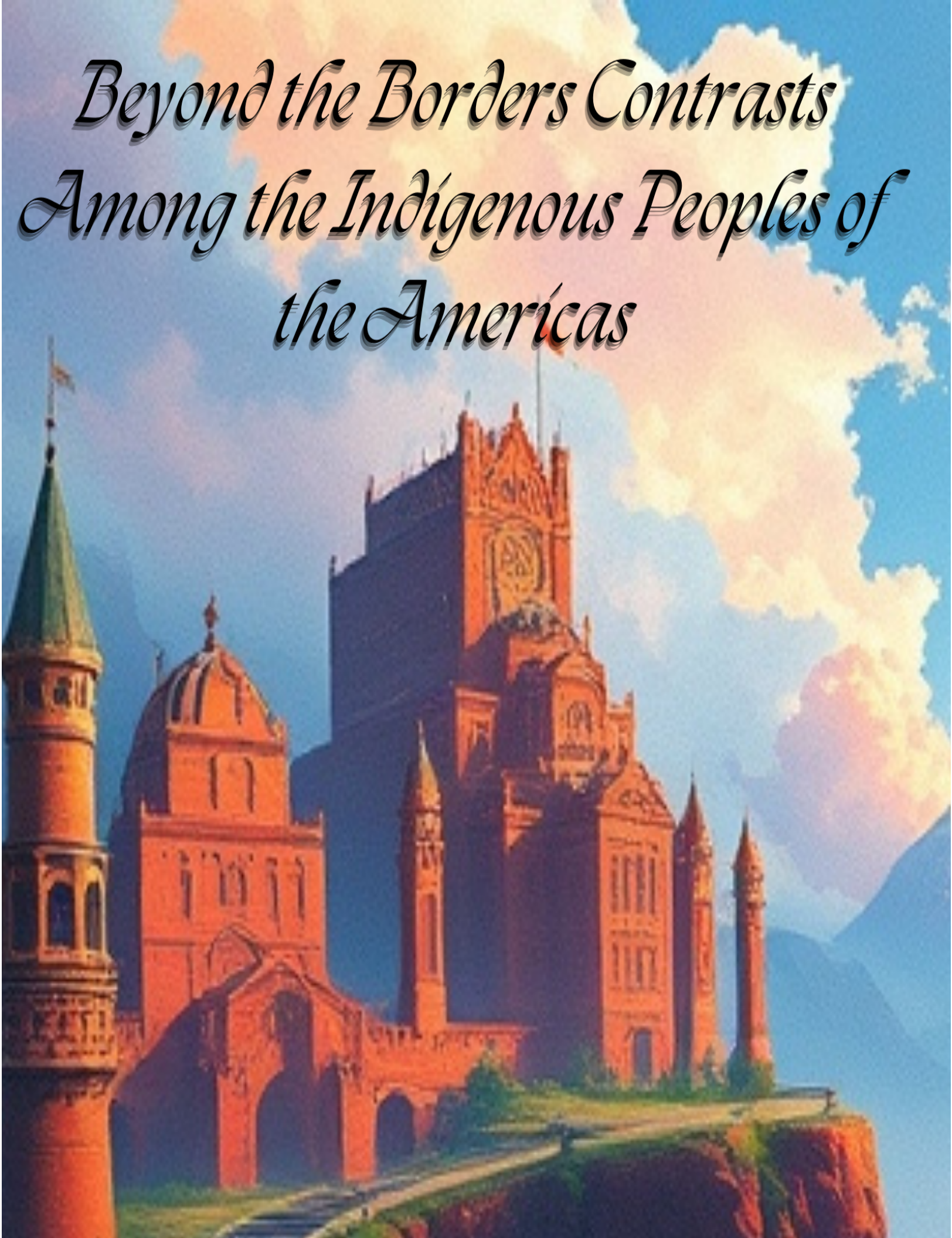
Beyond the Borders Contrasts Among the Indigenous Peoples of the Americas



The wild Indians of North America were profoundly different from the ancient people of Central America and Peru. The Pueblo or Village Indians of New Mexico have scarcely any thing in common with the Apaches, Comanches, and Sioux. Even the uncivilized Indians of South America are different from those in the United States. Our wild Indians have more resemblance to the nomadic Koraks and Chookchees found in Eastern Siberia, throughout the region that extends to Behring's Strait, than to any people on this continent. Those who have seen these Siberians, traveled with them, and lived in their tents, have found the resemblance very striking; but I infer from what they say that the Korak or Chookchee is superior to the Indian. See Kennan's "Tent Life in Siberia." finds evidence that the American aborigines had a common origin in what he calls "their systems of consanguinity and affinity." If it can be made to appear beyond question that these systems prevail and are identical every where from Patagonia to the Arctic Zone, his argument will have great force. But this has not yet been shown. He says: "The Indian nations, from the Atlantic to the Rocky Mountains, and from the Arctic Sea to the Gulf of Mexico, with the exception of the Esquimaux, have the same system. It is elaborate and complicated in its general form and details; and, while deviations from uniformity occur in the systems of different stocks, the radical features are, in the main, constant. This identity in the essential characteristics of a system so remarkable tends to show that it must have been transmitted with the blood to each stock from a common original source. It affords the strongest evidence yet obtained of unity in origin of the Indian nations within the region defined." But unity in race among wild Indians found within the region specified would be sufficiently manifest without this evidence. That the same system of consanguinity and affinity, with precisely the same features of identity, ever was extended over the whole continent, remains unproved. The supposed traces of it among the Pueblos are by no means clear. A more complete and accurate research is required to show that identically the same system ever has existed any where between the United States and Patagonia. A system not wholly unlike it, though not the same, might grow up any where in widely separated tribal communities of barbarous peoples, without doing any thing more than the tribal system itself to show a common origin in race. The aborigines of America may have been originally all of the same race. There are some considerations in favor of this hypothesis which have been used by writers entitled to great respect; but it can not yet be claimed with reason that they have been able to settle this question beyond the reach of doubt, even in their own minds. Therefore, to speak moderately, it would be premature to assume that the Mound-Builders were even remotely of the same race with the wild Indians, from whom they were so different in all we know of them. The attempt to establish this hypothesis of identity in race has given rise to a tendency to underrate the development of the ancient people of Mexico and Central America, and to lower the estimate of their attainments sufficiently to bring them within reach of close relationship to the wild Indians. The difficulty being reduced in this way, there follows an attempt to get rid of it entirely, and establish connection between these unlike peoples, by talking of "Semi-Village Indians." But the hypothesis used in this case is not well warranted by facts. Such "Semi-Village Indians" as are supposed, really standing half way between the savages and the Pueblos, and being actually savages half developed into Pueblos, have never had a clearly defined and unquestionable existence here since the continent became known to Europeans. In the border region between the northern wild Indians and the old Mexican race there are exceptional communities formed by association or mixture, but we can not reasonably give them the significance claimed for the supposed "Semi-Village Indians." Moreover, these exceptional communities are usually Pueblos whose habits have been changed and their civilization lessened by association with wild Indians, or in some other way. The Navajos began their present condition by fleeing to the mountains from the Spaniards. The Mound-Builders, who must have been, still more than the Pueblos, unlike the barbarous Indians, can not be explained by any reference whatever to such communities. If they were of the same race, they were far from being the same people. Some ethnologists, whose suggestions are entitled to respectful attention whether accepted or rejected, specify considerations which they believe forbid us to regard the ancient Mexicans and the northern wild Indians as identical in race. They point to the well known fact that the fauna of the American continent below the northern frontier of Mexico is remarkably different from that between this line and the Arctic Sea. At the north, America abounds in species similar to those of Europe and Asia, with some admixture of forms wholly American.

while at the south the old-world forms disappear, and the fauna of the whole region between Mexico and Cape Horn becomes "as peculiar as that of Australia."The explanation given is, that during the glacial period the larger part of North America, like Northern Asia and Europe, was covered with ice and partly submerged, and that the fauna found in this part of North America was introduced after the glacial period by immigration from Asia and Europe over connecting lands or islands at the northwest and the northeast, and perhaps by some migration from the south; the fauna at the south meanwhile remaining very much as it was before, with very little change through later migrations from the north. Professor Huxley called attention to this subject in a brief address to the London Ethnological Society in. After stating the case, he presented the following queries and suggestions: "The Austro-Columbian fauna, as a whole, therefore, existed antecedently to the glacial epoch. Did man form part of that fauna? To this profoundly interesting question no positive answer can be given; but the discovery of human remains associated with extinct animals in the caves of Brazil, by Lund, lends some color to the supposition. Assuming this supposition to be correct, we should have to look in the human population of America, as in the fauna generally, for an indigenous or Austro-Columbian element, and an immigrant or 'Arctogeal' element." He then suggests that the Esquimaux may now represent the immigrant element, and the old Mexican and South American race that which was indigenous, and that the "Red Indians of North America" may have appeared originally as a mixture of these two races. He adds, very reasonably, "It is easy to suggest such problems as these, but quite impossible, in the present state of our knowledge, to solve them." WHO WERE THE MOUND-BUILDERS? They were unquestionably American aborigines, and not immigrants from another continent. That appears to me the most reasonable suggestion which assumes that the Mound-Builders came originally from Mexico and Central America. It explains many facts connected with their remains. In the Great Valley their most populous settlements were at the south. Coming from Mexico and Central America, they would begin their settlements on the Gulf coast, and afterward advance gradually up the river to the Ohio Valley. It seems evident that they came by this route; and their remains show that their only connection with the coast was at the south. Their settlements did not reach the coast at any other point. Their constructions were similar in design and arrangement to those found in Mexico and Central America. Like the Mexicans and Central Americans, they had many of the smaller structures known as teocallis, and also large high mounds, with level summits, reached by great flights of steps. Pyramidal platforms or foundations for important edifices appear in both regions, and are very much alike. In Central America important edifices were built of hewn stone, and can still be examined in their ruins. The Mound-Builders, like some of the ancient people of Mexico and Yucatan, used wood, sun-dried brick, or some other material that could not resist decay. There is evidence that they used timber for building purposes. In one of the mounds opened in the Ohio Valley two chambers were found with remains of the timber of which the walls were made, and with arched ceilings precisely like those in Central America, even to the overlapping stones. Chambers have been found in some of the Central American and Mexican mounds, but there hewn stones were used for the walls. In both regions the elevated and terraced foundations remain, and can be compared. I have already called attention to the close resemblance between them, but the fact is so important in any endeavor to explain the Mound-Builders that I must bring it to view here. Consider, then, that elevated and terraced foundations for important buildings are peculiar to the ancient Mexicans and Central Americans; that this method of construction, which, with them, was the rule, is found nowhere else, save that terraced elevations, carefully constructed, and precisely like theirs in form and appearance, occupy a chief place among the remaining works of the MoundBuilders. The use made of these foundations at Palenque, Uxmal, and ChichenItza, shows the purpose for which they were constructed in the Mississippi Valley. The resemblance is not due to chance. The explanation appears to me very manifest. This method of construction was brought to the Mississippi Valley from Mexico and Central America, the ancient inhabitants of that region and the Mound-Builders being the same people in race, and also in civilization, when it was brought here. A very large proportion of the old structures in Ohio and farther south called "mounds," namely, those which are low in proportion to their horizontal extent, are terraced foundations for buildings, and if they were situated in Yucatan, Guatemala, and Southern Mexico, they would never be mistaken for any thing else. The high mounds also in the two regions are remarkably alike. In both cases they are pyramidal in shape, and have level summits of considerable extent.

which were reached by means of stairways on the outside. The great mound at Chichen-Itza is high, and has on its summit a ruined stone edifice; that at Uxmal is high, and has a similar ruin on its summit; that at Mayapan is high; the edifice placed on its summit has disappeared. The great mound at Miamisburg, Ohio, is 68 feet high; and that at Grave Creek, West Virginia, is high. Both had level summits, and stairways on the outside, but no trace of any structure remains on them. All these mounds were constructed for religious uses, and they are, in their way, as much alike as any five Gothic churches. Could these works of the Mound-Builders be restored to the condition in which they were when the country was filled with their busy communities, we should doubtless see great edifices, similar in style to those in Yucatan, standing on the upper terraces of all the low and extended "mounds," and smaller structures on the high mounds, such as those above named. There would seem to be an extension of ancient Mexico and Central America through Texas into the Mississippi and Ohio valleys; and so, if there were no massive stone-work in the old ruins of those countries, it might seem that the Mound-Builders' works were anciently extended into them by way of Texas. The fact that the settlements and works of the Mound-Builders extended through Texas and across the Rio Grande indicates very plainly their connection with the people of Mexico, and goes far to explain their origin. We have other evidence of intercourse between the two peoples; for the obsidian dug from the mounds, and perhaps the porphyry also, can be explained only by supposing commercial relations between them. We can not suppose the Mound-Builders to have come from any other part of North America, for nowhere else north of the Isthmus was there any other people capable of producing such works as they left in the places where they dwelt. Beyond the relics of the Mound-Builders themselves, no traces of the former existence of such a people have been discovered in any part of North America save Mexico, and Central America, and districts immediately connected with them. At the same time, it is not unreasonable to suppose the civilized people of these regions extended their settlements through Texas, and also migrated across the Gulf into the Mississippi Valley. In fact, the connection of settlements by way of Texas appears to have been unbroken from Ohio to Mexico. This colonizing extension of the old Mexican race must have taken place at a remote period in the past; for what has been said of the antiquity of the MoundBuilders shows that a very long period, far more than two thousand years, it may be, must have elapsed since they left the Valley of the Ohio. Perhaps they found the country mostly unoccupied, and saw there but little of any other people until an irruption of warlike barbarians came upon them from the Northwest. In speculating on the causes of their withdrawal after centuries of occupation, absolute certainty is impossible, and we have no means of going much beyond mere conjecture. We may suppose as most probable that an influx of barbarians destroyed their border settlements, interrupted their mining operations, and caused them to retire gradually toward the Gulf. Fragments of their communities may have become incorporated with the barbarous tribes. This conjecture has been used to explain certain exceptional peculiarities noticed in some of the wild Indian tribes. For instance, it has been suggested that the Mandan Indians were a separated and lost fragment of the mound-building people, they being noticeably unlike other Indians in many respects, lighter in color, and peculiar in manners and customs. What is conjectured may be true, but we have no means of proving its truth. That the Mandans were like what a lost community of Mound-Builders might have become by degeneration through mixture and association with barbarians may be supposed, but the actual history of that remarkable tribe might give its peculiarities a very different explanation. The Mandans were supposed to be a branch of the Dacotahs. They may have been, like the Navajos, a changed community of Pueblos, but any attempt to explain them by means of conjecture is useless. The supposition that the Toltecs and the Mound-Builders were the same people seems to me not improbable. The reasons for it will be stated when we come to a discussion of the antiquities, books, and traditions of Central America. I will only say here that, according to dates given in the Central American books, the Toltecs came from "Huehue-Tlapalan," a distant country in the northeast, long previous to the Christian era. They played a great part and had a long career in Mexico previous to the rise of their successors in power, the Aztecs, who were overthrown by the Spaniards. MEXICO AND CENTRAL AMERICA. RUINS and other vestiges revealing an ancient civilization are found throughout the whole southern section of North America, extending as far north as New Mexico and Arizona. But here the antiquities do not all belong to the same period in the past.

Nor exhibit unvarying likeness and unity of civilized life. They are somewhat less homogeneous, and do not constantly represent the same degree of civilization. In this region, the monuments suggest successive and varying periods in the civilized condition of the old inhabitants, some of the oldest and most mysterious monuments seeming to indicate the highest development. In the northern part of this region we find ruins of great buildings similar in plan and arrangement to those still used by the Pueblos, but far superior as monuments of architecture, science, and skill, and much more unlike those farther south than is apparent in the principal structures of the Mound-Builders. They show that the old settlers in the Mississippi Valley did not belong to the Pueblo branch of the Mexican race. Farther south, in the central part of the region specified, development was more advanced. Here, in the last ages of American ancient history, was the seat of the Mexican or Aztec civilization, but the monuments in this part of the country are mostly older than the Aztec period. The most astonishing remains are found still farther south, in Chiapa, Tabasco, Oxaca, Yucatan, Honduras, Tehuantepec, Guatemala, and other parts of Central America. In this southern region, mostly buried in heavy forests, are wonderful ruins of great cities and temples. Only a small part of modern Mexico is included in the region where these ruins are situated, and most of them, probably, were not much better understood by the ancient Mexicans than they are by us. Many of those explored in later times were unknown to that people, just as others, more in number, doubtless, than those already described, still remain unvisited and unknown in the great and almost impenetrable forests of the country. THE NORTHERN REMAINS. The ruins in Northern Mexico, including New Mexico and Arizona, consist chiefly, as already stated, of the remains of structures similar in general design and purpose to those of the Village Indians, the Pueblos. In the more ancient times, doubtless, as at present, a large proportion of the dwellings and other edifices, like those in the Mississippi Valley, were built of perishable materials which have left no trace. Many of them, however, were built of stone, and have left ruins which show their character. Stone ruins are common in this northern region, although wood and adobe seems to have been more commonly used as building material. Some of the ruined stone edifices were inhabited when the country was conquered by the Spaniards. The remains present every where the same characteristics. They represent a people who built always in the same way, with some variations in the forms of their structures, and had substantially the same condition of life; but the ruins are not all of the same age. Their character can be sufficiently shown by describing a few of them. In New Mexico, west of the Rio Grande, between the head waters of the San Jose and Zuni rivers, a bluff or ridge rises in a valley two hundred feet high. The Spaniards named it “El Moro.” One side of this bluff is vertical, and shows yellowish-white sandstone rock, on the face of which are inscriptions; “Spanish inscriptions and Indian hieroglyphics.” It was carefully described in 1849 by Lieutenant Simpson, and was explored again four or five years later by Lieutenant who described it in his report to the government, published in the third volume of “Explorations and Surveys for a Railroad Route to the Pacific.” On the summit of this height, which Lieutenant Simpson named “Inscription Rock,” are the ruins of an extensive Pueblo edifice built of stone. The walls were built “with considerable skill.” In some places they are still “perfect to the height of six or eight feet, vertical, straight, and smooth; and the masonry is well executed, the stones being of uniform size—about fourteen inches long and six wide.” The layers are horizontal, each successive layer breaking joints with that below it. Remains of cedar beams were discovered, and also obsidian arrow-heads, painted pottery, and other relics. Another ruin was seen on a height across the gorge. It was found to be similar to this, both in character and condition of decay. Lieutenant Whipple went westward along the thirty-fifth parallel. We can not do better than follow the report of what he saw. View of buildings and setting in landscape Pueblo Ruin at Pecos. His next stopping-place, after leaving “El Moro,” was in the beautiful valley of Ojo Pescado. Here, close by a spring that showed artificial stone-work of ancient date, were two old Pueblo buildings in ruins, “so ancient that the traditions of present races do not reach them.” Not far away is a deserted town of later date. The two ancient structures were circular in form and equal in size, each being about eight hundred feet in circumference. They were built of stone, but the walls have crumbled and become chiefly heaps of rubbish. The pottery found here, like that at “El Moro,” is “painted with bright colors, in checks, bands, and wavy stripes; many fragments show a beautiful polish.

A few pieces were discovered larger in size, inferior in color and quality, but indicating a more fanciful taste. United, they formed an urn with a curious handle; a frog painted on the outside and a butterfly within." In the same neighborhood, on the summit of a cliff twenty feet high, was another old ruin "strongly walled around." In the centre was a mound on which were traces of a circular edifice. The next place of encampment was at Zuni, where, as shown in Figure, can be seen one of these great Pueblo buildings inhabited by two thousand people (Lieutenant Whipple's estimate). It has five stories, the walls of each receding from those below it. Looking from the top, he says it reminded him of a busy ant-hill, turkeys and tamed eagles constituting a portion of its inhabitants. Not more than a league away is an "old Zuni" which shows nothing but ruins. Its crumbling walls, worn away until they are only from two to twelve feet high, are "crowded together in confused heaps over several acres of ground." This old town became a ruin in ancient times. After remaining long in a ruined condition it was again rebuilt, and again deserted after a considerable period of occupation. It is still easy to distinguish the differences in construction between the two periods. "The standing walls rest upon ruins of greater antiquity;" and while the primitive masonry is about six feet thick, that of the later period is only from a foot to a foot and a half thick. Small blocks of sandstone were used for the latter. Heaps of débris cover a considerable space, in which, among other things, are relics of pottery and of ornaments made of sea-shells. Pieces of quaintly-carved cedar posts were found here, and their condition of decay, compared with that of the cedar beams at "El Moro," "indicated great antiquity." The place of this ruin is now one of the consecrated places of the Village Indians; it has "a Zuni altar" which is constantly used and greatly venerated. On leaving the place, their guide blew a white powder toward the altar three times, and muttered a prayer. This, he explained, was "asking a blessing of Montezuma and the sun." This altar seems to represent recollections of the ancient sun-worship. Drawing of a person descending a ladder from the roof of a building Modern Zuni. At a place west of Zuni ancient relics were found, indicating that an extensive Pueblo town had formerly stood there, but "the structures were probably of adobes," as there was no débris of stone walls, and only very faint traces of foundations. Near the Colorado Chiquito is an extensive ruin, on the summit of an isolated hill of sandstone, the faces of its walls being here and there visible above heaps of débris. It appears to be very old. As near as could be ascertained, the great rectangular Pueblo building was three hundred and sixty feet in extent on one side, and one hundred and twenty on the other. In some places the walls are ten feet thick, "with small rooms inserted in them." Stone axes, painted pottery, and other articles are found in the débris: "The indented pottery, said to be so very ancient, is found here in many patterns." On a ridge overlooking the valley of Pueblo Creek are traces of an old settlement of large extent, supposed to have been that heard of in by the friar Marco de Niça as "the kingdom of Totonteac." Adobe seems to have been used here for building. Traces of other ruins were seen in various places, and springs along the route showing ancient stone-work are mentioned. Drawing of ruins Pueblo Ruins in the Valley of the Gila. Ruins are abundant in the Rio Verde Valley down to the confluence of that river with the Rio Salinas. It is manifest that this whole region was anciently far more populous than it is now. Lieutenant Whipple says, "Large fields in the valley of the Rio Gila, and many spots among the Pinal Lena Mountains, are marked with the foundations of adobe houses." Figure represents a Pueblo ruin in the Valley of the Gila. "In Cañon Chelly, near San Francisco Mountain, and upon Rio Verde, there are ruins of more permanent structures of stone, which in their day must have excelled the famed Pueblos of New Mexico." There was a higher degree of civilization in the ancient times, so far as relates to architecture and skill in the arts and appliances of life, than has been shown by people of the same race dwelling there in our time; but the ancient condition of life seems to have been maintained from age to age without material change. THE "SEVEN CITIES OF CEVOLA." In the New Mexican valley of the Chaco, one degree or more north of Zuni, are ruins of what some suppose to have been the famous "Seven Cities of Cevola." In Spanish cupidity having been strongly incited by tales of the greatness and vast wealth of Cevola, Coronado, then governor of New Galicia, set out with an army to conquer and rob its cities.

The report in which he tells the story of this conquest and of his disappointment is still in existence. The Cevolans defended themselves with arrows and spears, and hurled stones upon his army from the tops of their buildings. But resistance was of no avail; Cevola was conquered by Coronado, and immediately deserted by all its inhabitants who escaped death. The conquering buccaneer, however, did not find the treasures of gold and silver he expected. Three hundred and thirty years or more have passed away since this expedition of the Spanish marauders was undertaken, but the “Seven Cities of Cevola” (if they really were the “cities” whose remains are found in the Chaco Valley), although much dilapidated, are still sufficiently well preserved to show us what they were. There are seven ruins in the Chaco Valley, all of the same age, from one to three miles apart, the whole line along which they are situated being not more than ten miles in extent. Coronado said of Cevola, “The seven cities are seven small towns, standing all within four leagues together;” and “all together they are called Cevola.” The Chaco ruins show that each of these “cities” was, Pueblo fashion, a single edifice of vast size, capable of accommodating from five hundred to three thousand people. They were all built of stone, around three sides of a square, the side opposite the main building being left open. represents one of these buildings restored, according to Lieutenant Simpson. Figure is a ground plan of this structure. The outer faces of the walls were constructed with thin and regular blocks of sandstone; the inner surfaces were made of cobblestone laid in mortar, and the outer walls were three feet thick. They were four or five stories high, and the only entrances to them were “window openings” in the second story. Above the cañon inclosing the valley containing these ruins, at a distance of thirteen miles, are the remains of another “city” of precisely the same kind. Its walls are at present between twenty and thirty feet high, their foundations being deeply sunk into the earth. Lieutenant Simpson, who explored that region in, says it was built of tabular pieces of hard, fine-grained, compact gray sandstone, none of the layers being more than three inches thick. He adds, “It discovers in the masonry a combination of science and art which can only be referred to a higher stage of civilization and refinement than is discoverable in the work of Mexicans or Pueblos of the present day. Indeed, so beautifully diminutive and true are the details of the structure as to cause it at a little distance to have all the appearance of a magnificent piece of mosaic.” Drawing of multi-story rectangular building complex Pueblo Building, restored. Plan of building complex Ground Plan of Pueblo Building. Other ruins have been examined in this northern part of the old Mexican territory, and more will be brought to light, for the whole region has not been carefully examined, and new discoveries are constantly reported. CENTRAL MEXICO. As we go down into Central Mexico, the remains assume another character, and become more important; but the antiquities in this part of the country have not been very completely explored and described, the attention of explorers having been drawn more to the south. Some of them are well known, and it can be seen that to a large extent they are much older than the time of the Aztecs whom Cortez found in power. In the northern part of the Mexican Valley was the city of Tulha, the ancient capital of the Toltecs. At the time of the conquest its site was an extensive field of ruins. At Xochicalco, in the State of Mexico, is a remarkable pyramid, with a still more remarkable base. It was constructed with five stages or stories, and stands on a hill consisting chiefly of rock, which was excavated and hollowed for the construction of galleries and chambers. The opening serves as an entrance to several galleries, which are six feet high and paved with cement, their sides and ceilings seeming to have been covered with some very durable preparation which made them smooth and glistening. Captain Dupaix found the main gallery sixty yards, or one hundred and eighty feet long, terminating at two chambers which are separated only by two massive square pillars carefully fashioned of portions of the rock left for the purpose by the excavators. Over a part of the inner chamber, toward one corner, is a dome or cupola six feet in diameter at the base, and rather more in height. It has a regular slope, and was faced with square stones well prepared and admirably laid in cement. From the top went up a tube or circular aperture nine inches in diameter, which probably reached the open air or some point in the pyramid. In this part of Mexico can be seen, among other things, the great pyramid or mound of Cholulu, the very ancient and remarkable pyramidal structures at Teotihuacan, and an uncounted number of teocallis or pyramids of smaller size.

The pyramid of Cholulu covers an area of forty-five acres. It was terraced and built with four stages. When measured by Humboldt it was square at the base, and high. At present it is a ruin, and, to superficial observers, seems little more than a huge artificial mound of earth. Its condition of decay indicates that it is much older than even the Toltec period. The largest structure at Teotihuacan covers eleven acres. These structures, and the Mexican teocallis generally, were made of earth, and faced with brick or stone. Captain Dupaix saw, not far from Antequera, two truncated pyramids which were penetrated by two carefully constructed galleries. A gallery lined with hewn stone, bearing sculptured decorations, went through one of them. A similar gallery went partly through the other, and two branches were extended at right angles still farther, but terminating within. He mentions also the ruins of elaborately decorated edifices which had stood on elevated terraces. At one place he excavated a terraced mound, and discovered burnt brick; and he describes two ancient bridges of the Tlascalans, both built of hewn stone laid in cement, one of them being long and. Obelisks or pillars high stood at the corners of these bridges. Important remains of the ancient people exist in many other places; and "thousands of other monuments unrecorded by the antiquaries invest every sierra and valley of Mexico with profound interest." At Papantla, in the State of Vera Cruz, there is a very ancient pyramidal structure somewhat peculiar in style and character. It is known that important ruins exist in the forests of Papantla and Mesantla which have never been described. The remarkable pyramid at Papantla was examined and described by Humboldt. The only material employed in constructing it was hewn stone. The stone was prepared in immense blocks, which were laid in mortar. The pyramid was an exact square at the base, each side being in length, and the height about. The stones were admirably cut and polished, and the structure was remarkably symmetrical. Six stages could be discerned by Humboldt, and his account of it says, "A seventh appears to be concealed by the vegetation which covers the sides of the pyramid." A great flight of steps leads to the level summit, by the sides of which are smaller nights. "The facing of the stones is decorated with hieroglyphics, in which serpents and crocodiles carved in relievo are visible. Each story contains a great number of square niches symmetrically distributed. In the first story there are on each side, in the second , and in the third. There are of these niches on the whole pyramid, and in the stairs toward the east." The civilization of the Aztecs who built the old city of Mexico will be made a separate topic; but it may be said here that when they came into the Valley of Mexico they were much less advanced in civilization than their predecessors. There is no reason whatever to doubt that they had always resided in the country as an obscure branch of the aboriginal people. Some have assumed, without much warrant, that they came to Mexico from the North. shows, with much probability, that they came from the southern part of the country, where communities are still found speaking the Aztec language. When they rose to supremacy they adopted, so far as their condition allowed, the superior knowledge of their predecessors, and continued, in a certain way, and with a lower standard, the civilization of the Toltecs. It has been said, not without reason, that the civilization found in Mexico by the Spanish conquerors consisted, to a large extent, of "fragments from the wreck that befell the American civilization of antiquity." To find the chief seats and most abundant remains of the most remarkable civilization of this old American race, we must go still farther south into Central America and some of the more southern states of Mexico. Here ruins of many ancient cities have been discovered, cities which must have been deserted and left to decay in ages previous to the beginning of the Aztec supremacy. Most of these ruins were found buried in dense forests, where, at the time of the Spanish Conquest, they had been long hidden from observation. The ruins known as Palenque, for instance, seem to have been entirely unknown to both natives and Spaniards until about the year. Cortez and some of his companions went through the open region near the forest in which these ruins are situated without hearing of them or suspecting their existence. The great ruins known as Copan were in like manner unknown in the time of Cortez. The Spaniards assaulted and captured a native town not far from the forest that covered them, but heard nothing of the ruins. The captured town, called Copan, afterward gave its name to the remains of this nameless ancient city, which were first discovered in, and described by the Spanish licentiate Palacios. This was little more than forty years after the native town was captured; but, although Palacios tried, "in all possible ways," to get from the older and more intelligent natives some account of the origin and history of the ruined city, they could tell him nothing about it.

To them the ruins were entirely mythical and mysterious. With the facts so accessible, and the antiquity of the ruins so manifest, it is very singular that fell into the mistake of confounding this ruined city, situated in an old forest that was almost impenetrable, with the town captured by the Spaniards. The ruins here were discovered accidentally; and to approach them it was necessary, as at Palenque, to cut paths through the dense tropical undergrowth of the forest.To understand the situation of most of the old ruins in Central America, one must know something of the wild condition of the country. says: “By far the greater proportion of the country is in its primeval state, and covered with dense, tangled, and almost impenetrable tropical forests, rendering fruitless all attempts at systematic investigation. There are vast tracts untrodden by human feet, or traversed only by Indians who have a superstitious reverence for the moss-covered and crumbling monuments hidden in the depths of the wilderness. For these and other reasons, it will be long before the treasures of the past, in Central America, can become fully known.” A great forest of this character covers the southern-half of Yucatan, and extends far into Guatemala, which is half covered by it. It extends also into Chiapa and Tabasco, and reaches into Honduras. The ruins known as Copan and Palenque are in this forest, not far from its southern edge. Its vast depths have never been much explored. There are ruins in it which none but wandering natives have ever seen, and some, perhaps, which no human foot has approached for ages. It is believed that ruins exist in nearly every part of this vast wilderness. According to the old Central American books and traditions, some of the principal seats of the earliest civilization, that of the “Colhuas,” was in this forest-covered region. In their time the whole was cultivated and filled with inhabitants. Here was a populous and important part of the Colhuan kingdom of “Xibalba,” which, after a long existence, was broken up by the Toltecs, and which had a relation, in time, to the Aztec dominion of Montezuma, much like that of the old monarchy of Egypt to the kingdom of the Ptolemies. In the time of the Spaniards there was in the forest at Lake Peten a solitary native town, founded nearly a century previous to their time by a Maya prince of Itza, who, with a portion of his people, fled from Yucatan to that lonely region to escape from the disorder and bloodshed of a civil war. This was the civil war which destroyed Mayapan, and broke up the Maya kingdom of Yucatan. In, Don Martin Ursua, a Spanish official, built a road from Yucatan to Lake Peten, captured the town, and destroyed it. He reported that the builders of this road found evidence that “wrecks of ancient cities lie buried in this wilderness.” All along the route they discovered vestiges of ruins, and special mention is made of “remains of edifices on raised terraces, deserted and overgrown, and apparently very ancient.” Should you visit the ruins of one of these mysterious old cities, you would see scattered over a large area great edifices in different stages of decay, which were erected on the level summits of low pyramidal mounds or platforms. The summits of these mounds are usually of sufficient extent to furnish space for extensive terraces or “grounds,” as well as room for the buildings. The edifices were built of hewn stone laid in a mortar of lime and sand, the masonry being admirable, and the ornamentation, in most cases, very abundant. The pyramidfoundations of earth were faced with hewn stone, and provided with great stone stairways. These, we may suppose, were the most important buildings in the old city. The ordinary dwellings, and all the other less important structures, must have been made chiefly of wood or some other material, which had perished entirely long ago and left no trace, for at present their remains are no more visible than those of the forest leaves which grew five hundred years ago. One explorer of Palenque says: “For five days did I wander up and down among these crumbling monuments of a city which, I hazard little in saying, must have been one of the largest ever seen.” There is, however, nothing to show us certainly the actual size of any of these ancient cities. It is manifest that some of them were very large; but, as only the great structures made of stone remain to be examined, the actual extent of the areas covered by the other buildings can not be determined.The chief peculiarity of these ruins, that which especially invites attention, is the evidence they furnish that their builders had remarkable skill in architecture and architectural ornamentation. All who have visited them bear witness that the workmanship was of a high order. The rooms and corridors in these edifices were finely and often elaborately finished, plaster, stucco, and sculpture being used. In one room of a great building at Uxmal says “the walls were coated with a very fine plaster of Paris, equal to the best seen on walls in this country.”

Speaking of the construction of this edifice, he says, “throughout, the laying and polishing of the stones are as perfect as under the rules of the best modern masonry.” All the ruins explored have masonry of the same character. The floors, especially of the courts and corridors, were made sometimes of flat stones admirably wrought and finely polished, and sometimes of cement, which is now “as hard as stone.” describing corridors of the “Palace” at Palenque, says “the floors are of cement, as hard as the best seen in the remains of Roman baths and cisterns.” We give two illustrations of their method of constructing the arch. shows an arch of Las Monjas, at Uxmal. shows the most common form of the arch in the older ruins.The ornamentation is no less remarkable than the masonry and architectural finish. It is found on the walls within and without, and appears in elaborate designs on the heavy cornices. The exterior ornamentation is generally carved or sculptured on the smooth surface of the stone, and must have required a vast amount of time and labor, as well as skillful artists. In some of the ruins inscriptions are abundant, being found on walls, tablets, and pillars. The general effect of the exterior decoration is thus described by in the account of his first view of the ruins at Palenque: “We saw before us a large building richly ornamented with stuccoed figures on pilasters, curious and elegant; trees growing close to it, and their branches entering the doors; the style and effect of structure and ornament unique, extraordinary, and mournfully beautiful.” In a description of the walls around an interior court of a building at Uxmal, we have this tribute to the artistic skill of the decorators: “It would be difficult, in arranging four sides facing a court-yard, to have more variety, and, at the same time, more harmony of ornament.” In some of the ruins, and especially at Copan, there are clusters of four-sided stone pillars or obelisks varying from twelve to over twenty feet high. These are elaborately sculptured, and show human figures, ornamental designs, and many inscriptions. One or two statues have been discovered, and a statuette twelve inches high is described; “it is made of baked clay, very hard, and the surface is smooth as if coated with enamel.” At Palenque are remains of a well-built aqueduct; and near the ruins, especially in Yucatan, are frequently found the remains of many finely constructed aguadas or artificial lakes. The bottoms of these lakes were made of flat stones laid in cement, several layers deep. In Yucatan traces of a very ancient paved road have been found. This road ran north and south, and probably led to cities in the region now covered by the great wilderness. It was raised above the graded level of the ground, and made very smooth. These antiquities show that this section of the continent was anciently occupied by a people admirably skilled in the arts of masonry, building, and architectural decoration. Some of their works can not be excelled by the best of our constructors and decorators. They were highly skilled, also, in the appliances of civilized life, and they had the art of writing, a fact placed beyond dispute by their many inscriptions. A more particular account of some of these ruins will be given in the next chapter. Among the more important works relating to them are those of Stephens and Catherwood, some of the volumes of, Frederick Waldeck’s work, and a recent French volume by Desiré Charnay, which is accompanied by a folio volume of photographs. Palacios, who described Copan in may properly be called the first explorer. A brief account of Palenque was prepared by Captain Del Rio in, and published in. Captain Dupaix’s folios, in French, with the drawings of Casteñada, contain the first really important memoir on these ruins. It was prepared in, detained in Mexico during the Mexican Revolution, and finally published at Paris in. The volumes of Brasseur de Bourbourg are valuable. They relate chiefly to matters not always understood, and seldom discussed with care, by those who merely visit and describe the monuments, such as the writing, books, and traditions of the ancient Mexican and Central American people. His style is diffuse, sometimes confused, and rather tedious; and some of his theories are very fanciful. But he has discovered the key to the Maya alphabet and translated one of the old Central American books. No careful student of American archæology can afford to neglect what he has written on this subject.

MEXICO AND CENTRAL AMERICA. TO understand the situation and historical significance of the more important antiquities in Southern Mexico and Central America, we must keep in view their situation relative to the great unexplored forest to which attention has been called. Examine carefully any good map of Mexico and Central America, and consider well that the ruins already explored or visited are wholly in the northern half of Yucatan, or far away from this region, at the south, beyond the great wilderness, or in the southern edge of it.

Uxmal, Mayapan, Chichen-Itza, and many others, are in Yucatan. Palenque, Copan, and others are in the southern part of the wilderness, in Chiapa, Honduras, and Guatemala. visited ruins much farther south, in San Salvador, and in the western parts of Nicaragua and Costa Rica. The vast forest which is spread over the northern half of Guatemala and the southern half of Yucatan, and extended into other states, covers an area considerably larger in extent than Ohio or Pennsylvania. Does its position relative to the known ruins afford no suggestion concerning the ancient history of this forest-covered region? It is manifest that, in the remote ages when the older of the cities now in ruins were built, this region was a populous and important part of the country. And this is shown also by the antiquities found wherever it has been penetrated by explorers who knew how to make discoveries, as well as by the old books and traditions. Therefore it is not unreasonable to assume that Copan and Palenque are specimens of great ruins that lie buried in it. The ruins of which something is known have merely been visited and described in part by explorers, some of whom brought away drawings of the principal objects. In giving a brief account of the more important ruins, I will begin with the old city of which most has been heard. PALENQUE. No one can tell the true name of the ancient city now called Palenque. It is known to us by this name because the ruins are situated a few miles distant from the town of Palenque, now a village, but formerly a place of some importance. The ruins are in the northern part of the Mexican State of Chiapa, hidden out of sight in the forest, where they seem to have been forgotten long before the time of Cortez. More than two hundred years passed after the arrival of the Spaniards before their existence became known to Europeans. They were discovered about the year. Since that year decay has made some progress in them. Captain Del Rio, who visited and described them in, examined “fourteen edifices” admirably built of hewn stone, and estimated the extent of the ruins to be “seven or eight leagues one way [along the River Chacamas], and half a league the other.” He mentions “a subterranean aqueduct of great solidity and durability, which passes under the largest building.” Other explorers have since visited Palenque, and reported on the ruins by pen and pencil; but it is not certain that all the ruined edifices belonging to them have been seen, nor that the explorations have made it possible to determine the ancient extent of the city with any approach to accuracy. The very great difficulties which obstruct all attempts at complete exploration have not allowed any explorer to say he has examined or discovered all the mouldering monuments hidden in the dense and tangled forest, even within the space allowed by Del Rio’s “half league” from the river, not to speak of what may lie buried and unknown in the dense mass of trees and undergrowth beyond this limit. The largest known building at Palenque is called the “Palace.” It stands near the river, on a terraced pyramidal foundation high and long, by broad at the base. The edifice itself is long, and high. It faces the east, and has doorways on each side, with at the ends. It was built entirely of hewn stone, laid with admirable precision in mortar which seems to have been of the best quality. A corridor wide, and roofed by a pointed arch, went round the building on the outside; and this was separated from another within of equal width. The “Palace” has four interior courts, the largest being in extent. These are surrounded by corridors, and the architectural work facing them is richly decorated. Within the building were many rooms. From the north side of one of the smaller courts rises a high tower, or pagoda-like structure, thirty feet square at the base, which goes up far above the highest elevation of the building, and seems to have been still higher when the whole structure was in perfect condition. The great rectangular mound used for the foundation was cased with hewn stone, the workmanship here, and every where else throughout the structure, being very superior. The piers around the courts are “covered with figures in stucco, or plaster, which, where broken, reveals six or more coats or layers, each revealing traces of painting.” This indicates that the building had been used so long before it was deserted that the plastering needed to be many times renewed. There is some evidence that painting was used as a means of decoration; but that which most engages attention is the artistic management of the stone-work, and, above all, the beautifully executed sculptures for ornamentation. Two other buildings at Palenque, marked by, in his plan of the ruins, as views of which are shown in Figures are smaller, but in some respects still more remarkable. The first of these, long by wide, stands on the summit of a high truncated pyramid.

And has solid walls on all sides save the north, where there are five doorways. Within are a corridor and three rooms. Between the doorways leading from the corridor to these rooms are great tablets, each long and 8 feet high, and all covered with elegantly-carved inscriptions. A similar but smaller tablet, covered with an inscription, appears on the wall of the central room. Elevation and plan of the Temple of the Inscriptions, Palenque Palenque—Front View and Ground Plan. consists of a steep and lofty truncated pyramid, which stands on a terraced foundation, and has its level summit crowned with a building long by wide, which has three doorways at the south, and within a corridor and three rooms. This edifice, sometimes called "La Cruz," has, above the height required for the rooms, what is described as "two stories of interlaced stuccowork, resembling a high, fanciful lattice." Here, too, inscribed tablets appear on the walls; but the inscriptions, which are abundant at Palenque, are by no means confined to tablets. As to the ornamentation, the walls, piers, and cornices are covered with it. Every where the masterly workmanship and artistic skill of the old constructors compel admiration; going so far as to say of sculptured human figures found in fragments, "In justness of proportion and symmetry they must have approached the Greek models." Elevation and plan of the Temple of the Sun, Palenque, Palenque (La Cruz)—Front View and Ground Plan. is usually called "La Cruz" because the most prominent object within the building is a great bas-relief on which are sculptured a cross and several human figures. This building stands on the high pyramid, and is approached by a flight of steps. says, "It is impossible to describe adequately the interior decorations of this sumptuous temple." The cross is supposed to have been the central object of interest. It was wonderfully sculptured and decorated; human figures stand near it, and some grave ceremony seems to be represented. The infant held toward the cross by one of the figures suggests a christening ceremony. The cross is one of the most common emblems present in all the ruins. This led the Catholic missionaries to assume that knowledge of Christianity had been brought to that part of America long before their arrival; and they adopted the belief that the Gospel was preached there by This furnished excellent material for the hagiologists of that age; but, like every thing else peculiar to these monkish romancers, it betrayed great lack of knowledge. The cross, even the so-called Latin cross, is not exclusively a Christian emblem. It was used in the Oriental world many centuries (perhaps millenniums) before the Christian era. It was a religious emblem of the Phœnicians, associated with Astarte, who is usually figured bearing what is called a Latin cross. She is seen so figured on Phœnician coin. The cross is found in the ruins of Nineveh. Describing one of the finest specimens of Assyrian sculpture (the figure of "an early Nimrod king" he calls it), says: "Round his neck are hung the four sacred signs; the crescent, the star or sun, the trident, and the cross." These "signs," the cross included, appear suspended from the necks or collars of Oriental prisoners figured on Egyptian monuments known to be fifteen hundred years older than the Christian era. The cross was a common emblem in ancient Egypt, and the Latin form of it was used in the religious mysteries of that country, in connection with a monogram of the moon. It was to degrade this religious emblem of the Phœnicians that Alexander ordered the execution of two thousand principal citizens of Tyre by crucifixion. The cross, as an emblem, is very common among the antiquities of Western Europe, where archæological investigation has sometimes been embarrassed and confused by the assumption that any old monument bearing the figure of a cross can not be as old as Christianity. What more will be found at Palenque, when the whole field of its ruins has been explored, can not now be reported. The chief difficulty by which explorers are embarrassed is manifest in this statement of: "Without a guide, we might have gone within a hundred feet of the buildings without discovering one of them." More has been discovered there than I have mentioned, my purpose being to give an accurate view of the style, finish, decoration, and general character of the architecture and artistic work found in the ruins rather than a complete account of every thing connected with them. The ruins of Palenque are deemed important by archæologists partly on account of the great abundance of inscriptions found there, which, it is believed, will at length be deciphered, the written characters being similar to those of the Mayas, which are now understood. COPAN AND QUIRIGUA. The ruins known as Copan are situated in the extreme western part of Honduras, where they are densely covered by the forest. As already stated, they were first discovered by Europeans about forty years after the war of the conquest swept through that part of the country, and were at that time wholly mysterious to the natives.

The monuments seem older than those at Palenque, but we have only scant descriptions of them. They are situated in a wild and solitary part of the country, where the natives “see as little of strangers as the Arabs about Mount Sinai, and are more suspicious.” For this reason they have not been very carefully explored. It is known that these ruins extend two or three miles along the left bank of the River Copan. Not much has been done to discover how far they extend from the river into the forest. describes as follows his first view of them: “We came to the right bank of the river, and saw directly opposite a stone wall from high, with furze growing out of the top, running north and south along the river, in some places fallen, in others entire.” This great wall supported the rear side of the elevated foundation of a great edifice. It was made of cut stone well laid in mortar or cement, the blocks of stone being long. shows the wall somewhat imperfectly. He saw next a square stone column standing by itself, high and on each side. From top to bottom it was richly ornamented with sculptured designs on two opposite sides, the other sides being covered with inscriptions finely carved on the stone. On the front face, surrounded by the sculptured ornaments, was the figure of a man. Fourteen other obelisks of the same kind were seen, some of them being higher than this. Some of them had fallen. These sculptured and inscribed pillars constitute the chief peculiarity of Copan. says of them: “The ruins of Copan, and the corresponding monuments which I examined in the valley of the Chamelican, are distinguished by singular and elaborately carved monoliths, which seem to have been replaced at Palenque by equally elaborate basso relievos, belonging, it would seem, to a later and more advanced period of art.” The great building first noticed stands, or stood, on a pyramidal foundation, which is supported along the river by that high back wall. The structure on the river line. described it as an “oblong inclosure,” and states that it has a wide terrace nearly above the river, on which great trees are growing, some of them more than in circumference. Here, as at Palenque, the ornamentation was “rich and abundant.” The ruins, greatly worn by decay, still show that “architecture, sculpture, painting, and all the arts that embellish life had flourished in this overgrown forest.” Some beautifully executed sculptures were found buried in the earth, and there can be no doubt that extensive excavation, if it were possible in that almost invincible forest, would lead to important and valuable discoveries. Besides the great building and the monoliths, several pyramidal structures are mentioned by who points out that extensive exploration is impossible unless one shall first clear away the forest and burn up the trees. Palacios, who described this ruined city nearly three hundred years ago, saw much more than. He described “the ruins of superb edifices, built of hewn stone, which manifestly belonged to a large city.” He mentions, in connection with the great wall, an enormous eagle carved in stone, which bore a square shield on its breast covered with undecipherable characters. He mentions, also, a “stone giant,” and a “stone cross” with one arm broken. He saw a “plaza,” circular in form, surrounded by ranges of steps or seats, which reminded him of the Coliseum at Rome, “as many as eighty ranges still remaining in some places.” This “plaza” was “paved with beautiful stones, all square and well worked.” Six of the great obelisks, which he described as “statues,” stood in this inclosure, and in its centre was a great stone basin. A history of Guatemala, by a writer named Huarros, states that the “Circus of Copan,” as he calls the “plaza” described by Palacios, was still entire in the year. He mentions gateways which led into the inclosure, and says it was surrounded on the outside by stone pyramids six yards high, near which were standing sculptured figures or obelisks. No doubt, remains of this remarkable “circus” would be found now, if the forest should be removed. What else could be found there by means of careful and thorough exploration may never be known, for the region is uninviting, the forest very difficult, and such an exploration would require much more than the means and efforts of one or two individuals. Not very far away, in the neighboring State of Guatemala, on the right bank of the River Motagua, to which the Copan is a tributary, are the ruins called Quirigua. It is manifest that a great city once stood here. These ruins have a close resemblance to those at Copan, but they appear to be much older, for they have, to a great extent, become little more than heaps of rubbish. Over a large space of ground traces of what has gone to decay are visible. Doubtless important relics of the old city are now more abundant below the surface than above it. describing what he saw there, confines his attention chiefly to a pyramidal structure with flights of steps.

And monoliths larger and higher than those at Copan, but otherwise similar. He states, however, that while they have the same general style, the sculptures are in lower relief and hardly so rich in design. One of the obelisks here is twenty feet high, five feet six inches wide, and two feet eight inches thick. The chief figures carved on it are that of a man on the front, and that of a woman on the back. The sides are covered with inscriptions similar in appearance to those at Copan. Some of the other standing obelisks are higher than this. It seems reasonable to infer that the structures at Quirigua were more ancient than those at Copan. View of the ruins Ruins at Mitla. MITLA. The ruins called Mitla are in the Mexican State of Oxaca, about twelve leagues east from the city of Oxaca. They are situated in the upper part of a great valley, and surrounded by a waste, uncultivated region. At the time of the Spanish Conquest they were old and much worn by time and the elements, but a very large area was then covered by remains of ancient buildings. At present only six decaying edifices and three ruined pyramids, which were very finely terraced, remain for examination, the other structures being now reduced to the last stage of decay. Figures present views of some of these structures, as given by Von Temski. from Charnay's photograph, shows a ruin at Mitla. Detail of building Great Hall at Mitla. These important ruins were not described by Stephens and Catherwood. Captain Dupaix's work gives some account of them, and Desiré Charnay, who saw them since, brought away photographs of some of the monuments. Four of the standing edifices are described by Dupaix as "palaces," and these, he says, "were erected with lavish magnificence; they combine the solidity of the works of Egypt with the elegance of those of Greece." And he adds, "But what is most remarkable, interesting, and striking in these monuments, and which alone would be sufficient to give them the first rank among all known orders of architecture, is the execution of their mosaic relievos, very different from plain mosaic, and consequently requiring more ingenious combination and greater art and labor. They are inlaid on the surface of the wall, and their duration is owing to the method of fixing the prepared stones into the stone surface, which made their union with it perfect." Figure taken from Charnay's photograph, shows part of the mosaic decoration on a wall of one of the great edifices at Mitla. View of ruins Ruined Palace at Mitla. Detail of architectural stone mosaic sculpture Mosaics at Mitla. The general character of the architecture and masonry is much like that seen in the structures at Palenque, but the finish of the workmanship appears to have been more artistic and admirable. These ruins are remarkable among those of the country where they are found. All who have seen them speak much as Dupaix speaks of the perfection of the masonry, the admirable design and finish of the work, and the beauty of the decorations. Their beauty, says, can be matched only by the monuments of Greece and Rome in their best days. One fact presented by some of the edifices at Mitla has a certain degree of historical significance. There appears to be evidence that they were occupied at some period by people less advanced in civilization than their builders. describing one of them, points out this fact. He says of the structure: "It is a bewildering maze of courts and buildings, with facings ornamented with mosaics in relief of the purest design; but under the projections are found traces of paintings wholly primitive in style, in which the right line is not even respected. These are rude figures of idols, and meandering lines that have no significance. Similar paintings appear, with the same imperfection, on every great edifice, in places which have allowed them shelter against the ravages of time. These rude designs, associated with palaces so correct in architecture, and so ornamented with panels of mosaic of such marvelous workmanship, put strange thoughts in the mind. To find the explanation of this phenomenon, must we not suppose these palaces were occupied by a race less advanced in civilization than their first builders?" Two miles or more away from the great edifices here mentioned, toward the west, is the "Castle of Mitla." It was built on the summit of an isolated and precipitous hill of rock, which is accessible only on the east side. The whole leveled summit of this hill is inclosed by a solid wall of hewn stone twenty-one feet thick and eighteen feet high. This wall has salient and retiring angles, with curtains interposed. On the east side it is flanked by double walls. Within the inclosure are the remains of several small buildings. The field of these ruins was very large three hundred years ago. At that time it may have included this castle. In this part of Mexico Captain Dupaix examined a peculiar ruin, of which he gave the following account: "Near the road from the village of Tlalmanalco to that called Mecamecan, about three miles east of the latter.

There is an isolated granite rock, which was artificially formed into a kind of pyramid with six hewn steps facing the east. The summit of this structure is a platform, or horizontal plane, well adapted to observation of the stars on every side of the hemisphere. It is almost demonstrable that this very ancient monument was exclusively devoted to astronomical observations, for on the south side of the rock are sculptured several hieroglyphical figures having relation to astronomy. The most striking figure in the group is that of a man in profile, standing erect, and directing his view to the rising stars in the sky. He holds to his eye a tube or optical instrument. Below his feet is a frieze divided into six compartments, with as many celestial signs carved on its surface." It has been already stated that finelywrought "telescopic tubes" have been found among remains of the MoundBuilders. They were used, it seems, by the ancient people of Mexico and Central America, and they were known also in ancient Peru, where a silver figure of a man in the act of using such a tube has been discovered in one of the old tombs. RUINS FARTHER SOUTH. Old ruins, of which but little is known, exist in Guatemala, Honduras, San Salvador, and the more southern portion of Central America., who tells us more of them than any other explorer, says, "I heard of remains and monuments in Honduras and San Salvador equal to those of Copan in extent and interest." He mentions the ruins of Opico, near San Vincente, in San Salvador, which "cover nearly two square miles, and consist of vast terraces, ruins of edifices, circular and square towers, and subterranean galleries, all built of cut stones: a single carving has been found here on a block of stone." Remains of "immense works" exist in the district of Chontales, near the northern shore of Lake Nicaragua; and pottery found in Nicaragua "equals the best specimens of Mexico and Peru." Don Jose Antonio Urritia, curé of Jutiapa, gave the following account of a great ruin on a mountain in San Salvador, near the town of Comapa: it is called Cinaca-Mecallo: "The walls, or remains of the city wall, describe an oval figure, within which roads or streets may be traced, and there are various subterranean passages and many ruined edifices. The materials of construction are chiefly thin stones, or a species of slate, united by a kind of cement which in appearance resembles melted lead." It does not appear that he made a complete examination of the monuments, but he mentions three that gained his attention, and left upon his mind a very strong impression. "The first is a temple consecrated to the sun, chiefly excavated in the solid rock, and having its entrance toward the east. On the archway of the entrance are carved representations of the sun and moon. Hieroglyphics are found in the interior. Besides the sculptured bassi relievi, these stones bear hieroglyphics painted with a kind of red varnish which remains unimpaired. The second is a great stone slab covered with inscriptions or hieroglyphics. The third is the figure of a wild animal sculptured on a rock or stone, of "great size." THE RUINS IN YUCATAN. The remains of ancient cities are abundant in the settled portion of Yucatan, which lies north of the great forest. Charnay found "the country covered with them from north to south." Stephens states, in the Preface to his work on Yucatan, that he visited "forty-four ruined cities or places" in which such remains are still found, most of which were unknown to white men, even to those inhabiting the country; and he adds that "time and the elements are hastening them to utter destruction." Previous to the Spanish Conquest, the region known to us as Yucatan was called Maya. It is still called Maya by the natives among themselves, and this is the true name of the country. Why the Spaniards called it Yucatan is unknown, but the name is wholly arbitrary and without reason. It is said to have arisen from an odd mistake like that which occasioned the name given to one of the capes by Hernandez de Cordova. Being on the coast in he met some of the natives. Their cacique said to him, "Conèx cotoch," meaning "Come to our town." The Spaniard, supposing he had mentioned the name of the place, immediately named the projecting point of land "Cape Cotoche," and it is called so still. At that time the country was occupied by the people still known as Mayas. They all spoke the same language, which was one of a closely related family of tongues spoken in Guatemala, Chiapas, Western Honduras, and in some other districts of Central America and Mexico. Yucatan was then much more populous than at present. The people had more civilization, more regular industry, and more wealth. They were much more highly skilled in the arts of civilized life. They had cities and large towns; and dwelling-houses, built of timber and covered with thatch, like those common in England, were scattered over all the rural districts.

Some of the cities now found in ruins were then inhabited. This peninsula had been the seat of an important feudal monarchy, which arose probably after the Toltecs overthrew the very ancient kingdom of Xibalba. It was broken up by a rebellion of the feudal lords about a hundred years previous to the arrival of the Spaniards. According to the Maya chronicles, its downfall occurred in the year. Mayapan, the capital of this kingdom, was destroyed at that time, and never afterward inhabited. Merida, the present capital of Yucatan, was built on the site of an ancient Maya city called Tihoo. It is stated in the old Spanish accounts of Merida that it was built on that site because there was in the ruins an abundance of building material. There is mention of two “mounds” which furnished a vast amount of hewn stone. noticed in some of the edifices stones with “sculptured figures, from the ruins of ancient buildings;” and he mentions that a portion of an ancient building, including an arch in the Maya style, was retained in the construction of the Franciscan convent.We shall notice only some of the principal ruins in Yucatan, beginning with Mayapan, the ancient capital. The remains of this city are situated about ten leagues, in a southern direction, from Merida. They are spread over an extensive plain, and overgrown by trees and other vegetation. The most prominent object seen by the approaching explorer is a great mound, high and square at the base. It is an imposing structure, seen through the trees, and is itself overgrown like a wooded hill. shows one view of this. Four stairways, in a ruinous condition, wide, lead up to an esplanade within of the top, which is reached by a smaller stairway. The summit is a plain stone platform square. This, of course, was a temple. Sculptured stones are scattered around the base, and within the mound subterranean chambers have been discovered. It is probable that the principal edifices at Mayapan were not all built wholly of stone, for they have mostly disappeared. Only one remains, a circular stone building in diameter, which stands on a pyramidal foundation high. This is represented in. On the southwest side of it, on a terrace projecting from the mound, was a double row of columns without capitals, apart. There are indications that this city was old, and that the buildings had been more than once renewed. Brasseur de Bourbourg classes some of the foundations at Mayapan with the oldest seen at Palenque and Copan. This point, however, can not be determined with sufficient accuracy to remove all doubt. Mayapan may have stood upon the foundations of a very ancient city which was several times rebuilt, but the city destroyed in could not have been as old as either Palenque or Copan.UXMAL. The ruins of Uxmal have been regarded as the most important in Yucatan, partly on account of the edifices that remain standing, but chiefly because they have been more visited and explored than the others. It is supposed, and circumstantial evidence appears to warrant the supposition, that this city had not been wholly deserted at the time of the Spanish Conquest, although it had previously begun to be a ruin. It was wholly a ruin in .The area covered by its remains is extensive. Charnay makes it a league or more in diameter; but most of the structures have fallen, and exist now only in fragments scattered over the ground. It may be that many of them were not built wholly of hewn stone, and had not “Egyptian solidity” with their other characteristics. The most important of those remaining was named “Casa del Gobernador” by the Spaniards. It is long, and was built of hewn stone laid in mortar or cement. The faces of the walls are smooth up to the cornice. Then follows, on all the four sides, “one solid mass of rich, complicated, and elaborately sculptured ornaments, forming a sort of arabesque.” gives a view of the south end of this edifice, but no engraving can show all the details of the ornamentation.This building has eleven doorways in front, and one at each end, all having wooden lintels, which have fallen. The two principal rooms are long, and from wide. This structure is long and narrow The arrangement and number of the rooms are shown in the following ground plan of the building It stands on the summit of one of the grandest of the terraced foundations. This foundation, like all the others, is pyramidal. It has three terraces. The lowest is; the second is high; the third, high. Structures formerly existed on the second terrace, remains of which are visible. At the northwest corner one of them still shows its dilapidated walls, portions of them being sufficiently complete to show what they were. This edifice was long. It seems to have been finely finished in a style more simple than that of the great “casa” on the upper terrace. The figures of turtles sculptured along the upper edge of the cornice have given it the current designation, “House of the Turtles.”