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A NEW THEORY ON COLUMBUS'S
VOYAGE THROUGH THE BAHAMAS

(WITH FIVE PLATES)

By

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FOREWORD

The discovery of the New World was one of those turning points that shape the course of history. Since the birth of Christ there had not been an occurrence so potentially important to the history of western civilization. Of all the events of that epoch-making voyage, none equals that moment when white breakers off the island of Guanahaní were sighted in the light of an early morning moon.

Columbus remained at Guanahaní only a very short time and then in a flush of excitement pushed on to other islands. He never returned to the point of his first landfall, his energies being devoted to new and more alluring lands to the south.

During the period of the first Spanish settlements in the West Indies, the Bahamas lay off the beaten path and they returned to obscurity to be visited only by slave raiders and pirates. The question of the site of the first landfall seems to have received little attention until early in the nineteenth century. Since that time several widely divergent theories have been advanced on the landfall site and Columbus's first days in the New World. The principal source from which historians have drawn in propounding their theories is the transcription from Columbus's Journal appearing in Bartolome de las Casas. Bartolome is supposed to have made his transcription from the Journal that Columbus had sent to the Court at Barcelona after his return to Spain.

It is highly unlikely that Columbus would send the original of the Journal prepared on shipboard but would most probably send a "smooth" copy. Thus the Journal as it appears in the surviving Las Casas manuscript must be at least third-hand. Two other factors add to the confusion. The appearance of the Bahamas has changed considerably since the first landfall. The large trees that grew on the islands in the time of Columbus have disappeared almost without exception, and many of the islands now present a much lower silhouette from a distance. The loss of the trees has led to extreme erosion of the soil, and islands once fertile are now comparatively barren and rocky.

Also, it should be remembered that Columbus approached these islands as a man full of wonder. He and his crews believed they were in the fabled East Indies known to Europe only through obscure writings and rumor; and Columbus was sailing into the unknown. When we sail into the Bahamas today, we can visualize the entire archipelago on the strength of accurate modern charts. It is impossible for a modern man to approach these islands with the same attitude

with which Columbus approached them. Thus a psychological barrier is added to those of inaccurate documentary sources and completely altered terrain.

For these reasons the site of Columbus's landfall will probably never be known with certainty. (The possibility of discovering additional Columbus material in Spain is very slim indeed.) At best we can attempt to formulate a theory that contains fewer contradictions with the Journal than others and that is based on the limits of possibility imposed by distance and known sailing capabilities of Columbus's ships. The paper presented here attempts to do just that. The authors, Edwin A. and Marion Link, are well fitted for such a task.

Edwin A. Link is the inventor of the world-famed Link Trainer. He has pioneered improvements in air navigation technique that are now accepted practice on all the world's airways. This same interest in the subject of navigation is demonstrated in his life-long experience in offshore sailing.

Mr. Link became interested some years ago in tracing some of the early history of the New World through the newly expanding medium of marine archeology. Since that time he has developed equipment and processes for underwater search and recovery that have yielded invaluable additions to our knowledge of life at sea some centuries ago. In this connection he first became interested in Columbus's discovery of the New World, the controversy over the place of his first landfall, and the final resting place of the flagship *Santa María*, which foundered on a reef somewhere in the vicinity of the harbor at Cap Haïtien, Haiti. A carefully planned expedition to this area in the spring of 1955 resulted in the recovery of an anchor which there is good reason to believe came from this long lost and famous ship. Following this effort, when climatic conditions made it no longer possible to work on this site, Mr. Link turned his attention to tracing the route of Columbus on his first voyage through the Bahamas.

Marion Link's experience as a journalist and writer and her intense interest in history are demonstrated in the development of the paper presented here.

In publishing this monograph the Smithsonian Institution of course takes no sides in the major problems considered, but wishes only to assist in making available to scholars the Links' interesting thesis concerning a highly important event in American history.

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A NEW THEORY ON COLUMBUS'S VOYAGE THROUGH THE BAHAMAS

BY EDWIN A. LINK AND MARION C. LINK

(WITH FIVE PLATES)

INTRODUCTION

It is our belief that Christopher Columbus made his first landing in the New World on the shores of the Caicos Islands and not on Watling as is generally accepted today. We have also reached the conclusion that Columbus's little fleet followed a course through the Bahamas differing from any previously put forth by other investigators of his first landfall and route.

These convictions are the result of a most careful search of available charts, both past and present, and a thorough study of original source material and the studies and opinions of later-day historians. This was followed by a personal reconnaissance of the possible courses that Columbus might have sailed through the Bahamas, covering the whole area first by airplane and then by small boat.

It was our intention at the start of our search to compare especially two suggested courses—one commencing at Watling Island, the presently acknowledged San Salvador(1),¹ and continuing on to Rum Cay, Long Island, Crooked Island, and past the Ragged Islands to Cuba as advanced by several scholars including the well-known historian, Dr. Samuel Eliot Morison(2); the other proposed by Capt. P. Verhoog, Dutch Columbophile and retired officer of the Holland-America Line(3), beginning with a landfall at Caicos and leading from there to Mayaguana, to Acklin, to Great Inagua, and thence toward the Ragged Islands and Cuba.

Dr. Morison, who has made probably the most complete investigation into the Columbian voyages since the landfall, records his beliefs as to the probable First Landing and the track followed thereafter in his magnificent two-volume book "Admiral of the Ocean Sea" published in 1942. Dr. Morison actually sailed what he believed to be the Great Explorer's course from Watling Island through the Bahamas to Cuba(4).

¹ Numbers in parentheses refer to Notes on pages 26-30.

Captain Verhoog, whose lifetime hobby has also been concerned with Columbus, bases his conclusions on a thorough study of the subject from the original sources, augmented by experience gained from frequent sailings through the Bahamas as captain of large steamers en route to and from the Caribbean and South America. He summarizes his conclusion that Caicos was Columbus's San Salvador in a carefully considered treatise entitled "Guanahaní Again," published in Amsterdam in 1947. Both men, besides being thorough scholars, are also practical seamen and navigators.

In our own reading we had never felt that the area around Watling Island answered Columbus's description of San Salvador. But when we first read Verhoog's "Guanahaní Again" we were immediately struck with the reasonableness of his arguments for selecting Caicos as the site of the First Landing. We had long ago eliminated all other theories, including those of Navarrete, Markham, Washington Irving, G. V. Fox, and Capt. A. B. Becher of the Royal Navy(5), because of palpable fallacies in their deductions. Only the conclusions of Dr. Morison, which are similar to those advanced by Lt. J. B. Murdock of the U. S. Navy in 1884(6), and of Captain Verhoog as to these suggested courses seemed reasonable.

And as we examined these latter possibilities, we resolved to make an attempt to verify or refute the conflicting claims of Morison and Verhoog by tracing both routes by boat and by airplane after first making a thorough study of each.

Our first step was to apply each passage in the Admiral's account of his first voyage to both Morison's and Verhoog's theories. We then took a modern chart of the Bahamas and traced out the two tracks, measuring off distances and directions as their sponsors pictured them (chart 1, opp. p. 32). Both had many good points and both contained many discrepancies. This is certainly understandable when one considers the inaccuracies and outright errors that must be included in Columbus's account because of the loss of the original Journal, as well as in inaccurate copies of the text that have come down through the centuries. Available copies today have not come from the original Journal but from Las Casas's "Historia de la Indias"(7), in which he abridged most of the original log, repeating in detail only those entries from October 12 to 24.

It was a common practice in those days of hand-written copies to assemble a group of copiers, each making his own copy at the dictation of a reader. Thus errors could easily creep into the text depending on the accuracy and sharpness of hearing of the writers(8). Las

Casas's rendering of Columbus's Journal from the explorer's not too legible handwriting could in itself have been responsible for many errors.

As to charts, there are none in existence today of Columbus's original voyage through the Bahamas(9). And after the discovery, the Spaniards were so busy colonizing the areas to the south that many years elapsed before any thought was given to the original landfall. For centuries the Bahama Islands were very sketchily and inaccurately charted, and the designated place of landing varied with each map-maker. To add to the confusion, the names given to these islands were seldom twice the same.

After centuries of study by numerous investigators, researchers today have come to realize that their best chance of establishing the details of Columbus's landfall and course is by resorting to the original Journal and applying the information derived from it to the most accurate of present-day charts(10). But even here there are problems, for these charts too, some of them dating back more than a century, contain many errors. There seemed to be only one way to overcome these difficulties, and that was actually to sail the most likely courses, thereby affording an opportunity to check Columbus's descriptions of the places he visited with the existing topography of those same islands today.

It was during our study of the Journal that we were struck with a passage concerning Columbus's approach to the second island. Researchers in the past have all concluded that Columbus visited and named four islands on his voyage through the Bahamas, namely, San Salvador, Santa María de Concepción, Fernandina, and Isabella. We read and reread various translations of the Journal for Sunday, October 14, and Monday, October 15, which indicated that Columbus had sailed for a second island after visiting San Salvador, but "as from this island I saw another, larger, to the west, I clewed sails up to navigate all that day until night, and still was not able to reach the westerly point; this island I named Santa María de Concepción."

As we studied the charts while attempting to apply this passage, we saw that by using Caicos as the first island it would have been possible for Columbus to sail past the north shore of Mayaguana and on toward Samana, which could have been his Santa María de Concepción, where he could have anchored at the western end for the night. From there he could have gone on to Long Island, which could have been his Fernandina. From here on, the course seemed naturally to follow that laid out by Morison to Crooked Island and thence to the Ragged Islands.

The more we studied this route, the greater its possibilities seemed. There is no need here to go into the reasons by which Morison and Verhoog reached their contradictory conclusions. Our concern was to compare their two theories and then to investigate the possibilities in this new idea which had evolved.

Capt. P. V. H. Weems, USN Retired, a world authority on navigation (11), and Mendel L. Peterson, Lt. Comdr. U. S. Navy Reserve and curator of armed forces history, U. S. National Museum, Smithsonian Institution, accompanied us on *Sea Diver* (pl. 1, fig. 1), our 65-foot diesel trawler, to check and compare the three possible tracks. Captain Weems had first introduced us to the Verhoog theory and was an ardent champion of its feasibility. Mr. Peterson, who was well grounded in the history of that period, supplied a fund of information and a completely open mind to the problem.

We visited Turks Island, Caicos, Watling, Great Inagua, Crooked, and Long Islands and sailed the courses between these islands and any others where Columbus might have gone. We studied every sentence in that particular section of the Journal, attempting to apply them to the situation as suggested by each of the three theories.

But first we flew (12) over these islands several times to obtain a clearer picture of their layout and the possible courses from one to the other. Our view of them from the air was a revelation, for in the wide expanse revealed below us, we could visualize topography and relative distances as in no other way.

Ours was the first expedition to visit the Bahamas in search of the Columbus track with the intention of investigating not one but three possible solutions. Most students of the subject had reached their conclusions only from a study of books and charts without ever having had the opportunity to visit the places in question. Morison had sailed only the course he had previously determined was the correct one, while Verhoog had viewed only the main channels of the islands from the deck of a fast ocean liner. We were fortunate to be able to appraise each possible course first-hand on the scene.

Because we found many differences in various translations from the Spanish into English, we early realized the necessity of enlisting the aid of a competent Spanish language scholar to interpret the original text for us. This we found in Dr. Armando Álvarez Pedroso (13) of Havana, Cuba, author of "Cristóbal Colón, Biografía del Descubridor," a man well versed in old Spanish and necessarily a thorough student of Columbus.

To test our theory of the existence of an unnamed island that Columbus passed by after leaving San Salvador, we asked Dr.

Pedroso upon our first meeting to read the original Spanish text for October 14 and 15 and to make a simple chart of his interpretation of it. He verified our conclusions completely. Later, in order to confirm his own interpretation, Dr. Pedroso queried Dr. Ramón Menéndez Pidal, president of the Royal Academy of Spanish language in Madrid, who replied that he could find no fault with it. Since then we have asked many others to interpret this section of the Journal, with the same result. Almost invariably they conclude that Columbus passed an island that he did not name before anchoring for the night off the shore of one he called Santa María de Concepción.

Without taking undue liberties with the text of the Journal we were able to conclude that it was entirely feasible for Columbus to have landed at Caicos and to have sailed from Mayaguana to Samana to Long Island to Crooked. It was impossible to follow either Dr. Morison's or Captain Verhoog's proposed courses without finding startling and many times unexplainable discrepancies.

To substantiate our conclusions we shall attempt to set down the questions we faced, to compare the sites we visited and their relative agreement with the descriptions in Columbus's Journal, and to point out the errors in each theory.

COLUMBUS'S LANDFALL

But first let us follow the *Santa María*, the *Niña*, and the *Pinta* as they approach the shores of the New World. Let us try to visualize this Caicos Archipelago as the setting for the First Landfall.

It is the night of October 11, 1492, and Columbus's little fleet is boiling along toward the west with sails full set. For several days there have been evidences of land, including a variety of birds, broken branches, even a carved stick; and the sailors are eagerly watching for their first glimpse of the Indies for which they are searching. They are particularly keen because Columbus has offered an award of 10,000 maravedís (14) annually from his sovereigns to him who first sights land.

Columbus too is on the alert, and at 10 o'clock he calls Pero Gutiérrez to verify the sight of a light he has descried on the horizon. Soon after, a sailor on the forecastle calls out that he sees a light (15). They increase the vigilance of their watch, and at 2 o'clock Rodríguez de Triana catches the first glimpse of the white banks and beaches of Guanahaní glowing in the moonlight (16).

Nearly 500 years later from aboard *Sea Diver*, 7 miles north of the northernmost point of Turks Island, our party found that we could

see the top of its high bluff and the lighthouse that surmounts it. We realized that Columbus, standing on the poop deck of the *Santa María* 14 feet above the water on that historic night, could easily have seen the flicker of an Indian campfire on this point as it appeared and disappeared behind the rolling seas (17). Or if the light "like a small wax candle raised and lifted up" were a torch carried in the canoe of some Indian fisherman a few miles offshore, according to the dip tables it would still have been visible to Columbus 5 miles away (18).

In either case, the glimpse of a light in the enveloping darkness argued convincingly the presence of land nearby. And although Rodríguez de Triana is named in the Journal as being the first actually to sight land, Columbus used the presence of this light to justify his claim for the reward of the 10,000 maravedís annually for himself. This he would never have done unless he was convinced that the light they saw was real and therefore necessarily on land or near land.

Sea Diver approached Caicos to the west on approximately the same course Columbus could have followed, with the lighthouse on Turks Island bearing 170° , its beach just visible 7 miles away. At noon *Sea Diver's* log records sighting directly ahead a spot known as Grassy Creek with a white sand beach. We were 2 miles offshore, and the water depth was 60 feet. Perhaps it was near here that Columbus dropped his anchor at daylight and launched the ship's boats to go ashore. Although Columbus makes no mention of anchoring, there is little doubt that he did so, as the three ships remained in this location for nearly three days, and in order to launch the long boats, which were carried over the main hatch, it was necessary to drop the sails so that the main yardarm could be used to swing them over the side.

Columbus's description of Guanahaní (19) easily fits Caicos, which is "very large and very flat; with very green trees, and much water. In the center of it, there is a very large lagoon; there are no mountains, and all is so green that it is a pleasure to gaze upon it." According to Las Casas the island was bean-shaped (20), about 15 leagues in length (21). It was also known as Triango (22), or Triángulo, thus attributing to it a 3-sided formation.

We attempted to take *Sea Diver* into Grassy Creek harbor to anchor, with the intention of launching a small boat and cruising around the north point of the island as Columbus might have done. However, when we were only partly inside we encountered so many coral heads we decided to turn back. We could have gone in easily in a smaller boat. Farther in we could see that the water was calm and would make an excellent small-boat harbor close to shore, where



1. *Sea Diver*, 65-foot diesel trawler owned by E. A. Link, which was used in surveying the possible courses Columbus may have sailed through the Bahamas, anchored off a low Bahamian cay close beside a native fishing sloop.



2. In *Sea Diver's* deck cabin, Capt. P. V. H. Weems and Mr. and Mrs. Link study charts and notes concerning the proposed expedition. (Photograph by Peter Stackpole, courtesy Life magazine.)



1. Dr. Armando Álvarez Pedroso examines bones from a lead casket with a plate bearing the name of the Great Discoverer, which has been in the keeping of the cathedral of Santa Domingo since 1542. Dr. Pedroso was signally honored, as this ceremony is reserved by the Dominican Government for its most distinguished guests. (Photograph by S. Ferreira Quartel.)



2. Ed Link at the wheel of *Sca Diver* while Captain Weems plots course from north of Turks Island to Caicos where the expedition believes Columbus made his first landfall. (Photograph by Peter Stackpole, courtesy Life magazine.)

there was an ideal location for an Indian village on the banks of the creek. In fact, we subsequently found the ruins of a later settlement there. It seemed very possible that it was along this shore that "they saw naked people, and the Admiral went ashore in the armed boat" and planted the royal standard to claim this territory for Spain.

Columbus spent the remainder of that day, October 12, and the next in becoming acquainted with the people, exploring the nearby land, and attempting to converse with the natives in sign language to aid in determining the geography of the islands that surrounded him. He inquired where gold could be found and was told that "going to the south or rounding the island to the south, there was a king who had great vessels of it, and very many."

On Saturday night he recorded in his Journal, "I resolved to wait until the following afternoon, and, after, to leave for the southwest, for, as many of them indicated to me, there was land to the south and to the southwest and to the northwest, and that those of the northwest used to come to attack them very often."

At dawn on Sunday he ordered the ship's longboat and the boats of the caravels to be made ready and "went along the island in a north-northeasterly direction, in order to see the other part, which lay to the east, to see what was there, and also to see the villages." As they progressed along the shore there was a constant pageant of Indians with gifts lining the shore and making gestures for them to land. Columbus wrote that he "feared to do so, seeing a great ridge of rocks which encircled the whole of that island, and in the middle there is deep water and a harbor large enough for all the ships of Christendom, the entrance to which is very narrow. It is true that inside this belt there are some shoals, but the sea is no more disturbed than the water in a well."

He also noted where a fort could be built, "a piece of land, which is formed like an island although it is not one, on which there were six houses; it could be cut in order to form an island, in two days." Near the said piece of land, he said, was the loveliest grove of trees and much water. "I examined the whole of the harbor, and afterward returned to the ship and set sail. I saw so many islands, that I could not decide to which I would go first."

SEA DIVER TRACES COLUMBUS'S ROUTE

With *Sea Diver* once more in deep water and clear of the scattered coral heads off Grassy Creek, we headed north-northeast as Columbus had recorded to follow the coastline toward Cape Comete, which

jutted into the sea ahead of us. To the south a barrier reef followed the outline of the shore. The whole long, low coast was dotted with white beaches and occasional ledges. The high trees which must have graced this island in Columbus's time were now replaced by a low scrub and an occasional second-growth pine. There were several likely sites for Indian villages along the way with an occasional inlet where small boats could take shelter. Two miles below Cape Comete we found a sand beach protected by a continuation of the reef, then more rocks continuing to the point. Perhaps it was here that Columbus first went ashore.

A continuous reef made out around Cape Comete, then curved west and northwest following the direction of the shore. It was between this reef and the scalloped, curving sandy shore that we found the beginning of a reef harbor "large enough for all the ships of Christendom, the entrance to which is very narrow." For the reef continued in a solid line as far northwest as the eye could see, enclosing a sea "no more disturbed than the water in a well." In the distance we could see many islands fading into the horizon and were particularly aware of what appeared to be an unusually large island to the west beyond the irregular, low rounded hills and white beaches. Once around Cape Comete, *Sea Diver* was in much quieter water, even outside the reef, for we were now sheltered from the prevailing southeast wind.

Here Columbus could easily have seen, as he records in his Journal, "so many islands that I could not decide to which I would go first." (See pl. 4, fig. 1.) The Indians he had taken aboard "made signs to me that there were very many, so many that they could not be counted, and they mentioned by their name more than a hundred."

It is easy to see why, with these glimpses of land to the west, Columbus would enthusiastically return to his fleet and get it underway in that direction. There is nothing that says he headed southwest. Instead the Journal records, "For that reason I sought for the largest and resolved to steer for it, which I am doing. It will be 5 leagues away from this island of San Salvador; the others, some are farther away and some are less."

Sea Diver sailed past two headlands, either of which might have served as the "land formed like an island although it is not one" of Columbus's description. We had previously flown over these and observed that they were high, with narrow necks connecting them with the shore. They jutted out into the ocean, while visible behind each of them was a fair-sized lake which certainly in those early days must have been surrounded by "the loveliest grove of trees." One was

Cape Comete; the other, at the entrance to Lorimer Creek, guarded a narrow channel between the reefs leading into the tremendous reef harbor, which could indeed have held all the ships in Christendom at that time (pl. 3, fig. 1). Today this harbor has silted up from erosion due to the removal of trees and vegetation upon the bordering land. The Going-Through Creek, which used to be 20 feet deep, is now only 4 feet (23); but not so long ago when sisal was raised on these lands, this harbor was used by many seagoing ships. We later took *Sea Diver* into Jacksonville at the end of the harbor where we found the remains of a dock and a railroad formerly used to transport sisal.

We went ashore on Cape Comete with the small boat after anchoring *Sea Diver* outside the reef. Quick brown iguanas scurried out of our way across the hot stones of the point. Stone tables were lined up along the ridge where today's fishermen spread conchmeat to dry for preservation. It was easy to visualize the six thatched houses of the Arawaks which Columbus had seen. Just past the narrow neck of the point on the mainland was the glimmer of a lake. We examined the possibilities of separating this bit of land from the island proper. It would take more than two days work, but it could be done. We did not go ashore on the second point at Lorimer Creek, for we already knew from the air photos we had taken (pl. 3, fig. 1) that this also would easily fit the description of an islandlike piece of land which could easily be separated from the mainland and which was near trees and water.

We sailed the courses to and from Turks Island and up and down this eastern shore many times, as our headquarters for *Sea Diver* over a period of weeks was at Cockburn Harbour, South Caicos. During that time Captain Weems (pl. 3, fig. 2) spent two days in a small native sailing boat with two Bahamians exploring the shoreline of Caicos and its inner harbors. At many places where he went ashore he saw stumps of huge trees, testimony to the size of those from which the Indians once fashioned their dugout canoes. He was told that near Jacksonville there were to be seen Indian carvings in shallow caves. He reported many scattered lakes and the ruins of old plantation buildings. He saw wild horses and pigs. He was convinced that this reef harbor at Lorimer Creek was that which Columbus had admired. And he was impressed at the illusion of "many islands" fashioned from the continuation of the Caicos group visible to the northwest.

Columbus must have gotten his small fleet underway early in the afternoon of that Sunday to reach the end of North Caicos by dark. He lay to that night fearing to come to land to anchor before daylight

because of possible coral heads in the water between him and shore. By daylight he found himself within sight of Mayaguana, the next island "and as the island was more than 5 leagues distant, or maybe 7, and the tide delayed me, it was about midday when I arrived at said island, finding that the coast which lies toward the island of San Salvador runs north-south and has 5 leagues, and that the other, which I followed, runs east-west and has more than 10 leagues."

It is impossible to see Mayaguana Island from Caicos. We also found it impossible to see from one island to another anywhere on these suggested courses of Columbus, although Columbus frequently notes seeing the island ahead. Granting that several centuries ago the air may have been clearer, and that the additional height due to the tall trees on these islands at that time would make it possible to pick up the land at greater distances, it is doubtful if Columbus even then could have seen even the shortest stretch under consideration(24). Instead, it is more likely that he used the verb loosely to mean that he understood (perhaps from the captive Indians aboard) that such an island was there and that he picked up his next landfall each time after leaving the previous island in the distance.

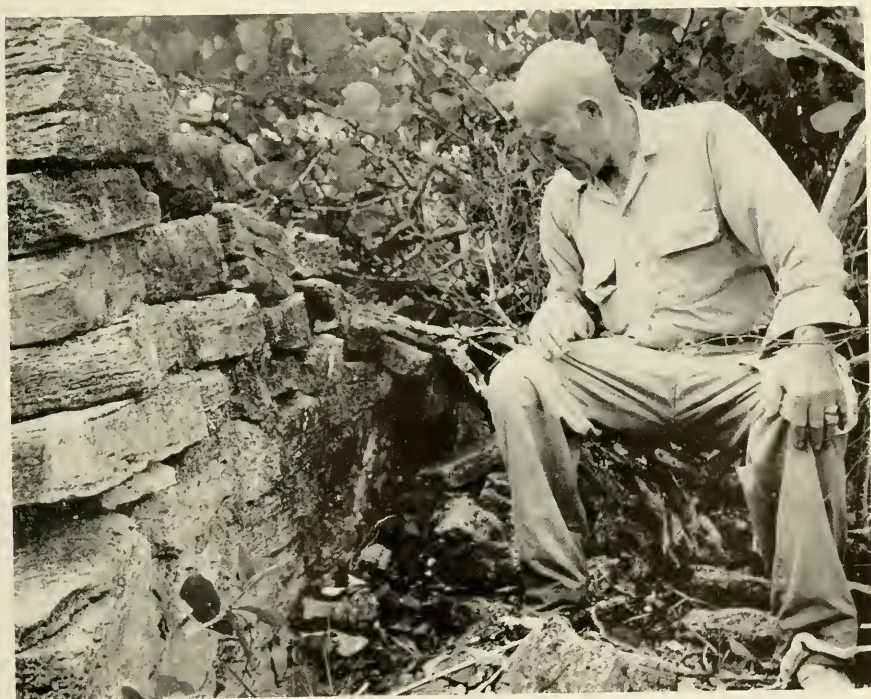
It must be borne in mind that Columbus had no means of measuring distance from one island to the next or of figuring the length of a coastline except the practiced judgment of a lifetime at sea and then much would depend on the height of the land which he could not know. Hence his estimate of 10 leagues for the north shore of Mayaguana which the fleet followed was fairly close, while that of 5 leagues for the shore facing San Salvador was much too high, for he only glimpsed from a distance the shoreline leading away to the south.

Even though Columbus were correct in setting down a guess as to the number of miles or leagues from one point to another, or the length of a shoreline, we still would not know the answer in terms of today's nautical miles, for there is no agreement as to the length of a Columbus mile or league. Whenever Verhoog converts Columbus leagues into miles he multiplies by 4, that is, 1 Columbus league is equal to 4 nautical miles. On the other hand, Morison figures 4 Roman miles of 4,850 feet to 1 Columbus league. Thus his Columbus league would be 3.185 nautical miles. But Morison complicates this by declaring that Columbus used both a shore league and a sea league and that his shore league was only 1.5 nautical miles(25).

We preferred to chart the possible courses, then plot the exact distances from one point to the next in nautical miles (charts 1 and 2). By applying the elapsed time given by Columbus between these points, it was then possible to ascertain whether that particular



1. The harbor at Jacksonville, Grand Caicos, guarded by a peninsula near Lorimer Creek entrance and protected by a solid barrier reef on the seaward side. (See Journal, Sunday, October 14.)



2. Captain Weems examines remains of an old fort on the peninsula near Lorimer Creek, Grand Caicos, where Columbus may have contemplated erecting a fortification. (See Journal, Sunday, October 14.)



1. View of Grand Caicos Island with Lorimer Creek in the background, demonstrating why Columbus could have been deluded into the idea of seeing many islands. (See Journal, Sunday, October 14.)



2. There is little fresh water to be found in the Bahama Islands today, and even in Columbus's time it was probably difficult to locate. Here, some of *Sea Diver's* crew collect fresh water for her tanks from a lagoon near Fort George, Caicos. Left to right: Edward Kemp, Vital Jetty, and Captain Weems. (See Journal, Wednesday, October 17.)

section of the course was feasible. His estimates of distance may have been subject to error, but we felt it was safe to rely upon the elapsed time he stated. Thus we knew that between dawn and noon it would have been possible for the three ships to sail the 30 miles between the southern end of Long Island and the northern tip of Crooked Island, as Morison claims, while it would have been impossible for the same ships in the same time to sail the course from the southern tip of Acklin Island to the northernmost point of Great Inagua 87 miles away at an average speed of 12 knots, as Verhoog suggests.

There is no record of the sailing speed of the *Santa María*. We are told only that it was slower than the two caravels. However, we do know that a broad and clumsy craft with a deep, round belly such as the *Santa María*'s could not be pushed through the water with much speed. We also know that a square rigger did not have the capacity for speed of the present-day rigs. Yet today 8 knots is a good speed for any of the trim sailing craft that cruise Bahamian waters. With all sails set and the best conditions of wind and sea, they scarcely ever exceed 12 knots. It is inconceivable that the ships of Columbus's time could have reached these speeds. We believe that 8 knots is about as fast as the *Santa María* would ever have traveled. On the other hand, with apparently normal winds, Morison has Columbus averaging under 2 knots on his suggested course from Watling Island to the western end of Rum Cay. With light winds he averages $2\frac{1}{2}$ knots from Rum Cay to Long Island; yet in rain and failing winds, he would have covered approximately 70 miles from the northern to the southern tip of Long Island at an average speed of 6 knots. How can one account for these variations?

In applying our theory, as can be seen from table 1, at no time would Columbus have to exceed the possible speeds in order to cover the point-to-point distances in the declared space of time. With the brisk east or southeast wind normal in these areas he could easily have covered the distance from San Salvador to Santa María, at no time averaging more than 7 knots; and later when he was badgered with rain and failing winds he still could have made the $2\frac{1}{2}$ to 5 knots required.

So, wherever possible, we compared the exact mileage between points with whatever estimates of distance Columbus had given, using approximately 3 nautical miles to a Columbus league. But we knew that errors in dead reckoning could be made even by the Great Navigator; for, while sometimes the distance quoted was for a course actually sailed, at other times it was merely a careful guess made after

gazing at a faraway horizon or a coastline disappearing into the distance. He had no instruments to aid him.

When he estimated first 5 and later 7 leagues from San Salvador to the next island, the 5 was a guess ahead, the 7 after he had sailed the course. But it took him so much longer than he had expected that he stated he believed a tide had held him back. We found no currents anywhere we sailed in the Bahamas, in deep, open water, strong enough to affect seriously either time or distance(26). Furthermore,

TABLE I.—*Columbus's First Voyage to the New World:
Average Sailing Speeds Through the Bahama Islands (Link Theory)*

<i>Track covered</i>	<i>Distance (nautical miles)</i>	<i>Hours (approx.)</i>	<i>Average speed (approx. knots)</i>
October 14:			
Left Caicos—early afternoon.			
Off Northwest Caicos—by dark.....	40	6	7
October 15:			
To east of Mayaguana—dawn.....	40	10	4
Off northwest Mayaguana—noon.....	35	7	5
Off southwest Samana—sunset.....	50	7	7
	165	30	5.5
October 16:			
Left Samana—10 a.m. or noon.			
Arrived Long Island—in night.....	60	12	5
Arrived Long Island—at dawn.....	60	18	3
October 17:			
Left north of Clarendetown harbor—before dark.			
Arrived south end of Long Island—in early morning	30	12	2½
October 19:			
Left Long Island—dawn.			
Arrived Crooked Island—before noon.....	30	6	5

Columbus had absolutely no means of judging current when he was away from shore.

The amount of magnetic variation that influenced Columbus's compass in the fifteenth century is today a subject of much speculation and the cause of great differences of opinion. Morison notes that Columbus's routes seldom crossed a region where the compass variation was more than 6° or half a point, and that a good part of the time while in the West Indies he was in the zone of no variation(27). Verhoog's opinion, on the other hand, swings from a variation of 20°, more or less, either easterly or westerly, to a later decision that it

must have been more than a point, probably about 15° , easterly, more or less (28).

As in the Watling theory, we did not find it necessary to apply any variation in order to work out the route from Caicos we believe Columbus followed, whereas Verhoog was forced to apply corrections for magnetic variation in order to make certain sections of the Journal fit his suggested course. How else explain his variance with the compass headings which Columbus gave between Fernandina and Isabella, and again when he left Isabella for Cuba by way of the Columbus banks, south of the Islas de Arena?

We quote the next passage because of its importance in substantiating our theory that Columbus passed by Mayaguana Island without stopping and without naming it, and that the second island, which he named Santa María de Concepción and on which he landed, was Samana, or Atwood Island as it is known today, some 50 miles beyond.

And as from this island I saw another, and larger, to the west, I clewed sails up (29) to navigate all that day until night, and still was not able to reach the westerly point; this island I named "Santa María de Concepción" and, about sunset, I anchored near the said point to see if there was gold there . . .

Columbus had every reason to sail past the reef-guarded north coast of Mayaguana, for there is no way through the reefs for its entire length. Also if he continued to hold the same course that he probably steered along the northeast shore of Caicos, it would have carried him past Mayaguana to a position within sight of Samana. In studying the chart, one may question why he would choose an island apparently as small as Samana when he might equally well have headed for Acklin, as Verhoog suggests. We had previously noted in our study of the charts that Acklin, while much larger in area than Samana, was low and flat on its northern part, while Samana had hundred-foot elevations. We later checked this from the air, approaching on the course we felt Columbus may have taken, at a low altitude over the water. We were able to discern Samana long before Acklin came in sight.

We later proved this on *Sea Diver* by setting a similar course from off the north shore of Mayaguana. When our radarscope showed we had reached a spot which was 12 miles from Acklin and 13 from Samana, it was possible to see Samana from the masthead, but Acklin was still invisible. Eight miles from Samana the whole shoreline could be seen from the deck by eye. It covered at least 45° of the horizon and, with the tops of its hundred-foot hills, looked like a large island.

Columbus then goes on to say, "It was nevertheless my will not to

pass any island without taking possession of it, although having taken one, it could be . . . said of all. And I anchored and was there until today, Tuesday, when at dawn I went ashore in the armed boats and landed." This could be interpreted as an explanation for not stopping at these other islands along the way, as, having taken possession of one, he had taken possession of all, particularly as this statement follows the one in which he said he sailed until night in an attempt to reach the westerly point.

Whether Columbus anchored at the northwest point of Mayaguana as Verhoog believes, or the southwest point of Samana where he spent the night and part of the next day exploring the island, is answered by his noting that "as the wind blew more strongly across from the southeast, I didn't want to detain myself, and went back to the ship." A sudden wind from the southeast would not have disturbed a ship in the shelter of the northwest part of Mayaguana Island but would have made the anchorage at Samana a risky spot (30). Consequently, "After that I set sail to go to the *other* large island which I was seeing to the west," Columbus records.

Although at this point, instead of sailing on to Long Island, which we believe was Columbus's Fernandina, we set *Sea Diver's* course toward Acklin Island to check the possibilities of Verhoog's theory that *it* was Fernandina, let us for the sake of continuity follow Columbus to Long Island. We will return later to indicate why we do not believe Acklin could have been Columbus's Fernandina.

The three Spanish ships left the island of Santa María about 10 a.m. (or noon) (31) and headed for Fernandina, which Columbus estimated was about 9 leagues to the west. As the wind was blowing from the southeast but veering south, they were able to hold a steady course toward the distant island which Columbus guessed to have a coastline of some 20 leagues running generally northwest and southeast. Because of light winds, Columbus was unable to reach the island "in time to be able to see the bottom in order to anchor in a clear place," and so he stood off and on until morning when he saw a village and anchored.

If we accept Columbus's statement in the Journal that Fernandina was 8 or 9 leagues to the west of Santa María, how then can we explain a route that shows Columbus sailing nearly 20 leagues to reach Long Island from present-day Samana? There is the remote possibility of an error in translation or interpretation over the centuries, but this is unlikely. As we have pointed out, however, there was a generous time allowance for him to have covered this 60 miles from 10 a.m. or noon of one day to sometime in the darkness of early

morning of the next. Similar discrepancies exist in both Morison's and Verhoog's theories.

Indian canoes bringing gifts and food struck out from a village on Fernandina during the night and swarmed around the three ships. After sending men ashore for water, Columbus set out at noon to sail north-northwest in order to round the island. He said it was his wish "to follow the coast of this island *where I was, to the southeast*, because it all trended north-northwest and south-southeast, and I wanted to take the said route to the south and southeast" where "lies the island which they call Samoet, where the gold is." But the wind was blowing from the southwest and south, and their Indian counselors told them that they could reach Samoet more quickly by rounding Fernandina to the north.

"And when I was about 2 leagues from the cape of the island," Columbus wrote, "I found a very wonderful harbor with a mouth, or rather it may be said with two mouths, since there is an islet in the middle, and both mouths are very narrow, and inside it is more than wide enough for a hundred ships, if it be deep and clear and there be depth at the entrance."

Columbus thought it well to examine this harbor closely and to take soundings and so anchored outside and went into it with all the ships' boats only to find that it was shallow. Thinking that it was the mouth of a river, they carried water casks to be filled, but when they arrived they found no river. So while his men accompanied the people of a nearby village in a search for water, Columbus waited on the shore for two hours walking among the trees and enjoying the "loveliest sight that I have yet seen."

Columbus's description of the harbor corresponds almost perfectly to Clarendetown just a few miles north of the rocky cape that stands out prominently halfway down the lower section of Long Island. As we first viewed it from the air, the harbor at Clarendetown appeared large, protected by a point of land and an island and a line of reefs under water with apparently two channels leading into it. Later when we visited it with *Sea Diver* we found that only one channel was navigable. Within, there was only a limited section that would have been deep enough for the ships of that day. The surrounding territory must have been beautiful at that time with fertile soil and tall trees, for even today the little village there is a lovely spot.

From there Columbus navigated to the northwest until he "had discovered all that part of the island as far as the coast which runs east and west. . ." About then the wind fell and began to blow from the west-northwest, and they were forced to turn back. They

"navigated all this night in an east-southeasterly direction, sometimes due east and sometimes southeast; this was done in order to keep clear from land, because there were very thick clouds and the weather was very bad. There was little wind and this prevented me from going to land to anchor."

The next morning, after a night when it rained very heavily from after midnight until near daybreak, found them at the end of the island to the southeast where they anchored until the weather cleared. They then continued the circuit of the island when they could do so "and anchored when it was no time to sail."

At dawn the morning of the 19th they set out to seek Samoet, the island that was to yield the gold they were seeking. Columbus sent *Pinta* to the east-southeast, *Niña* to the south-southeast, and he guided *Santa María* to the southeast. They were to follow these courses until midday, then change courses and rejoin *Santa María* if they had not sighted the island, but they had only been underway 3 hours when they saw an island to the east, "and all the three vessels reached it before midday at its northern point, where there is an islet and a ridge of rocks on its outside, to the north, and another between it and the main island."

Far away on the western coast they could see a distant cape toward which they headed. It was "indeed lovely, round and very deep, with no shoals off it. At first the shore is stony and low, and farther on there is a sandy beach. . . . the coast forms a big neck of land (32), and is very thickly wooded with very large trees." Back of it there was one elevation which could not be called a mountain but which beautified the rest of the island, and there was much water in the center of the island. Columbus anchored that night off this cape, which he named Cape Hermoso, noting, "I believe that it is on an island separated from that of Samoet and there is another small island in between."

We on *Sea Diver* found Columbus's description of Isabella fitted Crooked Island almost perfectly when we visited there, anchoring overnight south of Bird Rock, which was probably Columbus's Isleo. From the air we had previously noted a long L-shaped lagoon just inshore from the point opposite Bird Rock (pl. 5, fig. 1) (this does not appear on the present-day charts) and a large lake a few miles inland. The 200-foot hill near the center of the island and the wide curving sweep of beach from the point south-southwest to a conspicuous cape in the distance, even the break that separated Crooked from Fortune Island with a tiny island in the middle, all met Columbus's description. When we went ashore we found fertile ground and stumps of tre-

mendous trees; the smell of flowering shrubs and flowers was heavy in the air.

The next morning Columbus weighed anchor from Cape Hermoso and "anchored off the southwest point of this island of Samoet which point I named 'Cape de la Laguna' and which island I named 'Isabella.'" He hoped to steer northeast and east from the southwest and south, for he understood from the Indians aboard that there he would find the village and its king. But he "found the bottom so shallow everywhere that I could not enter or navigate to that point." And seeing that it would be a very great detour to follow the route to the southwest and around the southern end of the island, he determined to return by the way he had come from the north-northeast to the west.

Thus he must have anchored at the break between Crooked and Fortune Islands, hoping to find a way across the bight within. Then realizing that this was impossible, he reasoned that it would be closer to sail back toward the present Bird Rock, his Isleo, and then along the northern coast to seek the Indian village in the eastern part than to go to the southwest and so around the long part of the archipelago.

After anchoring at Cape del Isleo the next morning they went ashore and found a village from which the inhabitants had fled and "very extensive lagoons, and on them and all around them there are wonderful woods." He was deeply impressed by the beauty of the island and remarked about the powerful perfume of flowers. They took water for the ships in a lagoon near the cape and lingered here for four days. Columbus was forced to change his plan to round the island to the north for "the wind must blow from different directions and it does not blow just as men may wish." There was no wind, only a dead calm, and it rained heavily during this time. Also his observations on the natives who finally appeared convinced him that there was little gold there.

On Wednesday, October 24, is recorded the last entry in Columbus's own words: "This night, at midnight, I weighed anchor from the island of Isabella, from Cape del Isleo, which is on the north side, where I was anchored, to go to the island of Cuba." He navigated to the west-southwest.

It would have been impossible for him to sail in this direction if Cape Hermoso actually lay west of Cape del Isleo as recorded October 19(33). This must necessarily be an error in the Journal's text, for he could not have sailed south-southwest against a coastline running east and west without running aground. Furthermore, when Columbus approached the north point of Isabella from Fernandina,

east-west, he would have sighted Cape Hermoso long before sighting and reaching Cape del Isleo.

The fleet was afflicted with more rain and a failing wind as they set out for Cuba. They were with little wind until after midday "when it began to blow very lovingly" (34), and they set all sails to catch whatever wind there was. At nightfall Columbus recorded that Cape Verde on the southwest part of Fernandina lay to his northwest about 7 leagues distant. About then the wind commenced to blow so hard that he shortened sail, apprehensive of making such speed in the stormy night. At dawn he figured they had only gone 2 leagues the whole night.

They continued to the west-southwest until 9 that night making 5 leagues, then changed course to the west. The next afternoon they sighted land, a string of "seven or eight islands in a row, all lying from north to south." These were undoubtedly the Ragged Islands, for the fleet finally anchored in shallow water south of them. "It was everywhere shallow water for 5 or 6 leagues" is a perfect description of the Columbus banks south of the Ragged Islands. The captive Indians told them it was a day and a half journey by canoe from these islands to Cuba. Sure enough, after sailing to the south-southwest all day, "before night they saw land."

As *Sea Diver's* owner was already familiar with the vicinity of the Ragged Islands and the Columbus banks, having previously visited them on *Sea Diver* in search of the wreck of an ancient Spanish treasure ship, we did not retrace this leg of the voyage. He verified that the topography corresponded in every way with Columbus's description and his approach from Crooked Island. He concurred completely with Morison and the others who had previously selected Crooked Island and the Ragged Islands as Columbus's route to Cuba. But after our investigation of Caicos and the route leading from there, we were more eager than ever to compare this possible course with the one commencing at Watling Island. This was next on our plan of search.

We anchored *Sea Diver* off the small settlement of Cockburntown on the west coast of Watling Island within sight of a marker commemorating Columbus's first landing (35). A tall monument also has been erected on a high bluff on the east shore (36), a spot very difficult of access either by land or sea, as it would require portaging a boat from lake to lake to reach it by land, and the sea on the eastern shore is so rough and the scattered coral heads so dangerous that it would be foolhardy to try to reach it by boat.

Previously we had flown over this island, noting that it was nearly



1. Present-day Bird Rock with its lighthouse can be seen off the northwest point of Crooked Island, which was probably Columbus's island of Samoet. The conspicuous lagoon in the foreground does not appear on present-day charts of this island. (See Journal, Sunday, October 21, and Monday, October 22.)



2. Coral-encrusted anchor believed to have come from the *Santa Maria*, Columbus's flagship, found by the Link expedition in the harbor of Cape Haitien, Hispaniola, in the spring of 1955, is accepted for his country by Prefect Guillaume Sam, Governor of northern Haiti. To his left are the Honorable Roy T. Davis, American Ambassador to Haiti, Mr. and Mrs. Link, and Captain Weems. (Photograph by Peter Stackpole, courtesy Life magazine.)

half lakes and that the rocky headlands and sandy beaches of its eastern shore were almost inaccessible owing to the broken coral heads offshore. Only one part of the island appeared approachable for a boat of any size—that small section along the western coast where we anchored *Sea Diver*.

On our first day at Watling we completely circumnavigated the island with *Sea Diver*, first heading north along the west coast and then skirting the coral reefs that form the reef harbor on the north shore. As we headed south, *Sea Diver* rolled heavily in the big seas which stormed the rocky eastern shore and broke upon the scattered coral heads. There was no solid reef anywhere on the east side of the island. Nowhere was there a sign of a protected landing or a calm bit of water for anchoring.

Even Dr. Morison conceded that Columbus must necessarily have landed on the west coast of Watling, although Columbus makes no mention of such a fact. To the contrary his Journal reads: "They reached a small island of the Lucayos" and "Immediately they saw naked people, and the Admiral went ashore in the armed boat." As Watling is some 13 miles long by 7 miles wide, it would have taken several additional hours to reach the landing spot that Morison picks on the western shore(37).

On the second day we anchored *Sea Diver* off Green Cay on the northwest side of the island and headed our small boat across the reef harbor toward the rocky point on the eastern shore which Morison believes may have been Columbus's "piece of land formed like an island although it is not one." We had scarcely left *Sea Diver* when we regretted our rashness, for we found ourselves heading into a choppy sea which threatened to drown our outboard, and we did not dare turn back for fear of being swamped. When we reached the point we found salt spray dashing high above the cliffs on the seaward side. In order to negotiate the return to *Sea Diver* with a following sea it was necessary for two of the party to go to Cockburntown by land. Was this the harbor "no more disturbed than the water in a well"?

WATLING ISLAND NOT COLUMBUS'S SAN SALVADOR

After this investigation of Watling Island and its environs, following a survey of Rum Cay and the northern tip of Long Island, we concluded that Watling could not have been Columbus's San Salvador for the following reasons:

1. There is little possibility that Columbus could have seen a light

4 hours before sighting San Salvador if he were approaching Watling Island, for there are no islands to the east of Watling in any direction, and no fisherman would venture 30 miles out to sea in an open canoe at night with strong winds and heavy seas, even though he were able to maintain a light for the necessary period of time. However, in approaching Caicos it would be simple to glimpse a light on or near Turks Island 4 hours previous to the landfall. Columbus certainly could not have been mistaken when he claimed to see a light, for several others on board also saw it; and he would never have claimed the 10,000 maravedis from his sovereigns without the light as proof that land also was necessarily there.

2. The eastern coast of Watling is virtually unapproachable, with heavy seas breaking over thickly scattered coral heads along the rocky shore. There is no mention in the Journal of Columbus's having gone to the western side of the island to land.

3. Watling Island does not fit the description of San Salvador as well as Caicos. True, it does have a large lake in the middle, but it is not "very large and very flat" as compared with Caicos. It is 13 miles long, about a third the length of Caicos, while Las Casas describes San Salvador as 20 leagues long; and while Watling might be described as bean-shaped, it is certainly not triangular, as Las Casas implies.

4. Columbus describes "a great ridge of rocks that encircled the whole of that island." The only line of barrier reefs on Watling are on the north side where they form a large harbor. Elsewhere there are only scattered coral heads.

5. If Columbus landed on the west shore of Watling and went in the ships' boats in a north-northeast direction to explore, this would have brought him to the reef harbor on the north side, which he described as "no more disturbed than the water in a well." We found it so rough even in a moderate prevailing wind that we were forced to put two of our party ashore before we dared return across it. Also the commanding officer at a nearby U. S. Naval base (38) told us that his men were forbidden the greater part of the time to go out on it in small boats because of its rough condition. On the contrary, we had found the reef harbor on the northeast side of Caicos to be sheltered from the prevailing wind.

6. We visited a rocky island point on the east side of the harbor fordable from the mainland at low tide which might have been Columbus's "piece of land which is formed like an island although it is not one," but unlike Caicos this point had no body of water near it on the shore, and because of the heavy salt spray from the ocean it is

doubtful if "the loveliest grove of trees that I have ever seen" would have flourished near it. There are none today.

7. There is no justification for the statement "I saw so many islands that I could not decide to which I would go first." Watling is too small to give the impression of many islands within itself, and no other islands are visible in any direction. Even with the added height of the virgin forests of that day, it is doubtful if Columbus could have sighted Rum Cay, the nearest island, whereas the Caicos archipelago is made up of many islands.

8. Rum Cay is too small to answer Columbus's description of the second island: "The coast which lies toward the island of San Salvador runs north-south and has 5 leagues, and that the other, which I followed, runs east-west and has more than 10 leagues." Rum Cay is 6 to 12 miles. Rum Cay is southwest of Watling and does not "lie toward" it, as does Mayaguana to Caicos.

9. Although it does not appear on the charts, we found Columbus's "maravilloso puerto," according to Morison, a few miles north of Burnt Ground on the northern part of Long Island, a shallow indentation separated from the sea by two narrow mouths and a rocky islet between them. It had no depth whatsoever, and neither entrance was deep enough to permit access by the ships' boats. It was far too small to hold a hundred ships. We hold with Lieutenant Murdock (who otherwise selected the same route for Columbus as Morison) that Clarencetown harbor farther down the eastern shore answered the description more aptly (39).

10. The coast does not run east and west at the northern tip of Long Island, but after rounding the point it immediately falls off to the southwest. Thus it would be impossible for Columbus to have "discovered all the part of the island as far as the coast which runs east-westerly."

11. Furthermore, with rain and failing winds, it is doubtful if Columbus could have covered the distance from the northwesternmost point of Long Island to the southern end from dusk of one night to dawn the next day, a distance of approximately 70 miles.

From here on we have no differences with the accepted theory that Columbus went on to Crooked Island and from there to the Ragged Islands, the Columbus banks, and Cuba.

COLUMBUS'S ROUTE TO CUBA NOT BY WAY OF MAYAGUANA, ACKLIN, AND GRAND INAGUA

It now only remains to show why, even though the first landfall was on Caicos, Columbus's fleet did not sail to Cuba by way of

Mayaguana, Acklin, and Great Inagua as Verhoog believes. Instead, we are convinced they passed by Mayaguana to Samana, and then to Long Island, where their route joined the one proposed by Morison and other like-minded researchers. These are our reasons:

1. The eastern coast of Acklin Island is almost completely guarded by a barrier reef more than a mile offshore. Columbus states that "all the coast is free from rocks, except that there are some stones near the land under water." Because it would be next to impossible to go to a village on the shore through the reefs, Verhoog causes him to sail northward along the coast until he reaches an anchorage spot near the northeast point. It should be noted that there is no barrier reef along the shore of Long Island.

2. Acklin Island runs generally northeast-southwest, while Columbus describes Fernandina in several passages as running northwest-southeast, and later describes sailing it to the southeast to reach the southern point.

3. On a course from Mayaguana to the point where Verhoog indicates that Columbus made contact with Acklin, the fleet would have passed very close to French Cays, two large, flat land masses which at that time may have had trees and appeared more prominent than today. There is no mention of them.

4. Either from the chart or glimpsing it from the air, one might possibly visualize the break between Crooked and Acklin Islands as the "maravilloso puerto" that Columbus described 2 leagues from the cape. However, when *Sea Diver* sailed this course we found that the barrier reef kept us more than a mile from shore, making it impossible to see any details of this spot which Columbus described so vividly. We could not even make out an opening in the shore line. "At a distance of two lombard shots from land(40), the water off all these islands is so deep that it cannot be sounded," according to Columbus.

5. When the wind shifted and Columbus "navigated all this night in an east-southeasterly direction, sometimes due east and sometimes southeast," he would not have found himself the next morning as he describes "at the end of the island to the southeast," for Acklin Island swings sharply to the southwest. The distance of approximately 80 miles is also too great to have been covered overnight, for Columbus states there was little wind.

Columbus's fleet weighed anchor from the southern end of Fernandina at dawn on Friday, October 19, to reach the island he later called Isabella. Thus Verhoog would have him sail from the southern tip of Acklin to Great Inagua. Before Columbus had sailed for 3 hours he reported seeing an island to the east toward which they

started. They reached it "before midday, at its northern point, where there is an islet and a ridge of rocks on its outside, to the north, and another between it and the main island. . . . There was a north wind, and the said islet lay on the course of the island of Fernandina, from which I had departed east-west" and extended for 12 leagues to a cape he named Cape Hermoso.

At 4:30 in the morning on April 5, 1955, *Sea Diver's* bearing was 65° on Castle light just off the southwest point of Acklin. She was on a course of 120° heading for Great Inagua island. At her cruising speed of 8 knots we calculated it would take us 11 hours to cover the 87 nautical miles between us and the northeast point of Great Inagua.

Our lookout from the masthead did not sight land until 3:12 that afternoon. Already it was three hours past the time Columbus recorded having arrived at his destination. At 4 p.m. we could distinguish Little Inagua off the port bow with the higher hills of Great Inagua many miles ahead on the starboard bow. At 5:30, almost dusk, we finally reached Northeast Cape on Great Inagua. Columbus, supposedly having arrived there at noon with his clumsy sailing vessels, would already have sailed the additional 44 miles to Cape Hermoso (Northwest Point) where he reported anchoring for the night.

Little Inagua with its 5 miles of beaches on the west, and 7 on the south, lay 5 miles to the north of us. It was certainly no "isleo" (41), for it was almost the size of Rum Cay. We wondered how Columbus's ships would have had time to investigate the reefs that he reported lying north and south of it and still have had time to reach Cape Hermoso before dark. Also we found that Northeast Cape (Verhoog's Cape del Isleo) would have provided no good anchorage, for on the seaward side it was bordered with reefs and beset by heavy seas, while on the inward side there was very deep water right up to the shoreline. The southern shore of Little Inagua was completely exposed to the heavy seas of the open ocean. There was no place for Columbus's ships to have spent the four days preceding their departure for Cuba.

As a result of this journey and a later one to the western shore, we found these additional discrepancies in Captain Verhoog's theory:

6. Columbus said he navigated east-west to reach the northern point of Isabella, off which was an islet. We found it necessary to sail a course of 120° to reach Northeast Cape on Great Inagua from Acklin Island.

7. Columbus's fleet sighted the island 3 hours after leaving Fernandina and sailed the entire distance from dawn until noon. We on *Sea Diver* did not sight land for 9 hours after leaving Acklin, and it

was a total of 11 hours before we reached the cape, traveling at a speed of 8 knots.

8. There are reefs along the greater part of the northern shore of Great Inagua including the northern shore of Northwest Point. Columbus says "with no shoals off it."

9. Verhoog then takes Columbus to Southwest Point, which he selects as Cape de la Laguna "in order to steer northeast and east from the southeast and south," where he understood he would find the Indian village and its king. He found the water everywhere so shallow he could not *enter* or navigate to that point.

Although this is a perfect description of the bight inside Crooked Island, it certainly does not describe Great Inagua. Nor would Columbus have said "following the route to the southwest, it was a very great detour." However, at Crooked Island archipelago he would have had to sail southwest from Cape de la Laguna in order to round the island to the south. Verhoog says Columbus turned back because of the shallow waters off the south side of Great Inagua, but a glance at the chart will show that this was no more discouraging than many places he had already been and that he could easily discern deep water to seaward.

10. According to Verhoog, Columbus sailed over 200 miles from Great Inagua to reach Cuba when it would have been possible to take a direct route of only 48 miles from his anchorage at Southwest Point. His explanation that the longer course was a canoe route(42) does not hold, as, except for the Columbus banks, the entire route would have been across deep ocean waters far from land. However, the proposed route from Crooked Island to Cuba does qualify as the nearest and safest canoe route, as well as being one with which the Indians would have been familiar.

From the southern end of Great Inagua it would have been possible on clear days to see the high mountains of Cuba(43). *Sea Diver's* owner was able to see the Cuban ranges at an even greater distance from the Columbus banks. Certainly the Indians aboard would have been aware of Cuba's presence so nearby and would have counseled the shorter course.

11. When Columbus left for Cuba from Cape del Isleo (or Northeast Point) he sailed *west-southwest*. If this course had not carried him ashore on Great Inagua, it would have eventually taken him to Cuba—but not, as he states, by way of the Ragged Islands and the Columbus banks, which are *west-northwest* of this point.

12. This *west-southwest* course would never have taken him to a position where Verhoog's Cape Verde on the south point of Acklin

Island bore to the northwest of him at 7 leagues distance, as Columbus states. Also on this course he would have been forced to sail through the dangerous reefs along the east edge of the Columbus banks(44) in order to anchor there.

13. Neither would Columbus on this oblique course have seen the Ragged Islands like a chain of "seven or eight islands in a row, all lying from north to south." The course from Crooked Island, however, would have brought him straight toward these islands and then south to the Columbus banks, so that they would have answered this description.

Verhoog wonders about the mysterious large island of Baneque, northeast of Cuba. There is no doubt that Great Inagua was Baneque, but because Verhoog had already allocated it as Isabella, he was nonplussed. A brief study of Verhoog's own chart shows that on November 19 Columbus sailed north-northeast from Puerto Príncipe (Port Tanamo) on the north coast of Cuba, for a distance of 7 leagues. At this point the Journal records that Columbus "saw the island of Baneque due east," from which he was 60 miles away. A modern chart will also show that this could only be Great Inagua, for there is no other island in such a location.

By 10 o'clock the next morning he had navigated 18 leagues farther to the northeast-quarter-north, when he says "Baneque lay to the east southeast, from which direction the wind blew so that it was contrary . . . seeing that it did not change, and that the sea was rising he resolved to return to Puerto Príncipe. . . He did not wish *to go on* to the islet which he called *Isabella which was 12 leagues from him*. . . because the Indians whom he carried with him whom he had taken in Guanahani which he called *San Salvador and which was 8 leagues from that Isabella*, might get away."

As Great Inagua is already ruled out because of the contrary wind, only Crooked Island archipelago is left to qualify as Isabella. But to fortify his argument that Great Inagua was Isabella, Verhoog quotes the passage that San Salvador was 8 leagues (32 Columbus miles) from Isabella. True enough, Great Inagua is 34 miles from the Caicos Islands, while it is probably three times that distance from the Crooked Islands to either Caicos or Watling. That there is such a difference is not surprising, however, when one considers that Columbus could not see Isabella, or the Crooked Island archipelago, but only guessed at its location from the dead reckoning he had kept during the intervening weeks while the ships sailed across strange and uncharted waters. The 8 leagues he mentions must necessarily

have been only a guess, which happened to correspond with the distance between Caicos and Great Inagua.

The fact that Great Inagua was Baneque and not Isabella is further supported by an entry in the Journal on December 5 when, as the *Santa Maria* was poised at the eastern end of Cuba with Haiti to the southeast, it records Columbus's desire once more "to go to the island of Baneque which lay to the northeast, according to that which the Indians he had with him said." Once again Great Inagua was the only possible island to the northeast of him.

CONCLUSION

As *Sea Diver* made her way from island to island in an attempt to ferret out every last clue to this 500-year-old mystery of where Columbus first landed and voyaged in his discovery of the New World, a great deal of time on board was spent in studying pertinent books and charts. With Captain Weems's knowledge of navigation and the sea, and Mendel Peterson's background of history, plus the lively interest of all of us in our subject, many profitable hours were devoted to discussion of all phases of the problem.

It was only after long and serious deliberation both during our journey and afterward, the gist of which I have attempted to record here, that we came to the conclusion that this new course which the expedition's leader had evolved contained fewer discrepancies and fitted more completely the descriptions given by Columbus from beginning to end than either of the other two.

Therefore, we submit as our considered opinion that Columbus landed first at the Caicos Islands and not at Watling Island and that he followed a course through the Bahamas from Mayaguana to Samana to Long Island, from there to Crooked Island, the Ragged Islands, the Columbus banks, and Cuba.

NOTES

1. Called Watling Island since the seventeenth century by the English. In 1926 it was named San Salvador or Watling Island by an Act of the British Parliament (16-17 George V, ch. 27).

2. Samuel Eliot Morison, professor of history at Harvard University, Rear Admiral, USNR; author of many books and papers on Columbus; leader of the Harvard-Columbus expedition in 1939 and 1940 with the barkentine *Capitana* and the ketch *Mary Otis*.

3. Capt. Pieter Verhoog's entire material on the Columbus landfall and track was lost during a bombardment of Rotterdam in 1943, and he had to start all over again. A student of Spanish literature and the early voyages of discovery,

he has been a contributor to Dutch newspapers and periodicals since he retired in 1953 as Commanding Officer of the SS. *Nieuw Amsterdam*.

4. On the ketch *Mary Otis*.

5. Martín Fernández de Navarrete, author of "Colección de los Viajes y Descubrimientos," vols. 1-3, Madrid, 1825-1829, consisting of many important documents from the Spanish archives including Las Casas's rendering of the First Voyage from Columbus's Journal in the first up-to-date transcription to appear in print. Navarrete selected Grand Turk Island as San Salvador, the route continuing to Caicos, Little Inagua, Great Inagua, and Cuba.

Washington Irving, author of a four-volume "Life and Voyages of Christopher Columbus," published in 1828, based on the findings of Navarrete. He selected Cat Island as San Salvador, then Concepción Cay, Exuma, Long Island, Mucarras, and Cuba.

Capt. A. B. Becher of the British Royal Navy, author of "Landfall of Columbus," published in the Royal Geographical Society Journal in London in 1856, selected Watling Island for the landfall, followed by Long Island, Exuma, Crooked, Ragged, and Cuba. He believed that Columbus passed an unknown island to reach Santa María de Concepción, in this case Rum Cay.

Hon. Gustavus V. Fox, served as assistant secretary of the Navy under Abraham Lincoln. He wrote a monograph, "An Attempt to Solve the Problem of the First Landing Place of Columbus in the New World," published by the U. S. Coast and Geodetic Survey in 1882. Samana or Atwood Island was his choice for the first landfall followed by Crooked, Long, Fortune, and Ragged.

Clements R. Markham, one-time president of the British Hakluyt Society, which published his "Life of Christopher Columbus" and translation of Columbus's Journal in 1882. He inclined toward Watling Island as the first landfall.

6. Related in his "Cruise of Columbus in the Bahamas, 1492," published in Proc. U. S. Naval Inst. in 1884.

7. Fray Bartolome de Las Casas's abstract of the Journal of Columbus on his First Voyage can be found in Cesare de Lollo's "Raccolta di Documenti e Studi," Publicati Dalla R. Commissione Colombiana, Rome, 1892-1894, as well as in Navarrete's record. Although the original log has been lost, it is believed it was originally in the possession of his son, Fernando Colón, and that it later came into the possession of Las Casas; for Fernando Colón's "Historie" compares very closely to Las Casas's interpretation in many passages, indicating that they came from the same source. The Las Casas manuscript is now preserved in Madrid.

8. For example, on October 16, in referring to the island of Fernandina, the Journal records, "and all this coast runs north-northwest and south-southwest," while on October 17 it reads, in referring to the same island, "because it all trended north-northwest and south-southeast." In the Spanish there is only this difference between SSW. and SSE.: *sursudueste* as compared to *sursueste*. It would be easy to make a mistake either in copying or setting type. Columbus also spelled the word for west *queste* and *vueste*.

9. A chart of the location of Navidad, the first settlement in the New World, on the north coast of Hispaniola, made by the Admiral in 1493 is still in existence.

10. United States Navy Hydrographic Office charts Nos. 944 and 948 with British surveys of the Bahama Islands on the first chart from 1836 to 1885, and

on the second, from 1829 to 1848. These charts have been combined and reduced and are included as charts 1 and 2 following page 32 of this paper.

11. Founder of the Weems System of Navigation and a cofounder of the Institute of Navigation. Captain Weems is the author of many books on navigation and has invented and developed several navigation instruments and aids.

12. In a Grumman Widgeon owned by Mr. Link and based first at Nassau and later at Caicos Island.

13. Doctor of Laws, writer and member of Cuba's Academy of History. Dr. Pedroso has the honor to be one of the few to have viewed the remains of Columbus in their original lead casket in the Cathedral of Santa Domingo, in Ciudad Trujillo, Dominican Republic. (Pl. 2, fig. 1.)

14. This reward amounted to almost a year's salary for an ordinary seaman.

15. According to Oviedo's account. The seaman was told by Salcedo, the Admiral's servant, that it had already been seen.

16. Markham says that on the night of the 11th the moon rose at 11 p.m., and at 2 a.m. on the morning of the 12th it was 30° above the horizon. It would have been shining brightly on the sandy shores of an island some miles ahead, being in its third quarter.

17. Fernando Colón, in his "Vita del Ammiraglio," described the light as like a candle that went up and down as if people on shore were passing with it from one house to another. (Cap 21.)

18. If the poop deck of the *Santa María* were 14 feet from the water, a man standing on this deck, his eye level at 19 feet, would be able to see an object on the horizon 5 miles away, according to the Dip Table calculations in Weems, P.V.H., "Line of Position Book," 2d ed., Annapolis, 1928.

19. The Indian name for the island that Columbus christened San Salvador. The prefix *guana-* stands for "place of much water." Many Arawak names started thus if the location contained water, such as Guanabacoa, Havana, famous for its marvelous springs and fountains. The name does not come from the iguana as has been suggested previously.

20. "Tiene la dicha isla forma de una haba. . ." Las Casas, Apologética Hist., cap. 1, p. 241.

21. "Isla de 15 leguas de luengo, poco mas o menos . . ." Las Casas, Historia de las Indias, I, cap. 40, p. 291.

22. "Esta primera tierra fué una isleta de las que llamamos de los Lucayos, que las gentes de éstas, islas por proprio nombre llamaban Guanahaní, la última sillaba aguda, que en las cartas del marear que agora se pintan, llaman *Triango*, como ignorantes, los pintores, de la antigüedad . . ." Las Casas, Apologética Hist., cap. 1, p. 241.

23. "The creeks dividing the islands, from Grand Caicos to South Caicos, are now fordable, yet it is not so long ago that vessels of some size could reach the inner waters of the bank by passing between the islands." West Indies Pilot, vol. 3, 3d ed., p. 168, London, 1933.

24. That of Watling Island to Rum Cay, a distance of 19 miles.

25. The theory of a land league and a shore league suits Morison's Watling theory very well, but nowhere in any records of Columbus's sailings is there mention of such a system. It could be very confusing when sailing in a group of islands like the Bahamas to know when to apply the proper standard.

26. Both Dr. Morison and Captain Verhoog agree that the effect of currents

in the Bahamas is negligible. (Admiral of the Ocean Sea, vol. 2, cap. 13, p. 255, and Guanahaní Again, pp. 17-19.)

27. Admiral of the Ocean Sea, vol. 1, cap. 13, p. 246.

28. Guanahaní Again, p. 64; Columbus Landed on Caicos, Proc. U. S. Naval Inst., vol. 80, No. 10, p. 1105, 1954.

29. ". . . y como desta isla vide otra mayor al oueste, *cargué las velas* por andar . . ." Spanish dictionaries agree that the verb *cargar* means to "press" or "crowd" or "load on," while *velas* means sails. However, Lieutenant Murdock says "any dictionary of nautical terms shows that the true rendering of *cargué las velas* is 'I clewed up the sails,'" meaning furled the sails. Unfortunately, the English term "to clew up sails" also seems to have an ambiguous meaning which may be interpreted either to make sail or to furl sail. According to Webster's New Collegiate Dictionary "clew" means "to haul a sail by means of lines up to a yard or mast."

The same phrase is used at the beginning of the entry for October 15 in the Journal: "Avía temporejado esta noche . . . é en amaneciendo *cargar velas*," or, "I had lain to that night . . . ready to clew up sails at daybreak." Surely, the same phrase used as it is in two separate places in the record for October 15 must have the same meaning; and that meaning must necessarily be to make or crowd on sail, following as it does the explanation that Columbus had *lain* to that night.

30. "Poor anchorage on the south shore of Samana about two miles from the eastern end." West Indies Pilot, vol. 3, 3d ed., p. 15, London, 1933.

31. The Journal mentions, "So I departed at about 10 o'clock" in the entry for October 15, but the next day records, "I departed from the island of Santa María de Concepción, when it was already about midday."

32. ". . . haze una grande angla." This has been interpreted as "forms a big angle" by many translators, but the Spanish word would then be the masculine "ángulo" instead of the feminine "angla," and it is doubtful if such an error could have occurred in transcribing the original text.

33. "After the islet the coast runs to the west and extends for 12 leagues to a cape, which I named Cape Hermoso." Journal, Friday, October 19.

34. Gently, mildly.

35. Inscribed "Christopher Columbus made the first recorded landing in the New World on this beach, Oct. 12, 1492. Yawl *Heloise*, Feb. 25, 1951." By what right or proof this was erected is a matter for conjecture.

36. Placed there in 1891 by the Chicago Herald Expedition.

37. In the vicinity of Hall's Landing.

38. A United States guided-missile base established there recently.

39. See "The Cruise of Columbus in the Bahamas, 1492," by J. B. Murdock, USN, Proc. U. S. Naval Inst., vol. 10, No. 3, pp. 480-481, 1884.

40. Opinion varies between 500 and 1,000 yards for a lombard shot.

41. *Isleo*—a small island close to a bigger one; *isleta*—a small isle or islet; *isla*—isle or island.

Verhoog argues that Bird Cay off Crooked Island was too small to be an *isleo*, that it was an *isleta*. We argue that Little Inagua was too large and too far from Great Inagua to be called an *isleo*, that Columbus would have called it an *isla* just as he did the Islas de Arena, even though they were much smaller than Little Inagua.

His only use of *isleta* was in describing the "piece of land which is formed like an island although it is not one," when later on in the text he said; ". . . y después, junto con dicta *isleta*." He used *isleo* in describing the island at the entrance to the "maravillosa puerto," ". . . porque tiene un *isleo* en medio," and the small island near Isabella, ". . . adonde haze un *isleo*."

42. A route selected because of its proximity to land whenever possible and in the most sheltered waters.

43. There is a mountain range up to 4,020 feet on the eastern end of Cuba opposite Great Inagua.

44. The chart shows reefs, rocky heads, even a cay, with the notations "edges well defined" and "strong ripples."

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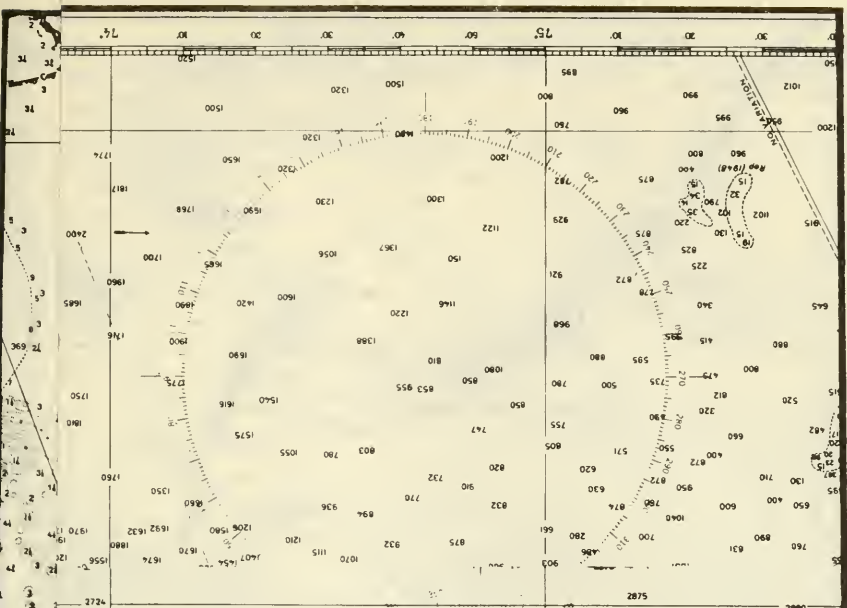
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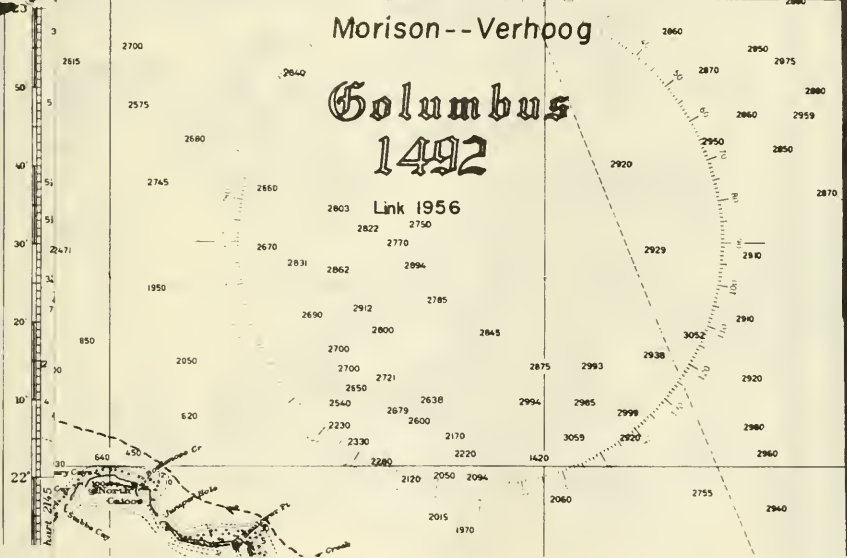
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Morison--Verhoog

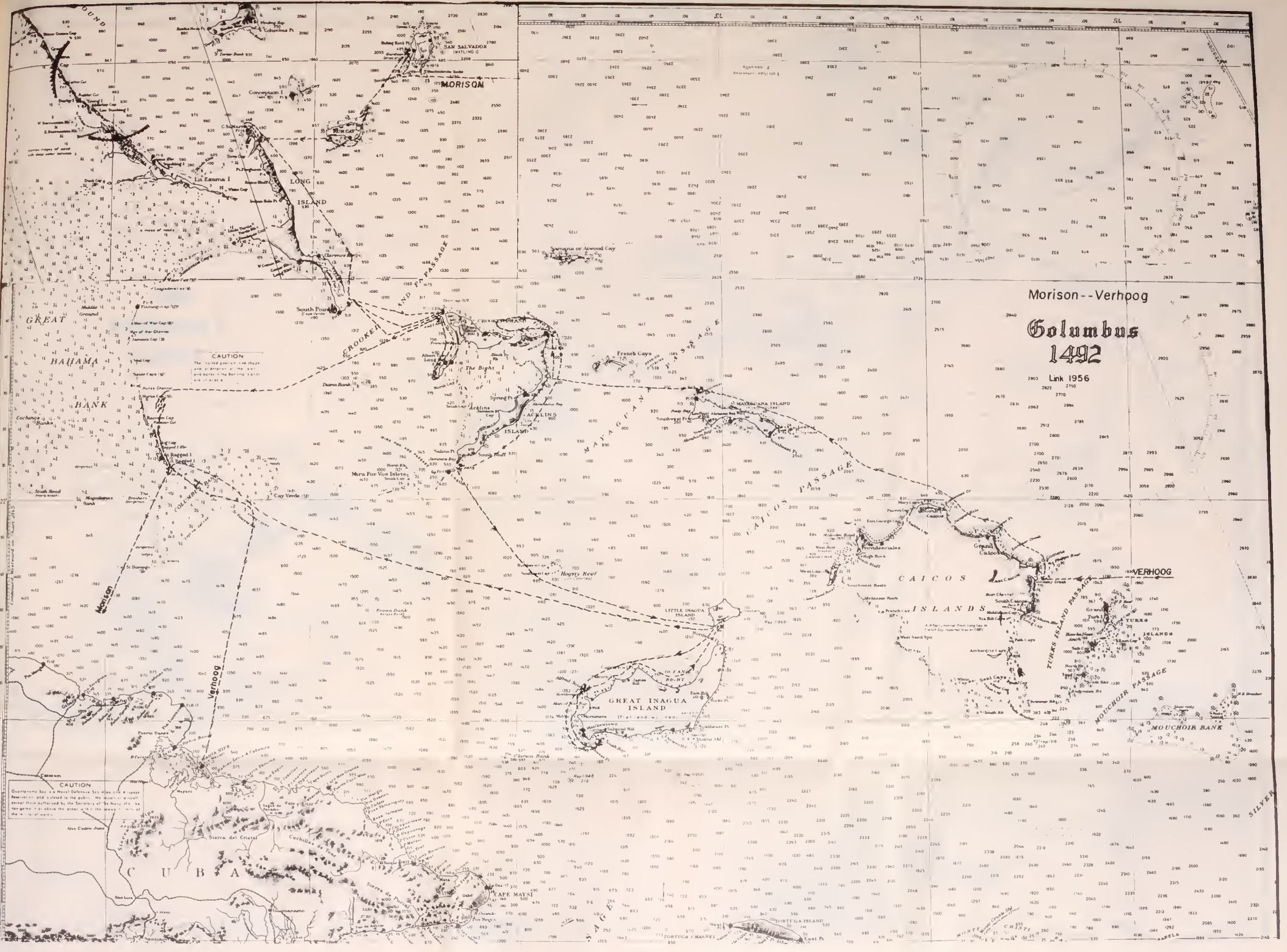
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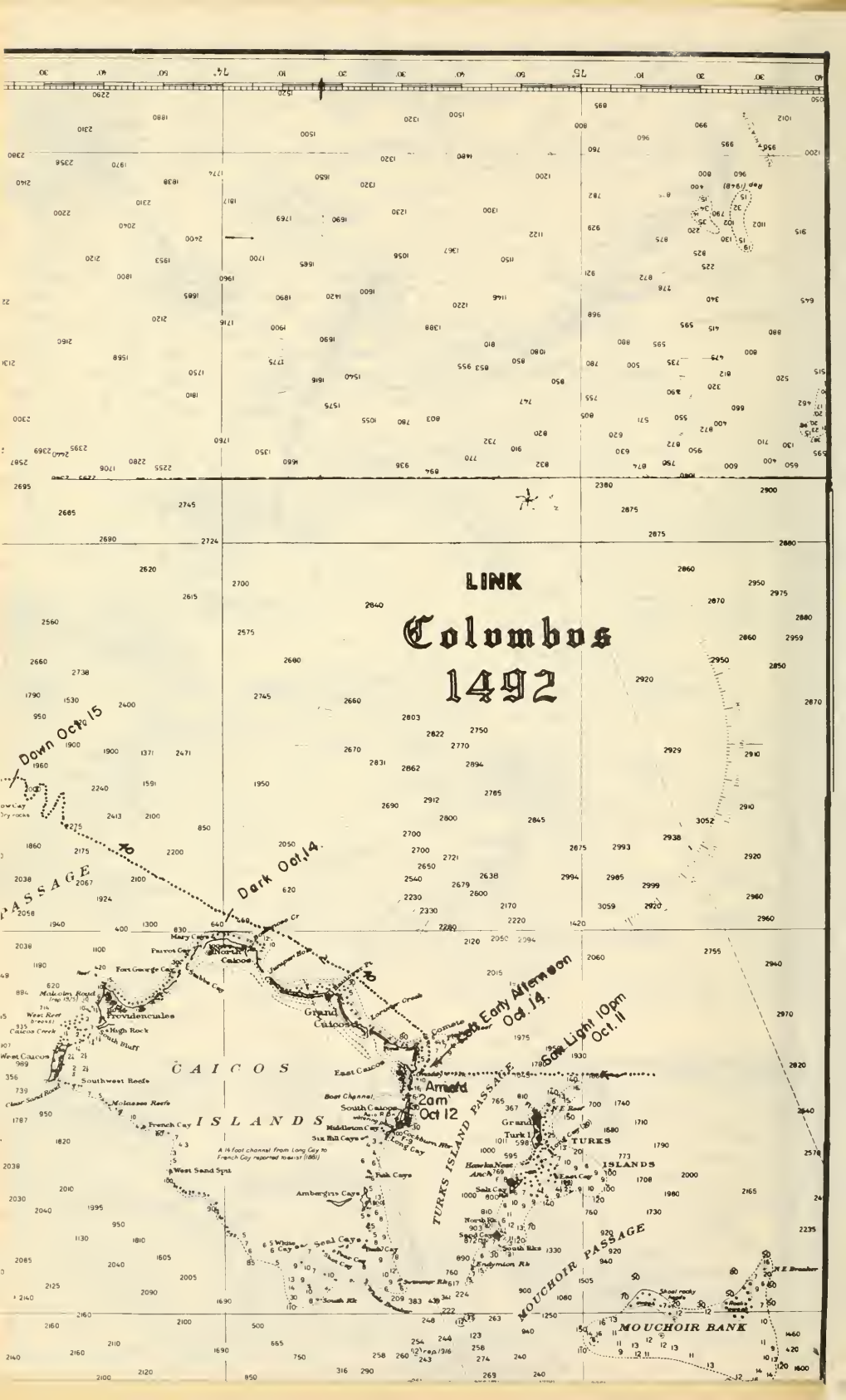
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APPENDIX

EXCERPTS FROM THE JOURNAL OF THE FIRST VOYAGE OF COLUMBUS (OCTOBER 11 THROUGH OCTOBER 27, 1492) AS TRANSLATED FROM THE SPANISH BY ARMANDO ÁLVAREZ PEDROSO

Thursday, October 11

He sailed to the west-southwest; they had a rougher sea than they had experienced during the whole voyage. They saw sandpipers and a green branch near the ship. Those in the caravel *Pinta* saw a cane and a stick, and they secured another small stick, carved, as it appeared, with iron, and a piece of cane, and other grass which grows on land, and a small board. Those in the caravel *Niña* also saw other indications of land and a small branch, covered with dog-roses. At these signs, all breathed again and rejoiced. On this day, to sunset, they went 27 leagues. After sunset, he sailed his former course to the west; they probably made 12 miles an hour, and up to two hours after midnight they had made 90 miles, which are 22 leagues and a half. And because the caravel *Pinta* was swifter and went ahead of the Admiral, she found land and made the signals which the Admiral had commanded. This land, a sailor, who was called Rodrigo de Triana, first sighted, although the Admiral, at 10 o'clock at night, being on the castle of the poop, saw a light. It was, however, so obscured that he would not affirm that it was land, but called Pero Gutiérrez, a gentleman of the bedchamber to the King, and told him that there seemed to be a light, and that he should look at it. He did so, and saw it. He also said the same to Rodrigo Sanchez de Segovia, whom the King and Queen had sent in the fleet as controller, and he saw nothing since he was not in a position from which it could be seen. After the Admiral had so spoken, it was seen one or two times, and it was like a small wax candle, raised and lifted up. Few thought that this was an indication of land, but the Admiral was certain that he was close to land. Accordingly, when they had intoned the "Salve Regina," that all sailors are accustomed to pray and chant in their manner, when they are all together, the Admiral asked and urged them to keep a good lookout from the forecandle and to watch carefully for land, and to the one who should first tell him that he saw land, he would give at once a silk doublet, apart from the other rewards which the sovereigns had promised, which were 10,000 maravedís annually to the one who first sighted it. Two hours after midnight, land appeared, at a distance of 2 leagues from them. They shortened all sail, remaining with the mainsail, which is the great sail without bonnets, and layed to, waiting for day, a Friday, on which they reached a small island of the Lucayos, which is called in the language of the Indians "Guanahani." Immediately they saw naked people, and the Admiral went ashore in the armed boat, and Martín Alonso Pinzón and Vicente Yanez, his brother, who was captain of the *Niña*. The Admiral brought out the royal standard, and the captains went with two banners of the green cross, which the Admiral flew on all the ships as a flag,



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with an F and a Y, and over each letter their crown, one being on one side of the † and the other on the other. When they had landed, they saw trees very green and many waters and fruit of various kinds. The Admiral called the two captains and the others who had landed, and Rodrigo de Escobedo, notary of the whole fleet, and Rodrigo de Segovia, and said that they should bear witness and testimony how he, before all of them, was taking possession, as in fact he took, of the said island in the name of the King and Queen, his sovereigns, making the declarations which are required, as is contained more at length in the testimonies which there were made in writing. Soon many people of the island gathered there. This which follows are the actual words of the Admiral, in his book of his first voyage and discovery of these Indies.

"I," he says, "in order that they might feel great amity toward us, because I gathered that they were a people to be delivered and to be converted to our holy faith rather by love than by force, gave to a few of them some red caps and some glass beads, which they hung around their necks, and many other things of little value. At this they were greatly pleased and became so entirely our friends that it was a wonder to see. Afterward they came swimming to the ships' boats, where we were, and brought us parrots and cotton thread in balls, and spears and many other things, and we exchanged for them other things, such as small glass beads and hawks' bells, which we gave to them. In fact, they took all and gave all they had, with good will, but it seemed to me that they were very deficient people in everything. They all go naked as their mothers bore them, and the women also, although I only saw one, a very young girl. And all of the men whom I did see were young, as I did not see one who was over 30 years of age, very well built, with very handsome bodies and very good faces. Their hair is coarse and short, almost like the hairs of a horse's tail; they wear their hair down over their eyebrows, except for a few strands behind, which they wear long and never cut. Some of them are painted black, and they are the color of the peoples of the Canaries, neither black nor white, and some of them are painted white and some red and some in any color that they find. Some of them paint their faces, some their whole bodies, some only the eyes, and some only the nose. They do not bear arms or know them, for I showed them swords and they took them by the blade and cut themselves through ignorance. They have no iron. Their spears are certain reeds, without iron, and some of these have a fish tooth at the end, while others are pointed in different ways. They are all generally fairly tall, good looking, and well proportioned. I saw some who bore marks of wounds on their bodies and by signs I asked them what was that, and they indicated to me that people had come from other islands, which are near, and wished to capture them, and they had to defend themselves. And I believed and still believe that they came here from the mainland to take them as prisoners. They should be good servants and of quick intelligence, since I see that very soon, they repeat all that is said to them, and I believe that they would easily become Christians, for it appeared to me that they had no creed. Our Lord willing, I will take from here, at the time of my departure, six of them to your highnesses, so that they may learn to talk. I saw no beast of any kind in this island, except parrots." All these are the words of the Admiral.

Saturday, October 13

"As soon as day broke, there came to the shore many of these men, all young, as I have said, and all of a good height, very handsome people. Their hair is not curly, but loose and coarse as the hair of a horse; all have very broad foreheads and heads, more so than any people that I have seen until now. Their eyes are very lovely and not small. They are not at all black, but of the color of the Canarians; nothing else could be expected, since this is on the same line, from east to west, with the island of Hierro in the Canaries.¹ Their legs are very straight; none are bow-legged. They are not big bellied, their stomachs being very well shaped. They came to the ship in boats, which are made of a tree trunk and are like a longboat all made of one piece. They are very wonderfully carved, considering the country, so large, that some carried 40 and 45 men. Others are smaller, so that in some but a single man came. They row them with a paddle, like a baker's shovel, and they travel wonderfully.

If one capsizes, all at once begin to swim and raise it upright, baling it out with gourds which they carry with them. They brought balls of spun cotton and parrots and spears and other trifles, which it would be tedious to write down, and they gave all for anything that was given to them. And I was attentive and tried to know if there was gold, and I saw that some of them wore a small piece hanging from a hole which they have in the nose, and from signs I was able to understand that, going to the south or rounding the island to the south, there was a king who had great vessels of it and very many. I endeavored to make them go there, and afterward saw that they were not inclined for the journey. I resolved to wait until the following afternoon, and, after, to leave for the southwest, for, as many of them indicated to me, there was land to the south and to the southwest and to the northwest, and that those of the northwest used to come to attack them very often. So I resolved to go to the southwest, to seek the gold and precious stones. This island is very large and very flat; with very green trees and much water. In the center of it, there is a very large lagoon; there are no mountains, and all is so green that it is a pleasure to gaze upon it. The people are very peaceful and since they long to possess something of ours, but thinking that nothing will be given to them unless they give something in return, so, as they have nothing, they take what they can and immediately jump into the water and swim. But all that they do possess, they give for anything which is given to them, so that they exchange things even for broken pieces of bowls and bits of broken glass. I even saw 16 balls of cotton being traded for three 'ceotis' of Portugal, which are worth a Castilian 'Blanca,' and in these balls there was more than 25 pounds of spun cotton. I forbade this and did not allow anything to be taken; I would command to be taken all of it, if there would be a large quantity, to be delivered to your highnesses; this grows here in the island; but owing to lack of time, I cannot give a definite account; and here is also found that gold which they wear hanging from the nose. But, in order not to lose time, I wish to see if I can make the island of Cipango. Now, as it is night, they all left to land . . . in their boats."

¹ There is a note on the right side margin of this entry (Las Casas's handwriting) which reads: "The islet of Guanahaní is on Hierro's island latitude."

Sunday, October 14

"At dawn, I ordered the ship's longboat and the boats of the caravels to be made ready, and I went along the island in a north-northeasterly direction, in order to see the other part, which lay to the east, to see what was there, and also to see the villages. And I soon saw two or three, and people that came to the beach, calling us and giving thanks to God. Some brought us water, others various eatables; others, when they saw that I was not inclined to land, jumped into the sea and came, swimming, and we understood that they asked us if we had come from heaven. One old man got into the longboat, and all the rest of the men and women cried in loud voices: 'Come and see the men who have come from heaven; bring them food and drink.' Many men and women came, each one with something, giving thanks to God, lying on the ground and raising their hands to the sky, and then shouting us to come to land. But I feared to do so, seeing a great ridge of rocks which encircled the whole of that island, and in the middle there is deep water and a harbor large enough for all the ships of Christendom, the entrance to which is very narrow. It is true that inside this belt there are some shoals, but the sea is no more disturbed than the water in a well. And in order to see all this, I went this morning, in order to be able to give an account of all to your highnesses and also to know where a fort could be built. I saw a piece of land, which is formed like an island although it is not one, on which there were six houses; it could be cut in order to form an island, in two days, although I do not see that it is necessary to do so, for these people are very unskilled in arms, as your highnesses will see from the seven whom I ordered to be taken with us, so that they may learn our language and then send them back. However, when your highnesses so command, they can all be carried off to Castile or held captive in the island itself, since with 50 men they would be all kept in subjection and forced to do whatever may be wished. Near the said islet, moreover, there are the loveliest groves of trees that I ever saw, and as green and in as full leaf as those of Castile in the month of April and May, and much water. I examined the whole of that harbor, and afterward returned to the ship and set sail. I saw so many islands that I could not decide to which I would go first. Those men, whom I had taken, made signs to me that there were very many, so many that they could not be counted, and they mentioned by their name more than a hundred. For that reason I sought for the largest and resolved to steer for it, which I am doing. It will be 5 leagues away from this island of San Salvador; the others, some are farther away and some are less. All are very flat, without mountains, and very fertile; all are inhabited and they make war upon one another, although these people are very simple and very well-built men."

Monday, October 15

"I had lain to that night, fearing to reach land and anchor before daylight, as I did not know whether the coast was free from shoals, ready to clew up sails at daybreak. And as the island was more than 5 leagues distant, or maybe 7, and the tide delayed me, it was about midday when I arrived at said island, finding that the coast which lies toward the island of San Salvador runs north-south and has 5 leagues, and that the other, which I followed, runs east-west and has more than 10 leagues. And as from this island I saw another, larger, to the west, I clewed sails up to navigate all that day until night, and

still was not able to reach the westerly point; this island I named 'Santa María de la Concepción' and, about sunset, I anchored near the said point to see if there was gold there, because those whom I had taken aboard from the island of San Salvador told me that there they wore very large golden bracelets on the legs and arms. I well believed that all that they said was a trick in order to get away. It was nevertheless my will not to pass any island without taking possession of it, although having taken one, it could be . . . said of all. And I anchored and was there until today, Tuesday, when at dawn I went ashore in the armed boats and landed. The people were many, naked, and of the same type as those of the other island of San Salvador; They allowed us to go through the island and gave us everything I asked from them. And as the wind blew more strongly across from the southeast, I didn't want to detain myself, and went back to the ship. A large boat was alongside the caravel *Niña*, and one of the men from the island of San Salvador who was in it, jumped into the sea and left on it; and during the middle of the night before, the other . . . and went after the boat, which fled so that there was not a boat that could have overtaken it, since he was way ahead of us. But they reached land and left the boat, and some of those with me went ashore after them, and they all escaped like chickens. The boat which they had abandoned we brought on board the caravel *Niña*; to this caravel it was coming from another direction, a second small boat with a man who wished to barter a ball of cotton, and some sailors jumped into the sea, because he would not come on board the caravel, and seized him. I was on the poop of the ship and saw everything, I ordered him brought to me and gave him a red cap and some small beads of green glass, which I put on his arm, and two hawks' bells, which I put in his ears, and ordered his boat, which was also in the ship's longboat, to be returned to him and sent him ashore. After that I set sail to go to the other large island which I was seeing to the west. I ordered that the other boat, which the *Niña* was towing astern, should be also set adrift. Afterward, on land, the other, to whom I had given the things mentioned and from whom I had refused to take the ball of cotton, although he wished to give it to me, was received by all of those people, and was much astonished and quite sure that we were good people and that the one who had run away had somehow wronged us and that accordingly we had kept him. It was to create this impression that I had so acted with him, ordering him to be set free and giving him the said presents, in order that we may be held in this esteem, so that when your highnesses again may send somebody here, they may not be unfriendly. All that I gave to him was not worth 4 pennies. So I departed at about 10 o'clock, with a southeast touching south wind, in order to pass over to this other island which is very large, and all these men, whom I carry with me from the island of San Salvador, make signs that there is in it very much gold and that they wear it as bracelets on their arms and on their legs, and in their ears and nose and on their necks. From this island of Santa María to this other there were 9 leagues, from east to west, and all this side of the island runs from northwest to southeast. It seems that the coast may extend for some 28 leagues or more on this side, and is very flat, without any mountain, as San Salvador and Santa María, and all of it beach, free from rocks, except that they all have some large stones near the land under water, for which it is necessary to keep a sharp lookout when the intention is to anchor, and not to anchor very near the shore, although the waters are always very clear and

the bottom can be seen. At a distance of two lombard shots from land, the water off all these islands is so deep that it cannot be sounded. These islands are very green and fertile with very soft winds, and it is possible that there are many things in them, which I do not know, because I do not wish to delay, in order to look for gold, sailing to and visiting many islands. And since these give such proofs, because they wear it on their arms and legs (and it is gold, because I showed them some pieces of it which I have) I cannot fail, with the aid of Our Lord, to find the place whence it comes. Being in the middle of the channel between these two islands, namely, that of Santa María and this large one which I name 'Fernandina,' I found a man, alone in a boat, going from the island of Santa María to that of Fernandina. He was carrying with him a piece of their bread, about as large as the fist, and a gourd of water and a piece of reddish earth reduced to powder and then kneaded, and some dried leaves, which must be a thing highly prized among them, since already at San Salvador they presented me with some of them. He also carried with him a basket of their make, in which he had a string of glass beads and two Castilian pennies, through which I know that he came from the island of San Salvador and had crossed to that of Santa María and was on his way to Fernandina. He came alongside the ship. I had him come on board, as he wanted to do so, and ordered to bring his canoe on board also, and all that he had with him to be kept safe. I commanded that bread and honey should be given to him to eat, and something to drink, and will take him to Fernandina. Then I will give him back all his belongings, in order that he may extend a good opinion of us, so that with the favor of God, when your highnesses send some one here, those who come may receive honor and they may give us all that they have."

Tuesday and Wednesday, October 16 and 17

"I departed from the island of Santa María de Concepción, when it was already about midday, for that of Fernandina, which loomed very large to the westward, and sailed all that day in a calm. I could not arrive in time to be able to see the bottom in order to anchor in a clear place, for it is necessary to be very careful in this matter so as not to lose the anchors, and accordingly I stood off and on all this night until day, arriving then at a village, where I anchored, to which had come the man whom I found yesterday in the boat in the middle of the channel. He had given such good reports of us that all this night there was no lack of boats alongside the ship; they gave us water and everything they had with them. I ordered something to be given to each of them, that is to say, some small beads; a string of ten or a dozen glass beads; some brass timbrels, of the kind worth a penny each in Castile, and some leather straps; all these things they regarded as most excellent. When they came on board, I also ordered they should give them sugar molasses to eat. And afterwards, at the hour of tierce, I sent the ship's boat ashore for water, and with good will they made signs to my people showing where the water was; and themselves carried the full casks to the boat; they were delighted to please us. This island is very large, and I am resolved to go around it, because, as far as I can understand, there is in it or near it a mine of gold. This island is almost 8 leagues away from that of Santa María in an east-west direction; and this cape where I came, and all this coast runs north-northwest and south-

southwest; I saw quite 20 leagues of it, but it did not end there. Now, as this is being written, I have set sail with a south wind in order to try to go around the whole island and to go on until I find Samoet, which is the island or city where there is gold, as say all that come on board the ship, and also those from the island of San Salvador and from Santa María. These people are like those of said islands and have the same speech and manners, except that the ones here seem to me to be somewhat more civilized and courteous, and more intelligent, since I saw that they have brought cotton and other trifles to the ship and they know how to bargain better than the others. And in this land I also saw cotton cloths made like mantillas; the people are more capable and the women wear in front of their bodies a small piece of cotton, which scarcely hides their secret parts. This island is very green and flat and very fertile, and I have no doubt that the whole year they sow panic grass and reap it, and also other things. I saw many trees very different from ours, and many of them had branches of different kinds, and all coming from one trunk; one branch is of a kind and the other of another, and they are so unlike each other that it is the greatest wonder of the world. How great is the difference between one and another! For example, one branch has leaves like those of a cane and another like those of a mastic tree; and thus, on a single tree, there are five or six different kinds and all so different from each other. They are not grafted; so that it cannot be said that it is the result of grafting; on the contrary, they are wild and these people do not care for them. In them I have not seen any creed, and I believe that they would be speedily converted to Christianity, since they have a very good understanding. The fish here are so different from ours that it is a wonder; some of them are shaped like cocks, of the finest colors in the world: blue, yellow, red, and of all colors; others in a thousand different colorings, and the colors are so fine that there is not a man that would not be astonished and take a long time watching them. There are also whales. I saw no animals of any kind on land, except parrots and lizards. A boy told me that he saw a large snake. I did not see any sheep or goats or other animals, but I have been here a very short while, only half a day. But, if there had been any, I could not have failed to see one. I will describe the circuit of this island after I have gone around it."

Wednesday, October 17

"At midday I left the village where I was anchored, from which I had taken water, in order to go around this island of Fernandina; the wind was southwest and south, and since my wish was to follow the coast of this island where I was, to the southeast, because it all trended north-northwest and south-southeast, and I wanted to take said route to the south and southeast, because in that direction, as all the Indians whom I have with me say and from signs of another, towards the south, lies the island which they call Samoet, where the gold is, and since Martín Alonso Pinzón, captain of the caravel *Pinta*, where I stationed three of these Indians, came and told me that one of them very definitely made him understand that the island could be rounded more quickly in a north-northwesterly direction, and I saw that the wind would not help me on the course which I wished to steer, being favorable for the other course, I sailed north-northwest. And when I was about 2 leagues from the cape of the island, I found a very wonderful harbor with a mouth, or rather it may be

said with two mouths, since there was an islet in the middle, and both mouths are very narrow, and inside it is more than wide enough for a hundred ships, if it be deep and clear and there be depth at the entrance. I thought it wise to examine it closely and sound it, and so I anchored on the outside coming into it with all the ship's boats; we saw that it was shallow. And as I thought, when I saw it, that it was the mouth of a river, I had ordered to bring barrels to fill them with water, and on land I found some eight or ten men, who immediately came to us and showed us a village near there, where I sent the people for water, some of them armed and some with barrels, and so they took it. And as it was some distance away, I was kept there for two hours. During this time I walked among the trees, and it was the loveliest thing that has ever been seen, seeing so much verdure in such a great scale like that of Andalusia in May; all the trees are as different from ours as day is from night, and so is the fruit, the grass, stones, and everything else. It is true that some trees were of the same kind as some in Castile, but yet there is a great difference in the whole, and the rest of the trees of other kinds are so many that there is no one who could identify or compare them with those of Castile. The people are like the ones already mentioned. They are of the same type and as naked and of the same height, and they offer what they have for whatever is given to them. Here I saw that some boys from the ships exchanged some little pieces of broken dishes and glass for their spears. The others, who went to get the water, told me that they had been in their houses and that they were inside very swept and clean, their beds and coverings being like nets of cotton. The houses are all like tents, and very high and with good chimneys, but in the many villages which I have visited I have not seen any with more than 12 to 15 houses. They saw here that married women wore cotton drawers, but girls do not, except some who were already 18 years old. There are here mastiffs and small dogs, and here they found a man who had in his nose a piece of gold, which might have been half the size of a Spanish gold coin, on which they saw letters. I was angry with them because they had not bargained for it and given whatever might be asked, in order that it could be examined, to see what kind of money it was. They replied to me that they didn't dare to bargain. After the water had been carried, I returned to the ship and set sail, and navigated to the northwest till I had discovered all that part of the island as far as the coast which runs east-westerly. Afterward all these Indians began to say that this island was smaller than the island of Samoet and that it would be well to turn back in order to arrive at it sooner. There the wind fell and then began to blow from west-northwest, and so blowing contrary to the course which we had been following. Therefore I turned back and navigated all this night in an east-southeasterly direction, sometimes due east and sometimes southeast; this was done in order to keep clear from land, because there were very thick clouds and the weather was very bad. There was little wind and this prevented me from going to land to anchor. This night it rained very heavily from after midnight until near daybreak, and it is still cloudy and ready to rain. We are at the end of the island to the southeast, where I hope to anchor until the weather clears, in order to see the other islands that I should visit. It has rained, more or less, every day since I have been in the Indies. Your highnesses may believe that this land is the best and most fertile and temperate and level and good that might be found in the world."

Thursday, October 18

"After it was light, I followed the wind and sailed around the island as far as I could, and anchored when it was no time to sail; but I did not land, and at dawn I set sail."

Friday, October 19

"At dawn I weighed anchors and sent the caravel *Pinta* to the east and south-east, and the *Niña* to south-southeast, while I sailed in the ship to the southeast, and gave orders that they should follow these courses until midday, and that they should then change their course and rejoin me. And then before we had sailed for three hours, we saw an island to the east, toward which we steered, and all the three vessels reached it before midday, at its northern point, where there is an islet and a ridge of rocks on its outside, to the north, and another between it and the main island, which the men from San Salvador, whom I have with me called 'Saometo' and which I named 'Isabella.' There was a north wind, and the said islet lay on the course of the island of Fernandina, from which I had departed east-west. After that islet the coast runs to the west and extends for 12 leagues to a cape, which I named Cape Hermoso. It is on the west part and it is indeed lovely, round and very deep, with no shoals off it. At first the shore is stony and low, and farther on there is a sandy beach which is the character of most of that coast, and there I anchored this night, Friday, until morning. All this coast, and the part of the island which I saw, is mainly a beach; the island is the loveliest thing that I have seen, for, if the others are very lovely, this is more so. It has many tall trees and they are very green, and this land has a bigger height than the other islands which have been discovered. There is in it an elevation, which cannot be called a mountain, but which serves to beautify the rest and it seems that there is much water in the middle of the island. From this part, to the northeastern side, the coast forms a big neck of land, and is very thickly wooded with very large trees. My wish was to anchor there, in order to land and see such beauty; but the water was shallow and I could not anchor unless far from the shore; but the wind was very favorable to reach this cape, where I am now lying at anchor, and which I have named Cape Hermoso, because such it is. So I did not anchor on that neck of land. Looking at this cape, so green and lovely, and all the other things and lands of these islands that are so lovely, I do not know where to go first, and my eyes never get tired of looking at such lovely verdure, so different from ours. I still believe that they have many herbs and many trees which will be of great value in Spain for dyes and as medicinal spices, but I do not recognize them and this gives me a great sorrow. When I arrived here, at this cape, there came from the land the scent of flowers or trees, so delicious and sweet, that it was the most delightful thing in the world. In the morning, before I leave I will go to land to see what there is here at this point. It is not in the village but farther inland, where these men, whom I have with me, say the king is, and that he wears much gold. In the morning I wish to go far enough inland until I find the village and see or talk with this king, who, according to the signs which these men make, rules all these neighboring islands and is clothed and wears on his person much gold, although I do not trust much what they say, both because I do not understand them well and because they are so lacking in gold that any

small amount which this king may wear would seem to be much to them. This point here I call Cape Hermoso. I believe that it is an island separated from that of Samoet and there is another small island in between. I make no attempt to examine so much in detail, since I could not do that in 50 years, because I wish to see and discover as much as I can, in order to return to your highnesses in April, if it please Our Lord. It is true that, if I arrive anywhere where there is gold or spices in large quantity, I shall wait until I have collected as much as I am able; and that's why I do nothing but sail to see if I can find it."

Saturday, October 20

"Today, at sunrise, I weighed anchor from the place where I was with the ship, anchored off the southwest point of this island of Samoet, which point I named 'Cape de la Laguna' and which island I named 'Isabella,' in order to steer northeast and east from the southeast and south, where the village and its king were, as I understood from these men whom I have with me. I found the bottom so shallow everywhere that I could not enter or navigate to that point, and saw that, following the route to the southwest, it was a very great detour. Therefore I decided to go back by the same way which I had come from the north-northeast, to the west, and round this island in that direction; and the wind was so light that I never made the entire coast until night, and as it is dangerous to anchor off these islands except in daytime, when it is possible to see where you can anchor, since the bottom varies everywhere, some part being clean and some not, I proceeded to stand off under sail all this Sunday [sic] night. The caravels anchored, because they found themselves near land earlier, and they thought that by making the usual signal, I should go and anchor, but I did not wish to do it."

Sunday, October 21

"At 10 o'clock I arrived here at this 'Cape del Isleo' and anchored, as did the caravels. After having my meal, I went ashore, where there was no village but a single house, in which I found nobody, and I believe they fled in terror, because in the house were all their household goods. I did not allow them to touch anything, and proceeded to examine the island, with these captains and people. If the others, already seen, are very lovely and green and fertile, this is much more so, and has many and very green trees. There are very extensive lagoons, and by them and all around them there are wonderful woods; here and in the whole island all is green and the grass is as that in April in Andalusia. The singing of little birds is such that it seems that man could never wish to leave this place; the flocks of parrots darken the sun; and fowl and small birds are so different and so unlike ours, that it is a marvel. There are, moreover, trees of a thousand types, all with their various fruits and all with marvelous scent. I am the unhappiest man in the world because I do not recognize them, for I am very sure that all are of great value, and I am bringing specimens of them and also of the herbs. As I was walking around one of these lagoons, I saw a snake, which we killed, and I am bringing its skin to your highnesses. When it saw us, it jumped into the lagoon and we followed it, as the water was not very deep, until we killed it with our spears. It is 7 palms in length; I believe that there are many similar in

these lagoons. Here I recognized the aloe, and tomorrow I am resolved to have 10 quintals brought to the ship, since they tell me that it is very valuable. Further, going in search of very good water, we went to a village near here, half a league from where I am anchored. When the people heard us, all fled and left their houses and hid their clothing and whatever they had in the undergrowth. I did not allow anything to be taken, even of the value of a pin. Afterward, some of the men among them came toward us and one came quite close. I gave him some hawks' bells and some little glass beads, and he was well satisfied and very happy. And to be more friendly making some request of them, I asked him for water; and after I had returned to the ship, they came to the beach with their gourds full, and were delighted to give it to us; so I ordered to give them another string of small glass beads and they said that they would come back tomorrow. I was anxious to fill here all the ships' casks with water; accordingly, if the weather allows it I shall set out to go around this island, until I can speak with this king and try to see if I can obtain from him the gold which I hear that he wears. After that I wish to leave for another very large island, which I believe must be Cipango, according to the indications that the Indians that I have are giving me; they call it 'Colba' in which they say that there are ships and very many and magnificent sailors; and from this island I intend to go to another which they call 'Bohio' and they also say is very large. The others, which lie between them, I shall see lightly and if I find a quantity of gold or spices, I shall decide what to do. But I am still decided to sail to the mainland and to the city of Quinsay and deliver the letters of your highnesses to the Grand Khan, request a reply and return with it."

Monday, October 22

"I have been waiting here all night and today to see if the king of this place or other persons would bring gold or anything else of importance. There came many people, who were like those of the other islands, just as naked and just as painted, some white, some red, some black, and many other ways. They brought spears and some cotton balls to barter, and here they exchanged them with sailors for bits of glass, broken cups, and pieces of broken clay bowls. Some of them wore some pieces of gold, hanging from the nose, and they gladly exchanged them for a hawk's bell, of the type for a sparrow hawk's leg, and for glass beads; but the quantity is so small that it amounts to nothing. It is true, that laying aside whatever little thing which might be given to them, they still regarded our arrival as a great wonder, and they believed that we had come from heaven. We carried water to the ships from a lagoon which is here, near Cape del Isleo, for so I named it. And in said lagoon, Martín Alonso Pinzón, captain of the *Pinta*, killed another snake like that of yesterday, 7 palms long; and here I ordered to be collected as much aloe as was found."

Tuesday, October 23

"Today I would like to sail to the island of Cuba, which I believe must be Cipango, according to the indications which these people give me concerning its size and riches. I will not delay here any longer or . . . round this island to go to the village, to have a talk with this king or lord, as I had decided, in order not to delay too long, since I see that there is no gold mine here and because to go around these islands, the wind must blow from different direc-

tions and it does not blow just as men may wish, and also since it is wise to go where large trade can be found. I say that it is not right to delay, but to go on our way and to discover many lands, until a very profitable . . . land is reached. My impression, however, is that this one is very rich in spices, but I have no knowledge of these matters, which gives me the greatest sorrow in the world, for I see a thousand kinds of trees, each one of which bears fruit after its kind and all as green now as they would be in Spain in the months of May and June, and a thousand kinds of herbs, and also of flowers. And in all this none was recognized but the aloe, of which I have ordered a great quantity to be brought to the ship to take to your highnesses. I have not sailed yet for Cuba because there is no wind, but a dead calm, and it is raining heavily as it did yesterday, without being cold at all. On the contrary during the day it is hot and nights are mild as in May in Andalusia, in Spain."

Wednesday, October 24

"This night, at midnight, I weighed anchor from the island of Isabella, from Cape del Isleo, which is on the north side, where I was anchored, to go to the island of Cuba; of this I hear from these people that it is very large, having much trade, and having in it gold and spices, and great ships and merchants; they showed me that I should steer west by southwest to go there. This I believe because I think that, if it be as all the Indians of these islands and those whom I carry with me in the ships give me to understand by signs, for I do not know their language, it is the island of Cipango, of which marvelous things are told; and in the spheres which I have seen and in the drawings of world maps, it is placed in this region. And so I sailed until daybreak to the west by southwest, and at dawn the wind fell and it rained, and so it was almost all night. I was thus with little wind until after midday, and then it began to blow very lovingly, and I set all my sails on the ship, and two bonnets, and the foresail and spitsail, the mizen, main topsail, and the boat's sail on the poop. So I went on my course until nightfall, when Cape Verde, in the island of Fernandina, which is on the south side in the western part, lay to my northwest, and was 7 leagues away from me. And as the wind blew hard, and I did not know what distance there was to the island of Cuba, and in order not to arrive at night, because all these islands lie in very deep water, so that no bottom can be found beyond two lombard shots' distance, and then it is all patchy, one part being rocky and another sandy, and hence it is impossible to anchor safely, except when it is possible to see, I decided to take in all sail, except the foresail, and to proceed under it. After a short while, the wind became much stronger and I made a considerable distance, at which I felt misgiving, and as there were thick clouds and it was raining, I ordered the foresail to be furled, and that night we scarcely sailed 2 leagues, etc."

Thursday, October 25

After sunrise, until 9 o'clock, he sailed to the west by southwest. They made about 5 leagues. Afterward he changed the course to the west. He went 8 miles an hour, until 1 o'clock in the afternoon, and from then until 3 o'clock, and they sailed about 44 miles. Then they sighted land and it was seven or eight islands in a row, all lying from north to south. They were 5 leagues away from them, etc.

Friday, October 26

He was to the south of said islands. It was everywhere shallow water for 5 or 6 leagues. He anchored about there; the Indians whom he carried with him said that from these islands to Cuba it was a journey of a day and a half for their boats, which are small vessels of a single piece of wood, carrying no sail. These are canoes. From there he set out for Cuba, because from the indications which the Indians made to him concerning its greatness and its gold and pearls, he thought that it was that land, that is to say, Cipango.

Saturday, October 27

They weighed anchor, at sunrise, from those islands, which he called "Islas de Arena" ("Sand Islands"), on account of the little depth of water which there was to the south of them up to a distance of 6 leagues. He made 8 miles an hour to the south-southwest until 1 o'clock and they sailed about 40 miles, and by nightfall they had gone about 28 miles more, on the same course; and before night they saw land. They spent the night on watch while it rained heavily. On Saturday, up to sunset, they went 17 leagues to the south-southwest.

NOTES TO APPENDIX

I. The above translation has been made directly from Father Las Casas's autograph kept at Madrid, as transcribed in "Raccolta di Documenti e Studi Pubblicati dalla R. Commissione Colombiana del Quarto Centenario dalla Scoperta dell' America," pt. 1, vol. 1, pp. 15 to 30.

II. Special care has been taken to follow closely Columbus's old Spanish wording. Accordingly, the translator has retained as far as the modern English language allows, the same phrases, idiomatic expressions, equal paragraph divisions, and punctuation employed by the Discoverer.

III. Some Spanish words used by Columbus (because they are archaic Castilian) have today quite a different meaning. In these cases the significance as denoted by the Admiral has been translated into English.

IV. It is my belief that this is a thoroughly dependable translation.

ARMANDO ÁLVAREZ PEDROSO

Havana, May 11, 1956