from destruction.¹

According to another Peruvian tradition, only two brothers were saved from the flood, and that by taking refuge on a high mountain which floated upon the waters. After the flood had subsided they, having eaten up all their food, went down into the valley for more. Upon their return to the mountain they found, to their surprise, that food had already been prepared for them by unknown hands. Curious to know who their benefactors were, they agreed that while one went down into the valley the other should keep watch. Soon after the one chosen to go had departed the one who was left behind saw two aras with the faces of women preparing their food. But these, becoming aware of his presence, fled. Giving chase, he soon captured one of them, who became his wife. From this union sprang the tribe of the Canaris.²

According to the Cherokee flood myth, the Cherokee Noah was warned of the coming of the flood or freshet by the barking of a dog, and saved himself and his family on a raft.³

In the Algonkin tradition there were no antediluvians and no family which escaped the flood, but after the waters had subsided the earth was peopled by Michabo, their spirit of the dawn.⁴

With the Dakotas no one escaped the deluge, and

¹ Bancroft, V: 14.

² Bancroft, V: 15.

³ "Nineteenth Rept. Bu. Am. Ethno.," p. 261.

⁴ "Myths," p. 235.

this was also the belief of the Nicaraguans and the Botocudos of Brazil.¹

The myth of the Ascochimi of California tells us that no one escaped the flood, but that after the waters had assuaged the Coyote planted the feathers of various kinds of birds from which sprang the various races of men.²

And, according to the Navajos and a tradition of the Aztecs, the antediluvians were changed into birds, and so escaped the cataclysm.³

The peculiarities of these myths, both in general form and detail, make it wholly impossible, though their authenticity is not questioned, to prove that they relate to the great deluge described by Moses; indeed, it is far more probable that these accounts are either wholly mythical, or else that they have been suggested by local inundations. Such floods are common in the American river valleys and could not have failed to make a deep impression on the uncultivated minds affected by them. This, after all, may be the true explanation of the flood myths so common among American tribes.⁴

But, even if it were true that some of the flood myths of America relate to the Biblical deluge, they, with hardly a variation, present one feature which puts them in direct opposition to the account of the migration of the Jaredites as given in the Book of Mormon. According to the Book of Mormon, the people who came here from Babel were all destroyed about 600 B. C., with the exception of two men, Coriantumr and Ether, and what became of them we are not informed; according to these myths the

¹ "Myths," p. 235.

² "Myths," p. 235.

³ "Myths," p. 240.

⁴ "North Americans of Yesterday," p. 407.

people who escaped the flood were not destroyed, but continued down to the discovery of the continent in 1492.

Thus, the Quiche myth given by Mr. Etzenhouser has the ancestors of that tribe come across great tracts of land and water from the East. Now, if the Book of Mormon is true, there was not a tribe living on the continent when it was discovered by Columbus, whose ancestors came direct from the Tower of Babel, so the ancestors of the Quiches could not have been the Jaredites, and this tradition does not prove what Elder Etzenhouser would like to have us believe.

Ixtlilxochitl's Toltec tradition also would not prove what Mormon writers tell us, even if its authenticity were undoubtedly established, for it makes the Toltecs come to America 520 years after the flood, and we know that they were here as late as the tenth century A. D. On the contrary, Mr. Stebbins and others try to make us believe that the Toltecs were the Nephites, who did not come from the Tower of Babel at all.

The Tzendal tradition of Votan and his coming also fails, and for the same reason, for the Votanese were not exterminated six centuries before Christ, but continued down to the time of the Discovery and are represented to-day by the Mayas of Yucatan.

And the people who came from the "seven caves" were not all exterminated before the beginning of our era, but were the ancestors of the historic Maya and Nahua tribes of Central America and Mexico.

As these myths make the tribes who dwelt here in 1492 the direct descendants of those who are said to have escaped from the flood or floods, they oppose, rather than sustain, the Book of Mormon claim that the first inhabitants of the New World were the Jaredites, who were exterminated 600 B. C.

2. *Did Ancient American Civilization Come from Palestine?*

The Book of Mormon asserts that temples and synagogues, similar to those of Palestine, were erected by the Nephites in both South and North America. No sooner had they become settled in Peru, we are told, than they built a temple like the temple of Solomon. "And I, Nephi, did build a temple; and I did construct it after the manner of the temple of Solomon, save it were not built of so many precious things: for they were not to be found upon the land; wherefore, it could not have been built like unto Solomon's temple. But the manner of construction was like unto the temple of Solomon; and the workmanship thereof was exceeding fine."—2 *Nephi*, 4:3. And, after the Nephites had spread into the land northward, we are told further they built "temples," "synagogues" and "sanctuaries."

But, turning to the monuments of the country, we find nothing to sustain the theory that a Jewish civilization once existed on the American continent. The ancient Americans built large and imposing structures, but their architectural types were peculiar to themselves, very different from the architectural types of the ancient nations of the Old World. "There is nothing in any of the remains, so far developed," says Dellenbaugh, "that indicates foreign influence, prior to the Discovery. Every architectural work on the continent is purely Amerindian or modified by contact with other races subsequent to 1492."—*North Americans of Yesterday*, p. 247.

The Jews were not adepts in architecture. With them building "was always kept within the limits of a mechanical craft, and never rose to the rank of a fine art." When they returned from Egyptian captivity they

occupied the houses of the former inhabitants of Palestine, and, afterwards, whenever they attempted anything in the line of architecture on a grand scale, as in the case of David's palace and Solomon's temple, they employed Phœnician artists. On account of the decadence of their remains little is known of the architecture of their earlier days. There is sufficient evidence on hand, however, Biblical and archæological, for us to say that ordinarily the structures were of stone or sun-dried brick, and that they were erected with the design of utility and not beauty. In later times the chief distinguishing features of their dwelling-houses were plain, bare walls, sometimes rising to two or more stories in height; flat roofs; apartments arranged around a court or around courts; small windows which mostly faced the interior courts, and usually low doors which swung in sockets.

While in general principles all buildings are constructed alike, there is nothing specifically Jewish about American architecture, nor anything that would indicate that the culture of ancient America had been influenced by Jewish ideas.

Brinton sums up the chief features of Peruvian architecture as "cyclopean walls fitted together without mortar; structures of several stories in height, not erected upon tumuli or pyramids; the doors narrowing in breadth toward the top; the absence of pillars or arches; the avoidance of exterior and mural decoration; the artistic disposition of niches in the walls, and the extreme solidity of the foundations."

None of these features are specifically Jewish, while many of them are strikingly un-Jewish. The Jews fitted together the stones of their buildings with mortar; the Peruvians laid theirs up without, although they used a very hard stucco with which to plaster the outside. The

roofs of Palestine were flat; those of Peru were bell-shaped.¹ The door of the Jewish house was rectangular in shape; that of the Peruvians was wider at the bottom than at the top. And the Jews, without doubt, understood the principle of the arch, while "the Peruvian architects were wholly unacquainted with the true principle of the circular arch reposing on its keystone."—*Conquest of Peru*, Vol. I., p. 96.

Here, then, in a section of America where, above all other sections, we should find evidences of the Jewish civilization of the ancient inhabitants, we find a number of fundamental architectural features that are strikingly un-Jewish.

Passing into Central America and Mexico we find as great a lack of Jewish architectural features as in Peru. The temples of these countries were as different from the temple of Solomon and the Jewish synagogues as a lighthouse is from the Mosque of Omar.

First, the temples of this region differed from the Jewish temple in position. They were built upon *artificial*, truncated pyramids whose sides were faced with stone slabs and whose summits were reached by flights of stone steps.

Second, they differed from it in arrangement. The Jewish temple had its courts, its holy place and its holy of holies, but no such arrangement appears in the temples of Yucatan and Mexico. The ground plans of Jewish and American temples were entirely different.

Third, they differed from it in adornment. The Yucatec and Mexican temples were often adorned with the most hideous, heathenish, grotesque and obscene devices. Besides, their walls were often inscribed with

¹"Conquest of Peru," Vol. I., p. 95.

hieroglyphics so different from Hebrew characters as in themselves to nullify the theory that these structures

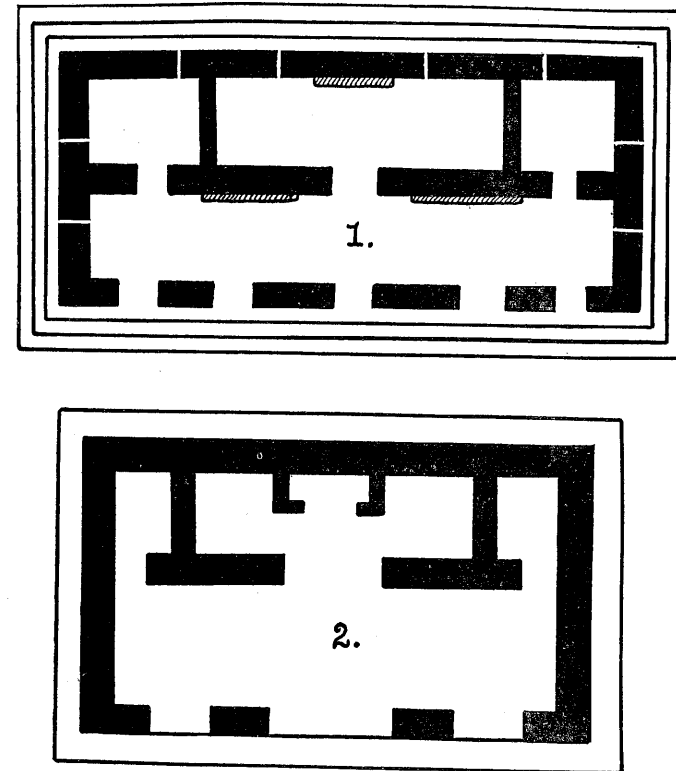


FIGURE II.

1. GROUND PLAN "TEMPLE OF THE THREE TABLETS."
2. GROUND PLAN "TEMPLE OF THE SUN." PALENQUE.

were reared by a people whose ancestors had come from the Holy Land.

And, *fourth*, they differed from it in design, being the shrines of heathen gods and the places where human,

not animal, sacrifices were offered up, as is evidenced by the shape of the altars found in or near them.

It would be impossible to conceive of structures more different from one another in arrangement, adornment, construction and design than those of Central America and Mexico and Palestine.

Moving up into the Mississippi Valley, we still look in vain for evidences of a prehistoric Jewish civilization. The Mound Builders used perishable materials entirely in the construction of their buildings, cut stone and mortar being wholly unknown to them. They erected their structures upon great piles of earth. They worked their metals in a cold state and did not know how to manufacture iron and steel tools. They had no beasts of burden. They knew nothing of the Oriental cereals, and they had no system of hieroglyphical writing.

These facts plainly refute the Book of Mormon claim that a civilization of Jewish origin, planted in Peru, spread throughout both Americas in ancient times.

3. *Did Ancient American Civilization Come from Egypt?*

The Book of Mormon asserts that the ancient Americans employed a system of writing known among them as the "Reformed Egyptian," and in support of this certain resemblances in the arts and customs of the American tribes to those of Egypt are presented.

Apostle W. W. Blair writes: "The ancient Nephites and Zarahemlaites were, no doubt, not only acquainted with the language, but also with much about the habits, customs, arts and sciences peculiar to Egypt; for the Israelites, in all their history from Abraham to King Zedekiah, and afterwards, had direct and intimate intercourse with the Egyptians. Therefore it is not strange

that we find in Mexico and Peru, as stated by Mr. Delafield, these evidences of Egyptian art and manners, especially that of hieroglyphic writing. In conclusion upon this point we have only to say that the claim of the Book of Mormon that the ancient inhabitants of America were skilled in Egyptian language, is now fully vindicated. And here we have another unanswerable proof of the truth of that book."—*Joseph the Seer*, p. 162.

But Mr. Blair, who, at the time this was written, was one of the chief polemics in the Reorganized Mormon Church, and who was a writer of more than ordinary ability, falls into the grievous error, altogether too common among Mormon writers, of following an investigator whose theory hardly outlived his day. This investigator is Mr. John Delafield, whose work, "An Inquiry into the Origin of the Antiquities of America," was published in Cincinnati in 1839.

While it is true that in some respects the culture of the ancient Americans was like that of Egypt, it is equally true that in others it was like that of China, Polynesia, India, Phœnicia and Greece, and, if this proves that it was derived from one, it proves that it was derived from all these nations. In citing analogies as the proof of a theory plenty of room must be allowed for accident and human instinct. Indeed, it is difficult to understand how, on natural grounds, the American nations could have avoided living in some respects like the other nations of the world, unless they had not lived at all. Men build shelters for themselves, and do hundreds of other things by instinct, and a likeness in these respects can not prove relationship. It is only when the resemblances pointed out are numerous and striking that they deserve serious attention. And right here is where the evidences presented by Delafield and Blair fail. They

are neither more numerous nor more striking than those presented to prove the Mongolian, Polynesian or Phœnician derivation theories. On the Egyptian analogies cited Bancroft remarks: "Few of these analogies will, however, bear close investigation, and even where they will they can hardly be said to prove anything."—*Native Races*, Vol. V., p. 55.

Delafield arranges the various Egyptian analogies under seven heads, as follows:

"I. *Philological*. The various analogies in language.

"II. *Anatomical*. The peculiar craniological formation common to those countries, as asserted by Dr. Warren.

"III. *Mythological*. The existence of two peculiar modes of worship, addressed to two deities; one sanguinary, the other peaceful. . . .

"IV. *Hieroglyphic*. The use of three peculiar systems of hieroglyphic writing of the Egyptians.

"V. *Astronomical*. 1. Identity in the division of the year, month and week, and the calculations thereof. 2. Identity in the use of intercalary days. 3. Identity in zodiacal signs.

"VI. *Architectural*. 1. Identity in sepulchral tumuli (mounds for burial). 2. Identity in pyramidal temples. 3. In the uses of these temples. 4. In the mechanical power which enabled them to move masses that no other races have ever accomplished. 5. Their use of hieroglyphic sculpture on all their sacred buildings. 6. Similarity in zodiacal and planispheric carvings. 7. Identity in sepulchral ornaments.

"VII. Identity in practice of embalming and preservation of the royal corpses." Quoted in "Joseph the Seer," p. 162.

Mr. Blair employs this quotation to prove one thing:

That the ancient Americans were familiar with, and practiced, some of the arts of ancient Egypt. The people themselves, he tells us, came from Jerusalem and were of the stock of Abraham. Let us now take up these analogies, one by one, and examine them for the purpose of ascertaining just how far they go to prove his theory.

I. We begin with the supposed analogies between the spoken languages of America and Egypt. These have proved to Delafield that ancient American culture was influenced by Egyptian civilization, just as similar analogies have proved to Adair that the American Indians came originally from Palestine, and to Lang that they came from Polynesia. But in both their grammatical structure and etymology the American languages differ widely from the Egyptian. The fact that such competent philologists as Duponceau, Gallatin, Hayden, Brinton and Powell, men whose scholarship and competency can not be questioned, throw overboard all such theories is a sufficient answer to the absurd claim of Apostle Blair that "the ancient inhabitants of America were skilled in Egyptian language." These authorities tell us that our native tongues all bear the indisputable stamp of indigenouslyness. Duponceau, as early as 1819, declared that the American grammatical forms "differ essentially from those of the ancient and modern languages of the old hemisphere." Gallatin says that "they bear the impress of primitive languages, and assumed their form from natural causes, and afford no proof of their being derived from a nation in a more advanced state of civilization." Hayden tells us that "no theories of derivation from the Old World have stood the test of grammatical construction." Brinton states that their common characteristics are "sufficient to place them in a linguistic class by themselves." And Powell declares that "the Indian

tongues belong to a very low type of organization." As the Egyptian was an advanced form of speech, it may be said without reserve that the American tongues were not derived from it. Apostle Blair's witness, Delafield, is a theorist with but a poor reputation as an authority; Duponceau, Gallatin, Hayden, Brinton and Powell, on the contrary, are acknowledged authorities on the subject of American philology.

2. The anatomical similarity cited proves nothing in regard to the origin of ancient American civilization, and, as Mr. Blair and his church contend that the ancient Americans were of Jewish descent, if it were established it would act rather as an argument against than an argument for the book that he seeks to prove divine. It may be well to say, however, that American craniology offers no support whatever to any of the derivation theories, for, instead of there being only one type of skull on the continent, we find many types, so that while the crania of one locality might approximate to the Egyptian type, the crania of another locality might approximate to the German type. Moorehead tells us that the crania of Ohio are, in some instances, as wide apart as the Caucasian and the Ethiopian.

3. The mythological similarity mentioned is also certainly erroneous. I have failed to find that either the Egyptians or the Americans had just "two peculiar modes of worship, addressed to two deities; one sanguinary, the other peaceful." While it is true that among the Aztecs a god of war was worshiped, I do not believe that any one of the gods of ancient Egypt was exclusively a god of war. The gods and goddesses worshiped at Memphis were Ptah, "Father of the Beginning;" Pakht, the cat-headed goddess; Nefer Atum, son of Ptah and sun of the underworld; Seb, god of earth and

vegetation; Nut, wife of Seb; Osiris, son of Seb, the good principle; Isis, wife of Osiris; Horus, the strong young sun of the day; Athor; Set, the principle of physical and moral darkness; Nephthys, goddess of the dead; Apis, the sacred bull; Serapis; Ra, the "victorious principle of light, life and right;" Mentu, Ra as the rising sun; Atmu, Ra as the setting sun; and Shu, the solar light. Those of Thebes were Ammon, the god of productivity; Mut, goddess of womanhood; Khuns, son of Ammon and Mut and divinity of the moon; Neph, soul of the universe; Khem, the energizing principle of physical life; Neith, mother of the sun; Mat, goddess of truth; Thoth, the moon-god; and Anubis, the guide of ghosts. (Gayley's "Classic Myths," pp. 504, 505.) All these gods and goddesses received adoration in their particular cities, and it is certainly erroneous to claim that in Egypt there were just two modes of worship addressed to two deities, one sanguinary and the other "peaceful." This claim is likewise unsupported in America. The less-advanced tribes knew no such distinction in their worship, their gods being gods of war on one occasion and gods of peace on another. If such a distinction existed, we certainly should find it in Mexico, but even there it does not appear. The Aztecs worshiped Tezcatlipoca, their chief divinity; Quetzalcoatl, their god of the air; Tlaloc, their god of rain; Huitzilopochtli, their terrible god of war; Xuihtecutli, their god of fire; Mixcoatl, their god of hunting and thunder, and hundreds of lesser divinities. It has been believed by some that they worshiped an invisible god, Teotl, but this is denied by others, and Brinton declares that this term only expresses in its most general form the idea of the supernatural. It appears upon comparison that the religious system of America was very much inferior to

that of Egypt. Nadaillac states that the polytheism which existed in America was "a very inferior polytheism . . . to that, for instance, which history records among the Egyptians or the Greeks." While Gallatin says that "viewed only as a development of the intellectual faculties of man, it is, in every respect, vastly inferior to the religious systems of Egypt, India, Greece or Scandinavia." But just how it would help the case of Mr. Blair, even if it were proved that the ancient Americans and the ancient Egyptians had two such modes of worship, he does not make plain. The Book of Mormon does not inform us that the Nephites practiced any of the distinctive ceremonies or held any of the distinctive beliefs of the Egyptian religion, but asserts that at first they were Jews and afterwards Christians. So, if it should be shown that in their religion the ancient Americans were similar to the people of ancient Egypt, it would prove that the Book of Mormon is false in its teachings on this point.

4. The hieroglyphics, next, claim our attention. Mr. Blair says: "Now when we find by testimony outside of the Book of Mormon that the ancient inhabitants of America possessed a knowledge of Egyptian hieroglyphics and sculpturing and architecture, we have another strong evidence of the divinity of that book."—*Joseph the Seer*, p. 161. But where does he find this evidence? In Delafield's book. And Bancroft, speaking of this author's evidence adduced in support of the assertion that the ancient Americans used Egyptian hieroglyphics, says: "Delafield, it is true, discerns a distinct analogy between the hieroglyphs of Egypt and America. And the evidence he adduces is absurd enough."—*Native Races*, Vol. V., p. 61. There is one fact that disproves this theory: No Egyptologist has ever been able to trans-

late the inscriptions on the monuments of America; they are a sealed book and can not be opened by the same key that has unlocked the literary treasures of ancient Egypt. To prove that the hieroglyphics of America and Egypt are entirely distinct from each other, I submit the following quotations from authorities on the question.

"If there were any hope of evidence that the civilized peoples of America were descendants, or derived any of their culture from the ancient Egyptians, we might surely look for such proof in their hieroglyphics. Yet we look in vain. To the most expert decipherer of Egyptian hieroglyphics, the inscriptions at Palenque are a blank and unreadable mystery, and they will perhaps ever remain so."—*Native Races*, Vol. V., p. 61.

"The two countries were entirely different . . . in their written characters."—*Ancient America*, p. 183.

"The hieroglyphics are too few on American buildings to authorize any decisive inference. On comparing them, however, with those of the Dresden codex, probably from this same quarter of the country, with those on the monuments of Xochicalco, and with the ruder picture-writing of the Aztecs, it is not easy to discern anything which indicates a common system. Still less obvious is the resemblance to the Egyptian characters, whose refined and delicate abbreviations approach almost to the simplicity of an alphabet."—*Conquest of Mexico*, Vol. III., pp. 409, 410.

"Notwithstanding the oft-repeated assertion that a resemblance between Egyptian and Maya hieroglyphics exists, no one of the Egyptologists so successful in their chosen field has been able to decipher the Maya writing."—*North Americans of Antiquity*, p. 418.

"So far as now"—1900 A. D.—"understood, there is no relationship between any kind of Amerindian writing

and that of other races. Like everything else pertaining to the Amerind people, the development appears to have been purely indigenous."—*North Americans of Yesterday*, p. 80.

In the light of the facts brought out in these quotations, it appears that the claim that the ancient Americans used "Reformed Egyptian" will not stand before archaeological research.

5. The assertion that the Egyptians and the Americans were alike in their astronomical systems is also false. Delafield tells us that this likeness consisted in: "1. Identity in the division of the year, month and week, and the calculations thereof. 2. Identity in the use of intercalary days. 3. Identity in zodiacal signs." But a brief comparison of the calendar systems of the two countries will show that there is little upon which to base his claim.

The Egyptian day began at midnight and was composed of twenty-four hours. Their week, according to Dio Cassius, began on Saturday. Their months were lunar months of thirty days each. Twelve of these with five supplementary days added made a vague year. As a quarter of a day was lost each year, the reckoning went back a day every four years, which resulted in a revolution of the seasons in every 1,461 years.¹ Their solar year began with the autumnal equinox.²

On the method of computing time among the Peruvians, Prescott writes: "They divided the year into twelve lunar months, each of which, having its own name, was distinguished by its appropriate festival. They had also weeks; but of what length, whether of seven, nine or ten days, is uncertain. As their lunar year would necessarily fall short of the true time, they rec-

¹ "Encyclopedia Britannica," article "Calendar."

² "International Encyclopedia," article "Calendar."

tified their calendar by solar observations made by means of a number of cylindrical columns raised on the high lands round Cuzco, which served them for taking azimuths; and, by measuring their shadows, they ascertained the exact times of the solstices. . . . The year itself took its departure from the date of the winter solstice."—*Conquest of Peru*, Vol. I., p. 77.

The only similarity here to the Egyptian system is in the lunar month, and this proves nothing, as all uncivilized men have reckoned by this division of time. Let the reader observe that while the solar year of the Egyptians began at the autumnal equinox, the year of the Peruvians began at the winter solstice.

Among the Aztecs the day was divided into four parts, morning, noon, evening and midnight; five days composed a week, the last day of which was devoted to marketing and pleasure; four weeks made a month; eighteen months, plus five intercalary days, made a civil year; thirteen civil years composed a "knot;" four "knots" made a "cycle;" and two "cycles" an "age" of 104 years. At the end of each cycle of fifty-two years thirteen days were added to make up for the one-quarter day lost each year. Just when the year began is not certain, as authorities differ, giving January 9; February 1, 2, 24 and 26; March 1 and April 1 as the Aztec new year. The five intercalary days that were added each year were called *nemontemi*, or unlucky days, and children born and enterprises undertaken upon them were considered unlucky. The Aztecs had also a ritual calendar, of which Bancroft says: "The year contained as many days as the solar calendar, but they were divided into entirely different periods. Thus, in reality there were no months at all, but only twenty weeks of thirteen days each; and these not constituting a full year, the

same kind of reckoning was continued for 105 days more, and at the end of a *tlapilli*"—their "knot" or period of fifty-two years—"thirteen days were intercalated to make up for the lost days."—*Native Races*, Vol. II., p. 515.

The Maya year was practically the same as the Mexican, differing from it only in its names. It consisted of eighteen months of twenty days each and began on a date corresponding to our July 16. Besides this manner of reckoning time, the Mayas had another, according to which their year was divided into twenty-eight periods of thirteen days each.

Among the Muyscas the day was divided into four parts, three days made a week, ten weeks a lunation or *suná*, twelve *sunas* composed a rural year, twenty *sunas* a civil year and thirty-seven *sunas* a ritual year.

The reader, by comparing the calendar systems of Egypt and America, will discover that they are unlike in so many particulars and alike in so few that the assertion that that of the latter country was derived from that of the former can not be credited. The only similarities that are sufficiently pronounced to attract attention are the lunar months observed by the Egyptians and the tribes of America and the practice of the intercalation of five days on to the end of the twelve lunar months to make the year 365 days long. Yet, as there are so many discrepancies between the two systems, and as these points of similarity can be satisfactorily explained on natural grounds, it is absurd to try to prove by them that the culture of ancient America was derived in part from Egypt.

Delafield claims, further, that there is an identity in the zodiacal signs of the two countries. But this is also false. The zodiacal signs of Egypt were twelve in num-

ber: the Fleece, two Sprouting Plants, the Beetle, the Knife, the Mountain of the Sun, the Serpent, the Arrow, the Mirror, Water, the Bull, the Virgin and the Fishes. The day signs of the Aztecs were twenty in number: the Swordfish, the Wind, the House, the Lizard, the Snake, Death, the Deer, the Rabbit, Water, the Dog, the Monkey, Brushwood, the Cane, the Tiger, the Eagle, the Vulture, Movement, the Flint, Rain and the Flower.¹ Of these signs but two can truthfully be said to be common to both countries. They are the Serpent and Water. The Sprouting Plant of Egypt may faintly suggest the Cane of America and the Arrow the Flint. It is doubtful whether the Mexican sign, interpreted to be the Swordfish, was intended for that monster or for some other; it certainly bears no resemblance to a fish, therefore none to the sign Fishes of the Egyptian zodiac. The rest of the signs are entirely different. There is a closer correspondence between the zodiacal signs of eastern Asia and those of America than there is between those of Egypt and America. The "Britannica Encyclopedia" (Art. "Zodiac") says: "A large detachment of the 'cyclical animals' even found its way to the New World. Seven of the twenty days constituting the Aztec month bore names evidently borrowed from those of the Chinese horary signs. The Hare (or Rabbit), Monkey, Dog and Serpent reappeared without change; for the Tiger, Crocodile and Hen, unknown in America, the Ocelot, Lizard and Eagle were substituted as analogous." So, if a similarity of zodiacal signs proves anything, it proves that the Aztec civilization came from China in place of Egypt.

6. It is asserted that the architecture of America cor-

¹ "Encyclopedia Britannica," article "Zodiac."

responded to that of Egypt in certain particulars. These are stated by Delafield as: "1. Identity in sepulchral tumuli (mounds for burial). 2. Identity in pyramidal temples. 3. In the uses of these temples. 4. In the mechanical power which enabled them to move masses that no other races have ever accomplished. 5. Their use of hieroglyphic sculpture on all their sacred buildings. 6. Similarity in zodiacal and planispheric carvings. 7. Identity in sepulchral ornaments."

Without comment I put in opposition to this summary of architectural analogies the following quotations from other and better authorities:

"The Palenque architecture has little to remind us of the Egyptian or the Oriental."—*Conquest of Mexico*, Vol. III., p. 407.

"It may be, as he"—De Bourbourg—"says, that for every pyramid in Egypt there are a thousand in Mexico and Central America, but the ruins in Egypt and those in America have nothing in common. The two countries were entirely different in their language, in their styles of architecture, in their written characters, and in the physical characteristics of their earliest people, as they are seen sculptured or painted on the monuments. An Egyptian pyramid is no more the same thing as a Mexican pyramid than a Chinese pagoda is the same thing as an English lighthouse. It was not made in the same way, nor for the same uses. The ruined monuments show, in generals and in particulars, that the original civilizers in America were profoundly different from the ancient Egyptians. The two peoples can not explain each other."—*Ancient America*, p. 183.

"There are those who, in the truncated pyramids, see evidences of Egyptian origin. The pyramids, like the temple mounds, were used for sepulchres; but here the

analogy ends. The Mound Builders burned the bodies of the dead, or left them to be resolved into dust by the slow process of decay; but the Egyptians, believing that the soul would again tenant the body, resorted to expensive processes for its preservation. The same remarks will apply when we institute a comparison between the Teocallis of Central America and the pyramids. They differ both in the mode of construction and the object aimed at. The pyramids are complete in themselves, and as they tower up in the Nile Valley, the eye at once takes in the coherence of the several parts. The Teocallis form but a part of the general plan; they were but the foundations for more elaborate structures. 'There is no pyramid in Egypt,' says Stevens, 'with a palace or temple upon it; there is no pyramidal structure in this country (Central America) without.' The pyramids, according to Herodotus, were originally coated with stone from base to summit; the Teocallis have flattened summits, with flights of steps descending to the base."—*Prehistoric Races*, p. 187.

"In its general features, American architecture does not offer any strong resemblances to the Egyptian."—*Native Races*, Vol. V., p. 59.

"It"—the great mound at Cholula—"has been called a pyramid, with other mounds in Mexico and Central America, but this is not a proper term for these Amerindian works. They have not the character of the Egyptian pyramids, nor were they constructed with the same object. The pyramids were tombs, while the large Amerind mounds were *foundations* for buildings."—*North Americans of Yesterday*, p. 351.

On the similarities and dissimilarities of Egyptian and American sculpture work Bancroft remarks: "Between American and Egyptian sculpture there is, at first

sight, a very striking general resemblance. This, however, almost entirely disappears upon close examination and comparison. Both peoples represented the human figure in profile, the Egyptians invariably, the Americans generally; in the sculpture of both, much the same attitudes of the body predominate, and these are but awkwardly designed; there is a general resemblance between the lofty headdresses worn by the various figures, though in detail there is little agreement. These are the points of analogy and they are sufficiently prominent to account for the idea of resemblance which has been so often and so strongly expressed. But while sculpture in Egypt is for the most part in intaglio, in America it is usually in relief. In the former country the faces are expressionless, always of the same type, and, though executed in profile, the full eye is placed on the side of the head; in the New World, on the contrary, we meet with many types of countenance, some of which are by no means lacking in expression."—*Native Races*, Vol. V., pp. 60, 61.

It will be observed from these quotations that there is very little in either American architecture or sculpture to suggest the theory that the ancient Americans were familiar with the arts and customs of ancient Egypt.

7. The practice of embalment is mentioned by Delafield as still further proof of the Egyptian origin of ancient American civilization.

The following description of the Egyptian mode is given in the "Encyclopedia Britannica" (Art. "Embalming"): "In that country certain classes of the community were specially appointed for the practice of the art. The brains were in part removed through the nostrils by means of a bent iron implement, and in part by the injection of drugs. The intestines having been drawn

out through an incision in the left side, the abdomen was cleansed with palm-wine, and filled with myrrh, cassia, and other materials, and the opening was sewed up. This done, the body was steeped several days in a solution of litron or natron. Diodorus relates that the cutter appointed to make the incision in the flank for the removal of the intestines, as soon as he had performed his office, was pursued with stones and curses by those about him, it being held by the Egyptians a detestable thing to commit any violence or inflict a wound on the body. After the steeping, the body was washed, and handed over to the swathers, a peculiar class of the lowest order of priests, called by Plutarch *cholchytoe*, by whom it was bandaged in gummed cloth; it was then ready for the coffin. Mummies thus prepared were considered to represent Osiris. In another method of embalming, costing twenty-two minæ (about \$450), the abdomen was injected with 'cedar-tree pitch,' which, as it would seem from Pliny, was the liquid distillate of the pitch-pine. This is stated by Herodotus to have had a corrosive and solvent action on the viscera. After injection the body was steeped a certain number of days in natron; the contents of the abdomen were allowed to escape, and the process was then complete. The preparation of the bodies of the poorest consisted simply in placing them in natron for seventy days, after a previous rinsing of the abdomen with 'syrmaea.' The material principally used in the costlier modes of embalming appears to have been asphalt; wax was more rarely employed. In some cases embalming seems to have been effected by immersing the body in a bath of molten bitumen. Tanning also was resorted to. Occasionally the viscera, after treatment, were in part or wholly replaced in the body, together with wax figures of the four genii of Amenti. More

commonly they were embalmed in a mixture of sand and asphalt, and buried in vases, or *canopi*, placed near the mummy, the abdomen being filled with chips and sawdust of cedar and a small quantity of natron. In one jar were placed the stomach and large intestine; in another, the small intestines; in a third, the lungs and heart; in a fourth, the gall-bladder and liver."

Many of the so-called "mummies" of America are not real mummies at all, but have been preserved, not by artificial means, but by the coldness and dryness of the climate of those countries in which they have been found or by certain antiseptic properties in the soils of their depositories. Such are those bodies from caves of Tennessee, Kentucky, the cliff-houses of the southwestern part of the United States and many of those from the sepulchres of Peru.

But the ancient nations of the New World, as well as those of the Old, had various ways of preserving the dead. But none of these ways are very much like those of Egypt. The tribes of Virginia, the Carolinas and Florida, according to Beverly, first flayed the corpse, slitting the skin only in the back; then cleaned the bones, carefully removing all the flesh; and then, after drying them, put them back in the skin, filling the remaining cavity with fine white sand.¹ The lord of Chalco, capturing two Tezcucan princes, had them slain and dried and placed as light-holders in his ballroom that he might feast his eyes on their hated forms.² Among the Aztecs the body of the king was washed in aromatic water, after which the bowels were removed and the cavity was filled with aromatic substances. This was done, not to preserve the body indefinitely, however, but simply to pre-

¹ "First Rept. Bu. Am. Ethno.," p. 131.

² Bancroft, II: 604.

serve it until time for burial.¹ Certain Isthmian tribes embalmed their caciques by placing them on cane hurdles or hanging them up by a cord over a slow fire of herbs and drying them very much the same as a farmer does hams.² In Peru the simplest method of preserving the body was by exposing it to the action of the cold, exceedingly dry and highly rarefied atmosphere of the mountains. If any other method was employed, it was of a primitive character and was in no way similar to those methods practiced by the Egyptians.

Bancroft closes his review of the evidences presented to prove the theory of the Egyptian origin of ancient American civilization in these words: "But all such analogies are far too slender to be worth anything as evidence; there is scarcely one of them that would not apply to several other nations equally as well as to the Egyptians."—*Native Races*, Vol. V., p. 63. The claim that the ancient Americans possessed a knowledge of the customs and habits of Egypt rests, then, upon no better foundation than the faint similarities, forced resemblances, vague analogies and accidental coincidences which have been traced between the two countries. A very unstable foundation, indeed.

4. *Native American Culture of Indigenous Origin.*

Sweeping aside these views of the exotic origin of aboriginal American civilization, we may safely accept the conclusion that the culture of the ancient inhabitants of this continent was native born and bred. So many are the indications pointing in this direction that I feel warranted in saying that it is the point to which all unbiased students will eventually come, and to which most have come.

¹ Bancroft, II: 603.

² Bancroft, II: 782.

But, while it is certain that ancient American culture was of indigenous origin and development, no one can say that in the past influxes of foreign immigration into America did not occur. This is not only possible, but probable. All that we can contend for is that the distinctive culture of aboriginal America, so far as its character is known from the monuments and traditions, bore no marks of a foreign impress, and, so far as we can see, was purely indigenous. So, if bodies of immigrants did come to this continent in ancient times, they were too small in numbers or too weak in influence to leave any evidence of their existence behind.

The points of similarity between the Americans and other peoples are nothing more than we can expect. The changes of the moon may be observed in Africa as well as in America, and the Hottentot and Cherokee are not proved related because they happen to reckon time by these changes. Men everywhere have the faculty of adhesiveness, and it is no sign that the American Indians have come from Polynesia because they have banded themselves together into tribes. The faculties of self-esteem and approbateness are specially prominent in some races and account for the love of ornamentation manifested by the Indians and the Fiji Islanders without the supposition that they are related. While the universal and inherent idea of uncleanness attached to the menstrual discharges will fully account for the periodic separation of the Indian women without us supposing that the habit was derived from the Jews, I think that it is safe to reject, as proving ethnical identity, those analogies which may spring from common human instinct. As for the rest, unless it can be shown that they are not mere coincidences, they must be treated as such.

Turning our attention to the points of difference be-

tween the culture of the ancient Americans and that of the nations of the Old World, we find not only that they were numerous, but that they were also radical and vital, and show that the separation of the men of this continent from those of the other took place long before the organization of those kingdoms known to history and the development of the higher arts. The most salient features of the culture of ancient America, which prove its indigenous origin and development, are:

1. The ignorance on the part of the ancient Americans of the manufacture and use of iron and steel tools. This proves that their separation from the people of the Old World took place before the upper status of barbarism had been reached, hence before the founding of the kingdoms of Egypt and Israel from which the Book of Mormon claims the latter colony obtained its civilization.

2. The wide dissimilarity between the languages of the Americans and those of the other continent, those of America belonging to the polysynthetic group and those of Egypt and Palestine belonging to the inflectional. "While certain characteristics," says Bancroft, "are found in common throughout all the languages of America, these languages are as a whole sufficiently peculiar to be distinguishable from the speech of all the other races of the world."—*Native Races*, Vol. III., p. 553. And this proves the vast antiquity of the race, an antiquity reaching far back of 600 B. C.

3. The peculiar features in the religion and mythology of the American tribes. The gods of ancient America were peculiar to America and were of a lower order, even, than the gods of Greece and Egypt. The ancient Americans were sun-worshippers and animists, and practiced human sacrificing, while their cosmological

and eschatological beliefs were peculiar as were also their rites and ceremonies.

4. The peculiar types of American architecture which differ from the architectural types of the Old World. "There is nothing in any of the remains, so far developed," says Dellenbaugh, "that indicates foreign influence prior to the Discovery. Every architectural work on the continent is purely Amerindian or modified by contact with other races subsequent to 1492."—*North Americans of Yesterday*, p. 247.

5. The ignorance of some of the most-advanced tribes of the use of the plummet. "Nor, although they constructed stone walls of considerable height, did they have any knowledge of the plumb-line or plummet."—*Essays of an Americanist*, p. 442. This disproves any connection of the ancient Americans with the inhabitants of Egypt and Palestine at least as late as claimed in the Book of Mormon.

6. The peculiarities of the calendars of the Mayas, Mexicans and Muyscas by which they are distinguished from the calendar systems of the Egyptians and Jews.

7. The structure of American society which differed from the structure of Oriental society in being founded upon the gens or clan as its unit instead of upon the family.

That the reader may know how our archæologists stand on the origin of aboriginal culture, I submit the following quotations from their works:

"It is the spectacle of a people skilled in architecture, sculpture and drawing, and, beyond doubt, other more perishable arts, and possessing the cultivation and refinement attendant upon these, and not derived from the Old World, but originating and growing up here without models or masters, having a distinct, separate, inde-

pendent existence, like the plants and fruits of the soil, indigenous."—*Stephens, in "Incidents of Travel in Central America,"* Vol. II., p. 311.

"The more we study them"—the American monuments—"the more we find it necessary to believe that the civilization they represent was originated in America, and probably in the region where they are found. It did not come from the Old World; it was the work of some remarkably gifted branch of the race found on the southern part of this continent when it was discovered in 1492. Undoubtedly it was very old. Its original beginning may have been as old as Egypt, or even farther back in the past than the ages to which Atlantis must be referred; and it may have been later than the beginning of Egypt. Who can certainly tell its age? Whether earlier or later, it was original."—*Ancient America*, p. 184.

"We seek, then, in vain for any analogies in art which would connect the civilization of this country with that of the Old World. That art was not derived from a remote source; it was the outgrowth of a people domesticated to the soil."—*Prehistoric Races*, p. 330.

"Though there is no evidence that the Mound Builders were indigenous, we must admit that their civilization was purely such—the natural product of climate and the conditions surrounding them."—*North Americans of Antiquity*, p. 100.

"The most competent observers are agreed that American art bears the indisputable stamp of its indigenous growth. Those analogies and identities which have been brought forward to prove its Asiatic or European or Polynesian origin, whether in myth, folklore or technical details, belong wholly and only to the uniform development of human culture under similar conditions.

This is their true anthropological interpretation, and we need no other."—*Myths of the New World*, pp. 33, 34.

"That successive waves of migration occurred there is no reason to doubt, and that these successive bodies of immigrants differed to some extent in culture and in race is highly probable, but that the distinctively American culture which may be traced from the shell-heap to the mound, from the mound to the pueblo, from the pueblo to the structures of Mexico, Central America and Peru, irrespective of race—that this is indebted to an equivalent foreign culture for its chief features, is utterly incapable of proof in fact and highly improbable in theory."—*Prehistoric America*, pp. 523, 524.

"The generally accepted conclusion in reference to the origin of the American aborigines seems to be that man reached this continent while the peoples of the Old World were yet in a primitive condition, and at a time when the highest stage of culture was expressed by the knife and spearpoint of chipped stone, and developed independently in accord with the natural conditions with which he was surrounded."—*North America*, p. 356.

"That the Mayas were a race autochthon on the western continent and did not receive their civilization from Asia or Africa, seems a rational conclusion, to be deduced from the foregoing facts. If we had nothing but their name to prove it, it would be sufficient, since its etymology is only to be found in the American Maya language."—*Vestiges of the Mayas*, p. 82.

"It seems that the Amerindian race, while originally composed of different elements, was, as a body, separated from the other peoples of the world, at a remote epoch, and by peculiar climatic and geographic influences, welded into an ethnic unity, which was unimpressed by

outside influences till modern times."—*North Americans of Yesterday*, p. 458.

"One of the most difficult problems of North American archæology is that relating to the origin and peculiarities of Mexican and Central American civilization. That it was indigenous is now the prevailing opinion among antiquarians and ethnologists."—*American Archaeology*, p. 339.

THE ANTIQUITY OF ABORIGINAL AMERICAN CIVILIZATION.

On the high antiquity of ancient American civilization the Book of Mormon speaks in no uncertain terms. It tells us that the oldest works of Central America, Mexico and the United States were erected during a period of time beginning about five hundred years after the deluge and ending about 600 B. C., and that most of the other works of these countries, with many in Peru, were constructed during the thousand years intervening between the latter date and 400 A. D. According to this claim most of the ancient cities of the New World were erected before the beginning of the Christian era.

In its theory of the high antiquity of ancient American civilization the Book of Mormon has the support of most of the earlier archæologists. It used to be the habit with some to reckon the period between the Conquest and the golden age of ancient America by millenniums. Montesinos had Peru peopled by civilized men five centuries after the Deluge. Dupaix declared that Palenque was antediluvian, or, at least, that a flood had once covered it. While Catlin claimed that for three thousand years the ocean had been the bed of both it and Uxmal. Baldwin had the Mound Builders leaving the Mississippi Valley not later than two thousand years ago, after occupying that section for a "very long period," and had them

entering Mexico as the Toltecs in the year 955 B. C., back of which he traced the civilization of the Colhuas for untold ages. And Foster accepts both his theory and his date. Running to the opposite extreme is another class who hold that Palenque, Copan and the other cities of Central America were the work of the Toltecs after their expulsion from Mexico in the tenth century A. D.

I think that it can truthfully be said that but few of the ancient cities of America antedate the beginning of the Christian era, though the civilization, or the civilizations, that built them may have been centuries in developing. The theory that the greater part of the work was done before the birth of Christ, and that it was practically all completed before the fifth century A. D., as claimed by the Mormons, is nullified by every line of evidence, traditional, archæological and historical.

Some of the cities of Peru which are identified by the Committee on American Archæology with the Nephite cities of the Book of Mormon are known to have been built both within comparatively recent times, and by existing tribes. Gran Chimu is identified with the Nephite city of Middoni, but Brinton gives it not only a recent origin, but also ascribes it to the Yuncas, a tribe that lived in the vicinity at the time of the Spanish Conquest. He says: "There is little doubt but that the Yuncas immigrated to their locality at some not very distant period before the conquest. According to their own traditions their ancestors journeyed down the coast in their canoes from a home to the north, until they reached the port of Truxillo. Here they settled and in later years constructed the enormous palace known as the *Gran Chimu*, whose massive brick walls, spacious terraces, vast galleries and fronts decorated with bas-reliefs and rich

frescoes, are still the wonder and admiration of travelers."—*The American Race*, p. 224.

It is also pretty certain that the "enigmatical ruins" of Tiahuanuco, which were deserted when the Spaniards came to Peru, are the work of the Aymaras. "The observations of David Forbes on the present architecture of the Aymaras," Brinton says, "lend strong support to his theory that the structures of Tiahuanuco, if not projected by that nation, were carried out by Aymara architects and workmen."—*Ibid*, p. 220.

When the Spaniards came to Peru they found it inhabited by two prominent tribes, the Quichuas and Aymaras, the latter subject to the former. But this had not always been, and not a few of the students of the antiquities and history of Peru believe that in the earlier period of Peruvian civilization the Aymaras were the leading people and that they were "the creators or inspirers of the civilization which the Kechuas extended so widely over the western coast."—*Ibid*, p. 219. For this reason it seems probable that to them is to be ascribed not only Tiahuanuco, but also Old Huanuco, Cuzco and other cities of the first epoch of Peruvian civilization.

Passing up into Central America, we find evidence of the post-Christian erection of most of the ancient cities of that section. This is certainly true of Uxmal, Chichen Itza, Peten and most of the others of Yucatan, and it has been maintained, by some writers, even for Palenque, Copan and T'Ho.

Palenque is conceded to be one of the oldest cities in Central America. It was deserted when Cortez conquered Mexico, and probably had been for some time. The traditional date of its founding, according to Ordoñez, is 955 B. C., and its founder, according to the

Tzendals, was Votan. But this date is by no means established, and it is probable that the Mayan occupancy of this region began subsequent to it. Bancroft, after giving the traditional date of its founding, says: "Palenque may be conjecturally referred to a period between the first and eighth centuries."—*Native Races*, Vol. IV., p. 362. And Nadaillac says: "The most daring conjectures do not admit of our dating the monuments of Palenque earlier than the first centuries of our era."—*Prehistoric America*, p. 322. While Peet declares that the ruined cities of this continent "do not date earlier than five hundred years after Christ."—*Ancient Monuments and Ruined Cities* (Introduction).

Copan is identified by the Committee on American Archæology as a Jaredite city, probably Moron. This would put its founding two thousand or more years before Christ. But, on the contrary, if tradition is to be trusted, it could not have been built so very long before the Conquest, for the account of its founding was yet in the memory of the natives when they first met the Spaniards. These ruins were first visited by Diego de Palacio in the year 1576, and the description that he has left is pronounced by Maudsley, the English explorer, to be "such a one as might have been written by any intelligent visitor within even the last few years." Palacio gave the following native account of the founding of the city: "I endeavored with all possible care to ascertain from the Indians, through the traditions derived from the ancients, what people lived here, or what they knew or had heard from their ancestors concerning them. But they had no books relating to their antiquities, nor do I believe that in all this district there is more than one, which I possess. They say that in ancient times there came from Yucatan a great lord, who built these edifices, but that

at the end of some years he returned to his native country, leaving them entirely deserted. And this is what appears most likely, for tradition says that the people of Yucatan in time past conquered the provinces of Uyajal, Lacandon, Verapaz, Chiquimula and Copan, and it is certain that the Apay language, which is spoken here, is current and understood in Yucatan and the aforesaid provinces."¹

The cities of Yucatan were, no doubt, erected after Palenque and by colonies from the country of which that city was the capital or the chief religious center. The first people are, however, said to have come from the east, and are called in the traditions *cenial*, or "little descent," because of the smallness of their numbers. The others, who came from the west, are called *nohenial*, or "great descent." The first are thought by some to have come from the Old World, but Lizana believes that they came from Cuba, and Orozco y Berra thinks that they came from Florida. Fancourt, Brinton, Thomas and most other recent writers reject in toto the idea of an eastern immigration and bring the ancient inhabitants from the west or northwest. And this is in accord with all the other evidences. The Yucatec hero was Zamna, who is said to have introduced Maya institutions, divided the country into provinces and named the various localities on the peninsula. He died at an advanced age and was buried at Izamal. Following the rule of Zamna, the Itzaob, three most holy men, ruled over the Itzas at Chichen Itza. One of these brothers was Kukulcan, the Quetzalcoatl of the Nahuas. The founding of Chichen Itza is fixed by Thomas in the sixth century A. D. "The date of the founding of Chichen is of course unknown,

¹ "American Archæology," p. 307.

yet the traditions, as shown by the author in his 'Study of the Manuscript Troano,' appear to indicate the sixth century A. D. as the probable date."—*American Archaeology*, p. 302. Following the Itzas the Tutul Xiu reigned in Yucatan. Perez gives 173 A. D. as the date of their migration from Chiapas, but Bancroft, who computes their periods differently, fixes it as late as 401 and would have them enter the southern part of the peninsula in the year 482.¹ But be this as it may, it is certain that this royal family entered Yucatan after the beginning of the Christian era and that they erected the city of Uxmal in the early part of the twelfth century. On the antiquity of the cities of Yucatan Bancroft writes: "The history of the Mayas indicates the building of some of the cities at various dates from the third to the tenth centuries. As I have said before, there is nothing in the buildings to indicate the date of their erection—that they were or were not standing at the commencement of the Christian era."—*Native Races*, Vol. IV., p. 284.

The reasons that some writers have advanced for believing that the cities of Central America are of great antiquity are: (1) Their extremely dilapidated condition. (2) The immense trees and the great amount of vegetable mould found upon them. And (3) the ignorance of the natives concerning their origin and history. But in answer to these it may be said, first, that the buildings were usually made of soft limestone, which under the action of tropical rains, heat and vegetation soon presents an antiquated appearance; second, that in a tropical climate the growth of forest trees, and the consequent accumulation of vegetable mould, is so rapid that by this evidence the ruins could, at best, be given an

¹ Bancroft, V: 627.

antiquity of but a few hundred years; and, third, that the ignorance of the natives in regard to their origin is due to the weakness of the primitive mind in retaining the most signal events after the lapse of a few generations. Yet we know that the Tzendals, Quiches and Mayas did possess traditions by which they were connected with the people who built Palenque and the other Central American cities.

It will not be necessary to take up the question of the antiquity of the Mound Builders, as it has already been considered. Suffice it to say that it is conceded by all that the mound-building period did not close until after the European occupation began, and by most all that it did not begin until after the commencement of the Christian era. And what has been said for the antiquity of the Mound Builders can also be said for the antiquity of the Cliff Dwellers.

The views of most recent writers on the antiquity of native American civilization are ably set forth in the following by Dr. Brinton, an authority whose opinions, though not always accepted, are always respected by other archæologists:

"When we turn to the monumental data, to the architecture and structural relics of the ancient Americans, we naturally think first of the imposing, stone-built fortresses of Peru, the massive pyramids and temples of Yucatan and Mexico, and the vast brick-piles of the Pueblo Indians.

"It is doubtful if any of these notable monuments supply prehistoric dates of excessive antiquity. The pueblos, both those now occupied and the vastly greater number whose ruins lie scattered over the valleys and mesas of New Mexico and Arizona, were constructed by the ancestors of the tribes who still inhabit that

region, and this at no distant day. Though we can not assign exact dates to the development of this peculiar civilization, there are abundant reasons, drawn from language, physical geography and the character of the architecture, to include all these structures within the period since the commencement of our era.

"There is every reason to suppose that the same is true of all the stone and brick edifices of Mexico and Central America. The majority of them were occupied at the period of the Conquest; others were in process of building; and of others the record of the date of their construction was clearly in memory and was not distant. Thus, the famous temple of Huitzilopochtli at Tenochtitlan, and the spacious palace—or, if you prefer the word, 'communal house'—of the ruler of Tezcuco, had been completed within the lifetime of many who met the Spaniards. To be sure, even then there were once famous cities fallen to ruins and sunk to oblivion in the tropical forests. Such was Palenque, which could not have failed to attract the attention of Cortez had it been inhabited. Such also was T'Ho, on the site of the present city of Merida, Yucatan, where the earliest explorers found lofty stone mounds and temples covered with a forest as heavy as the primitive growth around it. But tradition and the present condition of such of these old cities as have been examined unite in the probability that they do not antedate the Conquest more than a few centuries.

"In the opinion of some observers, the enigmatical ruins on the plains of Tiahuanaco, a few leagues from the shore of Lake Titicaca, in Peru, carry us far, very far, beyond any such modern date. 'Even the memory of their builders,' says one of the more recent visitors to these marvelous relics, Gen. Bartolome Mitre, 'even their

memory was lost thousands of years before the discovery of America.'

"Such a statement is neither more nor less than a confession of ignorance. We have not discovered the period nor the people concerned in the ruins of Tiahuanaco. It must be remembered that they are not the remains of a populous city, but merely the foundations and beginnings of some vast religious edifice which was left incomplete, probably owing to the death of the projector or to unforeseen difficulties. If this is borne in mind, much of the obscurity about the origin, the purpose and the position of these structures will be removed. They do not justify a claim to an age of thousands of years before the Conquest; hundreds will suffice. Nor is it necessary to assent to the opinion advanced by General Mitre, and supported by some other archæologists, that the most ancient monuments in America are those of most perfect construction, and, therefore, that in this continent there has been, in civilization, not progress, but failure; not advance, but retrogression.

"The uncertainty which rests over the age of the structures at Tiahuanaco is scarcely greater than that which still shrouds the origin of the mounds and earthworks of the Ohio and Upper Mississippi Valleys. Yet I venture to say that the opinion is steadily gaining ground that these interesting memorials of vanished nations are not older than the medieval period of European history. The condition of the arts which they reveal indicates a date that we must place among the more recent in American chronology. The simple fact that tobacco and maize were cultivated plants is evidence enough for this."—*Essays of an Americanist*, pp. 25-27.

CERTAIN FEATURES OF AMERICAN CIVILIZATION WHICH
PLAINLY OPPOSE THE BOOK OF MORMON.

I. *The ancient Americans did not manufacture iron.*

On the other hand, the peoples described in the Book of Mormon are said to have been iron workers who did not use stone at all in the manufacture of their tools and weapons, and who were as far advanced as the civilized nations of Europe, Asia and Africa in the time of Christ.

The Book of Mormon says of the Jaredites: "And they did work in all manner of ore, and they did make gold, and silver, and iron, and brass, and all manner of metals."—*Ether* 4:7.

On the use of iron among the Nephites, we have the following passages:

"And I"—Nephi—"did teach my people to build buildings: and to work in all manner of wood, and of iron, and of copper, and of brass, and of steel, and of gold, and of silver, and of precious ores, which were in great abundance."—*2 Nephi* 4:3.

"And we multiplied exceedingly, and spread upon the face of the land, and became exceeding rich in gold, and in silver, and in precious things, and in fine workmanship of wood, in buildings, and in machinery, and also in iron, and copper, and brass, and steel, making all manner of tools of every kind to till the ground, and weapons of war."—*Jarom* 1:4.

"And it came to pass that king Noah built many elegant and spacious buildings; and he ornamented them with fine work of wood, and of all manner of precious things, of gold, and of silver, and of iron, and of brass, and of ziff, and of copper."—*Mosiah* 7:2.

In proof of this claim we are referred to the fact that certain South American tribes had names for the

metal in their languages. "Some of the languages of the country, and perhaps all," says Baldwin, in speaking of Peru, "had names for iron; in official Peruvian it was called *quillay*, and in the old Chilean tongue *panilic*. 'It is remarkable,' observes Molina, 'that iron, which had been thought unknown to the ancient Americans, has particular names in some of their tongues.' It is not easy to understand why they had names for this metal, if they never at any time had knowledge of the metal itself."—*Ancient America*, p. 248.

Elders Etzenhouser and Stebbins also mention the finding of certain iron and steel tools in the mounds of North America as corroborating these passages in the Book of Mormon. These finds consisted of the remains of iron, and perhaps steel, knives, part of a steel bow, etc. Mr. Stebbins gives the destructiveness of rust as the reason why more of such implements have not been found. He says: "Of course this fact of the speedy decay of iron and steel is sufficient reason why weapons and tools that were used by the Jaredites and Nephites have not been found by us. But the testimonies already presented leave no room for saying that the Book of Mormon is false in saying that those ancients did have full knowledge and use of iron and steel in those ancient times."—*Lectures*, p. 278.

But, after nearly a hundred years of research, our archaeologists have decided that these evidences are insufficient to establish the claim that the ancient Americans were workers in iron. The mere fact that some of the South American tribes had names for the metal proves nothing, as these names may have been invented in a number of ways. They may have been coined at the time these tribes first saw the iron implements of the whites, or, what is more probable, they may have been

applied to the metal in its crude state. As iron ore is found in all parts of America, and as some of the tribes are known to have worked it into implements by a process of chipping and grinding, this latter seems the most reasonable explanation of the presence of these names in the vocabularies of certain tribes. Nothing can be better established than that the Peruvians did not use manufactured-iron tools and implements.

As for the iron articles in the mounds of North America, instead of proving that the Mound Builders were iron workers, they prove that those mounds in which they have been found have been erected within historic times. These tools and implements bear so many marks of European workmanship that this can no longer be either successfully denied or reasonably doubted. The following account from Professor Thomas, of the finding of an old-fashioned case-knife in a mound in Tennessee, in the "Twelfth Annual Report of the Bureau of American Ethnology,"¹ will make this plain:

"Suppose, for example, that a mound is found in Tennessee, which in appearance, construction and contents, with a single exception, is in every respect precisely like those attributed to the so-called 'veritable Mound Builders,' and that this single exception is an ordinary, old-fashioned, steel-bladed 'case-knife' with a bone handle, found at the bottom of the tumulus, where it could not reasonably be attributed to an intrusive burial, must we conclude that the 'veritable Mound Builders' manufactured knives of this class? Yet a case precisely of this kind in every particular occurred during the investigation carried on by the Bureau of Ethnology in 1884."

¹ See also "Ohio Mounds" and "Work in Mound Exploration" for similar relics.

I presume that there is not a Latter-day Saint who will claim that this bone-handled case-knife was manufactured by the Mound Builders, and as there are many other relics from the mounds as conclusively European, we can reasonably attribute the rest to the same source.

The assertion that oxidization will account for the almost total absence of iron tools and weapons among the antiquities of America is without good foundation, for the conditions of many localities in the Old World, where iron tools and implements of great age have been found in an excellent state of preservation, are not as conducive to the preservation of the metal as are the conditions of many of the localities of the New.

In the debris of Khorsabad, Babylonia, Hilprecht tells us, Place discovered "iron implements of every description in such a fine state of preservation that several of them were used at once by his Arab workmen."—*Explorations in Bible Lands*, p. 83. At Nimrud Layard found "a large quantity of iron scales of Assyrian armor" (*Ibid*, p. 106), besides "iron implements such as picks, saws, hammers, etc." (*Ibid*, p. 124). While at Nippur a number of iron nails and two iron bands were taken from the ruins (*Ibid*, p. 505). Now, if the ancient Americans used iron and steel exclusively for cutting tools and weapons, why can we not find them, or at least their rust, in the cold, dry regions of Peru and Arizona? In both these countries even vegetable matter has been preserved for untold centuries. In Peru we find not only the preserved corpses of the ancient inhabitants, but also such articles and materials as cactus thorns, wool, thread, locks of hair, pieces of cloth sometimes entire, wooden needles, cocoa leaves and shells entombed with them. While in the section of the Cliff Dwellers, deposited with the mummies, have been found such arti-

cles and materials as ears of corn, yucca leaves, skins, pumpkin shells, cornmeal, wooden spoons and cotton cloth. It is indeed strange, if the early inhabitants of those regions were Nephites and Gadiantons, that their more perishable possessions have been preserved, while every vestige of their iron tools and weapons has been wiped out.

We are informed by good authorities that in Peru stone was used exclusively by the ancient inhabitants out of which to manufacture their surgical instruments. Probably the most complete collection of ancient crania from that country was that of Dr. Manuel Antonio Muniz, at one time surgeon-general of the army of Peru. His collection consisted of over a thousand crania, of which nineteen were trephined, several more than once. All of these crania, with the exception of the nineteen, were destroyed a few years ago in a political disturbance, and these, with a single exception, were placed in the National Museum of the United States for preservation. In his excellent paper, "Primitive Trephining in Peru," published in the "Sixteenth Annual Report of the Bureau of American Ethnology," p. 59, Prof. W. J. McGee describes these trephined skulls, with others from the same country, and says on the instruments used by the ancient inhabitants for the purpose of performing this operation: "Putting the various dimensions"—of the incisions made in the skulls—"together, they are found to define a blade corresponding with an ordinary stone knife or spearhead, or with an arrowpoint attached to a short haft, while the dimensions are inconsistent with those possessed by any known cutting instrument of metal. Considering next the longitudinal striæ in the sides of the kerfs, it appears that they would naturally and necessarily be produced by the reciprocal operation of a knife or spearhead chipped

from stone of coarse texture, or of such structure as to give a splintery fracture, and that these features would not be produced by any known single-point tool of metal, polished stone, tooth or shell. Accordingly, the detailed features displayed by the collection afford practically conclusive evidence that the incising instrument was a stone blade of common form and character. There is absolutely no suggestion in any of the specimens that the kerfs were produced by any other kind of tool, either of other material than stone or of other form than a blunt, single-tip blade."

Peru presents to us a number of imposing ruins built of colossal stones. How these stones could have been prepared without steel tools has been the wonder of archæologists. Elder Phillips, in his tract, "The Book of Mormon Verified," p. 15, asks: "How could such works be hewn from stone without iron tools?" And then sarcastically exclaims: "Perhaps they did it with their finger nails!" That they did it with neither iron tools nor yet with their finger nails we know. On their substitute for steel Prescott writes: "The natives were unacquainted with the use of iron, though the soil was largely impregnated with it. The tools used were of stone, or more frequently of copper. But the material on which they relied for the execution of their most difficult tasks was formed by combining a very small portion of tin with copper. This composition gave a hardness to the metal which seems to have been little inferior to that of steel."—*Conquest of Peru*, Vol. I., p. 92.

That the ancient Peruvians did not use iron and steel tools is now conceded. Says Bancroft: "Iron ore is very abundant in Peru, but the only evidence that iron was used is the difficulty of executing the native works of excavation and cutting stone without it, and the fact that

the metal had a name in the native language. No traces of it have ever been found."—*Native Races*, Vol. IV., p. 794.

Passing up into the land of the Mayas, we find no evidence whatever that this people, or any other who inhabited that region, used the metal. One of the strongest evidences of this is that the hard, flinty spots in the stones from which their statues were carved are left uncut. "That iron and steel were not used for cutting implements," says Bancroft, "is clearly proved by the fact that hard, flinty spots in the soft stone of the statues are left uncut, in some instances where they interfere with the details of the sculpture."—*Native Races*, Vol. IV., p. 102.

He adds that the chay-stone points found in the ruins are sufficiently hard to work the soft material.

Dellenbaugh says: "So far no prehistoric iron has been found in the ruins of Yucatan."—*North Americans of Yesterday*, p. 81.

Nadaillac says of the remains of Chiapas and Yucatan: "Hieroglyphics, true conventional signs, mark then a period of human evolution. They are met with on the monuments of Chiapas as on those of Yucatan; on the walls of Palenque or Copan as on those of Chichen Itza or Quirigua; they were sculptured or engraved on granite or on porphyry, with quartzite and obsidian implements. Iron, we repeat, was absolutely unknown; nowhere do we find it mentioned, and nowhere do we meet with the characteristic rust which is the undeniable proof of its presence."—*Prehistoric America*, pp. 377, 378.

At the time of the Conquest the Mexicans, Prescott tells us, "used only copper instruments, with an alloy of tin, and a siliceous powder, to cut the hardest stones, and some of them of enormous dimensions." He adds: "This

fact, with the additional circumstance that only similar tools have been found in Central America, strengthens the conclusion that iron was neither known there nor in ancient Egypt."—*Conquest of Mexico*, Vol. III., p. 406. As the Mexicans at the time of the Conquest used only these simple tools, and as there is no evidence of the prehistoric use of iron, we are justified in believing that their early ancestors had no others.

Notwithstanding the fact that a few iron implements have been found in the mounds, all archaeologists, of any note whatever, declare that the Mound Builders did not use this metal.

"He"—the Ohio Mound Builder—"failed to grasp the idea of . . . the use of metal (except in the cold state)."—*Primitive Man in Ohio*, p. 200.

"The Mound Builders were acquainted with several of the metals, and had their implements and ornaments of copper; silver in the form of ornaments is occasionally found; galena occurs in considerable quantities, while no trace of iron has been discovered."—*The Mound Builders*, p. 72.

"There is no evidence that the use of iron was known, except the extreme difficulty of clearing forests and carving stone with implements of stone and soft copper."—*Native Races*, Vol. IV., p. 779.

"Iron and bronze appear to have been practically unknown to them, and in no part of a vast territory they occupied have excavations revealed the existence or the use of any metal but native copper, with its associated silver, gold and a few fragments of meteoric iron."—*Prehistoric America*, p. 129.

"The use of iron as a metal was unknown in America previous to the discovery by Columbus."—*American Archaeology*, p. 11.

2. *The ancient Americans did not have the horse.*

The Book of Mormon declares that the Jaredites and Nephites had the horse and other domestic animals.

Of the former, Ether says: "And the Lord began again to take the curse from off the land, and the house of Emer did prosper exceedingly under the reign of Emer; and in the space of sixty and two years, they had become exceeding strong, insomuch that they became exceeding rich, having all manner of fruit, and of grain, and of silks, and of fine linen, and of gold, and of silver, and of precious things, and also all manner of cattle, of oxen, and cows, and of sheep, and of swine, and of goats, and also many other kind of animals which were useful for the food of man; and they also had horses, and asses, and there were elephants, and cureloms, and cumoms: all of which were useful unto man, and more especially the elephants, and cureloms, and cumoms."—*Ether* 4:3.

After the extermination of the Jaredites these domestic animals became wild, and when the Nephites entered Peru they are said to have found in the wilderness "both the cow, and the ox, and the ass, and the horse, and the goat, and the wild goat, and all manner of wild animals, which were for the use of men."—1 *Nephi* 5:45. See also *Enos* 1:6, *Alma* 12:11 and *Alma* 12:24.

To make it appear to their readers that these references relative to the use of the horse by the civilized nations of ancient America are confirmed by scientific research, Mormon writers¹ hand out the following quotations from geologists:

"In North America . . . in the Champlain period there were great elephants and mastodons, oxen, horses, stags,

¹"Stebbins," p. 279. "Etzenhouser," pp. 23, 24. "Blair," p. 166.

beaver, and some edentates in quaternary North America, unsurpassed by any in the world."—*J. D. Dana, LL. D., in "Text-book of Geology,"* p. 319.

"We know that the equine type of quadrupeds existed in America from the period of the Eocene. We are, in fact, acquainted with twenty-one species of horse-like animals, and the genus of true horses has been traced down to the times preceding the present."—*Professor Winchell, in "Evolution,"* p. 82.

"Seven species of rhinoceros existed on the plains of Colorado; twenty-seven species of horses also cropped the herbage of those vast savannas, varying in size from that of our domestic variety, down to that of a New Foundland dog."—*Professor Hayden, in "Explorations of the West."*

If our Mormon friends will grant that the Jaredites and Nephites were here in the "Champlain period," or before that in the period of the "Eocene," we will grant that they could have had horses in abundance, but until this concession is made we shall feel ourselves justified in denying that these quotations in any way corroborate the claim of the Book of Mormon.

No one who has studied geology will deny that in the earlier epochs the horse was an inhabitant of this continent along with many other species now extinct. And it is also probable that the horse and man were coexistent for sometime after the latter's arrival. Thus much I concede. But that the horse was here when man had developed himself into a semi-civilized being, and at the time those cities which have been attributed to the Jaredites and Nephites were erected, I most emphatically deny. For some unknown cause the horse long ago became extinct on the western continent, and remained so until the coming of the Europeans. "There is no doubt," says

Brinton, "but that the horse existed on the continent contemporaneously with postglacial man; and some palæontologists are of the opinion that the European and Asian horses were descendants of the American species; but for some mysterious reason the genus became extinct in the New World many generations before its discovery."—*The American Race*, p. 50.

That it was not employed as a beast of burden by the builders of the structures of Peru, Central America and the Mississippi Valley is made evident by the absence of its remains among the ruins and of its carved form on any of the ancient statuary.

"The builders"—of the mounds—"had no beasts of burden. These large structures were, therefore, built by man unaided."—*Prehistoric America*, p. 85.

"The mound builders had neither iron nor steel of which to form spades and shovels, nor had they beasts of burden to assist in the transportation of material."—*American Archaeology*, p. 61.

"The Amerinds of North America as a race possessed no beast of burden but the dog. . . . The Amerinds encountered on the plains of Texas in 1540 by Coronado were using the dog, just as they afterwards used the horse, for transporting tents and tent-poles."—*North Americans of Yesterday*, pp. 276, 277.

3. *The ancient Americans did not possess the domesticated cereals of the Old World.*

Mosiah says of the Nephites: "And we began to till the ground, yea, even with all manner of seeds, with seeds of corn, and of wheat, and of barley, and with neas, and with sheum, and with seeds of all manner of fruits; and we did begin to multiply and prosper in the land."—*Mosiah* 6:2.

But where is the proof of this extraordinary asser-

tion? It seems very probable that, if the Americans had once had wheat and barley, they would not have given up their cultivation and use, and yet they were not to be found in America when the Europeans came. "Wheat, rye, barley, oats, millet, and rice," says Nadaillac, "were unknown to the Indians."—*Prehistoric America*, p. 4.

Besides, no remains of wheat, barley or Oriental corn have ever been found in any of the ancient granaries or cemeteries on the continent. In Peru, Arizona and at Madisonville, Ohio, maize, in some instances charred, has been taken from graves and other places, but not a vestige of wheat or barley has ever been found.