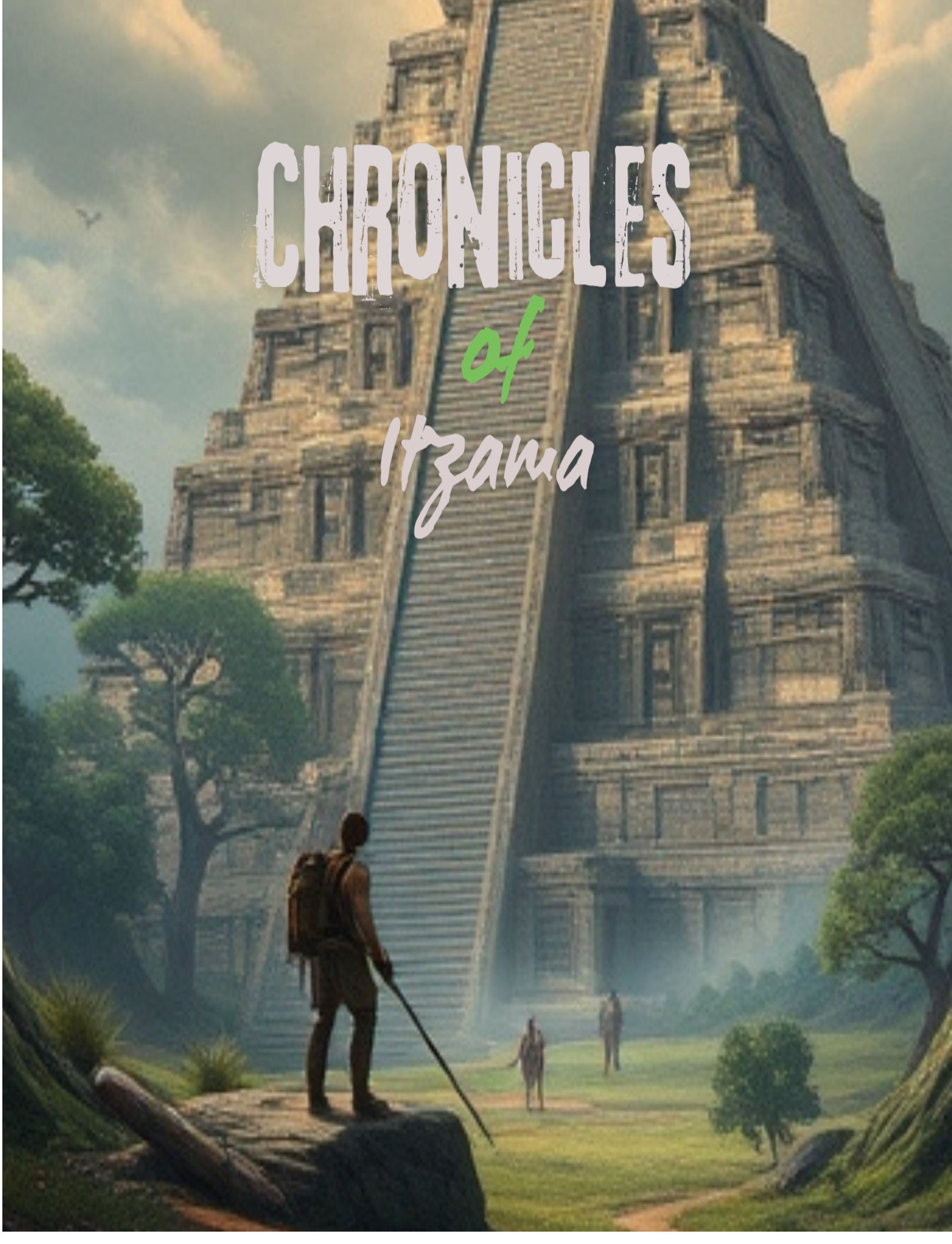
CHRONICLES
of
Itzama

Detail of an inscription from a Codex Manuscript Writing. An extensive and important manuscript work, written two hundred years ago by Francisco Ximenes, an ecclesiastic, is preserved in Guatemala. He, being drawn to inquiries concerning the antiquities and ancient history of the country, was able to get possession of several of the old books, one of them being that known as “Popol-Vuh.” His manuscript, arranged in four great volumes (one of which, it is said, has disappeared), contains valuable information in regard to the ancient history and traditions of Guatemala. One of the volumes has a copy of the “Popol-Vuh” in the native tongue, and another has a Spanish translation of the work. He left also a manuscript Dictionary of the principal Guatemalan dialects (which belong to the Maya family), entitled “Tesoro de las Lenguas Quiché, Cakchiquel, y Tzutohil.” Probably other manuscripts of the same character exist at Madrid and in Central America which are not yet known to those who can understand their importance. As already stated, none of the great books of annals have been discovered, but some of the old American manuscripts now preserved in several of the libraries and private collections of Europe are important. Three are specified as particularly valuable to students of American antiquity: that called the “Codex Chimalpopoca,” an old Toltec book, written in the Toltec language; one now entitled the “Codex Cakchiquel;” and the “Popol-Vuh.” The latter, written in the Quiché dialect, was translated into Spanish two hundred years ago by Ximenes, but his translation remained in Guatemala unprinted and quite unknown until it was discovered in our time. Brasseur de Bourbourg, who is master of the Quiché language, and to whom we are indebted for most that is known of the manuscripts of Ximenes, thought this Spanish translation very imperfect; therefore he has translated the work into French. The “Popol-Vuh” was written in as an abridged reproduction of a very ancient Quiché book which contained an account of the history, traditions, religion, and cosmogony of the Quichés. The first part of it is devoted to the cosmogony and traditional lore; the rest gives an account of the Quichés, who, at the time of the Conquest, were the dominant people in the Central American regions south of the great forest. If the history were consecutive and clear, it would not take us back into the past more than three or four centuries beyond, for the Quiché domination was probably not much older than that of the Aztecs. But the history is not clear. Putting aside the mythical and legendary portion of it which relates to origins and migrations, we can see that it extends over some fourteen generations, which may indicate that Quiché became an independent and ruling power about. For those who study the book it is full of interest. It shows us their conceptions of the Supreme Being and his relation to the world; it enables us to see what they admired in character as virtue, heroism, nobleness, and beauty; it discloses their mythology and their notions of religious worship; in a word, it bears witness to the fact that the various families of mankind are all of “one blood,” so far, at least, as to be precisely alike in nature. The cosmogony and mythical lore of the Quichés seem to have their root in the beliefs and facts of a time far more ancient than the national beginning of this people. In assuming the form in which we find them, they must have passed through several phases of growth, which changed their appearance and obscured their meaning. Manifestly the history of the country did not begin with the Quichés. The account of the creation, with every thing else in this cosmogony and mythology, is original, like the civilization to which they belong. According to the “Popol-Vuh,” the world had a beginning. There was a time when it did not exist. Only “Heaven” existed, below which all space was an empty, silent, unchanging solitude. Nothing existed there, neither man, nor animal, nor earth, nor tree. Then appeared a vast expanse of water on which divine beings moved in brightness. “They said ‘earth!’ and instantly the earth was created. It came into being like a vapor; mountains rose above the waters like lobsters and were made. Thus was the earth created by the Heart of Heaven.” Next came the creation of animals; but the gods were disappointed because the animals could neither tell their names nor worship the Heart of Heaven. Therefore it was resolved that man should be created. First, man was made of earth, but his flesh had no cohesion; he was inert, could not turn his head, and had no mind, although he could speak; therefore he was consumed in the water. Next, men were made of wood, and these multiplied, but they had neither heart nor intellect, and could not worship, and so they withered up and disappeared in the waters. A third attempt followed: man was made of a tree called tzité, and woman of the pith of a reed; but these failed to think, speak, or worship, and were destroyed.

All save a remnant which still exists as a race of small monkeys found in forests. A fourth attempt to create the human race was successful, but the circumstances attending this creation are veiled in mystery. It took place before the beginning of dawn, when neither sun nor moon had risen, and was a wonderwork of the Heart of Heaven. Four men were created, and they could reason, speak, and see in such a manner as to know all things at once. They worshiped the Creator with thanks for existence, but the gods, dismayed and scared, breathed clouds on their eyes to limit their vision, and cause them to be men and not gods. Afterward, while the four men were asleep, the gods made for them beautiful wives, and from these came all the tribes and families of the earth. No account of the rescued fragments of this old literature of Ancient America should omit giving due credit to Chevalier Boturini, the Milanese, who went from Italy to America in as an agent of the Countess Santibañey, who claimed to be a descendant of Montezuma. He, too, was a devotee, and believed that preached the Gospel in America; but he had antiquarian tastes, and was sufficiently intelligent to understand the importance of the old manuscripts which had furnished so much fuel for the bonfires of fanaticism. During the eight years of his residence in Mexico and Central America he hunted diligently for those still in existence, and made a considerable collection, including in it some of the Mexican "picture writings." But when about to leave, he was despoiled of his treasure and flung into prison by the Spanish viceroy. He finally left the country with a portion of them, but was captured by an English cruiser and again despoiled. The manuscripts left in Mexico were finally sold at auction while Humboldt was there; he secured a portion of them. Another portion was brought to France about, who made important additions to it. himself spent years searching for remains of the old writings, and he has now, it is supposed, the most valuable collection in Europe. It is likely that most of the recovered books may be translated by those who can bring to the work habits of patient study and a thorough knowledge of the native dialects. Dictionaries of these dialects, as they were spoken at the time of the Conquest, were prepared by some of the Spanish priests, and other facilities are not wanting. It is surprising, however, that no one has translated the "Codex Chimalpopoca" (which seems the most important) if the language in which it is written is in fact sufficiently modern to be managed as easily as that of "Popol Vuh." It must be translatable, for its general tenor is known, and passages of it are quoted. Brasseur de Bourbourg states that he has undertaken a translation. But who will translate the inscriptions at Copan and Palenque? Is the language in which they were written an old form of speech, from which the dialects of the Maya family, or a portion of them, were derived? They have not been translated. No one has found a clew to their meaning. The characters are understood, but they appear to show an older form of the language, which at present can not be deciphered. Brasseur de Bourbourg's "Rosetta Stone," discovered in Landa's manuscript, will not serve him here. Another more potent must be found before these old inscriptions can be made to give up their secrets.197-* THE ANCIENT HISTORY SKETCHED. It is impossible to know what was contained in the books of annals written by the official chroniclers of these ancient American countries, for these books are lost. They existed at the time of the Conquest; some of them were seen and described by Las Casas; but, so far as is known, not one of these books of regular annals, such as he described, has escaped destruction; therefore it is impossible to know any thing certainly of their character as histories. The books preserved furnish little more than vague outlines of the past, with obscure views of distinct periods in the history, created by successive dominations of different peoples or different branches of the same people. What they enable us to know of the old history resembles what is known of the early times of the Greeks, who had no ancient histories excepting such as were furnished by their "poets of the cycle." In one case we are told of Pelasgians, Leleges, Cadmeans, Argives, and Eolians very much as in the other we are told of Colhuas, Chichimecs, Quinames, and Nahuas. But the outline is not wholly dark; it does not exclude the possibility of a reasonable attempt at hypothesis. When Cortez entered Mexico, the Aztecs, Montezuma's people, had been in power more than two centuries. Most of the ancient history, of which something is said in these books, relates to ages previous to their time, and chiefly to their predecessors, the Toltecs. According to these writings, the country where the ruins are found was occupied in successive periods by three distinct peoples.

The Chichimecs, the Colhuas, and the Toltecs or Nahuas. The Toltecs are said to have come into the country about a thousand years before the Christian era. Their supremacy appears to have ceased, and left the country broken up into small states, two or three centuries before the Aztecs appeared. They were preceded by the Colhuas, by whom this old civilization was originated and developed. The most ancient people, those found in the country by the Colhuas, are called Chichimecs. They are described as a barbarous people who lived by hunting and fishing, and had neither towns nor agriculture. This term Chichimecs appears to have been a generic appellation for all uncivilized aborigines. Brasseur de Bourbourg says, "Under the generic name Chichimecs, which has much embarrassed some writers, the Mexican traditions include the whole aboriginal population of the New World, and especially the people by whom it was first occupied at the beginning of time." Some of the traditions state that the Colhuas came from the east in ships. Sahagun mentions that a tradition to this effect was current in Yucatan. The precise value of these traditional reports is uncertain; but, if accepted as vague historical recollections, they could be explained by supposing the civilized people called Colhuas came from South America through the Caribbean Sea, and landed in Yucatan and Tabasco. They are uniformly described as the people who first established civilization and built great cities. They taught the Chichimecs to cook their food, cultivate the earth, and adopt the ways of civilized life; and the Chichimecs civilized by their influence are sometimes called Quinames. The Colhuas are connected with vague references to a long and important period in the history previous to the Toltec ages. They seem to have been, in some respects, more advanced in civilization than the Toltecs. What is said of events in their history relates chiefly to their great city called Xibalba, the capital of an important kingdom to which this name was given. The Toltecs, in alliance with the uncivilized Chichimecs of the mountains, subjugated this city and kingdom, and thus brought to a close the period which may be termed Colhuan. This kingdom appears to have included Guatemala, Yucatan, Tabasco, Tehuantepec, Chiapa, Honduras, and other districts in Central America; and it may have included all Southern Mexico, for places north of the Tampico River are mentioned as being within its limits when the Toltecs came into the country. Some of the principal seats of the Colhuan civilization were in the region now covered by the great forest. Some investigators have sought to identify the city of Xibalba with the ruined city known to us as Palenque. Brasseur de Bourbourg says: "Palenque appears to have been the same city to which the books give the name of Xibalba;" but this is nothing but conjecture. We may as reasonably suppose Copan, Quirigua, or some other old ruin, to have been Xibalba. Those who attempt to believe this old American civilization was brought across the Atlantic by the Phœnicians in very remote times, assume, against the plain testimony of the monuments, that the Colhuas came to America from some country on the Mediterranean. They may have come from some other part of this continent. In my judgment, it is not improbable that they came by sea from South America. Brasseur de Bourbourg would say they were people of the Atlantic race, who, having escaped destruction by the cataclysm, found their way to Yucatan and Tabasco. But there is little beside conjecture to support any theory of their origin. We have only the fact that, according to the old books and traditions of the country, they occupied that region at a remote period, and originated the civilization whose monuments are found there. Tradition places their first settlements on the Gulf coast in Tabasco, between Tehuantepec and Yucatan. It is inferred that the Mayas, Tzendals, Quichés, and some other communities of the old race, were descendants of the Colhuas, their speech being more highly developed than that of any native community not connected with this family, and their written characters having a close resemblance to those of the oldest inscriptions. THE TOLTECS OUR MOUND-BUILDERS. As the remains of the Mound-Builders show clearly that they had commercial intercourse with the Mexican and Central American countries, and as it seems probable that they had otherwise a very close relation to the people of those countries, it would be surprising to find no mention of their country in the old books and traditions of the Central Americans and Mexicans. If we could have the lost books, especially those of the more ancient time, and learn to read them, it might be possible to know something of the origin and history of the MoundBuilders. It is believed that distinct reference to their country has been found in the books still in existence, and there appears to be reason for this belief. Brasseur de Bourbourg, one of the few investigators who have explored them, says: "Previous to the history of the Toltec domination in Mexico, we notice in the annals of the country two facts of great importance.

But equally obscure in their details: first, the tradition concerning the landing of a foreign race, conducted by an illustrious personage, who came from an eastern country; and, second, the existence of an ancient empire known as Huehue-Tlapalan, from which the Toltecs or Nahuas came to Mexico, in consequence of a revolution or invasion, and from which they had a long and toilsome migration to the Aztec plateau." He believes that Huehue-Tlapalan was the country of the Mound-Builders in the Mississippi and Ohio Valleys. According to the native books he has examined, it was somewhere at a distance in the northeast; and it is constantly said that some of the Toltecs came by land and some by sea. Sahagun learned from the old books and traditions, and stated in the introduction to the first book of his history, that the Toltecs came from that distant northeastern country; and he mentions a company that came by sea, settled near the Tampico River, and built a town called Panuco. Brasseur de Bourbourg finds that an account of this or another company was preserved at Xilanco, an ancient city situated on the point of an island between Lake Terminos and the sea, and famous for its commerce, wealth, and intelligence. The company described in this account came from the northeast in the same way, it is said, to the Tampico River, and landed at Panuco. It consisted of twenty chiefs and a numerous company of people. Torquemada found a record which describes them as people of fine appearance. They went forward into the country and were well received. He says they were industrious, orderly, and intelligent, and that they worked metals, and were skillful artists and lapidaries. All the accounts say the Toltecs came at different times, by land and sea, mostly in small companies, and always from the northeast. This can be explained only by supposing they came by sea from the mouth of the Mississippi River or from the Gulf coast near it, and by land through Texas. But the country from which they came was invariably HuehueTlapalan. Cabrera says Huehue-Tlapalan was the ancient country of the Toltecs. Its simple name was Tlapalan, but they called it Huehue, old, to distinguish it from three other Tlapalans which they founded in the districts of their new kingdom. Torquemada says the same. We are not authorized to reject a fact so distinctly stated and so constantly reported in the old books. The most we can do against it with any show of reason is to receive it with doubt. Therefore it seems not improbable that the "Old Tlapalan" of Central American tradition was the country of our Mound-Builders. Another circumstance mentioned is not without significance. It is said, in connection with this account of the Toltec migration, that Huehue-Tlapalan was successfully invaded by Chichimecs, meaning barbarous aboriginal tribes, who were united under one great leader. Here is one statement (a little condensed) touching this point: "There was a terrible struggle, but, after about thirteen years, the Toltecs, no longer able to resist successfully, were obliged to abandon their country to escape complete subjugation. Two chiefs guided the march of the emigrating nation. At length they reached a region near the sea named 'TlapalanConco,' where they remained several years. But they finally undertook another migration and reached Mexico, where they built a town called 'Tollanzinco,' and later the city of Tullan, which became the seat of their government." This is substantially what is told of the defeat and migrations of the Toltecs. The history of Ixtlilxochitl adds doubtful modifications and particulars not found in the "Codex Chimalpopoca." (See Quatre Lettres, etc.) This Chichimec invasion of Huehue-Tlapalan is placed at a period which, in the chronology of the native books, was long previous to the Christian era, and is mentioned to explain the beginning of the Toltec movement toward Mexico; but the account of it is obscure. To find a system of chronology in these old books is not surprising when we consider that even the Aztecs of Montezuma's time knew enough of astronomy to have a correct measure of the year. The Aztecs adopted the methods of astronomy and chronology which were used by their predecessors. They divided the year into eighteen months of twenty days each; but, as this gave the year only three hundred and sixty days, five supplementary days were added to each year, and a sixth day to every fourth year. The bissextile is known to have been used by the Mayas, Tzendals, and Quichés, and it was probably common. We can not reasonably refuse to give some attention to their chronology, even while doubting its value as a means of fixing dates and measuring historical periods. Its method was to count by equal periods of years, as we count by centuries, and their chronology presents a series of periods which carries back their history to a very remote time in the past. Brasseur de Bourbourg says: "In the histories written in the Nahuatl language, the oldest certain date is nine hundred and fifty-five years before Christ."This, he means, is the oldest date in the history of the Nahuas or Toltecs which has been accurately determined.

The calculation by which it is found is quoted from the later portion of the "Codex Chimalpopoca" as follows: "Six times years plus years" previous to the year. This is given as the date of a division of the land by the Nahuas. The division was made years previous to .If this date could be accepted as authentic, it would follow that the Nahuas or Toltecs left Huehue-Tlapalan more than a thousand years previous to the Christian era, for they dwelt a long time in the country of Xibalba as peaceable settlers before they organized the civil war which raised them to power. SOME CONFIRMATION OF THIS HISTORY. That the ancient history of the country was something like what is reported in the old writings seems not improbable when we consider the condition in which the native population was found three hundred and fifty years ago. This shows that Mexico and Central America had been subjected to disrupting political changes caused by violent transfers of supreme influence from one people to another several times in the course of a long history. Such a history is indicated by the monuments, and its traces were noticeable in peculiarities of the native inhabitants of the various districts at the time of the Spanish Conquest. They are still manifest to travelers who study the existing representatives of the old race and the old dialects sufficiently to find them. There were several distinct families or groups of language, and, in many cases, the people represented by each family of dialects were in a state of separation or disruption. To a considerable extent they existed in fragmentary communities, sometimes widely separated. The most important group of related dialects was that which included the speech of the Mayas, Quichés, and Tzendals, which, it is supposed, represented the language of the original civilizers, the Colhuas. Dialects of this family are found on both sides of the great forest. There were other dialects supposed to indicate Toltec communities; and there were communities south of Mexico, in Nicaragua, and even farther south, which used the Aztec speech. Very likely all these differing groups of language came originally from the same source, and really represent a single race, but comparative philology has not yet reported on them. Mention is made of another people, called Waiknas or Caribs, and conjecture sees in them remains of the aboriginal barbarians termed Chichimecs. They dwelt chiefly in the "dense, dank forests" found growing on the low alluvion of the Atlantic coast. So far as is known, their speech had no affinity with that of any other native community. People of this race constitute a chief element in the mixed population of the "Mosquito Coast," known as Moscos. In Yucatan the old inhabitants were Mayas, and people using dialects related to theirs were numerous in Tabasco, Chiapa, Guatemala, and the neighboring districts, while all around the country were scattered communities supposed to be of Toltec origin, as their speech could not be classed with these dialects nor with that of the Aztecs. The most reasonable explanation of this condition of the people is that furnished by the old chronicles and traditions. The country must have been occupied, during successive periods, by different peoples, who are represented by these broken communities and unlike groups of language. When all the native writings still in existence shall have been translated, and especially when the multitude of inscriptions found in the ruins shall have been deciphered, we may be able to see in a clearer light the ruins, the people, and their history. THE AZTEC CIVILIZATION. IF a clever gleaner of the curious and notable things in literature should write on the curiosities of historical speculation, he would be sure to take some account of "A New History of the Conquest of Mexico" published in Philadelphia. The special aim of this work is to deny utterly the civilization of the Aztecs. The author has ability, earnestness, and knowledge of what has been written on the subject; he writes with vigor, and with a charming extravagance of dogmatic assumption, which must be liked for its heartiness, while it fails to convince those who study it. This writer fully admits the significance of the old ruins, and maintains that a great civilization formerly existed in that part of the continent. This he ascribes to the Phœnicians, while he gives it an extreme antiquity, and thinks the present ruins have existed as ruins "for thousands of years," explaining these words to mean that their history "is separated by a cycle of thousands of years from the civilization of our day." In his view, the people who constructed the old cities were subjugated and destroyed, long ages since, "by inroads of northern savages," who were the only people in the country when the Spaniards arrived. The chief business of this "New History" is to set forth these views. Under the treatment of its author, Montezuma becomes a rude Indian sachem, his kingdom a confederation of barbarous Indian tribes like that of the Iroquois, the city of Mexico a cluster of mud huts or wigwams in an everglade.

Its causeways rude Indian footpaths, its temples and palaces pure fictions of lying Spanish romance, and all previous histories of the Aztecs and their country extravagant inventions with a “Moorish coloring.” He would have us believe that what he calls “the pretended civilization of Montezuma and his Aztecs” was a monstrous fable of the Spaniards, a “pure fabrication,” encouraged by the civil authority in Spain, and supported by the censorship of the Inquisition. Therefore he undertakes to destroy “the fabric of lies,” unveil those “Mexican savages” the Aztecs, and tell a “new” story of their actual character and condition. Of course, views so preposterous do not find much favor. If the Mexicans had been nothing more than this, the experience of Cortez among them would have been like that of De Soto in his long and disastrous march through Florida, the Gulf regions, and the country on the lower Mississippi. Cortez and his men had a different fortune, because their march was among people who had towns, cities, settled communities, and the appliances and accumulations of civilized life. Doubtless some of the Spaniards exaggerated and romanced for effect in Spain, but they did not invent either the city of Mexico or the kingdom of Montezuma. We can see clearly that the Mexicans were a civilized people, that Montezuma’s city of Mexico was larger than the present city, and that an important empire was substantially conquered when that city was finally subjugated and destroyed. That the ancient city of Mexico was a great city, well built partly of timber and partly of cut stone laid in a mortar of lime, appears in all that is said of the siege, and of the dealings of Cortez with its people and their rulers. Montezuma, wishing to remove false notions of the Spaniards concerning his wealth, said to Cortez during their first interview, “The Tlascalans, I know, have told you that I am like a god, and that all about me is gold, silver, and precious stones; but you now see that I am mere flesh and blood, and that my houses are built of lime, stone, and timber.” Lime, stone, and timber! This was the poorest view of the old city of Mexico that could be given to those who saw it. It is not easy to understand how a denial of the Aztec civilization was possible. THE DISCOVERY AND INVASION. The first inhabitants of that part of the continent seen by Spaniards were Mayas from Yucatan. Columbus met them in at an island near Ruatan, off the coast of Honduras. While he was stopping at this island, these Mayas came there “in a vessel of considerable size” from a port in Yucatan, thirty leagues distant. It was a trading vessel, freighted with a variety of merchandise, and it used sails. Its cargo consisted of a variety of textile fabrics of divers colors, wearing apparel, arms, household furniture, and cacao, and the crew numbered twenty men. Columbus, who treated them very kindly, described these strangers as well clothed, intelligent, and altogether superior to any other people he had discovered in America. Adventurers hunting for prey soon began to make voyages in that direction and report what they saw. Sailing along the coast of Yucatan, they discovered cities, and “the grandeur of the buildings filled them with astonishment.” On the main land and on one or two islands they saw great edifices built of stone. The seeming riches and other attractions of the country led the Spaniards to invade Yucatan, but they were defeated and driven off. At this time they gained considerable knowledge of Mexico, and persuaded themselves that immense wealth could be found there. Finally, in March, , Cortez landed near the place where Vera Cruz was afterward built, and moved on through the country toward the city of Mexico. Studying, in all the histories of the Conquest, only their incidental references to the civilized condition of the people, we can see plainly what it was. As the invaders approached Tlascala, they found “beautiful whitewashed houses” scattered over the country. The Tlascalans had towns, cities, agriculture, and markets. Cortez found among them all that was needed by his troops. His supremacy in Tlascala was easily established; and it was not difficult to induce the people to aid him cordially in his operations against Mexico, for they hated the Aztecs, by whom they had recently been subjugated. In a description of their capital, he stated that it was as large as the city of Granada, in Spain. He went next to Cholulu, where, near the great mound, was an important city, in which they saw a “great plaza.” Bernal Diaz said of this city, “I well remember, when we first entered this town and looked up to the elevated white temples, how the whole place put us completely in mind of Valladolid.” The “white temples” were “elevated” because they stood on high pyramidal foundations, just as they are seen in the old ruins. It is probable, however, that these were built of adobe bricks or of timber. The city very likely was much older than the Aztec empire.

A Spanish officer named Ordaz ascended Mount Popocatapetl, and one thing he saw was “the Valley of Mexico, with its city, its lagunas and islands, and its scattered hamlets, a busy throng of life being every where visible.” THE CITY OF MEXICO. At the city of Mexico Cortez had a great reception, negotiation having established the form of friendly relations between him and Montezuma. Quarters were provided in the city for the Spanish portion of his army, a vast edifice being set apart for their use which furnished ample accommodations for the whole force. The place could be entered only by causeways. They marched on a wide avenue which led through the heart of the city, beholding the size, architecture, and beauty of the Aztec capital with astonishment. This avenue was lined with some of the finest houses, built of a porous red stone dug from quarries in the neighborhood. The people gathered in crowds on the streets, on the flat roofs, in the doorways, and at the windows to witness the arrival of the Spaniards. Most of the streets were narrow, and had houses of a much less imposing character. The great streets went over numerous canals, on well-built bridges. Montezuma’s palace was a low, irregular pile of stone structures extending over a large space of ground. Among the teocallis of the Aztec capital the “great temple” stood foremost. It was situated in the centre of a vast inclosure, which was surrounded by a heavy wall eight feet high, built of prepared stone. This inclosure was entered by four gateways opening on the four principal streets of the city. The “temple” was a solid structure built of earth and pebbles, and faced from top to bottom with hewn stone laid in mortar. It had five stages, each receding so as to be smaller than that below it. In general outline it was a rectangular pyramid three hundred feet square at the base, with a level summit of considerable extent, on which were two towers, and two altars where “perpetual fires” were maintained. Here the religious ceremonies were conducted. The ascent was by a circular flight of steps on the outside which went four times around the structure. The water in the lagoons being salt, the city was supplied with water by means of an aqueduct which extended to Chapultepec. Such substantially is the account given of the old city of Mexico and its great temple by every writer who saw them before the Conquest, and all the struggles which took place for possession of this capital had a character that would have been impossible any where save in a large city. In every account of the attacks on the great temple, we can see that it was a great temple; and we may perceive what the old city was by reading any account of the desperate and bloody battles in which the Spaniards were driven from it, after standing a ten days’siege in the great stone building they occupied. THE CONQUEST. This battle took place in the latter part of June , several months after the friendly reception, and was occasioned by the treacherous and most atrocious proceedings of the Spaniards, which drove the Mexicans to madness. Nearly a year passed before Cortez made another attack on the Mexican capital. During this time he found means among the Tlascalans to build a flotilla of thirteen vessels, which were transported in pieces to Lake Tezcuco and there put together. This would have been impossible if he had not found in the country suitable tools and mechanics. By means of these vessels armed with cannon, and assisted by a great army of native allies consisting of Tlascalans, Cholulans, and many others, he took control of the lagunas, secured possession of the causeways, and attacked the city in vain for forty-five days, although his men several times penetrated to the great square. He now resolved to enter by gradual advances, and destroy every thing as he went. This he did, burning what was combustible, and tearing down most of the edifices built of stone; nevertheless, thirty or forty days more passed before this work of destruction was complete. The inhabitants of the city were given over to extermination. The conquerors proceeded immediately to rebuild the city, native architects chiefly being employed to do the work. Materials for the rebuilding were taken from the ruins; probably many of the old Aztec foundations were retained, and there may now be edifices in the city of Mexico which stand on some of these foundations. Twelve acres of the great inclosure of the Aztec temple were taken for a Spanish plaza, and are still used for this purpose, while the site of the temple is occupied by a cathedral. The plaza is paved with marble. Like the rest of the great inclosure, it was paved when the Spaniards first saw it, and the paving was so perfect and so smooth that their horses were liable to slip and fall when they attempted to ride over it. Some relics recovered from ruins of the old temple have been preserved.

Among them is the great Aztec calendar which belonged to it, on which are carved hieroglyphics representing the months of the year. This calendar was found in buried in the great square. It was carved from a mass of porous basalt, and made eleven feet eight inches in diameter. It was a fixture of the Aztec temple; it is now walled into one side of the cathedral. The “stone of sacrifice,” another relic of the temple, nine feet in diameter, and covered with sculptured hieroglyphics, can still be seen in the city, and in the suburbs, it is said, vestiges of the ruins of long lines of edifices can be traced. Calendars made of gold and silver were common in Mexico. Before Cortez reached the capital, Montezuma sent him two “as large as cartwheels,” one representing the sun, the other the moon, both “richly carved.” During the sack of the city a calendar of gold was found by a soldier in a pond of Guatemozin’s garden. But these Spaniards did not go to Mexico to study Aztec astronomy, nor to collect curiosities. In their hands every article of gold was speedily transformed into coin. In every Spanish description of the city we can see its resemblance to cities whose ruins are found farther south. If the Spaniards had invented the temple, they would not have made it unlike any thing they had ever before seen or heard of, by placing its altar on the summit of a high pyramid. This method of constructing temples is seen in the old ruins, but it was unknown to Cortez and his men until they found it in Mexico. The only reasonable or possible explanation of what they said of it is, that the temple actually existed at the Aztec capital, and that the Spaniards, being there, described what they saw. The uniform testimony of all who saw the country at that time shows that the edifices of towns and cities, wherever they went, were most commonly built of cut stone laid in mortar, or of timber, and that in the more rural districts thatch was frequently used for the roofs of dwellings. Moreover, we are told repeatedly that the Spaniards employed “Mexican masons,” and found them “very expert” in the arts of building and plastering. There is no good reason to doubt that the civilized condition of the country, when the Spaniards found it, was superior to what it has been at any time since the Conquest. WHO WERE THE AZTECS? The Mexicans, or Aztecs, subjugated by Cortez, were themselves invaders, whose extended dominion was probably less than two hundred and fifty years old, although they had been much longer in the Valley of Mexico. There were important portions of the country, especially at the south, to which their rule had not been extended. In several districts besides those of the Mayas and the Quichés the natives still maintained independent governments. The Aztec conquest of the central region, between the Gulf of Mexico and the Pacific, was completed only a few years previous to the arrival of the Spaniards, and the conquest of this region had not been fully secured at some points, as appeared in the readiness of the Tlascalans and others to act in alliance with Cortez. But the Aztecs did not come from abroad. They belonged in the country, and seem to have been originally an obscure and somewhat rude branch of the native race. It is very probable that the Colhuas and Nahuas or Toltecs of the old books and traditions, together with the Aztecs, were all substantially the same people. They established in the country three distinct family groups of language, it is said, but the actual significance of this difference in speech has not been clearly determined. These unlike groups of language have not been sufficiently analyzed and studied to justify us in assuming that they did not all come from the same original source, or that there is a more radical difference between them than between the Sclavonic, Teutonic, and Scandinavian groups in Europe. These ancient Americans were distinct from each other at the time of the Conquest, but not so distinct as to show much difference in their religious ideas, their mythology, their ceremonies of worship, their methods of building, or in the general character of their civilization. If the Toltecs and our Mound-Builders were the same people, they probably went from Mexico and Central America to the Valley of the Mississippi at a very remote period, as Colhuan colonies, and after a long residence there returned so much changed in speech and in other respects as to seem a distinct people. The Aztecs appear to have dwelt obscurely in the south before they rose to power. They must have been at first much less advanced in civilization than their predecessors, but ready to adopt the superior knowledge and methods of the country they invaded. THEY CAME FROM THE SOUTH. It has sometimes been assumed that the Aztecs came to Mexico from the north, but there is nothing to warrant this assumption, nothing to make it probable.

Nothing even to explain the fact that some persons have entertained it. People of the ancient Mexican and Central American race are not found farther north than New Mexico and Arizona, where they are known as Pueblos, or Village Indians. In the old times that was a frontier region, and the Pueblos seem to represent ancient settlers who went there from the south. There was the border line between the Mexican race and the wild Indians, and the distinction between the Pueblos and the savage tribes is every way so uniform and so great that it is well-nigh impossible to believe they all belong to the same race. In fact, no people really like our wild Indians of North America have ever been found in Mexico, Central America, or South America. Investigation has made it probable that the Mexicans or Aztecs went to the Valley of Mexico from the south. says: "The hypothesis of a migration from Nicaragua and Cuscutlan to Anahuac is altogether more consonant with probabilities and with tradition than that which derives the Mexicans from the north; and it is a significant fact, that in the map of their migrations presented by Gemelli, the place of the origin of the Aztecs is designated by the sign of water (atl standing for Aztlan), a pyramidal temple with grades, and near these a palm-tree." Humboldt thought this indicated a southern origin. Communities of Aztecs still exist as far south as Nicaragua and Costa Rica, with some variations in their speech, but not so great, probably, as to make them unintelligible to each other. The Spanish historian, Oviedo, called attention to the fact that an isolated community of Aztecs was found occupying the territory between Lake Nicaragua and the Pacific. They were called Niquirans, and seems to have verified this fact. The result of his investigation is that the people of the district specified are Aztecs, and that, "from the comparative lateness of the separation or some other cause," their distinguishing features were easily recognized, their speech being nearly identical with the native speech heard in the Valley of Mexico. Oviedo said of them: "The Niquirans who speak the Mexican language have the same manners and appearance as the people of New Spain (Mexico)." In the neighboring districts, communities closely related to the Mayas are found, and others that appear to belong to the Toltec family. Aztecs are found still farther south, and there appear to be conclusive reasons for believing that Montezuma's people went from the south to Anahuac or Mexico. According to the native histories as reported by Clavigero, the Aztecs began their migration northward from Aztlan about the year, and founded the more important of their first settlements in the Valley of Mexico about the year , a little over three hundred years previous to the Spanish invasion. Another result of investigation adds a century to this estimate. This result is reached as follows: the Mexicans stated constantly that their calendar was reformed some time after they left Aztlan, and that in the year eight cycles of fifty-two years each and thirteen years of a ninth cycle had passed since that reform was made. This carries back the beginning of their migration considerably beyond the year 1090 A.D. Their sway seems to have been confined for a long time to Anahuac. They grew to supremacy in part probably by the arrival of new immigrants, but chiefly by conquest of the small states into which the country was divided. They could learn from their more cultivated neighbors to reform their calendar, compute time with greater accuracy, and make important improvements in other respects. They must also have modified their religious system to some extent, for it does not appear that they had adopted the worship of Kukulcan (whose name they transformed into Quetzalcohuatl) before they came to Mexico. But they brought with them an effective political organization, and very likely they were better fitted than most of their new neighbors for the rude work of war. Before the city of Mexico was built, the seat of their government was at Tezcuco. The character of their civilization after they rose to pre-eminence was shown in their organization, in their skill as builders, in the varied forms of their industry, and in the development of their religious ceremonies. It is manifest that they adopted all the astronomical knowledge and appliances found in the neighboring states which they subjugated. Their measure of the solar year and their numbering of the months were precisely like what had long existed in this part of the country; and they had the same astronomical implements or contrivances. One of these contrivances, found at Chapultepec, is described as follows: "On the horizontal plane of a large, carefully-worked stone, three arrows were cut in relief, so that the shaft ends came together and made equal angles in the centre. The points were directed eastward, the two outside showing the two solstitial points, and that in the centre the equinoctial. A line on the carved band holding them together was in range with holes in two stones which stood exactly north and south.

A cord drawn tightly through the holes in these two stones would, at the moment of noon, cast its shadow on the line drawn across the band. It was a perfect instrument for ascertaining east and west with precision, and for determining the exact time by the rising and setting of the sun at the equinoxes and solstices. This stone has now been broken up and used to construct a furnace." These Aztecs were manifestly something very different from "Mexican savages." At the same time, they were less advanced in many things than their predecessors. Their skill in architecture and architectural ornamentation did not enable them to build such cities as Mitla and Palenque, and their "picture writing" was a much ruder form of the graphic art than the phonetic system of the Mayas and Quichés. It does not appear that they ever went so far in literary improvement as to adopt this simpler and more complete system for any purpose whatever. If the country had never, in the previous ages, felt the influence of a higher culture than that of the Aztecs, it would not have now, and never could have had, ruined cities like Mitla, Copan, and Palenque. Not only was the system of writing shown by the countless inscriptions quite beyond the attainments of Aztec art, but also the abundant sculptures and the whole system of decoration found in the old ruins. ANCIENT PERU. THE ruins of Ancient Peru are found chiefly on the elevated table-lands of the Andes, between Quito and Lake Titicaca; but they can be traced five hundred miles farther south, to Chili, and throughout the region connecting these high plateaus with the Pacific coast. The great district to which they belong extends north and south about two thousand miles. When the marauding Spaniards arrived in the country, this whole region was the seat of a populous and prosperous empire, complete in its civil organization, supported by an efficient system of industry, and presenting a very notable development of some of the more important arts of civilized life. These ruins differ from those in Mexico and Central America. No inscriptions are found in Peru; there is no longer a "marvelous abundance of decorations;" nothing is seen like the monoliths of Copan or the bas-reliefs of Palenque. The method of building is different; the Peruvian temples were not high truncated pyramids, and the great edifices were not erected on pyramidal foundations. The Peruvian ruins show us remains of cities, temples, palaces, other edifices of various kinds, fortresses, aqueducts (one of them four hundred and fifty miles long), great roads (extending through the whole length of the empire), and terraces on the sides of mountains. For all these constructions the builders used cut stone laid in mortar or cement, and their work was done admirably, but it is every where seen that the masonry, although sometimes ornamented, was generally plain in style and always massive. The antiquities in this region have not been as much explored and described as those north of the isthmus, but their general character is known, and particular descriptions of some of them have been published. THE SPANISH HUNT FOR PERU. The Spanish conquest of Peru furnishes one of the most remarkable chapters in the history of audacious villainy. It was the work of successful buccaneers as unscrupulous as any crew of pirates that ever robbed and murdered on the ocean. After their settlements began on the islands and the Atlantic coast, rumors came to them of a wonderful country somewhere at a distance in the west. They knew nothing of another ocean between them and the Indies; the western side of the continent was a veiled land of mystery, but the rumors, constantly repeated, assured them that there was a country in that unknown region where gold was more abundant than iron among themselves. Their strongest passions were moved; greed for the precious metals and thirst for adventures. Balboa was hunting for Peru when he discovered the Pacific, about He was guided across the isthmus by a young native chief, who told him of that ocean, saying it was the best way to the country where all the common household utensils were made of gold. At the Bay of Panama Balboa heard more of Peru, and went down the coast to find it, but did not go south much beyond the eighth degree of north latitude. In his company of adventurers at this time was Francisco Pizarro, by whom Peru was found, subjugated, robbed, and ruined, some fifteen or twenty years later. Balboa was superseded by Pedrarias, another greedy adventurer, whose jealousy arrested his operations and finally put him to death. The town of Panama was founded in by this Pedrarias, chiefly as a point on the Pacific from which he could seek and attack Peru. Under his direction, in the search was attempted by Pascual de Andagoya, but he failed to get down the coast beyond the limit of Balboa's exploration. Meanwhile clearer and more abundant reports of the rich and marvelous nation to be found somewhere below that point were circulated among the Spaniards.

And their eagerness to reach it became intense. In three men could have been seen in Panama busily engaged preparing another expedition to go in search of the golden country. These were Francisco Pizarro, a bold and capable adventurer, who could neither read nor write; Diego de Almagro, an impulsive, passionate, reckless soldier of fortune, and Hernando de Luque, a Spanish ecclesiastic, Vicar of Panama, and a man well acquainted with the world and skilled in reading character, acting at this time, it is said, for another person who kept out of view. They had formed an alliance to discover and rob Peru. Luque would furnish most of the funds, and wait in Panama for the others to do the work. Pizarro would be commander-in-chief. The vessels used would necessarily be such as could be built at Panama, and, therefore, not very efficient. Pizarro went down the coast, landing from time to time to explore and rob villages, until he reached about the fourth degree of north latitude, when he was obliged to return for supplies and repairs. It became necessary to reconstruct the contract and allow Pedrarias an interest in it. On the next voyage, one of the vessels went half a degree south of the equator, and encountered a vessel “like a European caravel,” which was, in fact, a Peruvian balsa, loaded with merchandise, vases, mirrors of burnished silver, and curious fabrics of cotton and woolen. It became again indispensable to send back to Panama for supplies and repairs, and Pizarro was doomed to wait for them seven months on an island. He next visited Tumbez, in Peru, and went to the ninth degree of south latitude; but he was obliged to visit Spain to get necessary aid before he could attempt any thing more, and it was not until the year that the conquest of Peru was actually undertaken. In Pizarro finally entered Tumbez with his buccaneers, and marched into the country, sending word to the Inca that he came to aid him against his enemies. There had been a civil war in the country, which had been divided by the great Inca, Huayna Capac, the conqueror of Quito, between his two sons, Huascar and Atahuallpa, and Huascar had been defeated and thrown into prison, and finally put to death. At a city called Caxamalca, Pizarro contrived, by means of the most atrocious treachery, to seize the Inca and massacre some ten thousand of the principal Peruvians, who came to his camp unarmed on a friendly visit. This threw the whole empire into confusion, and made the conquest easy. The Inca filled a room with gold as the price of his ransom; the Spaniards took the gold, broke their promise, and put him to death. THE RUINS NEAR LAKE TITICACA. It is now agreed that the Peruvian antiquities represent two distinct periods in the ancient history of the country, one being much older than the other. Mr. Prescott accepts and repeats the opinion that “there existed in the country a race advanced in civilization before the time of the Incas,” and that the ruins on the shores of Lake Titicaca are older than the reign of the first Inca. In the work of Rivero and Von Tschudi, it is stated that a critical examination of the monuments “indicates two very different epochs in Peruvian art, at least so far as concerns architecture; one before and the other after the arrival of the first Inca.” Among the ruins which belong to the older civilization are those at Lake Titicaca, old Huanuco, Tiahuanaco, and Gran-Chimu, and it probably originated the roads and aqueducts. At Cuzco and other places are remains of buildings which represent the later time; but Cuzco of the Incas appears to have occupied the site of a ruined city of the older period. gives a view of the ancient Peruvian masonry. Montesinos supposes the name of Cuzco was derived from cosca, a Peruvian word signifying to level, or from heaps of earth called coscos, which abounded there. In his account of the previous times there is mention that an old city built there was in ruins. Perhaps the first Inca found on its site nothing but coscos, or heaps of ruins. View of masonry wall Ancient Peruvian Masonry. View of buildings Ruins of “Temple” on the Island of Titicaca. View of ruins Ruins on Titicaca Island. At Lake Titicaca some of the more important remains are on the islands. On Titicaca Island are the ruins of a great edifice described as “a palace or temple.” Remains of other structures exist, but their ruins are old, much older than the time of the Incas. represent different ruins on the island of Titicaca. They were all built of hewn stone, and had doors and windows, with posts, sills, and thresholds of stone, the doorways being narrower above than below. On the island of Coati there are remarkable ruins. The largest building here is also described as “a palace or temple,” although it may have been something else. It was not high, but very large in extent. It stood around three sides of a parallelogram, with some peculiarities of construction connected with the ends or wings.

Making allowance for the absence of the pyramidal foundations, it has more resemblance to some of the great constructions in Central America than to any thing peculiar to the later period of Peruvian architecture. Another ruin on this island is shown in. The antiquities on the islands and shores of this lake need to be more completely explored and described, and probably interesting discoveries could be made at some points by means of well-directed excavations. View of building Ruins on the Island of Coati. A few miles from Lake Titicaca, at Tiahuanaco, are ruins which were very imposing when first seen by the Spaniards in the time of Pizarro. It is usual to speak of them as the oldest ruins in Peru, which may or may not be correct. They must, however, be classed with those at the lake. Not much now remains of the edifices, which were in a very ruinous condition three hundred and forty years ago. They were described by Cieça de Leon, who accompanied Pizarro, and also by Diego d'Alcobaça. Cieça de Leon mentions "great edifices" that were in ruins, "an artificial hill raised on a groundwork of stone," and "two stone idols resembling the human figure, and apparently made by skillful artificers." These "idols" were great statues, ten or twelve feet high. One of them, which was carried to La Paz in, measured "three and a half yards" in length. Sculptured decorations appear on them, and, according to Cieça de Leon, the figures seemed to be "clothed in long vestments" different from those worn in the time of the Incas. Of a very remarkable edifice, whose foundations could be traced near these statues, nothing remained then "but a well-built wall, which must have been there for ages, the stones being very much worn and crumbled." Cieça de Leon's description goes on as follows: "In this place, also, there are stones so large and so overgrown that our wonder is incited, it being incomprehensible how the power of man could have placed them where we see them. They are variously wrought, and some of them, having the form of men, must have been idols. Near the walls are many caves and excavations under the earth, but in another place, farther west, are other and greater monuments, such as large gateways with hinges, platforms, and porches, each made of a single stone. It surprised me to see these enormous gateways made of great masses of stone, some of which were thirty feet long, fifteen high, and six thick." View of stone gateway Fig. 55.—Monolithic Gateway at Tiahuanaco. Many of the stone monuments at Tiahuanaco have been removed, some for building, some for other purposes. In one case, "large masses of sculptured stone ten yards in length and six in width" were used to make grinding stones for a chocolate mill. The principal monuments now seen on this field of ruins are a vast mound covering several acres, where there seems to have been a great edifice, fragments of columns, erect slabs of stone which formed parts of buildings, and several of the monolithic gateways, the largest of which was made of a single stone ten feet high and thirteen broad. gives a view of one. The doorway is six feet four inches high, and three feet two inches wide. Above it, along the whole length of the stone, which is now broken, is a cornice covered with sculptured figures. "The whole neighborhood," says, "is strewn with immense blocks of stone elaborately wrought, equaling, if not surpassing in size, any known to exist in Egypt or India." View of ruins Remains of Fortress Walls at Cuzco. View of ruins End View of Fortress Walls at Cuzco. At Cuzco, two or more degrees north of Lake Titicaca, there are ruins of buildings that were occupied until the rule of the Incas was overthrown. Remains of the old structures are seen in various parts of the present town, some of them incorporated into new edifices built by the Spaniards. Cyclopean remains of walls of the Temple of the Sun now constitute a portion of the Convent of. In the days of the Incas, this temple stood "a circuit of more than four hundred paces," and was surrounded by a great wall built of cut stone. Remains of the old fortifications are seen; and there is an extensive ruin here which shows what is supposed to be all that remains of the palace of the Incas. give views of remains of the ancient fortress walls at Cuzco. Occasionally there is search at Cuzco, by means of excavation, for antiquities. Within a few years an important discovery has been made; a lunar calendar of the Incas, made of gold, has been exhumed. At first it was described as "a gold breastplate or sun;" but William Bollaert, who gives an account of it, finds that it is a calendar, the first discovered in Peru. Many others, probably, went to the melting-pot at the time of the Conquest. This is not quite circular. The outer ring is five inches and three tenths in diameter, and the inner four inches.

It was made to be fastened to the breast of an Inca or priest. The figures were stamped on it, and there “seem to be twenty-four compartments, large and small, including three at the top. At the bottom are two spaces; figures may or may not have been there, but it looks as if they had been worn away.” It was found about the year. The uniform and constant report of Peruvian tradition places the beginning of this old civilization in the Valley of Cuzco, near Lake Titicaca. There appeared the first civilizers and the first civilized communities. This beautiful valley is the most elevated table-land on the continent, Lake Titicaca being above the sea level. Were it not within the tropics, it would be a region of eternal snow, for it is more than higher than the beginning of perpetual snow on Mont Blanc. Near it are some of the higher peaks of the Andes, among them Sorato, Illimani, and Sahama. OTHER RUINS IN PERU. The ancient Peru conquered and robbed by Pizarro is now divided into Ecuador, Peru, Bolivia, and Chili as far down as the thirty-seventh degree of south latitude. Its remains are found to some extent in all these countries, although most abundantly in Peru. The ruins known as “the Palaces of Gran-Chimu” are situated in the northwestern part of Peru, near Truxillo. Here, in the time of the first Incas, was an independent state, which was subjugated by the Inca set down in the list of Montesinos as the grandfather of Huayna Capac, about a century before the Spaniards arrived. For what is known of these ruins we are chiefly indebted to Mariano Rivero, director of the National Museum at Lima. They cover a space of three quarters of a league, without including the walled squares found on every side. The chief objects of interest are the remains of two great edifices called palaces. “These palaces are immense areas surrounded by high walls of brick, the walls being now ten or twelve yards high and six feet thick at the base.” There was in each case another wall exterior to this. Within the palace walls were squares and dwellings, with narrow passages between them, and the walls are decorated. In the largest palace are the remains of a great reservoir for water, which was brought to it by subterranean aqueducts from the River Moche, two miles distant. Outside the inclosures of these palaces are remains of a vast number of buildings, which indicate that the city contained a great population. The Spaniards took vast quantities of gold from the huacas or tombs at this place. The amount taken from a single tomb in the years was officially estimated at nearly a million dollars. presents an end view of the walls at Gran-Chimu. represent some of the decorations at Chimu-Canchu. View of stone walls End View of Walls at Gran-Chimu. Detail of architectural decoration Decorations at Chimu-Canchu. View of building Edifice, with Gateway, at Old Huanuco. Remarkable ruins exist at Cuelap, in Northern Peru. “They consist of a wall of wrought stones constituting a solid mass with a level summit.” Probably the interior was made of earth. On this mass was another, In this, and also in the lower structure, there are many rooms made of wrought stone, in which are a great number of niches or cells one or two yards deep, which were used as tombs. Other old structures exist in that neighborhood. Farther south, at Huanuco el Viego, or Old Huanuco, are two peculiar edifices and a terrace, and near them the faded traces of a large town. The two edifices were built of a composition of pebbles and clay, faced with hewn stone. One of them is called the “Look-out,” but it is impossible to discover the purpose for which it was built. The interior of the other is crossed by six walls, in each of which is a gateway, the outer one being finely finished, and showing a sculptured animal on each of the upper corners. It has a large court, and rooms made of cut stones. Connected with this structure was a well-built aqueduct. give views of the socalled palace and its ground plan. Figure 63 represents the Look-out. Plan of structure Ground Plan of Edifice at Old Huanuco. View of structure “Look-out” at Old Huanuco. View of ruins Ruins at Pachacamac. Seven leagues from Lima, near the sea, are the much-dilapidated ruins, shown in Figure 64, of a large city of the Incas, which was built chiefly of adobes or sun-dried bricks. It is called Pachacamac. Ruins of towns, castles, fortresses, and other structures are found all about the country. At one place, near Chavin de Huanta, there are remarkable ruins which are very old. The material used here was like that seen at Old Huanuco. From the interior of one of the great buildings there is a subterranean passage which, it is said, goes under the river to the opposite bank. Very ancient ruins, showing remains of large and remarkable edifices, were seen near Huamanga, and described by Cieça de Leon.

The native traditions said this city was built by “bearded white men, who came there long before the time of the Incas, and established a settlement.” It is noticed every where that the ancient Peruvians made large use of aqueducts, which they built with notable skill, using hewn stones and cement, and making them very substantial. Some of them are still in use. They were used to carry water to the cities and to irrigate the cultivated lands. A few of them were very long. There is mention of one which was a hundred and fifty miles long, and of another which was extended four hundred and fifty miles across sierras and over rivers, from south to north. THE GREAT PERUVIAN ROADS. Nothing in Ancient Peru was more remarkable than the public roads. No ancient people has left traces of works more astonishing than these, so vast was their extent, and so great the skill and labor required to construct them. One of these roads ran along the mountains through the whole length of the empire, from Quito to Chili. Another, starting from this at Cuzco, went down to the coast and extended northward to the equator. These roads were built on beds or “deep under-structures” of masonry. The width of the roadways varied from twenty to twenty-five feet, and they were made level and smooth by paving, and in some places by a sort of macadamizing with pulverized stone mixed with lime and bituminous cement. This cement was used in all the masonry. On each side of the roadway was “a very strong wall more than a fathom in thickness.” These roads went over marshes, rivers, and great chasms of the sierras, and through rocky precipices and mountain sides. The great road passing along the mountains was a marvelous work. In many places its way was cut through rock for leagues. Great ravines were filled up with solid masonry. Rivers were crossed by means of a curious kind of suspension bridges, and no obstruction was encountered which the builders did not overcome. The builders of our Pacific Railroad, with their superior engineering skill and mechanical appliances, might reasonably shrink from the cost and the difficulties of such a work as this. Extending from one degree north of Quito to Cuzco, and from Cuzco to Chili, it was quite as long as the two Pacific railroads, and its wild route among the mountains was far more difficult. Sarmiento, describing it, said, “It seems to me that if the emperor should see fit to order the construction of another road like that which leads from Quito to Cuzco, or that which from Cuzco goes toward Chili, I certainly think he would not be able to make it, with all his power.” Humboldt examined some of the remains of this road, and described as follows a portion of it seen in a pass of the Andes, between Mansi and Loxa: “Our eyes rested continually on superb remains of a paved road of the Incas. The roadway, paved with well-cut, dark porphyritic stone, was twenty feet wide, and rested on deep foundations. This road was marvelous. None of the Roman roads I have seen in Italy, in the South of France, or in Spain, appeared to me more imposing than this work of the ancient Peruvians.” He saw remains of several other shorter roads which were built in the same way, some of them between Loxa and the River Amazon. Along these roads at equal distances were edifices, a kind of caravanseras, built of hewn stone, for the accommodation of travelers. These great works were described by every Spanish writer on Peru, and in some accounts of them we find suggestions in regard to their history. They are called “roads of the Incas,” but they were probably much older than the time of these rulers. The mountain road running toward Quito was much older than the Inca Huayna Capac, to whom it has sometimes been attributed. It is stated that when he started by this route to invade the Quitús, the road was so bad that “he found great difficulties in the passage.” It was then an old road, much out of repair, and he immediately ordered the necessary reconstructions. Gomara says, “Huayna Capac restored, enlarged, and completed these roads, but he did not build them, as some pretend.” These great artificial highways were broken up and made useless at the time of the Conquest, and the subsequent barbarous rule of the Spaniards allowed them to go to decay. Now only broken remains of them exist to show their former character. THE PERUVIAN CIVILIZATION. The development of civilization in Peru was very different from that in Mexico and Central America. In both regions the people were sun-worshipers, but their religious organizations, as well as their methods of building temples, were unlike. Neither of these peoples seems to have borrowed from the other. It may be that all the old American civilizations had a common origin in South America, and that all the ancient Americans whose civilization can be traced in remains found north of the Isthmus came originally from that part of the continent.

This hypothesis appears to me more probable than any other I have heard suggested. But, assuming this to be true, the first migration of civilized people from South America must have taken place at a very distant period in the past, for it preceded not only the history indicated by the existing antiquities, but also an earlier history, during which the Peruvians and Central Americans grew to be as different from their ancestors as from each other. In each case, the development of civilization represented by existing monuments, so far as we can study it, appears to have been original. In some respects the Peruvian civilization was developed to such a degree as challenged admiration. The Peruvians were highly skilled in agriculture and in some kinds of manufactures. No people ever had a more efficient system of industry. This created their wealth and made possible their great public works. All accounts of the country at the time of the Conquest agree in the statement that they cultivated the soil in a very admirable way and with remarkable success, using aqueducts for irrigation, and employing guano as one of their most important fertilizers. Europeans learned from them the value of this fertilizer, and its name, guano, is Peruvian. The remains of their works show what they were as builders. Their skill in cutting stone and their wonderful masonry can be seen and admired by modern builders in what is left of their aqueducts, their roads, their temples, and their other great edifices. They had great proficiency in the arts of spinning, weaving, and dyeing. For their cloth they used cotton and the wool of four varieties of the llama, that of the vicuña being the finest. Some of their cloth had interwoven designs and ornaments very skillfully executed. Many of their fabrics had rare excellence in the eyes of the Spaniards. Garcilasso says, “The coverings of the beds were blankets and friezes of the wool of the vicuña, which is so fine and so much prized that, among other precious things from that land, they have been brought for the bed of Don Philip II.” Of their dyes, this account is given in the work of Rivero and Von Tschudi: “They possessed the secret of fixing the dye of all colors, flesh-color, yellow, gray, blue, green, black, etc., so firmly in the thread, or in the cloth already woven, that they never faded during the lapse of ages, even when exposed to the air or buried (in tombs) under ground. Only the cotton became slightly discolored, while the woolen fabrics preserved their primitive lustre. It is a circumstance worth remarking that chemical analyses made of pieces of cloth of all the different dyes prove that the Peruvians extracted all their colors from the vegetable and none from the mineral kingdom. In fact, the natives of the Peruvian mountains now use plants unknown to Europeans, producing from them bright and lasting colors.” They had great skill in the art of working metals, especially gold and silver. Besides these precious metals, they had copper, tin, lead, and quicksilver. show some of the implements used by the Peruvians. Iron was unknown to them in the time of the Incas, although some maintain that they had it in the previous ages, to which belong the ruins at Lake Titicaca. Iron ore was and still is very abundant in Peru. It is impossible to conceive how the Peruvians were able to cut and work stone in such a masterly way, or to construct their great roads and aqueducts without the use of iron tools. Some of the languages of the country, and perhaps all, had names for iron; in official Peruvian it was called quillay, and in the old Chilian tongue panilic. “It is remarkable,” observes Molina, “that iron, which has 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. In the Mercurio Peruano, tome it is stated that, anciently, the Peruvian sovereigns “worked magnificent iron mines at Ancoriames, on the west shore of Lake Titicaca;” but I can not give the evidence used in support of this statement. Two knives. Copper Knives. Two pairs of tweezers. Copper Tweezers. Their goldsmiths and silversmiths had attained very great proficiency. They could melt the metals in furnaces, cast them in moulds made of clay and gypsum, hammer their work with remarkable dexterity, inlay it, and solder it with great perfection. The gold and silver work of these artists was extremely abundant in the country at the time of the Conquest, but Spanish greed had it all melted for coinage. It was with articles of this gold-work that the Inca Atahuallpa filled a room in his vain endeavor to purchase release from captivity. One of the old chroniclers mentions “statuary, jars, vases, and every species of vessels, all of fine gold.” Describing one of the palaces, he said: They had an artificial garden, the soil of which was made of small pieces of fine gold.