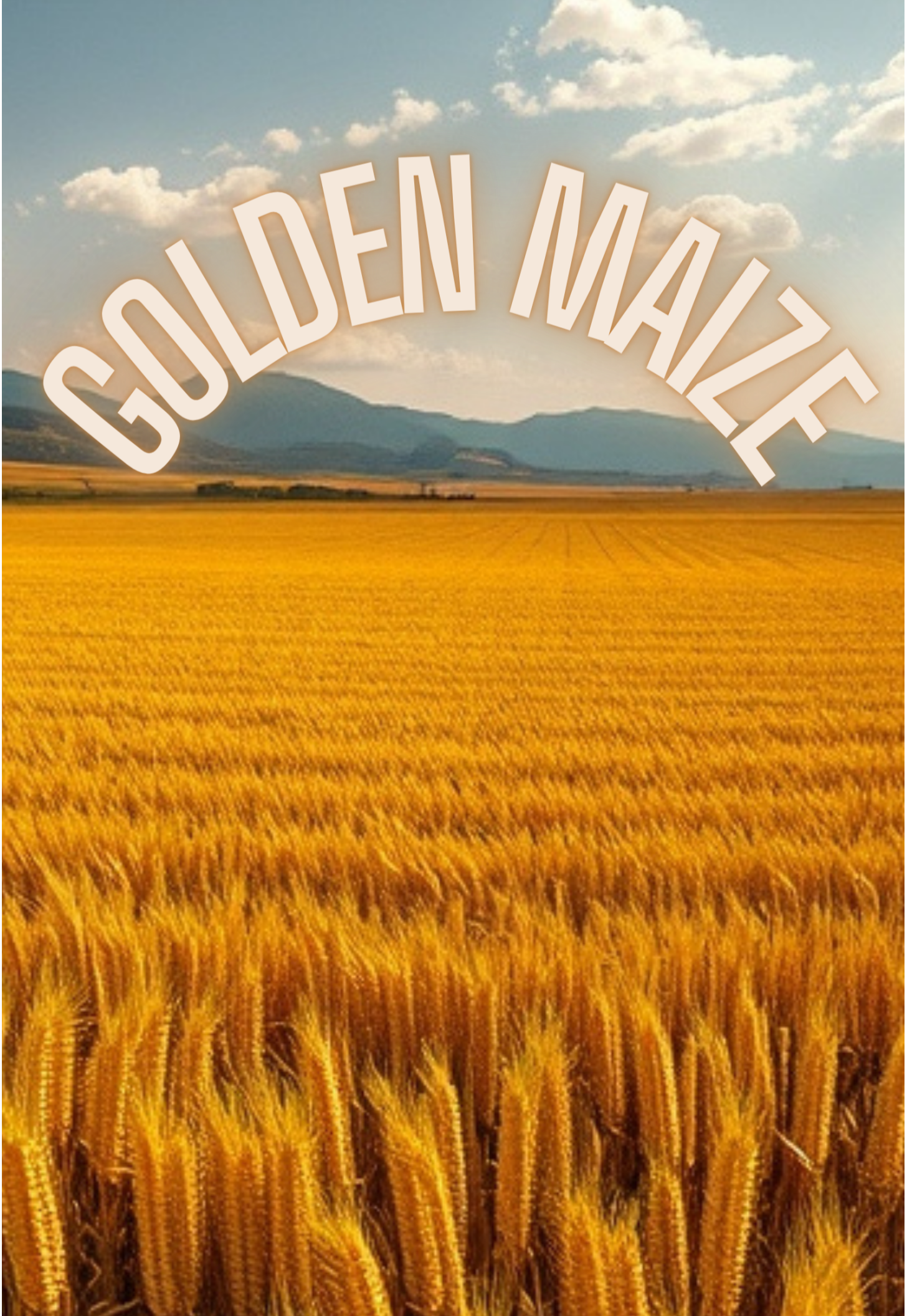
GOLDEN MAZE

And this was artificially sowed with different kinds of maize which were of gold, their stems, leaves, and ears. Besides this, they had more than twenty sheep (llamas), with their lambs, attended by shepherds, all made of gold. This may be the same artificial garden which was mentioned by Francisco Lopez de Gomara, who places it on “an island near Puna.” Similar gardens of gold are mentioned by others. It is believed that a large quantity of Peruvian gold-work was thrown into Lake Titicaca to keep it from the Spanish robbers. In a description of one lot of golden articles sent to Spain in by Pizarro, there is mention of “four llamas, ten statues of women of full size, and a cistern of gold so curious that it incited the wonder of all.” Nothing is more constantly mentioned by the old Spanish chroniclers than the vast abundance of gold in Peru. It was more common than any other metal. Temples and palaces were covered with it, and it was very beautifully wrought into ornaments, temple furniture, articles for household use, and imitations of almost every object in nature. In the course of twenty-five years after the Conquest, the Spaniards sent from Peru to Spain more than four hundred million ducats worth of gold, all or nearly all of it having been taken from the subjugated Peruvians as “booty.” show a golden and a silver vase, reduced from the actual size. represent various articles of pottery; all these illustrations are copies from articles taken from old Peruvian tombs. Cylindrical vase Golden Vase. Vessel with a face on the side Silver Vase. The most perfectly manufactured articles of Peruvian pottery were used in the tombs. Some of those made for other uses were very curious. A considerable number of articles made for common use have been preserved. Mariano Rivero, a Peruvian, says: “At this day there exist in many houses pitchers, large jars, and earthen pots of this manufacture, which are preferred for their solidity to those manufactured by our own potters.” The ancient Peruvians were inferior to the Central Americans in the arts of ornamentation and sculpture. Three elaborate ceramic vessels Fig. 69.—Articles of Pottery. Two elaborate ceramic vessels Articles of Pottery. Science among the Peruvians was not very highly developed, but engineering skill of some kind is indicated by the great roads and aqueducts. Their knowledge of the art of preparing colors and certain useful medicines implied a study of plants. Their progress in astronomy was not equal to that found in Central America; nevertheless, they had an accurate measure of the solar year, but, unlike the Central Americans, they divided the year into twelve months, and they used mechanical contrivances successfully to fix the times of the solstices and equinoxes. A class of men called amautas was trained to preserve and teach whatever knowledge existed in the country. It was their business to understand the quippus, keep in memory the historical poems, give attention to the science and practice of medicine, and train their pupils in knowledge. These were not priests; they were the “learned men” of Peru, and the government allowed them every facility for study and for communicating instruction. How much they knew of astronomy it is not easy to say. They had knowledge of some of the planets, and it is claimed that there is some reason to believe they used aids to eyesight in studying the heavens, such as some suppose were used by our Mound-Builders. A discovery made in Bolivia a few years since is cited in support of this belief. It is the figure of a man in the act of using a tube to aid vision, which was taken from an ancient tomb. an English chemist and geologist, obtained it in Bolivia, and carried it to England in. describes it as follows in a paper read to the London Anthropological Society: “It is a nude figure, of silver, two inches and a half in height, on a flat, pointed pedestal. In the right hand it has the mask of a human face, but in the left a tube over half an inch in length, the narrow part placed to the left eye in a diagonal position, as if observing some celestial object. This is the first specimen of a figure in the act of looking through a hollow tube directed to the heavens that has been found in the New World. We can not suppose the Peruvians had any thing that more nearly resembled a telescope. It was found in a chulpa, or ancient Indian tomb, at Caquingora, near Corocoro, in Bolivia.” He forgets the astronomical monument described by Captain Dupaix. The art of writing in alphabetical characters, so far as appears, was unknown to the Peruvians in the time of the Incas. No Peruvian books existed at that time, and no inscriptions have been found in any of the ruins. They had a method of recording events, keeping accounts, and making reports to the government by means of the quippu. This was made of cords of twisted wool fastened to a base prepared for the purpose.

These cords were of various sizes and colors, and every size and color had its meaning. The record was made by means of an elaborate system of knots and artificial intertwinings. The amautas were carefully educated to the business of understanding and using the quippus, and “this science was so much perfected that those skilled in it attained the art of recording historical events, laws, and decrees, so as to transmit to their descendants the most striking events of the empire; thus the quippus could supply the place of documents.” Each quippu was a book full of information for those who could read it. Among the amautas memory was educated to retain and transmit to posterity songs, historical narratives, and long historical poems. It is said, also, that tragedies and comedies were composed and preserved in this way, and that dramatic performances were among the regular entertainments encouraged and supported by the Incas. Whether the art of writing ever existed in the country can not now be determined. Some of the Peruvian tongues had names for paper; the people knew that a kind of paper or parchment could be made of plantain leaves, and, according to Montesinos, writing and books were common in the older times, that is to say, in ages long previous to the Incas. He explains how the art was lost, as I shall presently show. It is not improbable that a kind of hieroglyphical writing existed in some of the Peruvian communities, especially among the Aymaraes. Humboldt mentions books of hieroglyphical writing found among the Panoes, on the River Ucayali, which were “bundles of their paper resembling our volumes in quarto.” A Franciscan missionary found an old man sitting at the foot of a palm-tree and reading one of these books to several young persons. The Franciscan was told that the writing “contained hidden things which no stranger ought to know.” It was seen that the pages of the book were “covered with figures of men, animals, and isolated characters, deemed hieroglyphical, and arranged in lines with order and symmetry.” The Panoes said these books “were transmitted to them by their ancestors, and had relation to wanderings and ancient wars.” There is similar writing on a prepared llama skin found among other antiquities on a peninsula in Lake Titicaca, which is now in the museum at La Paz, Bolivia. It appears to be a record of atrocities perpetrated by the Spaniards at the time of the Conquest, and shows that some of the Aymaraes could at that time write hieroglyphics. PERUVIAN ANCIENT HISTORY. THE Peruvians, like most other important peoples in all ages, had mythical wonder-stories instead of authentic ancient history to explain the origin of their nation. These were told in traditions and legends preserved and transmitted from generation to generation by the amautas. If they were also recorded in secret books of hieroglyphical writing, such as those found among the Panoes on the Ucayali, which “contained hidden things that no stranger ought to know,” satisfactory evidence of the fact has never been brought to light. In addition to these, they had many historical traditions of much more importance, related in long poems and preserved in the same way; and there were annals and national documents recorded in the quippus. Some of the Spanish writers on Peru, who described what they saw in the country at the time of the Conquest, discussed its history. If they had used the proper sources of information with a more penetrating and complete investigation, and studied the subject as it might have been studied at that time, their historical sketches would now have great value. The two most important works written at this time, the “Relacion” of Sarmiento and the “Relaciones” of Polo de Ondegardo, were never printed. But none of these writers sought to study Peruvian antiquity beyond the period of the Incas, although some of them (Acosta for instance) inquired sufficiently to see that Manco Capac was a mythical personage prefixed to the dynastic line of the Incas without actually belonging to it. This limited view of the ancient history, which was inconsistent with what could be seen in the antiquities and traditions of the country, was generally accepted, because nothing more could be known in Europe, and its influence was established by the undue importance accorded to the “Commentarios Reales” of Garcilasso de la Vega, published in. GARCILASSO’S HISTORY. Garcilasso de la Vega, the son of a distinguished Spaniard of the same name, was born at Cuzco in. His mother, named Ñusta, was a niece of the great Inca Huayna Capac, and granddaughter of his no less eminent predecessor, Tupac Yupanqui. The intimate blood relationship which connected him with the Incas naturally drew attention to his work, and, with more haste than reason, was treated as the best possible qualification for writing Peruvian history; therefore his “Commentarios” acquired a very great celebrity, and came to be regarded as the highest authority on all questions relating to Peru previous to the Conquest. The work never deserved this reputation, although it was not without value as an addition to what had been written on the subject by Spaniards.

Garcilasso was not well qualified to write a faithful history of Peru either by his knowledge or by the temper of his mind. His aim was to glorify the Incas and their times, and much of his work was in the strain of tales heard in childhood from his mother. The "Commentarios Reales" were written just as their author's training had prepared him to write them. He lived in Cuzco without education until he was nearly twenty years old, his intellectual development being confined to the instruction necessary to make him a good Catholic. He then went to Spain and never returned to Peru. The next period of his life was devoted to seeking distinction in the Spanish military service; but political influence was against him, and he could not attain the object of his ambition. He finally retired to Cordova, acquired some literary culture, and resolved to win distinction by writing a history of his native country. His materials for such a history, in addition to what could be learned from the earlier Spanish writers, consisted entirely of what he had learned of his mother and his early Peruvian associates at Cuzco, and of such acquisitions as could be gained by means of correspondence with his acquaintances in Peru, after the purpose to write a history was formed. It can be seen readily that Garcilasso's history written in this way might have a certain value, while it could not be safely accepted as an authority. The first part of his work was published in 1609, when he was nearly seventy years old. According to his version of the Peruvian annals, the rule of the Incas began with the mythical Manco Capac, and lasted over five hundred years; and this version, with some variations in estimates of the time, has been repeated ever since. The dynastic line of the Incas thus determined is given in the work of Rivero and Von Tschudi as follows: Manco-Capac, mysterious "son of the sun," who began to reign in, and died in, having reigned forty years. Sinchi-Rocca, who reigned thirty years, from Lloque-Yupanqui, reigned thirty-five years, from. Mayta-Capac, thirty years, from. Capac-Yupanqui, forty-one years, from . Inca Rocca, fifty-one years, from. Yahuar-Capac, forty years, from. Viracocha, fifty-one years, from; his son Inca Urco reigned after him eleven days, and was then deposed "as a fool incapable of governing." Titu-Manco-Capac-Pachacutec, sixty years, from, living, says tradition, to be one hundred and three years old. Yupanqui, thirty-nine years, from .Tupac-Yupanqui (Garcilasso's great-grandfather) thirtysix years, from. Huayna-Capac, "the most glorious of the Incas," fifty years, from. After his death the empire was divided between his two sons Huascar and Atahuallpa. This caused a civil war, which ended with the death of Huascar in. One year later Atahuallpa was himself destroyed by Cortez. Manco-Capac, here set down as the first Inca, with a marvelous story of his mysterious origin and his miraculous powers as a civilizer, was undoubtedly borrowed from traditions of the origin of civilization in the more ancient times, which had been used by the Incas in support of their claim to direct descent from the sun. In reality, the first Inca was Rocca, or Sinchi-Rocca, and several of the early Spanish writers were sufficiently well informed to see this. The period of the Incas must have been less than five hundred years if their dynasty consisted of no more than twelve or thirteen sovereigns. In other respects, this table of the sovereigns may be substantially correct, for there is a general agreement in regard to the names and the order of succession, although Montesinos maintains that the fifth Inca on the list was borrowed by Garcilasso from traditions of a much more ancient sovereign who was greatly celebrated in the historical poems, or confounded with him. The period of the Incas was very distinct in Peruvian history, but it is now understood that they represent only the last period in the history of a civilization which began much farther back in the past. FERNANDO MONTESINOS. The only Spanish writer who really studied the ancient history of Peru in the traditional and other records of the country was Fernando Montesinos, who went there about a century after the Conquest. He was sent from Spain on service which took him to every part of Peru, and gave him the best possible opportunities for investigation. He was a scholar and a worker, with a strong inclination to such studies, and, during two periods of residence in the country, he devoted fifteen years to these inquiries with unremitting industry and great success. He soon learned to communicate freely with the Peruvians in their own language; then he applied himself to collect the historical poems, narratives, and traditions. He succeeded in getting assistance from many of the older men who had learned of the amautas, and especially of those who were trained to read the quippus. Nothing was omitted which could aid his purpose. In this way Montesinos made a great collection of what may be called the old Peruvian documents, and gained a vast amount of information which no other writer had used or even sought to acquire.

The materials collected were more important than is at once understood by those accustomed to depend wholly on writing and printing for the preservation of literature, because they can not easily realize to what extent the faculty of memory may be sharpened and developed by a class of men devoted to this culture in communities where such mechanical aids do not exist. It is known that long poems, stories, and historical narratives have been preserved by unlettered peoples much below the civilized condition of the Peruvians. Long poems, extending to three and four hundred lines, were retained by memory, and transmitted from generation to generation among the Sandwich Islanders. Many scholars have believed that all the early literature of Greece, including the Iliad, the Odyssey, and all other "poems of the Cycle," was preserved in this way by the Rhapsodists for centuries, down to the time of Peisistratus, and then for the first time reduced to writing. This shows at least what they have believed was possible. In Max Müller's "History of Ancient Sanskrit Literature" it is argued strongly that the Vedas were not written at first, but were transmitted orally, being learned by heart in the great religious schools of the Indo-Aryans as an indispensable part of education. This is likely to be true, whether we assume that the Indo-Aryans had or had not the art of writing; for, in the Vaidic age, the divine songs of the Veda were so intimately associated with the mysteries of their religion that they may have been held too sacred to be made common by written characters. Therefore it is no wise incredible, nor even surprising, that a considerable amount of literature existed in Peru without the aid of writing. On the contrary, it would be surprising if they had failed to do what has been done by every other people in like circumstances. The schools of the amautas were national institutions specially set apart for the business of preserving and increasing knowledge, teaching, and literary work of every kind. In a country where civilization was so much advanced in many respects, they could not have been entirely barren. Those who criticise Montesinos admit that "his advantages were great," that "no one equaled him in archæological knowledge of Peru," and that "he became acquainted with original instruments which he occasionally transferred to his own pages, and which it would now be difficult to meet elsewhere." The results of his investigation are embodied in a work entitled "Memorias Antiguas Historiales del Peru." This, with another work on the Conquest entitled "Annales," remained in manuscript at Madrid until the "Memorias" was translated into French by and printed in his collection of original documents relating to the discovery and exploration of America. HIS SCHEME OF PERUVIAN HISTORY. According to Montesinos, there were three distinct periods in the history of Peru. First, there was a period which began with the origin of civilization, and lasted until the first or second century of the Christian era. Second, there was a period of disintegration, decline, and disorder, introduced by successful invasions from the east and southeast, during which the country was broken up into small states, and many of the arts of civilization were lost; this period lasted more than a thousand years. Third and last came the period of the Incas, who revived civilization and restored the empire. He discards the wonder-stories told of Manco-Capac and Mama Oello, and gives the Peruvian nation a beginning which is, at least, not incredible. It was originated, he says, by a people led by four brothers, who settled in the Valley of Cuzco, and developed civilization there in a very human way. The youngest of these brothers assumed supreme authority, and became the first of a long line of sovereigns. Montesinos gives a list of sixty-four sovereigns who reigned in the first period. The first was Pûhua Manco, or Ayar-Uchu-Topa, the youngest of the four brothers, whose power was increased by the willing submission of "neighboring nations." His successor, called Manco-Capac, is described as a remarkable character; "adjacent nations dreaded his power," and in his time the kingdom was much increased. Next came Huainaevi-Pishua, and "during his reign was known the use of letters, and the amautas taught astrology and the art of writing on leaves of the plantain tree." Sinchi-Cozque won victories, and "adorned and fortified the city of Cuzco." Inti-Capac-Yupanqui, another remarkable character, divided the kingdom into districts and subdistricts, introduced a complete civil organization, instituted the solar year of three hundred and sixty-five days, and established the system of couriers. Manco-Capac. "made great roads from Cuzco to the provinces." These are the first six rulers named on the list. In the next thirteen reigns nothing special is noted save attention to civil affairs, occasional conquests, and "a great plague." The twentieth sovereign, called Huascar-Titupac, "gave all the provinces new governors of royal blood, and introduced in the army a cuirass made of cotton and copper." The twentyfirst, Manco-Capac-Amauta, "being addicted to astronomy, convened a scientific council, which agreed that the sun was at a greater distance from the earth than the moon, and that they followed different courses."

In the next twelve reigns, wars, conquests, and some indications of religious controversy are noted. The thirty-fourth ruler, called Ayay-Manco, “assembled the amautas in Cuzco to reform the calendar, and it was decided that the year should be divided into months of thirty days, and weeks of ten days, calling the five days at the end of the year a small week; they also collected the years into decades or groups of tens, and determined that each group of ten decades should form a sun.” Among the next twenty-nine sovereigns, Capac-Raymi-Amauta, the thirtyeighth of the line, and Yahuar-Huquiz, the fifty-first, were “celebrated for astronomical knowledge,” and the latter “intercalated a year at the end of four centuries.” Manco-Capac III., the sixtieth sovereign of this line, is supposed to have reigned at the beginning of the Christian era, and in his time “Peru had reached her greatest elevation and extension.” The next three reigns covered thirty-two years, it is said. Then came Titu-Yupanqui-Pachacuti, the sixty-fourth and last sovereign of the old kingdom, who was killed in battle with a horde of invaders who came from the east and southeast across the Andes. His death threw the kingdom into confusion. There was rebellion as well as invasion, by which it was broken up into small states. The account of what happened says: “Many ambitious ones, taking advantage of the new king’s youth, denied him obedience, drew away from him the people, and usurped several provinces. Those who remained faithful to the heir of Titu-Yupanqui conducted him to Tambotoco, whose inhabitants offered him obedience. From this it happened that this monarch took the title of King of Tambotoco.” During the next twenty-six reigns the sway of the old royal house was confined to this little state. These twenty-six successors of the old sovereigns were merely kings of Tambotoco. The country, overrun by rude invaders, torn by civil war, and harried by “many simultaneous tyrants,” became semi-barbarous; “all was found in great confusion; life and personal safety were endangered, and civil disturbances caused an entire loss of the use of letters.” The art of writing seems to have been mixed up with the issues of a religious controversy in the time of the old kingdom. It was proscribed now, even in the little state of Tambotoco, for we read that the fourteenth of its twenty-six rulers “prohibited, under the severest penalties, the use of quellca for writing, and forbade, also, the invention of letters. Quellca was a kind of parchment made of plantain leaves.” It is added that an amauta, who sought to restore the art of writing was put to death. This period of decline, disorder, and disintegration, which covered the “dark ages” of Peru, lasted until the rise of the Incas brought better times and reunited the country. Rocca, called Inca-Rocca, was the first of the Incas. He was connected with the old royal family, but did not stand in the direct line of succession. The story of his rise to power is told as follows: “A princess of royal blood, named MamaCiboca, contrived, by artifice and intrigue, to raise to the throne her son called Rocca, a youth of twenty years, and so handsome and valiant that his admirers called him Inca, which means lord. This title of Inca began with him, and was adopted by all his successors.” He appears to have had great qualities as a ruler. Not much time passed before he secured possession of Cuzco, made war successfully against the neighboring princes, and greatly extended his dominions. Under his successors, the empire thus begun continued to grow, until it was extended from Quito to Chili, and became the Peruvian empire which the Spaniards robbed and destroyed. PROBABILITIES. It has been the fashion to depreciate Montesinos, but I find it impossible to discover the reasons by which this depreciation can be justified. It is alleged that he uses fanciful hypotheses to explain Peru. The reply to this seems to me conclusive. In the first place, he is, in this respect, like all other writers of his time. That was an age of fanciful theories. Montesinos is certainly no worse than others in this respect, while he has the merit of being somewhat more original. He brought the Peruvian civilization from Armenia, and argued that Peru was Solomon’s Ophir. Undue importance has been accorded to several of the old Spanish chroniclers, whose works contain suggestions and fancies much more irrational. In the second place, his theories have nothing whatever to do with his facts, by which they are sometimes contradicted. He found in Peru materials for the scheme of its ancient history, which he sets forth. Readers will form their own estimates of its value, but no reasonable critic will confound this part of his work with his fanciful explanations, which are sometimes inconsistent with it. For instance, his theory assumes that the first monarch of the old kingdom began his reign as far back in the past as the year But he reports only sixtyfour rulers of that old kingdom. Now, if there were so many as sixty-four and if we allow an average of twenty years to each reign (which is sufficient).

We can not carry back the beginning of that first reign to the year There is another objection, which must be stated in the words of one of the critics who have urged it: “Montesinos treats the ancient history of Peru in a mode so original and distinct from all others that we can perceive it to be a production alike novel and unknown.” If this means any thing, it means that it was highly improper for Montesinos to find in Peru what was “unknown” to poorly-informed and superficial Spanish writers, who had already been accepted as “authorities.” It would have been singular if his careful investigation, continued through fifteen years, had not given him a great amount of information which others had never taken pains to acquire. His treatment of the subject was “original and distinct from all others,” because he knew what other writers did not know. His information did not allow him to repeat the marvelous story of Manco-Capac and Mama Oello, nor to confine Peruvian history to the time of the Incas. But when the result of his inquiries was announced in Europe, Garcilasso and others regulated the fashion of Peruvian studies, and the influence of their limited and superficial knowledge of the subject has been felt ever since. The curious theories of Montesinos may be brushed aside as rubbish, or be studied with other vagaries of that age in order to understand its difference from ours; but whoever undertakes to criticise his facts needs to be his equal in knowledge of Peru. His works, however, tell us all that can ever be known of Peruvian ancient history, for the facilities for investigation which existed in his time are no longer possible. It may, however, be useful to consider that the main fact in his report on the subject is no more “original and distinct” than the testimony of the monuments around Lake Titicaca. The significance of this testimony is now generally admitted. There was a period in the history of Peruvian civilization much earlier than that of the Incas, a period still represented by these old monuments which, so far as relates to this point, are as “novel” and “original” as Montesinos himself. That the civilization found in the country was much older than the Incas can be seen in what we know of their history. Their empire had grown to be what Pizarro found it by subjugating and absorbing a considerable number of small states, which had existed as civilized states before their time. The conquest of Quito, which was not inferior to the Valley of Cuzco in civilization, had just been completed when the Spaniards arrived. The Chimus, subjugated a few years earlier, are described as even more advanced in civilization than any other Peruvian community. The small states thus absorbed by Peru were much alike in manners, customs, manufactures, methods of building, and general culture. It is manifest that their civilization had a common origin, and that to find its origin we must go back into the past far beyond Inca-Rocco, the first of his line, who began the work of uniting them under one government. Moreover, there were civilized communities in that part of the continent which the Incas had not subjugated, such as the Muyscas on the table-land of Bogota, north of Quito, who had a remarkable civil and religious organization, a temple of the sun built with stone columns, a regular system of computing time, a peculiar calendar, and who used small circular gold plates as coin. They were described by Humboldt. The condition of the people composing the Peruvian empire at the time of the Conquest bore witness to an ancient history something like that reported by Montesinos. There were indications that the country had undergone important revolutionary changes before this empire was established. The Peruvians at that time were not all one people. The political union was complete, but there were differences of speech, and, to some extent, of physical characteristics. Three numerous and important branches of the population were known as Aymaraes, Chinchas, and Huancas. They used different tongues, although the Quichua dialect, spoken by the Incas, and doubtless a dialect of the Aymaraes, to whom the Incas belonged, was the official language in every part of the empire. There was a separated and fragmentary condition of the communities with respect to their unlike characteristics, which implied something different from a quiet and uniform political history. These differences and peculiarities suggest that there was a period when Peru, after an important career of civilization and empire, was subjected to great political changes brought about by invasion and revolution, by which the nation was for a long time broken up into separate states. Here, as in Mexico and Central America, there was in the traditions frequent mention of strangers or foreigners who came by sea to the Pacific coast and held intercourse with the people; but this was in the time of the old kingdom. As the Malays and other island people under their influence formerly traversed the Pacific, this is not improbable. Some have assumed that the Peruvians had no communication, with the Mexicans and Central Americans, and that the two peoples were unknown to each other.

This, however, seems to be contradicted by the fact that an accurate knowledge of Peru was found among the people inhabiting the Isthmus and the region north of it. The Spaniards heard of Peru on the Atlantic coast of South America, but on the Isthmus Balboa gained clear information in regard to that country from natives who had evidently seen it. To what extent there was intercourse between the two civilized portions of the continent is unknown. They had vessels quite as good as most of those constructed at Panama by the Spanish hunters for Peru, such as the balsas of the Peruvians and the "shallop" of the Mayas seen by Columbus, which made communication possible up and down the coast; but whether regular intercourse between them was ever established, and every thing else relating to this matter, must necessarily be left to a calculation of probabilities. CONCLUSION. If, as seems most likely, there was in South America an ancient development of civilized human life, out of which arose the civilizations found in Peru and Central America, its antiquity was much greater than can be comprehended by the current chronologies. This, however, can not make it improbable, for these chronologies are really no more reasonable than the monkish fancies used in the sixteenth and seventeenth centuries to explain these civilizations. We find the hagiologists very absurd, but the condition of mind which made them possible is closely akin to that which moves some men in our time to deny or limit the past, and reject the results of any investigation which tend to enlarge it. Rational inquiry constantly forces upon us the suggestion that there was more in the unwritten history of the human race than our inherited modes of thinking have allowed us to suppose, and that the beginning of civilization is far more ancient than our long accepted theories of antiquity are able to admit. What may be discovered in South America by a more complete geological and palæontological investigation it is not now possible to say. Professor Orton, in his recent book, "The Andes and the Amazon," far exceeds Montesinos in his estimate of the antiquity of Peruvian civilization. He says on this point: "Geology and archæology are combining to prove that Sorato and Chimborazo have looked down upon a civilization far more ancient than that of the Incas, and perhaps coeval with the flint-flakes of Cornwall and the shellmounds of Denmark. On the shores of Lake Titicaca are extensive ruins which antedate the advent of Manco-Capac, and may be as venerable as the lakedwellings of Geneva. Wilson has traced six terraces in going up from the sea through the province of Esmeraldas toward Quito, and underneath the living forest, which is older than the Spanish invasion, many gold, copper, and stone vestiges of a lost population were found. In all cases these relics are situated below the high-tide mark, in a bed of marine sediment, from which he infers that this part of the country formerly stood higher above the sea. If this be true, vast must be the antiquity of these remains, for the upheaval and subsidence of the coast is exceedingly slow."—P. 109. This refers to discoveries made on the coast of Ecuador in Esq. At various points along this coast he found "ancient or fossil pottery, vessels, images," and other manufactured articles, all finely wrought. Some of these articles were made of gold. The most remarkable fact connected with them is that they were taken from "a stratum of ancient surface earth" which was covered with a marine deposit six feet thick. The geological formation where these remains were found is reported to be "as old as the drift strata of Europe," and "identical with that of Guayaquil in which bones of the mastodon are met with." The ancient surface earth or vegetable mould, with its pottery, gold-work, and other relics of civilized human life, was, therefore, below the sea when that marine deposit was spread over it. This land, after being occupied by men, had subsided and settled below the ocean, remained there long enough to accumulate the marine deposit, and again been elevated to its former position above the sea level. Since this elevation, forests have been established over it which are older than the Spanish Conquest, and now it is once more subsiding. In at a meeting of the Royal Geological Society, Sir Roderick Murchison spoke of these discoveries as follows: "The discoveries has made of the existence of the works of man in a stratum of mould beneath the sea level, and covered by several feet of clay, the phenomenon being persistent for sixty miles, are of the highest interest to physical geographers and geologists. The facts seem to demonstrate that, within the human period, the lands on the west coast of Equatorial America were depressed and submerged, and that after the accumulation of marine clays above the terrestrial relics the whole coast was elevated to its present position." Assuming the facts to be as reports, and they have not been called in question, it follows that there was human civilization to a certain extent in South America at the time of the older stone age of Western Europe.

The oldest Peruvian date of Montesinos is quite modern compared with this. The fact may be considered in connection with another mentioned in the section on American Ethnology, namely, that the most ancient fauna on this continent, man probably included, is that of South America. But, without regard to what may be signified by these discoveries of there is good reason for believing that the Peruvian civilization was much more ancient than it has been the fashion to admit. Peru would now be a very different country if the Spaniards had been sufficiently controlled by Christianity and civilization to treat the Peruvians justly, and seek nothing more than friendly intercourse with them. But they went there as greedy buccaneers, unscrupulous robbers, and brought every thing to ruin. At no time since the Spanish Conquest has the country been as orderly, as prosperous, or as populous as they found it. It has fallen to a much lower condition. Industry and thrift have been supplanted by laziness and beggarly poverty. Ignorance and incapacity have taken the place of that intelligence and enterprise which enabled the old Peruvians to maintain their remarkable system of agriculture, complete their great works, and made them so industrious and skillful in their manufactures. The region covered by the Peruvian empire has not half as many people now as it had in the time of the Incas. Is it possible to imagine the present inhabitants of Ecuador, Peru, and Bolivia cultivating their soil with intelligent industry, building aqueducts five hundred miles long, and constructing magnificently paved roads through the rocks and across the ravines of the Andes, from Quito to Chili? One of the scholars connected with the scientific expedition which visited South America in describing the ancient greatness and present inferior condition of Quito, exclaims, “May the future bring it days equal to those when it was called the ‘City of the Incas!’” He might appropriately utter a similar wish for the whole country. APPENDIX. APPENDIX. A. THE NORTHMEN IN AMERICA. IT is generally known, I suppose, that original manuscript records of Norse voyages to this continent have been carefully preserved in Iceland, and that they were first published at Copenhagen in with a Danish and a Latin translation. These narratives are plain, straightforward, business-like accounts of actual voyages made by the Northmen, in the tenth and eleventh centuries, to Greenland, Newfoundland, Nova Scotia, and the coast of Massachusetts and Rhode Island. Within the whole range of the literature of discovery and adventure no volumes can be found which have more abundant internal evidence of authenticity. It always happens, when something important is unexpectedly added to our knowledge of the past, that somebody will blindly disbelieve. Dugald Stewart could see nothing but “frauds of arch-forgers” in what was added to our knowledge of ancient India when the Sanskrit language and literature were discovered. In the same way, here and there a doubter has hesitated to accept the fact communicated by these Norse records; but, with the evidence before us, we may as reasonably doubt any unquestioned fact of history which depends on similar testimony. Any account of these voyages should be prefaced by some notice of Iceland. Look on a map at the position of Iceland, and you will see at once that it should not be classed as a European island. It belongs to North America. It was, in fact, unknown to modern Europe until the year A.D., when it was discovered by Nadodd, a Norse rover. There is some reason to believe the Irish had previously sailed to this island, but no settlement was established in it previous to the year, when it was occupied by a colony of Norwegians under a chief named Ingolf. Owing to civil troubles in Norway, he was soon followed by many of the most intelligent, wealthy, and honorable of his countrymen. Thus Iceland, away in the Northern Ocean, became a place of great interest. In the tenth and eleventh centuries the Icelanders had become eminent among the Norse communities for intellectual culture and accomplishment. They were far superior to their countrymen in Norway. To them we are indebted for the existing records of Scandinavian mythology. They were daring and adventurous navigators, and, when we consider how near Iceland is to America, it should not surprise us to hear that they found the American continent; on the contrary, it would have been surprising if they had failed to find it. They first discovered Greenland, and in established a colony there. Afterward, in the course of many voyages, they explored the coast of America much farther south. Narratives of some of these voyages were carefully written and preserved. There are two principal records. One is entitled “An Account of Eirek the Red and Greenland.” This appears to have been written in Greenland, where Eirek settled, and where the Northmen had a colony consisting of two hundred and eighty settlements. The other record is an “Account of Thorfinn Karlsefne.”This was written in Iceland by a bishop, one of Thorfinn’s immediate descendants. The Norse narrative introduces Eirek’s voyage of discovery as follows: “There was a man of noble family, whose name was Thorvald.

He and his son Eirek, surnamed the Red, were obliged to flee from Jadir (in the southwest part of Norway) because, in some feud that arose, they committed a homicide. They went to Iceland, which, at that time, was thoroughly colonized." Thorvald died soon after reaching Iceland, but Eirek inherited his restless spirit. The record says he was at length involved in another feud in Iceland. Eirek, being unjustly treated by some of his neighbors, committed another homicide, and the narrative relates what followed: "Having been condemned by the court, he resolved to leave Iceland. His vessel being prepared, and every thing ready, Eirek's partisans in the quarrel accompanied him some distance. He told them he had determined to quit Iceland and settle somewhere else, adding that he was going in search of the land Gunniborn had seen when driven by a storm into the Western Ocean, and promising to revisit them if his search should be successful. Sailing from the western side of Iceland, Eirek steered boldly to the west. At length he found land, and called the place Midjokul. Then, coasting along the shore in a southerly direction, he sought to find a place more suitable for settlement. He spent the winter on a part of the coast which he named "Eirek's Island." A satisfactory situation for his colony was found, and he remained there two years. On returning to Iceland he called the discovered country "Greenland," saying to his confidential friends, "A name so inviting will induce men to emigrate thither." Finally, he went again to Greenland, accompanied by "twenty-five ships" filled with emigrants and stores, and his colony was established. "This happened," says the chronicle, "fifteen winters before the Christian religion was introduced into Iceland;" that is to say, Eirek made this second voyage to Greenland fifteen years previous to A.D. Biarni, son of Heriulf, a chief man among these colonists, was absent in Norway when his father left Iceland. On returning, he decided to follow and join the colony, although neither he nor any of his companions had ever seen Greenland, or sailed on the "Greenland Ocean." Having arranged his business, he set sail, and made one of the most remarkable and fearful voyages on record. On leaving Iceland they sailed three days with a fair wind; then arose a storm of northeasterly winds, accompanied by very cloudy, thick weather. They were driven before this storm for many days, they knew not whither. At length the weather cleared, and they could see the sky. Then they sailed west another day, and saw land different from any they had previously known, for it "was not mountainous." In reply to the anxious sailors, Biarni said this could not be Greenland. They put the ship about and steered in a northeasterly direction two days more. Again they saw land which was low and level. Biarni thought this could not be Greenland. For three more days they sailed in the same direction, and came to a land that was "mountainous, and covered with ice." This proved to be an island, around which they sailed. Steering toward the north, they sailed four days and again discovered land, which Biarni thought was Greenland, and so it proved. They were on the southern coast, near the new settlement. It is manifest that the first land Biarni saw was either Nantucket or Cape Cod; the next was Nova Scotia, around Cape Sable; and the island around which they coasted was Newfoundland. This voyage was made five hundred and seven years earlier than the first voyage of Columbus. Biarni's report of his discoveries was heard with great interest, and caused much speculation; but the settlers in Greenland were too busy making their new homes to undertake voyages in that direction immediately. Fourteen years later, Leif, a son of Eirek the Red, being in Norway, was incited to fit out an expedition to go in search of the strange lands Biarni had seen. On returning to Greenland "he had an interview with Biarni, and bought his ship, which he fitted out and manned with thirty-five men." The first land seen by Leif, after he sailed from Greenland, was the island around which Biarni sailed. This he named Helluland (the land of broad stones). Sailing on toward the south, they came next to a land that was low and level, and covered with wood. This they called Markland (the land of woods). The narrative goes on: "They now put to sea with a northeast wind, and, sailing still toward the south, after two days touched at an island [Nantucket?] which lay opposite the northeast part of the main land." Then they "sailed through a bay between this island and a cape running northeast, and, going westward, sailed past the Cape;" and at length they "passed up a river into a bay," where they landed. They had probably reached Mount Hope Bay. They constructed rude dwellings, and prepared to spend the winter at this place. It was about mid-autumn, and, finding wild grapes, they called the country Vinland. Leif and his people were much pleased with "the mildness of the climate and goodness of the soil."

The next spring they loaded their vessels with timber and returned to Greenland, where, Eirek the Red having died, Leif inherited his estate and authority, and left exploring expeditions to others. The next year Leif's brother Thorvald went to Vinland with one ship and thirty men, and there passed the winter. The following summer he explored the coast westward and southward, and seems to have gone as far south as the Carolinas. In the autumn they returned to Vinland, where they passed another winter. The next summer they coasted around Cape Cod toward Boston Harbor, and, getting aground on Cape Cod, they called it Kialarness, Keel Cape. Here the chronicle first speaks of the natives, whom it calls "Skrællings." It says: "They perceived on the sandy shore of the bay three small elevations. On going to them they found three boats made of skins, and under each boat three men. They seized all the men but one, who was so nimble as to escape with his boat;" and "they killed all those whom they had taken." The doctrine of "natural enemies" was more current among the old Northmen than that of human brotherhood. A retribution followed swiftly. They were presently attacked by a swarm of natives in boats. The "Skrællings" were beaten off; but Thorvald, being fatally wounded in the skirmish, died, and was buried on a neighboring promontory. His companions, after passing a third winter in Vinland, returned to Greenland, having been absent three years. This, considering the circumstances, was an adventurous voyage, a brave exploring expedition sent from the arctic regions to make discoveries in the mysterious world at the south. On reading the narrative, one longs for that more ample account of the voyage which would have been given if Thorvald himself had lived to return. The "Account of Eirek the Red and Greenland" tells of an expedition planned by Eirek's youngest son, Thorstein, which was prevented by Thorstein's death. It relates the particulars of a voyage to Vinland made by Eirek's daughter, Freydis, with her husband and his two brothers. Freydis is described as a cruel, hardhearted, enterprising woman, "mindful only of gain." The chronicle says her husband, named Thorvald, was "weak-minded," and that she married him because he was rich. During the voyage she contrived to destroy her husband's brothers and seize their ship, for which evil deed she was made to feel her brother Leif's anger on her return. The same chronicle gives an account of a voyage northward, up Baffin's Bay, and through what is now called Wellington Channel. There is also a romantic story of Thorstein's widow, Gudrid, an exceedingly beautiful and noble-minded woman, which tells how she was courted and married by Thorfinn Karlsefne, a man of distinguished character and rank, who came from Iceland with ships, and was entertained by Leif. Thorfinn came to Greenland in the year 1006, and, having married Gudrid, Thorstein's widow, was induced by her to undertake a voyage to Vinland. They left Greenland with three ships and a hundred and sixty men, taking with them livestock and all things necessary to the establishment of a colony. The vessels touched at Newfoundland and Nova Scotia, and, having reached Vinland, they passed up Buzzard's Bay, disembarked their livestock, and preparations were made for winter residence. Here they passed the winter; and here Gudrid gave birth to a son, who lived and grew to manhood, and among whose lineal descendants was Thorvaldsen, the Danish sculptor. The winter was severe; their provisions began to fail, and they were threatened with famine. This occasioned many anxieties and some adventures. One of the company, a fierce, resolute man, bewailed their apostasy from the old religion, and declared that to find relief they must return to the worship of Thor. But they found a supply of provisions without trying this experiment. Thor's worshiper afterward left the company with a few companions to pursue an expedition of his own, and was killed by the natives. The next spring Thorfinn explored the coast farther west and south. Then he went to the bay where Leif spent the winter, and there passed his second winter in Vinland. He called the bay Hóp. The Indians called it Haup; we call it Hope. During the next season they saw many natives and had much intercourse with them, which finally led to hostilities. The natives, in great numbers, attacked them fiercely, but were signally defeated. Freydis, being with the company, fought desperately in this battle, and greatly distinguished herself as a terrible combatant, although in that peculiar condition which does not specially qualify a woman for such exploits. Thorfinn afterward explored Massachusetts Bay, spent a third winter in Vinland, and then, with part of the company, returned to Greenland. He finally went back to his home in Iceland, and there remained during the rest of his life.The Indians had traditions which appear to have preserved recollections of these visits of the Northmen. In Michael Lort, Vice-president of the London Antiquarian Society, published a work, in which he quoted the following extract of a letter from New England, dated more than half a century earlier: "There was a tradition current with the oldest Indians in these parts that there came a wooden house, and men of another country in it, swimming up the Assoonet, as this (Taunton) river was then called, who fought the Indians with mighty success."

There was now a settlement in Vinland, at Hóp Bay, and voyages to that region became frequent. The old Norse narrative says: "Expeditions to Vinland now became very frequent matters of consideration, for these expeditions were considered both lucrative and honorable." The following appears in Wheaton's History of the Northmen: "A part of Thorfinn's company remained in Vinland, and were afterward joined by two Icelandic chieftains. In the year, it is said, an Irish or Saxon priest named who had spent some time in Iceland, went to preach to the colonists in Vinland, where he was murdered by the heathen." The following is from the Introduction to Henderson's Iceland: "In the year, Eirek, bishop of Greenland, made a voyage to Vinland." Thus it appears to be an authenticated fact that the Northmen had a settlement or settlements in New England six hundred years previous to the arrival of English settlers. It is probable that their Vinland settlements consisted chiefly of trading and lumbering establishments. The first explorers "loaded their vessels with timber" when ready to return to Greenland, where the lack of timber was so great that the settlers found it necessary to use stone for building material. The Vinland timber-trade became naturally an important business, but neither Greenland nor Iceland could furnish emigrants to occupy the country. Traces of the old Norse settlements in Greenland are still visible in the ruins of stone buildings. Near the Bay of Igalito, in Greenland, are remains of a stone church. Vinland was covered with great forests, and there it was much easier and cheaper to build houses of wood. The Norse records speak also of a region south of Vinland to which voyages were made. It is called Huitramannaland. Indeed, two great regions farther south are mentioned. There is a romantic story of one Biorn Asbrandson, a noble Icelander, who, being crossed in his matrimonial desires, went away toward Vinland; but his vessel was driven much farther south by a storm. Nothing was heard of him until part of the crew of a Norse vessel, on a voyage to Huitramannaland, were captured by the natives, among whom Biorn was living as a chief. He discovered an old acquaintance among the prisoners whom he found means to release. He talked freely with his old friend of the past, and of Iceland, but would not leave his savage friends. How little we know of what has been in the past ages, notwithstanding our many volumes of history! We listen attentively to what gets a wide and brilliant publication, and either fail to hear or doubt every thing else. If these Norse adventurers had sailed from England or Spain, those countries being what they were in the time of Columbus, their colonies would not have failed, through lack of men and means to support and extend them, and the story of their discoveries would have been told in every language and community of the civilized world. But the little communities in Iceland and Greenland were very different from rich and powerful nations. Instead of being in direct communication with the great movements of human life in Europe, recorded in what we read as history, they were far off in the Northern Ocean, and, out of Norway, almost unknown to Europe. Afterward, when the name and discoveries of Columbus had taken control of thought and imagination, it became difficult for even intelligent men, with the old Norse records before them, to see the claims of the Northmen. THE WELSH IN AMERICA. THE story of the emigration to America of Prince Madoc, or Madog, is told in the old Welsh books as follows: About the year A.D., Owen Gwynedd, ruling prince of North Wales, died, and among his sons there was a contest for the succession, which, becoming angry and fierce, produced a civil war. His son Madoc, who had "command of the fleet," took no part in this strife. Greatly disturbed by the public trouble, and not being able to make the combatants hear reason, he resolved to leave Wales and go across the ocean to the land at the west. Accordingly, in the year A.D., he left with a few ships, going south of Ireland, and steering westward. The purpose of this voyage was to explore the western land and select a place for settlement. He found a pleasant and fertile region, where his settlement was established. Leaving one hundred and twenty persons, he returned to Wales, prepared ten ships, prevailed on a large company, some of whom were Irish, to join him, and sailed again to America. Nothing more was ever heard in Wales of Prince Madog or his settlement. All this is related in old Welsh annals preserved in the abbeys of Conway and Strat Flur. These annals were used by Humphrey Llwyd in his translation and continuation of Caradoc's History of Wales, the continuation extending from A.D. This emigration of Prince Madog is mentioned in the preserved works of several Welsh bards who lived before the time of Columbus. It is mentioned by Hakluyt, who had his account of it from writings of the bard Guttun Owen. As the Northmen had been in New England over one hundred and fifty years when Prince Madog went forth to select a place for his settlement, he knew very well there was a continent on the other side of the Atlantic, for he had knowledge of their voyages to America; and knowledge of them was also prevalent in Ireland.

His emigration took place when. was king of England, but in that age the English knew little or nothing of Welsh affairs in such a way as to connect them with English history very closely. It is supposed that Madog settled somewhere in the Carolinas, and that his colony, unsupported by new arrivals from Europe, and cut off from communicated with that side of the ocean, became weak, and, after being much reduced, was destroyed or absorbed by some powerful tribe of Indians. In our colony times, and later, there was no lack of reports that relics of Madog's Welshmen, and even their language, had been discovered among the Indians; but generally they were entitled to no credit. The only report of this kind having any show of claim to respectful consideration is that of Rev. Morgan Jones, made in, in a letter giving an account of his adventures among the Tuscaroras. These Tuscarora Indians were lighter in color than the other tribes, and this peculiarity was so noticeable that they were frequently mentioned as "White Indians." account of his experiences among them was written in March, and published in the Gentleman's Magazine for the year, as follows: "REV. MORGAN JONES'S STATEMENT. "These presents certify all persons whatever, that in the year, being an inhabitant of Virginia, and chaplain to Major General Bennet, of Mansoman County, the said Major General Bennet and Sir William Berkeley sent two ships to Port Royal, now called South Carolina, which is sixty leagues southward of Cape Fair, and I was sent therewith to be their minister. Upon the of April we set out from Virginia, and arrived at the harbor's mouth of Port Royal the of the same month, where we waited for the rest of the fleet that was to sail from Barbadoes and Bermuda with one Mr. West, who was to be deputy governor of said place. As soon as the fleet came in, the smallest vessels that were with us sailed up the river to a place called the Oyster Point; there I continued about eight months, all which time being almost starved for want of provisions: I and five more traveled through the wilderness till we came to the Tuscarora country. "There the Tuscarora Indians took us prisoners because we told them that we were bound to Roanock. That night they carried us to their town and shut us up close, to our no small dread. The next day they entered into a consultation about us, and, after it was over, their interpreter told us that we must prepare ourselves to die next morning, whereupon, being very much dejected, I spoke to this effect in the British [Welsh] tongue: 'Have I escaped so many dangers, and must I now be knocked on the head like a dog!' Then presently came an Indian to me, which afterward appeared to be a war captain belonging to the sachem of the Doegs (whose original, I find, must needs be from the Old Britons), and took me up by the middle, and told me in the British [Welsh] tongue I should not die, and thereupon went to the emperor of Tuscarora, and agreed for my ransom and the men that were with me. "They (the Doegs) then welcomed us to their town, and entertained us very civilly and cordially four months, during which time I had the opportunity of conversing with them familiarly in the British [Welsh] language, and did preach to them in the same language three times a week, and they would confer with me about any thing that was difficult therein, and at our departure they abundantly supplied us with whatever was necessary to our support and well doing. They are settled upon Pontigo River, not far from Cape Atros. This is a brief recital of my travels among the Doeg Indians. "the son of John Jones, of Basateg, near Newport, in the County of Monmouth. I am ready to conduct any Welshman or others to the country. "New York, March." Other accounts of his "travels" among the "Doegs" of the Tuscarora nation were published much earlier, but no other has been preserved. His veracity was never questioned.What shall be said of his statement? Were the remains of Prince Madog's company represented in these "Doeg" Tuscaroras? He is very explicit in regard to the matter of language, and it is not easy to see how he could be mistaken. They understood his Welsh, not without needing explanation of some things "difficult therein." He was able to converse with them and preach to them in Welsh; and yet, if he got an explanation of the existence of the Welsh language among these "Doegs," or sought to know any thing in regard to their traditional history, he omits entirely to say so. Without meaning to doubt his veracity, one feels skeptical, and desires a more intelligent and complete account of these "travels." ANTIQUITIES OF THE PACIFIC ISLANDS. THERE are indications that the Pacific world had an important ancient history, and these multiply as our knowledge of that world increases. The wide diffusion of Malay dialects in the Pacific islands suggests the controlling influence by which that ancient history was directed. The ancient remains at Easter Island are known; two of the "great images" found there are now in the British Museum.

All who have examined this island believe these remains “were the work of a former race,” and that it had formerly “an abundant population.” It is not generally known that antiquities more important than these exist on many of the other islands of the Pacific Ocean. An educated and very intelligent gentleman, who has lived many years on one of these islands, and visited a considerable portion of Polynesia, finds that the Pacific has antiquities which deserve attention. He has sent me papers containing descriptions of some of them, taken from the diary of an intelligent and observant shipmaster, much of whose life as a mariner has been passed on the Pacific. These papers were prepared for publication in a newspaper at Sydney. The gentleman sending them says in his letter: “These researches are not very minute or accurate, but they indicate that there is a vast field ready for exploration in the Pacific, as well as in Central America and Egypt.” The papers to which I refer begin with ruins observed in the island of Ascension or Fanipe, and describe “the great temple” at Metallanine. This was a large edifice, well built of stone, and connected with canals and earth-works. “Vaults, passages, and platforms, all of basaltic stones,” are mentioned; also, “below the pavement of the main quadrangle, on opposite sides, are two passages or gateways, each about ten feet square, pierced through the outer wall down to the waters of the canal.” Within the walls is a “central pyramidal chamber or temple,” with a tree growing on it. The whole ruin is now covered with trees and other vegetation. Other ruins exist in the island, one or two of which are described. “Some are close upon the sea-shore, others are on the tops of solitary hills, and some are found on plateaus or cleared spaces far inland, but commanding views of the sea. One of the latter kind is a congeries of ruinous heaps of square stones, covering at least five or six acres. It is situated on a piece of table-land, surrounded by dense forest growths, and itself covered with low jungle. There is the appearance of a ditch, in the form of a cross, at the intersecting angles of which are tall mounds of ruin, of which the original form is now undistinguishable beyond the fact that the basements, constructed of large stones, indicate that the structures were square. The natives can not be induced to go near this place, although it abounds in wild pigeons, which they are extremely fond of hunting.” These ruined structures were not built by barbarous people such as now inhabit the island of Ascension. There is no tradition relating to their origin or history among the present inhabitants, who, it is said, attribute them to “mauli,” evil spirits. The “great temple” was occupied for a time, “several generations ago,” according to the natives, by the shipwrecked crew of a Spanish buccaneer; and relics of these outlaws are still found in its vaults, which they used as storehouses. On many low islands of the Marshall and Gilbert groups are curious pyramids, tall and slender, built of stones. The natives regard them with superstitious fear. The author of these papers, being a mariner, suggests that they are “landmarks or relics of ancient copper-colored voyagers of the Polynesian race during their great migrations.” Remarkable structures of this kind are found on Tapituea, one of the Kingsmill islands, and on Tinian, one of the Ladrones, where, also, remarkable Cyclopean structures are found. They are solid, truncated pyramidal columns, generally about twenty feet high and ten feet square at the base. The monuments on Tinian were seen by, who accompanied Bougainville. According to his description they form two long colonnades, the two rows being thirty feet apart, and seeming to have once been connected by something like roofing. On Swallow’s Island, some twelve degrees eastward of Tapituea, is a pyramid similar in construction, and on the west side of this island is “a vast quadrangular inclosure of stone, containing several mounds, or probably edifices of some kind, of which the form and contents are not known by reason of their being buried under drift-sand and guano.” On Strong’s Island, and others connected with it, are ruins similar to those at Metallanine. On Lele, which is separated from Strong’s Island at the harbor by a very narrow channel, there is a “conical mountain surrounded by a wall some twenty feet high, and of enormous thickness.” The whole island appears to present “a series of Cyclopean inclosures and lines of great walls every where overgrown with forest.” Some of the inclosures are parallelograms in extent; one is much larger. The walls are generally twelve feet thick, and within are vaults, artificial caverns, and secret passages. No white man is allowed to live on Lele, and strangers are forbidden to examine the ruins, in which, it is supposed, is concealed the plunder taken by the natives from captured or stranded ships. On the southwest side of the harbor, at Strong’s Island, “are many canals lined with stone. They cross each other at right angles, and the islands between their intersections were artificially raised, and had tall buildings erected on them, some of which are still entire. One quadrangular tower, about forty feet high, is very remarkable.

The forest around them is dense and gloomy; the canals are broken and choked with mangroves." Not more than people now inhabit these islands; their tradition is, that an ancient city formerly stood around this harbor, mostly on Lele, occupied by a powerful people whom they call "Anut," and who had large vessels, in which they made long voyages east and west, "many moons" being required for one of these voyages. Great stone structures on some of Navigator's Islands, of which the natives can give no account, are mentioned without being particularly described. Some account is given of one remarkable structure. On a mountain ridge above the sea, and near the edge of a precipice high, is a circular platform built of huge blocks of volcanic stone. It is in diameter, and about high. On one side was the precipice, and on the other a ditch that may have been originally deep. Trees six feet in diameter are now growing in the ruins of this platform. Remarkable ruins exist on some of the Marquesas Islands, but they have not been clearly described. At first, when these antiquities were noticed by seamen, it was suggested that they were the remains of works constructed by the old buccaneers; but closer examination soon put aside this theory. Neither the buccaneers, nor any other people from Europe, would have constructed such works; and, besides, it is manifest that they were ruins before any crew of buccaneers sailed on the Pacific. The remains on Easter Island were described by Captain Cook. It has now been discovered that such remains exist at various points throughout Polynesia, and greater familiarity with the islands will very likely bring to light many that have not yet been seen by Europeans. The author of these papers, referring to the old discarded suggestion relative to the buccaneers, says: "Centuries of European occupation would have been required for the existence of such extensive remains, which are, moreover, not in any style of architecture practiced by people of the Old World." It is stated that similar stone-work, consisting of "walls, strongholds, and great inclosures," exists on the eastern side of Formosa, which is occupied by a people wholly distinct in race from the Mongols who invaded and occupied the other side. The influence to which these ancient works are due seems to have pervaded Polynesia from the Marquesas Islands at the east, to the Ladrone and Carolina Islands at the west, and what is said of the present inhabitants of Ascension Island might have a wider application, namely, "They create on the mind of a stranger the impression of a people who have degenerated from something higher and better." At a few points in Polynesia a small portion of the people show Mongol traits. Dark-colored people, evidently of the Papuan variety, somewhat mixed with the brown race it may be, are found at various points in larger numbers; but the great body of the Polynesians are a brown race, established (at a very remote period, perhaps) by a mixture of the Papuans with the Malays. Now take into consideration the former existence of a great Malayan empire, the wide distribution of Malay dialects on the Pacific, and the various indications that there was formerly in Polynesia something higher and better in the condition of the people, and the ancient history indicated by these ruins will not seem mysterious, nor shall we feel constrained to treat as incredible the Central American and Peruvian traditions that anciently strangers came from the Pacific world in ships to the west coast of America for commercial intercourse with the civilized countries existing here. Ruins similar in character are found in the Sandwich Islands, but here the masonry is occasionally superior to that found elsewhere. A gentleman interested in archæological inquiries gives the following account of a Hawaiian ruin which he visited in the interior, about thirty miles from Hilo. He says he went with several companions to the hill of Kukii, which he describes as follows: "The hill is so regular in its outline that it appears like a work of art, a giant effort of the Mound-Builders. Its general form resembles very much the pyramid of Cholulu in Mexico, and from this fact I felt a great interest in climbing it. We proceeded, Conway, Eldhardt, Kaiser, and I, on foot up the grassy slope of the hill. There was an absence of all volcanic matter; no stone on the hill except what had been brought there by the hand of man. As we arrived near the summit we came upon great square blocks of hewn stone overgrown by shrubbery, and on reaching the summit we found that it had been leveled and squared according to the cardinal points, and paved. We found two square blocks of hewn stone imbedded in the earth in an upright position, some fifteen feet apart, and ranging exactly east and west. Over the platform was rank grass, and a grove of cocoanuts some hundred years old. Examining farther, I found that the upper portion of the hill had been terraced; the terraces near the summit could be distinctly traced, and they had evidently been faced with hewn stone. The stones were in perfect squares of not less than three feet in diameter, many of them of much greater size.

They were composed of a dark vitreous basalt, the most durable of all stone. It is remarkable that every slab was faced and polished upon every side, so that they could fit together like sheets of paper. They reminded me much of the polished stones in some of the walls of Tiahuanuco, and other ruins in Peru. Many of the blocks were lying detached; probably some had been removed; but there were still some thirty feet of the facing on the lower terrace partly in position. But all showed the ravages of time and earthquakes, and were covered with accumulated soil, grass, and shrubbery. Conway and myself, in descending the hill, had our attention attracted by a direct line of shrubbery running from the summit to the base of the hill, on the western side, to the cocoanut grove below. Upon examination, we found it to be the remains of a stairway, evidently of hewn stone, that had led from the foot of the hill to the first terrace, a height of nearly. Within this stairway, near the base, we found a cocoanut-tree growing, more than years old, the roots pressing out the rocks. The site for a temple is grand and imposing, and the view extensive, sweeping the ocean, the mountains, and the great lava plain of Puna. It was also excellent in a military point of view as a lookout. From the summit it appeared as an ancient green island, around which had surged and rolled a sea of lava; and so it evidently has been. “By whom and when was this hill terraced and these stones hewn? There is a mystery hanging around this hill which exists nowhere else in the Sandwich Islands. The other structures so numerously scattered over the group are made of rough stone; there is no attempt at a terrace; there is no flight of steps leading to them; there is no hewn or polished stone, nor is there any evidence of the same architectural skill evinced. They are the oldest ruins yet discovered, and were evidently erected by a people considerably advanced in arts, acquainted with the use of metallic instruments, the cardinal points, and some mathematical knowledge. Were they the ancestors of the present Hawaiians, or of a different race that has passed away?” He inquired of the oldest natives concerning the history of this ruin, but “they could give only vague and confused traditions in regard to it, and these were contradictory. The only point on which they agreed was that it had never been used within the memory of man.” They also said there was another old structure of the same kind in Kona, whose history is lost. The language of the Sandwich Islands is so manifestly a dialect of the Malayan tongue, that the influence of the Malays must have been paramount in these islands in ancient times. D. DECIPHERING THE INSCRIPTIONS. IN the “Actes de la Société Philologique,” Paris, for March, Mons. H. de Charencey gives some particulars of his attempt to decipher “fragments” of one or two very brief inscriptions on the bas-relief of the cross at Palenque. I know nothing of his qualifications for this work, but he appears to have studied the characters of the Maya alphabet preserved and explained by Landa. It is seen, however, that his attempt to decipher the inscriptions is a complete failure. In fact, he professes to have done no more than reproduce two or three words in Roman characters. He gives us Hunab-ku, Eznab, and Kukulcan as words found on the cross. Eznab is supposed to be the name of a month, or of a day of the week, and the others names of divinities. He finds that the characters of the inscriptions are not in all respects identical with those found in Landa, and that Landa’s list, especially when tested by the inscriptions, is incomplete. There is not absolute certainty in regard to the name Kukulcan; nevertheless, M. de Charencey makes this speculative use of it: “The presence of the name ‘Kukulcan’ on the bas-relief of the cross is important in a historical point of view. The name of this demigod, which signifies ‘the serpent with the quetzal plumes,’ is the Maya form of the Mexican name ‘Quetzalcohuatl,’ which has precisely the same meaning. But we know that the name and worship of this god were brought to the high plateaus of Central America toward the ninth century of our era, consequently the bas-relief in question can not be more ancient.” This assumes that the worship of Kukulcan was never heard of by the Mayas until the Aztecs arrived in Mexico, an assumption for which there is no warrant, and which proceeds in utter disregard of facts. It was the Aztecs who had never heard of Kukulcan, or, at least, had not adopted his worship, previous to this time. The Aztecs, when they settled in Anahuac, did not impart new ideas, religion, or culture to any body; on the contrary, they received much from the civilization of their new neighbors, which was more advanced than their own. It is very certain that neither the Mayas nor the Quichés borrowed any thing from them.