

THE LETTER OF DR. DIEGO ALVAREZ CHANCA, DATED
1494, RELATING TO THE SECOND VOYAGE OF CO-
LUMBUS TO AMERICA (BEING THE FIRST WRITTEN
DOCUMENT ON THE NATURAL HISTORY, ETHNOG-
RAPHY, AND ETHNOLOGY OF AMERICA)

(Translated from Spanish original, as spoken and written in the fifteenth century, with explanatory notes, geographical and historical remarks.)¹

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CHRISTOPHER COLUMBUS.

[This document is a letter addressed to the Municipal Council, or Cabildo,² of the city of Seville, Spain, by Dr. Diego Alvarez Chanca, a native of that city and physician to the fleet of Columbus on his second voyage of discovery to America,³ dated at the port of Isa-

¹ A lecture delivered before the Biological Section of the New York Academy of Sciences, at the American Museum of Natural History, March 5, 1906.

This important historical document, written not by any means with the idea of specially treating of the flora, the fauna, the ethnology, and the anthropology of America, yet speaking familiarly about those subjects, was translated into English by Mr. R. H. Major, of the British Museum, and published in London for the Hakluyt Society in 1847; but as it was penned by its author in the old Spanish of the fifteenth century, its translation into English, by a foreigner of the nineteenth century, naturally contains several almost unavoidable inaccuracies, and lacks appreciation of the many fine and subtle meanings in phraseology, deviating from the rules of grammar, which the original letter possesses. Besides, Dr. Chanca was an Andalusian, who had all the ready wit and quick perception of the humorous side of events, combined with the hyperbolic way of expressing their thoughts, so peculiar to the natives of Southern Spain, and almost impossible to appreciate in their full significance by foreigners. All other publications of this document by the English and American press, have been, I believe, repetitions of Mr. Major's version.

² This is the name then given to the corporation of a town in all the Spanish dominions, equivalent to Chapter, after the chapter of a cathedral or collegiate church. It is now called the *Ayuntamiento*, and is composed of a Corregidor or Alcalde, and several Regidores; the first corresponding to Mayor, and the latter to Aldermen.

³ This physician was a distinguished practitioner of much learning and professional skill, who held the position of Physician-in-Ordinary to the King and Queen of Castile and Aragon, and had attended their first-born

bella, in the island of Hispaniola, or Santo Domingo, West Indies, at the end of January, 1494. This letter left the port of Isabella on February 2d, in care of Don Antonio de Torres, commander of the twelve vessels sent back by Columbus to Spain with the news of the discoveries, and arrived there April 8, 1494. Every thing Dr. Chanca says in his letter, therefore, regarding those just discovered islands of the New World, he learned in the short space of time between November 3, 1493, when he saw the first island (Dominica), and the last week of January, 1494—that is, in less than three months.

Dr. Diego Alvarez Chanca had been especially appointed by the Spanish monarchs to accompany that expedition, not only on account of its great political and commercial importance, but also because among the 1,500 persons who came over from Europe to America in that fleet were several distinguished Court personages and a large number of young gentlemen belonging to aristocratic families, restless and daring warriors who had done excellent military service in the war just successfully ended against the Moors of Spain.

Mingling with the men of distinction who come over from Spain to America in that expedition I may mention the following: Juan Ponce de León, the future conqueror of Puerto Rico and later on the discoverer of Florida; Alonso de Ojeda, the future discoverer and explorer of the north coast of South America, with whom the Italian Amerigo Vespucci made his first trip to the New World, named after him; Pedro Margarit, the subsequent discoverer of the archipelago to which he gave the name of the Marguerite Isles; Juan de la Cosa, the expert cosmographer, author of the first map of America in existence, drawn by him in the year 1500 and now in the Royal Naval Museum at Madrid;¹ Antonio de Torres, a brother of the nurse (*aya*) of Prince Juan; the father and the uncle of Fray Bartolomé de las Casas, the accomplished Spanish historiographer of America; Bernal Diaz de Pisa, the accountant or treasury official

child, Princess Isabella (who afterward became Queen of Portugal) during a serious illness the year before. On his return to Spain, Dr. Chanca published in Spanish, in the year 1506, a treatise on The Treatment of Pleurisy (*Para curar el mal de costado*), and a commentarial work in Latin, criticising the book entitled “*De conservanda juventute et retardanda senectute*,” whose author was another eminent Spanish physician named Dr. Arnaldo de Villanova. The title of this second work of Dr. Chanca is “*Comentum novum in parabolis divi Arnaldi de Villanova*,” which was printed in Seville in the year 1514.

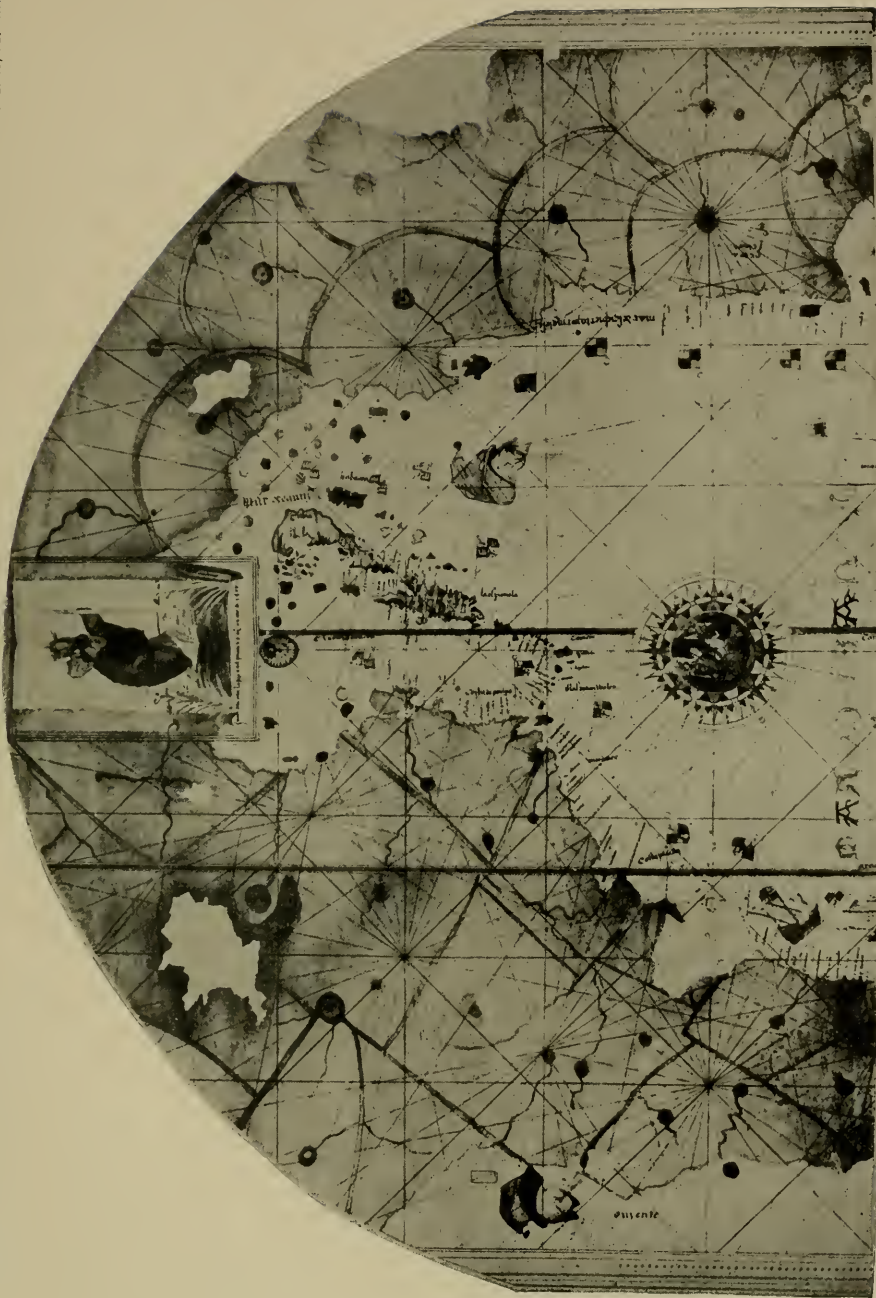
¹ See the accompanying illustration, which shows the American portion of that unique map.

of the expedition; Diego Marquez, the overseer of the flotilla and master of one of the caravels; Villacorta, a noted mechanical engineer; Fermín Zedo, an expert metallurgist; Francisco de Peñalosa; Ginés de Gorbálán; Juan de Rojas; Alonso de Valencia; Sebastian de Olano; Juan Aguado; Gaspar Beltrám; Juan de la Vega; Pedro Navarro, and Melchor Maldonado. Other equally distinguished persons who came over in the second voyage of Columbus to America, were: Fray Bernal Boil, apostolic delegate of Pope Alexander VI, accompanied by twelve fathers belonging to different religious orders, among whom the most prominent were Fray Román Pane, Fray Juan de Tisín, and Fray Juan de la Duela, familiarly called *el Bermejo*, on account of his red hair.

As an able practitioner of medicine, Dr. Chanca showed his skill by saving the life of Christopher Columbus, who suffered a very dangerous attack of typhus fever, on one occasion, and pernicious malarial fever, on another occasion, as well as the lives of many Spanish hidalgos who were at the point of death, as victims of disease, during their stay at the island of Hispaniola, the Santo Domingo of to-day, called at that epoch Haití by the aboriginal inhabitants.

This expedition of the Spaniards was altogether different from the one sent out the previous year in quest of a new passage to the Indies. Instead of three caravels, carrying only 120 persons, which accomplished the discovery of the Western Hemisphere, this flotilla was composed of three great galleons or carracks and fourteen caravels of different sizes. It was well provided with the requisites for the establishment of a permanent settlement in the land that had been discovered the year before. Even 20 horses for as many soldiers armed with lances, which played a most terrorizing influence among the American Indians,—because they had never seen horses before, and supposed that both the animal and his rider were a single individual—came over also on board those Spanish vessels.

Besides this excellent description of the first part of the second voyage of Columbus to America, which competent authorities consider the best in existence, Dr. Chanca also supplied information to Father Andrés Bernaldez, the celebrated parish priest of the town of Los Palacios and chaplain to the archbishop of Seville, Don Diego de Deza, which enabled Bernaldez to give many important details of this expedition of the Spaniards in his famous historical work entitled "Chronicle of the Catholic Kings." The town of Los Palacios is located twelve miles to the south from the city of Seville, and has at present a population of about 2,000.]



AMERICAN PORTION OF LA COSA MAP, 1500. ORIGINAL IN ROYAL NAVAL MUSEUM, MADRID, SPAIN

Here follows the letter :

“Since the occurrences which I relate in private letters to other persons are not of such general interest as those which are contained in this epistle, I have resolved to give you a complete narrative of the events of our voyage, as well as to treat of the other matters which form the subject of my petition to you.

“The expedition which their Catholic Majesties sent, by divine permission, from Spain to the Indies under the command of Christopher Columbus, admiral of the ocean, left Cadiz on the 25th. day of September, in the year 1493, with wind and weather favorable for the voyage. This wind lasted two days, during which time we managed to make nearly fifty leagues. The weather then changing, we made little or no progress for the next two days; it pleased God, however, after this, to restore us fine weather, so that in two days more we reached the island of Great Canary. Here we put into harbor, which we were obliged to do to repair one of the ships that made a great deal of water. We remained all that day, and on the following set sail again, but were several times becalmed, so that four or five days more passed before we reached the island of Gomera. We had to remain at Gomera one day to lay in our stores of meat, wood, and as much water to drink as we could stow, preparatory for the long voyage that we expected to make without seeing land.¹ Thus it happened that through the delay at these two ports, and being calmed the day after leaving Gomera, we spent nineteen or twenty days before we arrived at the island of Ferro.² After this we had, by the goodness of God, a return to fine weather, more continuous than any fleet ever enjoyed during so long a voyage; so that leaving Ferro on the thirteenth day of October, within twenty days we came in sight of land, but we should have seen it in fourteen or fifteen days if the ship *Capitana*³

¹From the island of Gomera Columbus embarked eight pigs, bulls, cows and calves, sheep and goats, fowls and pigeons, seeds of oranges, lemons, bergamots, citrons, pomegranates, dates, grapes, olives, melons, and other European fruits, as well as all kinds of orchard and garden vegetables. All these things were the origin of their species in the New World. The expedition likewise carried twenty horses belonging to twenty soldiers armed with lances, shipped before leaving Cadiz, besides stores of all kinds, including medical and surgical supplies, and implements of husbandry, from Spain.

²The southwesternmost of the group of the Canary Islands, and named Hierro in Spanish. Formerly this group was called the Fortunate Islands.

³A galleon (known in Spain as a nao, like the *Santa Maria* of the first voyage) of four hundred tons burden, that carried the Admiral's flag, and in which the writer of this historical document made the trip. Columbus's younger brother Diego, and three old comrades of his first voyage to America, were also on board this vessel.

had been as good a sailer as the other vessels,¹ for many times the others had to shorten sail because they were leaving us much behind. During all this time we had great fortune, for throughout the voyage we encountered no storm, with the exception of one on St. Simon's eve, which for four hours put us in considerable danger.²

"On the first Sunday after All Saints' day, namely, the 3d. of November, about dawn, a pilot of the ship *Capitana* cried out: 'The reward, I see land!'"³

"The joy of the people was so great, that it was wonderful to hear their cries and exclamations of pleasure; and they had good reason to be delighted, for they had become so wearied of bad living, and of working the water out of the leaky ships, that all sighed most anxiously for land. The pilots of the fleet reckoned on that day that between the time of leaving the island of Ferro and first reaching land we had made eight hundred leagues;⁴ others said seven hundred and eighty, so that the difference was not great, and three hundred more between Ferro and Cadiz, made in all eleven hundred leagues.⁵ I do not, therefore, feel now as one who had not seen enough water.

"On the morning of the aforesaid Sunday we saw lying before us an island, and soon on the right hand another appeared: the first⁶ was high and mountainous on the side nearest to us; the other was flat and very thickly wooded.⁷ As soon as the light of day became brighter other islands began to appear on the right and on the left of us, so that that day there were six of them to be seen lying in different directions, and most of them of considerable size.

¹ Sixteen in number.

² They believed themselves in much peril that evening, October 27, as they certainly were in such a sudden and fierce storm, accompanied by heavy rain, rapid lightning and loud peals of thunder, so frequent in the tropics—until they beheld several of those lambent flames called by sailors "St. Elmo's tapers," playing about the tops of the masts, and gliding along the rigging, which are occasionally seen about tempest-tossed vessels during a highly electrical state of the atmosphere. The sailors consider that phenomenon as of good omen.

³ The Spanish government had offered a reward in money to the first person who should see land on this voyage, the same as had been done on the first voyage of discovery to America.

⁴ That is, 2,400 Spanish miles, or about 2,057 English miles.

⁵ 3,300 Spanish miles, or about 2,829 English miles.

⁶ This was Dominica, so called by Columbus from having been discovered on a Sunday (*Dies Dominica*). It is 29 miles long and 13 miles in its greatest breadth, has an area of 291 square miles, and belongs to England.

⁷ The island to which Columbus gave the name *Marigalante*, the real name of the galleon *Capitana*, in which he and Dr. Chanca sailed. It has an estimated area of 60 square miles, and belongs to France.



GUADALOUPE, MARIE GALANTE, AND DOMINICA. [From Henrique's *Les Colonies Françaises*, Paris, 1889.]

FIG. 124.

"We directed our course towards that which we had first seen, and, reaching the coast, we proceeded more than a league in search of a port where we might anchor, but without finding one: all that part of the island which met our view appeared mountainous, very beautiful, and green even down to the water's edge. It was delight-

ful to see it, for at that season of the year there is scarcely any thing green in our country. When we found that there was no harbor on that side¹ the admiral decided that we should go to the other island, which lay on our right, and was about four or five leagues distant.² One of the vessels, however, still remained at the first island all that day seeking a harbor, in case it should be necessary to return thither. At last, having found a good one where they saw both people and dwellings,³ they returned that night to the fleet, that had already put into harbor at the other island; and there the admiral, accompanied by a large number of men, landed with the royal banner unfurled in his hands, and took possession of all that territory we had discovered on behalf of their Majesties.

"This island of Marigalante is filled with an astonishing thick growth of wood; that variety of trees being unknown to us, some of them bearing fruit and some others flowers. It was surprising to see that, and indeed every spot was covered with verdure.

"We found there a tree whose leaf had the finest smell of cloves that I have ever met with; it was in shape like a laurel leaf, but not so large: I think it was really a species of laurel. There were wild fruits of various kinds, some of which our men, not very prudently, tasted; and upon only touching them with their tongues, their mouths and cheeks became swollen, and they suffered such a great heat and pain that they seemed by their actions as if they were crazy, and felt obliged to resort to cooling applications to ease the pain and the discomfort.

"We found no signs of any people living in this island, and concluded it was uninhabited. We remained there two long hours for it was already near evening when we landed, and on the following morning we left for another very large island, situated below this one and at the distance of about seven or eight leagues.⁴ We approached it under the side of a great mountain that seemed almost to reach the skies, in the middle of which rose a peak higher than all the rest of the mountains near it, and from which many streams came out and diverged into different channels, especially towards that part to which we were proceeding. At about three leagues' distance from it, we could see an immense fall of water that appeared to us of the breadth of an ox, and came rolling down from

¹ Dominica has no harbors, but there are several good roadsteads on its western side.

² The island Marigalante, as already stated.

³ Probably the beautiful anchorage at the north end of the western coast of Dominica, now called Prince Rupert's Bay.

⁴ Known to-day as Guadeloupe, which belongs to France.

such a height that it looked as if it were falling from the sky. It could be seen from that great distance, and it occasioned many wagers to be laid on board the ships, some people saying that it was nothing else but a series of white rocks, while others maintained that it was a great volume of falling water. When we came nearer, it showed itself distinctly: it was the most beautiful thing in the world to see how from so great a height, and from so small a space, such a large fall of water was being discharged.¹

"As soon as we approached the island, the admiral ordered a light caravel² to run along the coast to search for a harbor. The captain of this small vessel put into land in a boat, and seeing some houses leapt on shore and went up to them, the inhabitants fleeing at sight of our men. He then entered the houses and found therein various household articles that had been left unremoved,³ from among which he took two 'parrots,' very large and quite different from the parrots we had before seen.⁴ He found also a great quan-

¹ Unquestionably, it was water that this culminating peak was throwing out. Neither Dr. Chanca, Columbus, nor any of their companions on this voyage speak of having seen a volcano on the island of Guadeloupe, and for this reason I am inclined to the opinion that the volcano La Souffrière of this island (for there is another with the same name on the island of St. Vincent) did not exist at the time of the discovery, but that some seismic convulsion occurred afterward that transformed that "great mountain that seemed almost to reach the skies" into a regular volcano. The fact that there are now three extinct volcanoes on that island seems to lend force to my way of thinking in regard to the subject. In Central America there is a volcano that pours forth water instead of lava or ashes.

² The fleet of Columbus, on this his second voyage of discovery, consisted of three galleons or carracks and fourteen caravels of different sizes, carrying a total of 1,500 persons, among whom were several distinguished personages and a large number of aristocratic young fellows anxious for adventure after their exploits in the war against the Moors had ended. On the first voyage only 120 persons accompanied Columbus, 38 of whom remained at the port of La Navidad in the island of Hispaniola or Santo Domingo when Columbus returned to Spain, arriving at the same little port of Palos from where he had started 225 days before. A wonderful achievement!

³ Among these household articles were netted hammocks, utensils of earthen pottery, what seemed to be an iron pot, and the stern post of a European ship. Several receptacles of different sizes and shapes, for various uses, called by the Indians jicarás, were also found. They were made from a melon-like fruit called Güira, in Spanish, and in English, Calabash-tree, of which there are two species, the *Crescentia cujete* and the *Crescentia cucurbitina*; cups, hollow dishes, bottles, etc., were then, and are still, made of this fruit, which is never eaten, but with the soft pulp of its inner part there is prepared a pectoral syrup which is a common household remedy in all the Spanish Antilles.

⁴ These were not real parrots, but as the author himself says in his letter, papagayos, that is, macaws with a short tail, or popinjays.

tity of cotton, both spun and already prepared for spinning, and provisions of food, of all of which he brought along with him a portion. Besides those articles of food he likewise brought away with him four or five bones of human arms and legs. When we saw those bones we immediately suspected that we were then among the Caribbee islands, whose inhabitants eat human flesh, because the admiral, guided by the information respecting their situation he had received from the Indians of the islands he had discovered during his former voyage, had directed the course of our ships with a view to find them, both on account of these Caribbee islands being nearest to Spain and also in the direct track to the island of Hispaniola, where he had left some of his men when he returned to Spain. Thither, by the goodness of God and the wise management of the admiral, we came in as straight a channel as if we had sailed by a well known and much-frequented route.¹

“This island of Guadeloupe is very large, and on the side where we arrived it seemed to us to be about twenty-five leagues in length. We sailed more than two leagues along the coast in search of a harbor. On the part towards which we moved it appeared all made up of very high mountains, and on the part we left there were extensive plains;² on the shore were a few small villages whose inhabitants fled as soon as they saw the sails of our ships. At last, after having gone about two leagues’ distance, we found a port late in the evening.³

“That night the admiral resolved that some of the men should

¹In order to do that, Columbus started from the Canary Islands on a much more southerly course than on his previous voyage, and thus avoided sailing over the Sargasso Sea, that large area of floating sea-weed in the Atlantic Ocean, formed by the *Sargasso baccifera* and allied species. Columbus was the first person who gave a description of it.

²Guadeloupe really consists of two islands, Grande Terre and Basse Terre, separated by a narrow channel called Rivière Salée or “Salt River.” Grande Terre is generally flat, composed of coral, limestone, and oceanic detritus, with the highest elevation less than 500 feet; while Basse Terre is of volcanic formation, and traversed from north to south by a ridge of mountains with prominent peaks. One of these culminating points is the semi-active volcano La Souffrière, about 4,500 feet high. This island was discovered on November 4, 1493, and named by Columbus, Nuestra Señora de la Guadalupe, in remembrance of the famous sanctuary of Our Lady of Guadeloupe, in the province of Extremadura, Spain, to the ecclesiastics of which monastery he had promised to give that name to some island found in the New World. The combined area of the two islands constituting Guadeloupe is 616 square miles.

³This port is now known as the Bay of Point-à-Pitre, one of the best in the Antilles, and is located at the south entrance of the Rivière Salée or channel between Grande Terre and Basse Terre.

land at the break of day in order to talk with the natives, and to learn, if possible, what sort of people they were, although we had already great suspicion, judging by the appearance of those who fled at our approach, that they were naked people like those whom the admiral had seen in his former voyage. In the morning several detachments under their respective captains started in different directions. One of the parties returned at the dinner hour with a boy about fourteen years of age, who said that he was one of the prisoners taken by these people. Another detachment brought in a little boy whom a man was leading by the hand, but he left him and fled. This boy was sent on board immediately with some of our men. Other detachments remained away longer, and brought along with them several women, natives of this island, together with other women from among the captive ones, who came willingly and of their own accord. The captain of another detachment of six men,¹ not knowing that we already had information about the inhabitants of this island, advanced farther away into the interior and all were lost. They could not find their way back to the coast until after four days. We thought they had been killed and eaten up by the people called Caribbees, for we could not account for their long absence in any other way, since there were among them pilots who, by their knowledge of the stars, could navigate either to or from Spain, so that we imagined they could not lose themselves in so small a place.² When they at last came back, they reported they had found many aromatic plants, delicious fruits, several kinds of unknown birds, and some considerable rivers,³ but all in a woodland so thick with luxuriant vegetation and high trees that they could not see the sky even by climbing the trees, and only with great difficulty walk. Finally they came out upon the sea-shore, and following the line of coast returned to the fleet. They brought with them some women and boys, ten in number.

“These stragglers came back from the interior of the island in such an emaciated condition, that it was distressing to see them. The admiral had sent searching parties into the woods to find them; they halloosed, and sounded their trumpets, and fired their arquebuses, but to no avail.

¹Some other authorities have said eight instead of six men.

²The captain of this detachment was Diego Marquez, the overseer of the fleet and master of one of the caravels, who had landed early in the morning with several men belonging to his vessel, and went, without permission of Columbus, on an exploring expedition into the interior of the island.

³The principal rivers of the island of Guadeloupe are now called the Goyaves, the Lamentin, and the Lazarde.

“On the first day of our landing several men and women came on the beach, down to the water’s edge, and gazed at the ships in astonishment at so novel a sight, but when a boat with some of our men was sent ashore, in order to speak with them, they cried aloud ‘taíno,’ ‘taíno,’ which is as much as to say ‘friends,’ ‘friends,’ and waited for the landing of the sailors, standing, however, by the boat in such manner that they might escape from our men when they wanted to do so. The result was that none of those men could be persuaded to join us, and only two of them were taken by force and led away. More than twenty of the female captives were taken with their own consent, and a few of the native women, by surprise, and forcibly carried off. Several of the boys, who were captives, came to us, fleeing from the natives of the island who had taken them prisoners in their own country.

“We remained eight days at that port¹ in consequence of the temporary loss of the before-mentioned captain and six men composing one of the detachments, and in that time we went on several occasions on shore, passing amongst the dwellings and through the villages located near the coast. We found there a vast number of human bones and skulls hung up about the houses, like vessels intended for holding various things. Very few men were there to be seen around, and the women that we had captured informed us that this was on account of the departure of ten canoes full of men having gone out to make war upon the inhabitants of other neighboring islands.³

¹The port referred to here is the handsome bay of Point-à-Pitre.

²These villages were composed of twenty or thirty houses, square in shape for the common people and circular for their chiefs, all surrounding an open place or plaza called batéy, among the Lucayans, a name now-a-days applied to the open space occupied by the different buildings of a sugar plantation. The houses had the name bohíos, and were made of trunks of trees, generally the royal-palm, and covered around with yagüas, that is, the large broad leaves covering the fruit of the royal-palm, which resemble thin, very pliable boards, from one to four feet wide and four to eight feet long, intertwined with reeds called bejucos, and still so named, and continued to the present day to be employed in the backwoods of Cuba, Puerto Rico, Santo Domingo, etc., as the abode of the farmers. The roofs of these huts are covered with the common, long, and flaked leaves of the same royal-palm, and have in front a sort of portico or extension of the roof that serves as shelter from the hot sun and from the rain.

At the entrance of one of these houses in the island of Turuqueira the explorers found some images of serpents, tolerably well carved in wood. Perhaps this house was the church or place of worship of the idolatrous aborigines of America.

³When the Caribbee men went forth on their predatory expeditions, always

“These islanders appear to us to be more civilized than those who had hitherto been seen, for although all Indians have houses made of straw,¹ yet the dwellings of these people are constructed in a much superior fashion, better stocked with provisions, and exhibit more evidences of industry both on the part of the men and of the women. They had a considerable quantity of cotton, already spun and also prepared for spinning, and many cotton blankets so well woven as to be in no way inferior to similar ones made in our country.²

“We inquired of the women who were prisoners of the inhabitants of this island, what sort of people these islanders were, and they replied, Caribbees. As soon as these women learned that we abhor such kind of people because of their evil practice of eating human flesh, they felt delighted. And after that, if any man or woman belonging to the Caribbees was forcibly brought forward by our men, they informed us (but in a secret way) whether he or she belonged to that kind of people, evincing at the same time by their dread of their conquerors that those poor women pertained to a vanquished nation, though they well knew that they were then safe in our company.³

accompanied by their caciques, or kings, the women remained at home to defend their shores from invasion, and they were as good archers as the men, partaking of the same warrior spirit as their husbands and male relatives.

¹Dr. Chanca here makes a mistake, for, though the houses of the native Indians of the Antilles may have had the appearance of being built of straw, they were almost exclusively made of the component parts of the royal-palm (*Roystonea regia*), as stated in the above explanatory note. He probably considered those houses made of straw because they certainly had that appearance, and in the short space of time which he had had to observe them he did not get the opportunity of seeing one of those huts in process of construction.

²They possessed also the art of making household utensils of clay, which they baked in kilns like the potters of Europe.

³Prof. Justin Winsor, the accomplished librarian of Harvard College, in his “Christopher Columbus,” referring to the Caribbee Indians, makes the following interesting statements: “The contiguity of these two races, the fierce Carib and the timid tribes of the more northern islands (the Lucayans) has long puzzled the ethnologist. Irving indulged in some rambling notions of the origin of the Carib, derived from observations of the early students of the obscure relations of the American peoples. Larger inquiries and more scientific observations has, since Irving’s time, been given to the subject, still without bringing the question to recognizable bearings. The craniology of the Carib is scantily known, and there is much yet to be divulged. The race in its purity has long been extinct. Lucien de Rosny, in an anthropological study of the Antilles published by the French Society of Ethnology in 1886, has amassed considerable data for future deductions.”

"We were able to distinguish which of the women were natives of this island and which captives, by the distinction that a Caribbee woman wore on each leg two bands or rings of woven cotton, one fastened around the knee and the other around the ankle, by this means making the calves of their legs look big and the above-mentioned parts small, which I imagine they do because they believe this sort of adornment makes them pretty and graceful: by that peculiarity we distinguish them.¹

"These captive women told us that the Caribbee men use them with such cruelty as would scarcely be believed; and that they eat the children which they bear to them, only bringing up those which they have by their native wives. Such of their male enemies as they can take away alive, they bring here to their homes to make a feast of them, and those who are killed in battle they eat up after the fighting is over. They claim that the flesh of man is so good to eat that nothing like it can be compared to it in the world; and this is pretty evident, for of the human bones we found in their houses every thing that could be gnawed had already been gnawed, so that nothing else remained of them but what was too hard to be eaten. In one of the houses we found the neck of a man undergoing the process of cooking in a pot, preparatory for eating it.²

"The habits of these Caribbees are beastly.

¹These bands or rings of woven cotton worn by the Caribbee women were about two inches wide and sometimes embellished with pieces of gold, pearls, and valuable stones; a sort of double garter known by them as llauto.

²Alexander von Humboldt, in his "Personal Narrative of Travels to the Equinoctial Regions of America," speaking about the Caribbees, makes the following instructive observations, worthy of serious reflection, upon the baneful influence of fads and fancies: "Reproaches addressed to the natives on the abominable practice which we here discuss, produce no effect; it is as if a Brahmin, travelling in Europe, were to reproach us with the habit of feeding on the flesh of animals. In the eyes of the Indian of the Guaisia, the Chernvichaena was a being entirely different from himself, and one whom he thought it was no more unjust to kill, than the jaguars of the forest. It was merely from a sense of propriety that, whilst he remained in the mission, he would only eat the same food as the Fathers. The natives, if they return to their tribe (*irse al monte*), or find themselves pressed by hunger, soon resume their old habits of anthropophagy. And why should we be so much astonished at this inconstancy in the tribes of the Orinoco, when we are reminded, by terrible and well-ascertained examples, of what has passed among civilized nations in times of great scarcity? In Egypt, in the thirteenth century, the habit of eating human flesh pervaded all classes of society; extraordinary snares were spread for physicians in particular. They were called to attend persons who pretended to be sick, but were only hungry; and it was not in order to be consulted, but devoured. An historian of great veracity, Abd-allatif, has related how a practice, which at first inspired dread and horror, soon occasioned not the slightest surprise."

“There are three islands: this one on which we are is called by the natives *Turuqueira*,¹ the other, which was the first we saw, is named *Cayre*,² and the third *Ayay*.³ There is a general resemblance among the natives of these three islands, as if they were of the same lineage. They do no harm to one another, but each and all of them wage war against the inhabitants of the other neighboring islands, and for this purpose sometimes they go as far as a hundred and fifty leagues in their canoes,⁴ which are a narrow kind of boat, each made out of a single trunk of a tree.⁵ Their arms are arrows, in place of iron weapons, and as they have no iron, some of them point their arrows with a sharpened piece of tortoise-shell, and others make their arrow heads of fish spines, which are naturally barbed like coarse saws. These arms are dangerous weapons only to naked people like the Indians, causing death or severe injury, but to men of our nation they are not much to be feared.⁶

¹The island of Guadeloupe, named by Columbus Nuestra Señora de la Guadalupe, as already explained.

²The island of Dominica.

³This must have been the island now known as Martinique, though Dr. Chanca fails to mention having been there. It is situated 30 miles south by west from Dominica and 20 miles north of St. Lucia. It is almost entirely of volcanic formation, with several well marked volcanic mountains, among which the loftiest peak is that of Mount Pelée in the northwestern part of the island. Before the terrific and appalling eruption of May 8 and August 30, 1902, which destroyed the city of Saint-Pierre and killed over 30,000 inhabitants, it had an altitude of about 4,500 feet. This volcano had been previously twice in eruption, in 1762 and in 1851.

At the time of the discovery no one speaks of having seen a volcano there; and it is my humble opinion that, like the volcano La Souffrière, on Guadeloupe, it is of subsequent origin. On Martinique there are to-day, as on Guadeloupe, several extinct volcanoes which in ages gone by were probably as active as Mount Pelée and La Souffrière some years ago. Mount Pelée remains at present entirely inactive in spite of the great number of slight earthquakes in all the neighborhood, and the tremendous upheavals in South America, California and Jamaica. Perhaps these subterranean convulsions are the very cause of the stoppage of its discharging activity.

⁴That is to say, 450 Spanish miles or about 376 English miles, which means as far as Puerto Rico, Santo Domingo, and Cuba to the north, and Trinidad, Curaçoa, and the north coast of South America to the south.

⁵In the language of the Caribbees these boats were called canaóas, and among the Lucayans acalli, the largest ones, holding forty or fifty persons, being known as piraguas, which is still the Spanish name for that kind of Indian boat, called in English pirogue.

The trunk of the tree of which these water crafts were made was excavated by burning into a suitable shape. They had no sails and were impelled by a long paddle of light timber, broad and flat at each end, and held at its center by both hands.

⁶Dr. Chanca did not then know that these Caribbee arrow points were poisoned, probably with the juice of a plant as the manchineel-tree. The

"In their wars upon the inhabitants of the neighboring islands, these people capture as many of the women as they can, especially those who are young and handsome, and keep them as body servants and concubines; and so great a number do they carry off, that in fifty houses we entered no man was found, but all were women. Of that large number of captive females more than twenty handsome women came away voluntarily with us.¹

"When the Caribbees take any boys as prisoners of war, they remove their organs, fatten the boys until they grow to manhood and then, when they wish to make a great feast, they kill and eat them, for they say the flesh of boys and women is not good to eat. Three boys thus mutilated came fleeing to us when we visited the houses.

"We left that island eight days after our arrival.² The next day at noon we saw another island, not very large, at about twelve leagues' distance from the one we were leaving.³ On that evening we saw another island, but finding there were many sandbanks near it we dropped anchor, not venturing to proceed until the morning.⁴ On the morrow another appeared, of considerable size,⁵ but death of a Spanish sailor wounded with one of these arrows, which penetrated his buckler and pierced his side during a fight with a party of these Indians, clearly demonstrated that that native weapon was not so harmless as it appeared to be.

¹These captive women were natives of the island of Borinquen, Puerto Rico of to-day, who seemed to be handsomer and more attractive than the Caribbee women.

²Tuesday, November 12, 1493. The island here referred to is Guadeloupe.

³This was Montserrat, so named by Columbus because its general appearance reminded Fray Bernal Boil (a high ecclesiastic born in the province of Tarragona, Spain, who had been especially selected by King Ferdinand to accompany this expedition) of the celebrated mountain of Montserrat, in his native province, where the Benedictine monastery of which he was one of the Fathers is located. I have myself visited Montserrat, 30 miles north-west from Barcelona, and 24 miles in circumference, which is, in my opinion, one of the most beautiful mountains in the world. It is the Mons Serratus of the ancient Romans, with its loftiest point, where the monastery is located, a little over 4,000 feet in height. At present there is here, as in some of the mountains of Switzerland, a railroad that makes the ascent and descent by going around this remarkable promontory over jagged pinnacles and steep precipices. The monastery is visited annually by about 80,000 pilgrims and tourists. This mountain is also a popular place for the people of Barcelona to spend two or three days on picnics and excursions, and for newly-married couples of the middle class to enjoy their honeymoon.

⁴Columbus called it "Santa Maria la Redonda" on account of its semi-circular shape. It is a rocky, barren islet, between the islands of Nevis (called Nieves in Spanish) and Montserrat, so steep on all sides that it seems inaccessible without ladders or ropes thrown from the top, and is inhabited only by workers in the phosphate mines.

⁵This was Santa Maria la Antigua. It is 28 miles long and 20 broad,

we touched at none of these because we were anxious to convey comfort and consolation to our people, who had been left on the first voyage in the island of Hispaniola. It did not please God, however, to grant us our desire, as will hereafter appear in this narrative.

“The next day at the dinner hour we arrived at an island which seemed to be worth finding, for judging by the extent of cultivation in it, it appeared very populous.¹ We went thither and put into harbor.²

“The difference between these Caribbees and the other Indians, with respect to dress, consists in wearing their hair very long, while the others have it clipt irregularly; also because they engrave on their heads innumerable cross-like marks and different devices, each according to his fancy; and they make these lasting marks with sharpened bamboo sticks. All of them, both the Caribbee and the other Indians, are beardless, so that it is an unusual thing to find one of these men with a beard. The Caribbees whom we have taken prisoners have their eyes and eyebrows stained circularly around, which I think they do for ostentation and also because it gives them a ferocious appearance.³

having a broken and elevated surface, and its soil is fertile. Now it is called only Antigua, and is the most important of the Leeward group of the British West Indies; its population, including that of the island of Barbuda, is at present 36,819 inhabitants.

¹Called by Columbus, St. Martin. It is of triangular shape, each side being from 9 to 11 miles long. The climate is healthy, but there is little natural water to drink, the inhabitants depending almost entirely on rain water. Since 1648 it has been divided between France and Holland. The French portion, a dependency of Guadeloupe, has an area of 20 square miles and a population of 3,500. The Dutch portion is a dependency of Curaçao, has an area of 18 square miles, and a population of 3,984 inhabitants.

²Grand Bay must have been this harbor.

³The dyeing material they used for that purpose was obtained from the red or yellowish-red seeds of a small tree, called by the Indians *catabi*, now known in the French West India Islands by the name of *roucouyer*, in Spanish *bija* (*Bixa orellana*), and in English *arnotta* and *annotte*, whose leaves are heart-shaped. It is now employed for coloring cheese and butter, and, in Germany, for coloring white wines. In Jamaica it is used as medicine, in the treatment of dysentery, and is considered to possess astringent and stomachic qualities.

Those marks and stains about the face and head of the Caribbees remind me of the similar custom of the ancient Romans, who after their victorious return entered Rome riding in their chariots with the face and neck painted red, in imitation of fire, as stated by Christopher Landino in his commentaries to Dante's "Divine Comedy"; and as was also done by the ancient Britons, as recorded by Julius Caesar in his famous Commentaries.

“ One of the Caribbees we held as captives told us that in one of the islands belonging to them, and called Cayre¹ (which was the first we saw, though we did not land on it), there is a great quantity of gold, and that if we were to give its inhabitants nails and tools with which to make their canoes, we might bring away as much gold as we like.

“ On the same day we arrived we left that island,² having being there no more than six or seven hours, and steering for a point of land that appeared to lie in our intended course of travel, we reached it by night. On the morning of the following day we coasted along, but found that although it was very large in extent it was not a continuous territory, for it was divided up into more than forty islets.³ The land was very high and most of it barren, an appearance which we had never observed in any of the islands visited by us before or since: the ground seemed to me to suggest the probability of its containing minerals.

“ We proceeded along the coast the greater part of that day, and on the evening of the next we discovered another island called by the Indians Borinquen,⁴ which we judged to be on that side about thirty leagues in length, for we were coasting along it the whole of

¹As already stated, this was the island of Dominica.

²The island to which Columbus gave the name of Santa Cruz, and now known as Saint Croix, where the explorers anchored on Thursday, November 14, 1493. It lies 65 miles east southeast of Puerto Rico, and is 83 square miles in extent. Together with the islands of St. Thomas and St. John, it forms to-day a Danish colony.

Here in this island, the most northerly one inhabited by the fierce Caribbees, the Spaniards had their first fight with the Indians in trying to capture a canoe with two women, one man and a boy. Two of the Spaniards were wounded with arrows, and one of them, a Biscayan sailor, died later. The women fought as bravely as the men, and one of them wounded the sailor. He was duly buried on the shore of the island of Haiti, as the Lucayans called Hispaniola or Santo Domingo.

³Columbus named the largest of all these islets Santa Ursula, and the others “ The Eleven Thousand Virgins ” (Las once mil vírgenes), which are now called the Virgin Islands. Santa Ursula is known to-day as *Tórtola*, which means turtle-dove. It is 11 miles long and 4 miles in its greatest breadth. The principal bay is on the southeast, and on that side there is a double curve of islets and reefs enclosing a vast roadstead with calm water, called Virgin's Causeway. The group of islets has an area of 58 square miles, and a population of 4,639 inhabitants. Cotton and sugar are cultivated for exportation. The chief town is called Roadtown.

⁴This was the island of Puerto Rico, which Columbus named “ San Juan Bautista ” (St. John the Baptist). The date of its discovery was Saturday, November 16, 1493.

one day.¹ This island is very beautiful, and, apparently, very fertile. Here the Caribbees come to make war upon its inhabitants, and often carry away many prisoners.

“These islanders have no large canoes, nor any knowledge of navigation, as our prisoners inform us, but they use bows like those of the Caribbees; and if by chance, when they are attacked, they succeed in taking prisoners some of the invaders, they eat them up in like manner as the Caribbees themselves do.

“We remained two days in a port of that island,² where a great number of our men went on shore, but we were not able to talk with the natives because at our approach they all fled, from fear, I suppose, that we were the Caribbees.

“All the above-mentioned islands were discovered on this voyage, the admiral not having seen any of them on his former trip. They are all very beautiful and possess a most luxuriant soil, but this island of Borinquen appears to exceed the others in beauty.³

“Here almost terminates the group of islands which on the side toward Spain had not been seen before by the admiral,⁴ although we regard as a matter of certainty that there is land more than forty leagues beyond the southernmost of these newly discovered islands. We believe this to be the case because two days before we saw the first island,⁶ we had observed some birds called ‘rabihorcados,’ which are marine birds of prey that do not sit nor sleep upon the water, making circumvolutions high in the air at the close of the evening,

¹An astonishingly-exact calculation of Dr. Chanca, for Puerto Rico is 90 miles long from east to west (very nearly the equivalent of 30 Spanish leagues), and 36 miles broad, with an area of 3,600 square miles and a population of 953,243 inhabitants. The capital is San Juan, but the city of Ponce is the acknowledged metropolis, the first with a population of 32,048 inhabitants, and the second numbering 27,952 souls.

²The port here referred to is now known as the bay of Mayagüez.

³The islands of St. Kitts and Nevis are not mentioned by Dr. Chanca in this account of the voyage, but they must have been seen by the explorers, for another writer of those times speaks of them as “San Cristobal” and “Nuestra Señora de las Nieves,” respectively.

⁴Here ended the Caribbee Islands; the account of whose fierce and savage inhabitants was received with eager curiosity by the learned of Europe. Traces of that same race of cannibals have more recently been discovered—and in a masterful and philosophical way described by Alexander von Humboldt—far in the interior of the country through which flows the great Orinoco river of Venezuela.

⁵It is truly admirable how nearly exact was this calculation of Dr. Chanca, for the comparatively large islands of Curaçoa and Trinidad, and the North coast of Venezuela, are about that distance from Martinique.

⁶The island of Dominica.

with the object of taking their reckoning of where they are and flying after that in a straight line towards land to sleep. These birds could not have been going to spend the night at more than twelve or fifteen leagues' distance from where they were, because it was already late in the evening, and the direction they took in their flight was toward the South.¹ From all this we concluded that there was land in that direction still undiscovered; but we did not go in search of it because it would have taken us out of our intended route. I hope that in a few more voyages it will be discovered.²

"It was at dawn when we left the above-mentioned island of Borinquen,³ and on that day prior to nightfall we caught sight of land, which although not recognized by any of those who had come hither in the former voyage, we believed to be Hispaniola from the information given us by the Indian women we had with us; and in said island we remain at present.⁴

"Between it and Borinquen another island appeared at a distance, but it was not of great size.⁵

"When we reached Hispaniola, the land at the place where we approached it was low and very flat,⁶ on seeing which a general

¹Probably these sea-birds were going to spend the night on the island of Martinique, 30 miles southwest of Dominica and 20 miles north of St. Lucia.

²And that land was in fact discovered, as predicted by the learned author of this overlooked important historical document, in the very next, or third voyage of Columbus. On July 31, 1498, he discovered the island of Trinidad, and caught a glimpse of terra firma at the delta of the Orinoco river. Afterwards he discovered the islands of Margarita, Tobago, Buen Aire, and Curaçoa, although he did not land at any of them. In his passage from the Gulf of Paria to the island of Hispaniola, Columbus also discovered on his third voyage, sailing along without touching at them, the little islands to which he gave the names of Asunción, Concepción, Sola, de los Testigos, de la Guarda, and de los Frailes, all belonging to the group known as the Windward Islands.

³That was the dawn of November 18, 1493. The explorers sailed from the bay known to-day as Mayagüez, where they had landed and visited a village located on the shore and constructed, as usual among these Indians, around a common square, like a market-place, from which a spacious road led to the sea-shore, having fences on each side of the way made of interwoven reeds and enclosing fruitful gardens. At the end of this road was a kind of terrace, or lookout, overhanging the waters of the bay.

⁴It was in fact the island of Hispaniola.

⁵This was the small island to which Columbus gave the name Mona, situated in the channel between Puerto Rico and Santo Domingo, now known as Mona Passage.

⁶That locality must have been between Point Macao and Point Engaño, which is flat. The higher land of the north coast begins at Point Macao.

doubt arose as to its identity, because neither the admiral nor his companions on the first voyage had seen it.

“This island of Hispaniola, being a large one, is divided up into provinces: that part which we first touched at, is called by the natives *Haiti*; another province adjoining it, they name *Samaná*, and the next province is known by them as *Bohío*, which is the place where we now are. These three provinces are subdivided into smaller portions.

“Those who have seen the length of its coast state that this is an island two hundred leagues long, and I, myself, should judge it not to be less than a hundred and fifty leagues. As to its breadth, nothing is hitherto known. At the date of writing this letter, it is already forty days since a caravel left here with the object of circumnavigating it, and it has not yet returned.¹

“The country is very remarkable, and contains a vast number of large rivers and extensive chains of mountains, with broad, open valleys, and the mountains are very high. It looks here as if the grass is never cut throughout the whole year. I do not think that they have any winter here, for at Christmas we found many bird-nests, some containing the young birds and others the eggs. No four-footed animal has ever been seen in this, nor in any of the other islands, except some dogs of various colors, as in our own country, but in shape and size like lap-dogs. Of wild, ferocious beasts, there are none.

“I came near forgetting to mention another four-footed little animal, in the color of its hair, size, and fur, like a rabbit, but with long tail and feet similar to those of a rat. These animals climb up the trees, and many of our men who have eaten them say their taste is very good.

“There are many snakes, small in size, also lizards, but not so many, for the Indians consider them as great a luxury as we do pheasants. These lizards are of the same size as ours, but different in shape.

“In a small adjacent island, close by a harbor which we named ‘Monte Cristo,’ where we stayed several days, our men saw an enormous kind of lizard which they said was as large around the body as a calf, and the tail shaped like a lance. They often went out to kill it, but bulky as it was it disappeared in the thicket and got into the sea, so that they could not catch it.

¹ On the parallel of 18°25' N. latitude the island of Santo Domingo has an extreme length of 400 miles, and its extreme breadth may be taken to be as of 150 miles on the meridian 71°20' West from Greenwich Observatory.

“There are, both in this and in the other islands, an infinite number of birds like those we have in our country, and many others such as we had never seen. No kind of domestic fowl has been found here, with the exception of some ducks in the houses of the island of Turuqueira.¹ Those ducks were in size larger than the ones we have in Spain, though smaller than geese, very pretty, with flat crest, and most of them as white as snow, but some also black.

“We ran along the coast of this island nearly a hundred leagues. We continued our course till we came to a harbor, which we named Monte Cristo, where we remained two days in order to observe the position and formation of the land in its neighborhood. There was a large river of excellent water close by,² but the surrounding ground was inundated, and consequently ill-calculated for a place of habitation.³

“As we went on making observations of this river and the neighboring land, some of our people discovered the bodies of two dead men in the grass by the river bank, one with a rope around his neck and the other with another rope round his feet: this was on the first day of our landing there.⁴ On the following day they found two other corpses farther on along the river, and it was noticed that one of them had a great quantity of beard. This was regarded as a very suspicious circumstance by many of us, because, as I have already said, all these Indians are beardless.

“This harbor is twelve leagues from the place where the Christians had been left by the admiral on his return to Spain from the first voyage,⁵ and under the protection of Guacamari, a king of these Indians who I suppose is one of the principal sovereigns of this island. After we anchored at said spot,⁶ the admiral ordered two lombards to be fired in order to see if there was any response from the Christians, who would fire in return, as a salute, for they also had lombards with them; but we received no reply, nor did we see on the sea-shore any body, or any sign of houses whatever.

¹ As already explained, the old island of Turuqueira is Guadeloupe.

² This river was called by the natives Yaquí, and has now the name Río de Oro.

³ This plain remark shows how well fitted was Dr. Chanca, as a medical man and a sanitarian, to accompany that large number of explorers and colonizers, which included many distinguished men.

⁴ That day was November 28, 1493.

⁵ A distance of 36 Spanish miles, equivalent to about 31 English miles.

⁶ The spot here referred to is the harbor named by Columbus, on his first voyage, La Navidad (the Nativity), reached by this large fleet of the second voyage on the night-fall of November 27, 1493.

Our people then became very much chagrined, and began to realize what the circumstances naturally suggested.

“While all of us were in this depressed state of mind, the same canoe with several Indians on board which we had seen that afternoon, came up to where we were anchored, and the Indians with a loud voice inquired for the admiral. They were conducted to the admiral’s vessel, and remained there on board for three hours talking with the admiral in the presence of us all. They said that some of the Christians left on the island had died of disease, others had been killed in quarrels amongst themselves, and that those who remained were all well. They also said that that province had been invaded by two kings named Caonabó and Mayrení, who burned all the houses, and that king Guacamari was at another place, some distance away, lying ill of a wound in his leg, which was the reason why he had not come himself in person.

“Next morning some of our men landed by order of the admiral, and went to the spot where the Christians had been housed. They found the building, which had been fortified to a certain degree by a palisade surrounding it, all burned up and levelled with the ground.¹

“They found also some rags and stuffs which the Indians had brought to set the fort and the houses in the environs on fire. They observed, too, that the few Indians seen going about in that neighborhood were shy, and dared not approach, but, on the contrary, when called, fled.

¹ The little wooden fortress in which Columbus had left 38 men the year before was built with the remains of the caravel *Santa María*, the largest of the three small vessels that discovered the Western Hemisphere of our planet, which had been wrecked on the reefs of that harbor. That small band of fool-hardy Spanish people was left well provided with arms and ammunition, medical and surgical supplies; but they all perished for lack of discipline and disregard of the orders and admonitions of Columbus before he returned to Spain.

Their commander was the hidalgo Diego de Arana Enriquez, who was a brother of Donna Beatriz, the second wife of Columbus (by whom he had his second son, Don Fernando, born at the city of Cordova on August 15, 1488), and he had as his lieutenants Pedro Gutierrez and Rodrigo de Escovedo.

Among those 38 men killed by the Indians was one of the two physicians or físicos (as they were then called) who had accompanied Columbus on his first voyage, and was left to care for the health of those boldly-venturous Spaniards. His name was Maese Juan. The name of the other ship surgeon, who returned with Columbus to Spain, was Maese Alonso. In my monograph on “The Medical History of Christopher Columbus, and the Part Taken by the Medical Profession in the Discovery of America,” I mention these two worthy members of the medical profession, who were the first physicians to tread American soil.

“ We had already been told by one of the Indians who, as interpreters, were carried to Spain and brought back with us, and who had conversed on board with the natives that came in their canoe to talk to the admiral, that all the Christians left on that island had been killed, but we did not believe it. Caonabó and Mayrení with their warriors had made an attack upon them, and burnt down the buildings.

“ We went to the place where Guacamari was. When we arrived there, we found him stretched upon his bed, which was made of cotton net-work, and according to their custom, suspended.¹ He did not arise, but from his bed made the best gesture of courtesy of which he was capable. He showed much feeling, and began by explaining to the best of his persuasive power how the Christians had died of disease, others had gone to the province where Caonabó was king, in search of gold mines, and had been killed there, and the rest had been attacked and slain in their own houses. Judging by the condition in which the dead bodies were found, I think it was not yet two months since this calamity had occurred.

“ Guacamari then made a present of eight marks and a half of gold to the admiral,² five or six hundred pieces of precious stones of different colors,³ and a cap ornamented with similar stones, which I think the Indians must value very highly because that cap was delivered with a great deal of reverence.⁴

“ It appears to me that these people put more value upon copper than gold. They beat the gold they find into very thin plates, in order to make masks of it, and then set it in a cement which they prepare for that purpose. Other ornaments they also make of the gold, which they wear on the head and hanging from their ears and nostrils,⁵ and for this object it is equally required that the gold should be in the shape of a thin plate. But it is not the costliness

¹This is the first mention in history of a hammock, called *hamaca* by those Indians, and still so named in Spanish.

²The Spanish mark, as a measure for gold and silver money, weighed eight Spanish ounces, equivalent to two-thirds of a Troy pound, and in money value was equal to 50 castellanos, or pesos as this standard Spanish coin is now called. The 50 castellanos in bullion value to-day would be worth about \$150 in U. S. currency.

³The diamond was not included in these precious stones, for it has never been found in the Antilles, nor the emerald, ruby, or sapphire.

⁴These Indians called this covering for the head, *chuco*, and it was worn in battle by the *caciques* like a helmet.

⁵These gold ornaments hanging from the ears or nostrils were called by the Lucayans, *chaquina*, and when used around the neck or the wrist like a necklace or bracelet, *chaquira*.

of the gold that they value in their ornaments; it is its showy appearance.

“The surgeon of the fleet¹ and myself being present, the admiral told Guacamari that we were skilled in the treatment of all human ills, and wished that he would show us his wound. Guacamari replied that he was willing, and then I said it would be better, if possible, to examine the wound outside the house,² because there were so many people inside of it, that made the place somewhat dark, and we needed better light. To this he consented, but in my opinion more from fear of the truth being found out than from any inclination on his part to do so, and went out of the house leaning on the arm of the admiral. After he was seated, the surgeon approached him and began to untie the bandage that covered the wound. Guacamari then told the admiral that his injury had been inflicted with a *ciba*, by which he meant with a stone. When the wound was uncovered, we examined it carefully; and it is a fact that there was no more wound on that leg than on the other, although he cunningly pretended, when we touched it, that it pained him very much.³

“There were certainly many proofs of an invasion by a hostile people, so that the admiral was at a loss what to do. He with many others of us thought, however, that for the present at least, and until we could ascertain the truth of what had happened, it was better to conceal our distrust.

“Fish is abundant here, an article of food that we greatly needed, for our provision of meat was running short, and it is a singular kind of fish, more wholesome than those we have in Spain. The climate does not allow the fish to be kept from one day to another, for all animal food speedily become unwholesome on account of the great heat and dampness.

“Large quantities of vegetables have been planted, and they cer-

¹On that expedition of the Spaniards there were, besides Dr. Chanca, in charge of the general health of the explorers (many of them distinguished persons belonging to the Court of Ferdinand and Isabella, as already explained), a ship surgeon, called in Spain in those times, *fisico* or *physicist*, and also a *pharmacist*.

²Dr. Chanca unquestionably had a suspicion that Guacamari was feigning, and wanted to be sure. As it afterward turned out, he was right in his incredulity.

³This remarkable example of refined hypocrisy and deceit in an uncivilized American Indian does not contribute to the idea of straightforward, impulsive sincerity and honesty of the human race in its unsophisticated state. The perfidy of Guacamari brings to my memory the origin of the well-known proverbial American expression, “Honest Indian.”

tainly attain a more luxuriant growth here in eight days than they would in Spain in twenty.

"We are frequently visited here by a large number of Indians, accompanied by their caciques, who are their captains or chiefs, and many women. They all come loaded with 'ages,' a sort of turnip, very excellent food, which they cook and prepare in various ways. This food is very nutritious, and has proved of the greatest benefit to us all after the privations we endured when at sea, which in truth were more severe than man ever suffered. This age the Caribbee Indians call *nabi*.

"These Indians barter their gold,¹ provisions, and every thing they bring with them, for tags, nails, broken pieces of darning-needles, beads, pins, laces, and broken saucers and dishes. They all, as I have said, go naked as they were born, except the women of this island,² who, some of them, wear a covering of cotton, which they bind around their hips, while others use grass and leaves of trees.³

"When these Indians wish to appear full-dressed, both men and women paint themselves, some black, others white and red, and different combinations of colors, in so many devices that the effect produced is very laughable; they also shave some parts of their heads, and in other parts of it wear long tufts of matted hair, which give them an indescribably ridiculous appearance. In short, whatever would be looked upon in our country as characteristic of a madman, is here regarded by the most prominent Indians as a mark of distinction.

"In our present position, we are in the neighborhood of many mines of gold, not any one of which, we are told, is more than twenty or twenty-five leagues off. The Indians say that some of them are in *Niti*, a place in the possession of *Caonabó*,⁴ that Indian king who killed the Christians; other mines are located in another place called *Cibao*,⁵ which, if it please God, we shall see with our

¹ The Lucayans called gold, *nucáy*.

² The island of Santo Domingo, and also the native women of Cuba.

³ That covering of cotton was called *nagua*, by these Indians, from which the Spanish word *enagua*, meaning the inner white skirt of a woman's dress, is derived.

⁴ He was a Caribbee by birth and ruled over the province of *Hispaniola*, called by the aborigines *Mangana*, in which were the mountains named *Cibao*. The appellation *Caonabó*, like all names of persons and of places in almost every Indian language, had a meaning, equivalent to Lord of the Golden House, and seeming to indicate the great wealth of his dominions.

⁵ This was the name given to a chain of mountains which traverses the center of the Island of Santo Domingo.

own eyes before many days have passed; indeed, we should go there at once were it not because we have so many things to attend to that there are not enough men among us to do it at present. And this is in consequence of one-third of our people having fallen sick within four or five days after we landed here, which misfortune I think has happened principally on account of the toil and privations of the journey, to which must be added the variableness of the climate;¹ but I trust in our Lord to be able to restore all the sick to health.²

“My idea of these Indians is that if we could talk their language, they would all become converted to our religion,³ for they do before the altars exactly the same things they see us doing, as, for instance: kneeling and bowing, singing the Ave María, or doing any other devotional exercises, and making the sign of the cross over one's self. They all say that they wish to become Christians, for, in reality, they are idolaters, having in their houses many kinds of strange figures.⁴ I asked them the meaning of those figures, and they told me ‘things of Turey,’ by which they meant ‘of Heaven,’ once I made the pretence that I was going to throw those figures into the fire, and this action of mine grieved them so much that they began to weep. They believe that every thing, no matter what, we have brought with us, comes from Heaven, and also called it *Turey*.”

¹The climate changes suddenly in these West Indian islands from very hot and dry to comparatively cool and very damp, due to heavy and long-continued rain.

²Columbus himself was also sick with malaria fever for several weeks, and seven months later suffered a dangerous malady, which I have ventured to diagnose as typhus, or “ship fever,” in my monograph on “The Medical History of Christopher Columbus” (which is the first, and only writing in existence on that subject), published in English in “Journal of the American Medical Association” for May 5, 1894, and “The Dublin Journal of Medical Science” for August and September, 1894. I have also published it in Spanish, French, and Italian.

³This belief of Dr. Chanca was fully confirmed in a very short time afterward, for all those Indians soon became strong Catholics, the same as are the Indians still remaining in all the Spanish-speaking countries of America.

⁴Most of them were rough images of snakes, crocodiles and other creeping animals. Their name for the evil spirit or devil was *cemí*. They had also speaking gods, or oracles, and their augurs or priests were known as *buhitís*, who played, besides, the same parts among them as the “medicine-men” of the Indians of these northern regions of America. The religious songs of the Lucayans, which were also their war songs to celebrate their victories—but not the war-dance or ghost-dance, and songs, of the North American indigines before their battling against some foe—and their funeral chants, when burying their dead caciques and noblemen, were called *areitos*.

“The little time that we have spent on land has been so much occupied in seeking for a place where to establish a settlement,¹ and in providing ourselves with things we needed, that we have had little opportunity of becoming acquainted with the natural productions of the soil. In spite of this drawback, we have already seen many marvellous things. For instance: trees producing a soft silky fiber fine enough (according to the opinion of those who are acquainted with that industrial art) to be woven into good cloth. And of this kind of trees there are so many, that we might load our vessels with the fiber, though it is somewhat difficult to gather it because these trees are very thorny, but some means can easily be found to overcome that difficulty.

“There are also cotton plants as large as peach trees, which all the year round produce cotton, and in abundance.

“We found other trees which produce wax, as good both in color and smell as bees-wax, and equally useful for burning; indeed, with very little difference between the one and the other.

“There is a vast number of trees which yield surprisingly fine turpentine.

“Tar is found in abundance, of very good quality too.

“We discovered trees which, in my opinion, bear nutmegs, but at present without fruit on them, and I say so because the bark tastes and smells like nutmegs.

“I saw one root of ginger, which an Indian was carrying around his neck.

¹They found at last a convenient place. It was on the shore of a good bay, on the north coast and upon high ground, with two rivers of potable water near by, and the back part well closed by the thick growth of an impassible forest that protected it from being set on fire by the Indians on a night attack. The building up of the first Christian town of the New World was commenced there, in that very spot, and to it Columbus gave the very appropriate name of Isabella, his faithful defender and protectress.

The engineers who came in that expedition at once laid out the square or plaza, and the streets; a convenient site for the church was selected, as well as another for the fortress, and a residential quarter for Columbus and the subsequent governors of the colony. These three buildings were to be made of stone, the principal houses of wood, others of intertwined reeds covered with mortar and called in Spanish, *embarrado*, or, in English, *adobe*, and the rest after the Indian fashion or *bohios*.

At Isabella the first aqueduct ever built upon American soil was carried to completion, and it consisted of a trench or open ditch that conducted the water of one of the two rivers through the middle of the principal streets. This sort of irrigatory aqueduct is called in Spain, *acequia*, where there are several of these kind of narrow canals. The ruins of the stone buildings in a solitary waste constitute to-day the melancholy relic of that historical locality.

“There are aloes too, though not of the same kind as those we are acquainted with in Spain, but nevertheless a species of aloes that we doctors use.

“A sort of cinnamon has likewise been found, but, to speak truthfully, it is not of such a fine quality as the one we have in Spain; or perhaps this is so because it is not now the proper season to gather it, or the soil in which it was found growing in this vicinity is not well adapted.

“We have also seen here some yellow mirabolans. At this season they are lying under the trees, and as the ground is very damp they are all rotten, and have a very bitter taste, due, in my opinion, to their state of decomposition; but the flavor of those parts which in spite of that have remained sound, is the same as that of the genuine mirabolan.

“There is, besides, a very good kind of mastic.

“None of the natives of all these islands we have visited possess any iron. They have, however, many implements, also hatchets and axes, all made of stone, which are so handsome and well finished that it is a wonder how they can contrive to make them without employing iron.

“Their principal food consists of a sort of bread made of the root of a herb, half way between a tree and grass, and the *age*, which I have already described as being like the turnip, and a very good food it certainly is. They use, to season it, a vegetable called *agí*, which they also employ to give a sharp taste to the fish and such birds as they can catch, of the infinite variety there are in this island, dishes of which they prepare in different ways.

“They have, besides, a kind of grain, in appearance like hazelnuts, very good to eat.

“They eat all the snakes, lizards, spiders, and worms that they find upon the ground, so that, according to my judgment, their beastiality is greater than that of any other beast on the face of the earth.

“The admiral had at one time determined to leave the search for the mines until he had dispatched the ships that were to return to Spain, on account of the great sickness which had prevailed among our men,¹ but afterwards he resolved to send two detachments

¹The explorers in great number were suffering from malaria fevers, about one-third of them, as Dr. Chanca said. That disease was in those days very little known, and much less its prevention and treatment. The miraculous *pulvis febrifugus orbis americani*, also called by the names “The jesuits’ powders” and “The countess’s powders” (*los polvos de la condesa*, alluding thereby to the Spanish countess of Chinchon, who was the wife

under the command of two captains, one to Cibao,¹ and the other to Niti,² places in which, as I have already stated, Caonabó lived and ruled.³ These two detachments in effect departed, and one of them returned on the twentieth of the month, while the other did so on the following day. The party that went to Cibao⁴ saw gold in so many places that one scarcely dares state the fact, for in truth they found it in more than fifty brooks and rivers, as well as upon their banks; so that the captain said that any body who wished to seek for gold throughout that province, would find as much as he wanted.

of the Spanish vice-roy of Perú, and the first European person to be cured with that wonderful new remedy), were not yet known to Europeans. The existence, and the wonderfully curative virtue, of the mysterious "quinquina" (a corruption of the indigenous Peruvian word kina-kina, which signified the bark par excellence), that saved the lives of Charles II. of England, Louis XIV. of France, and Friedrich the Great of Germany, was at that time known only to the aborigines of the yet undiscovered kingdom of Perú. And in truth, it was not until the year 1738 that, thanks to the valuable investigations of La Condamine, the tree that produces this most precious bark was known with certainty; and he was, too, the first scientist who conceived, and carried out, the idea of transporting and transplanting that tree to other countries than the one of its natural habitat.

¹ Which word in the Lucayan language meant "stone mountain."

² The fertile valley afterward called by the Spaniards "La vega real."

³ Coanabó was a Caribbee by birth and the cacique of the rich province known to the Indians with the name of Mangana, located in the interior of the island.

⁴ The captain of this detachment was a young and daring hidalgo named Alonso de Ojeda, who was a native of the city of Cuenca, Spain, and started with only fifteen armed soldiers, at the beginning of January, to find the famous gold mines of Cibao. He returned a few days after with the news that there was, in reality, an abundance of gold in that region. He had been a bold warrior in the recently-terminated war against the Moors of Granada, of whom the following feat of courage and intrepidity is related:—

It took place in the tower of the Giralda, at Seville. To entertain Queen Isabella, in whose company he was as an officer of the guard during her visit to that tower, and to give proof of his courage and agility, he, armed and accoutred as he was at that moment, mounted on a great beam which projected in the air twenty or twenty-five feet from the wall of the tower, and at such a great height from the ground below, that the people in the street looked like dwarfs. Along that beam he walked briskly, and when at its extreme end he stood on one leg, lifting the other in the air; then, turning nimbly round, he returned in the same way, unaffected by the giddy height. Reaching almost the other end of the beam, and close to the wall of the tower, he stood with one foot resting on the beam, placed the other foot against the wall, and threw an orange he carried in his pocket over the summit of the figure Giralda, at the top of the tower.

He brought with him specimens from the different parts, that is to say, from the sand of the rivers and its banks.¹

“It is generally believed that by digging as we know how, the gold will be found in greater compact masses, for the Indians neither know how to dig nor have they the means of digging the ground more than to a hand’s depth.

“The other captain, who went to the other place called Niti,² returned also with news of a great quantity of gold in three or four localities, of which he likewise brought specimens with him.”

“Thus, surely, their Highnesses the King and Queen may henceforth regard themselves as the most prosperous and wealthy sovereigns on earth, because never yet, since the creation of this world, has such a thing been seen or read of. On the return of the ships on the next voyage, they certainly will be able to carry back such a quantity of gold as will fill with amazement all who hear of it.⁴

“Here I think I shall do well to break off my narrative. And I believe that those who do not know me, and hear of these things that I relate to you, may consider me prolix and somewhat an exaggerator, but God is my witness that I have not exceeded by one iota the bounds of truth.”

¹One of those specimens was a nugget that weighed nine ounces.

²This second detachment was under the command of another young and fearless hidalgo called Ginés de Gorbacán, who was sent back to Spain by Columbus right after his return from this expedition to Niti, as a witness of the marvelous richness of the island of Hispaniola. He took with him, to Spain, the large nugget of gold which Alonso de Ojeda had found in his exploration of the mountains of Cibao.

³These specimens were fewer and of less value than the others, thus proving that the region called Niti was not so rich in gold as Cibao.

⁴Dr. Chanca in my opinion was admirably sagacious, for what he predicted here in this important historical document, written at the beginning of the year 1494, was realized but a few years after, when the Spanish galleons, loaded with the gold and silver of the New World, incited the avarice of men of other nations, who did not hesitate to become piratical adventurers—euphemistically called buccaneers—in order to rob the Spanish properties in America, both on land and upon the sea.