

## CLASSICS OF SCIENCE:

Discovery of America  
*Geography*

You can here read the accounts of the most eventful days of Columbus' voyage as written up by Las Casas, a member of the expedition, from the Admiral's log.

*PERSONAL NARRATIVE OF THE FIRST VOYAGE OF COLUMBUS TO AMERICA. From a manuscript recently discovered in Spain. Translated from the Spanish by Samuel Kettell. Boston, 1827.*

*We Set Sail*

Friday, Aug. 3d, 1492. Set sail from the bar of Saltes at 8 o'clock, and proceeded with a strong breeze till sunset, sixty miles or fifteen leagues S. afterwards SW. and S. by W. which is the direction of the Canaries.

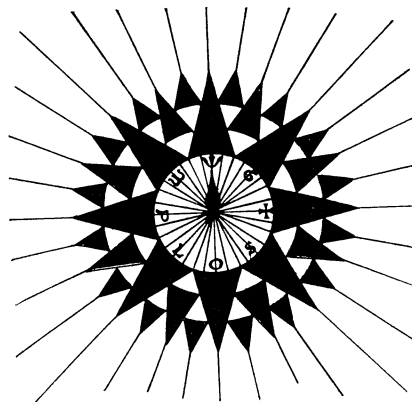
Monday, Aug. 6th. The rudder of the caravel *Pinta* became loose, being broken or unshipped. It was believed that this happened by the contrivance of Gomez Rascon and Christopher Quintero, who were on board the caravel, because they disliked the voyage. The Admiral says he had found them in an unfavorable disposition before setting out. He was in much anxiety at not being able to afford any assistance in this case, but says that it somewhat quieted his apprehensions to know that Martin Alonzo Pinzon, Captain of the *Pinta*, was a man of courage and capacity. Made a progress, day and night, of twenty-nine leagues. . . .

*A Month Later*

Sunday, Sept. 9th. Sailed this day nineteen leagues, and determined to count less than the true number, that the crew might not be dismayed if the voyage should prove long. In the night sailed one hundred and twenty miles, at the rate of ten miles an hour, which make thirty leagues. The sailors steered badly, causing the vessels to fall to leeward toward the Northeast, for which the Admiral reprimanded them repeatedly.

Monday, Sept. 10th. This day and night sailed sixty leagues, at the rate of ten miles an hour, which are two leagues and a half. Reckoned only forty-eight leagues, that the men might not be terrified if they should be long upon the voyage.

Sunday, Sept. 16th. Sailed day and night, W. thirty-nine leagues, and reckoned only thirty-six. Some clouds arose and it drizzled. The Admiral here says that from this time they experienced very pleasant weather, and that the mornings were most delightful, wanting nothing but the melody of the nightingales.



*THIS "ROSE OF THE WINDS" COMPASS card dating from 1492 is probably like those carried on the NINA, the SANTA MARIA and the PINTA, which caused such consternation when they varied a whole point from true north. Columbus knew of the variation of the compass needle, and is said to have "corrected" the compass by shifting the card to allay the fears of his ignorant crew*

He compares the weather to that of Andalusia in April. Here they began to meet with large patches of weeds very green, and which appeared to have been recently washed away from the land; on which account they all judged themselves to be near some island, though not a continent, according to the opinion of the Admiral, who says, "the continent we shall find further ahead."

Monday, Sept. 17th. Steered W. and sailed, day and night, above fifty leagues; wrote down only forty-seven; the current favored them. They saw a great deal of weed which proved to be rock-weed, it came from the W. and they met with it very frequently. They were of opinion that land was near. The pilots took the sun's amplitude, and found that the needles varied to the N. W. a whole point of the compass; the seamen were terrified, and dismayed without saying why. The Admiral discovered the case, and ordered them to take the amplitude again the next morning, when they found that the needles were true; the cause was, that the star moved from its place, while the needles remained stationary. At dawn they saw many more weeds, apparently river weeds, and among them a live crab, which the Admiral kept, and says that these are sure signs of land, being never found eighty leagues out at sea. They found the sea-water less salt since they left the Canaries, and the air

more mild. They were all very cheerful, and strove which vessel should outsail the others, and be the first to discover land; they saw many tunnies, and the crew of the *Nina* killed one. The Admiral here says that these signs were from the west, "where I hope that high God in whose hand is all victory will speedily direct us to land." This morning he says he saw a white bird called a water-wagtail, or tropic bird, which does not sleep at sea.

Saturday, Sept. 22d. Steered about W. N. W. varying their course, and making thirty leagues progress. Saw few weeds. Some *pardelas* were seen, and another bird. The Admiral here says, "this head wind was very necessary to me, for my crew had grown much alarmed, dreading that they never should meet in these seas with a fair wind to return to Spain." Part of the day saw no weeds, afterwards great plenty of it.

*False Report of Land*

Tuesday, Sept. 25. . . .

At sunset Martin Alonzo called out with great joy from his vessel that he saw land, and demanded of the Admiral a reward for his intelligence. The Admiral says, when he heard him declare this, he fell on his knees and returned thanks to God, and Martin Alonzo with his crew repeated *Gloria in excelsis Deo*, as did the crew of the Admiral. Those on board the *Nina* ascended the rigging, and all declared they saw land. The Admiral also thought it was land, and about twenty-five leagues distant. They remained all night repeating these affirmations, and the Admiral ordered their course to be shifted from W. to SW. where the land appeared to lie. They sailed that day four leagues and a half W. and in the night seventeen leagues SW. in all twenty-one and a half: told the crew thirteen leagues, making it a point to keep them from knowing how far they had sailed; in this manner two reckonings were kept, the shorter one falsified, and the other being the true account. The sea was very smooth and many of the sailors went in it to bathe, saw many dories and other fish.

Wednesday, Sept. 26th. Continued their course W. till the afternoon, then SW. and discovered that what they had taken for land was nothing but clouds. (*Turn to next page*)

## Discovery of America—Continued

Sailed, day and night, thirty-one leagues; reckoned to the crew twenty-four. The sea was like a river, the air soft and mild.

### *The Crew Discouraged*

Wednesday, Oct. 10th. Steered WSW. and sailed at times ten miles an hour, at others twelve, and at others, seven; day and night made fifty-nine leagues progress; reckoned to the crew but forty-four. Here the men lost all patience, and complained of the length of the voyage, but the Admiral encouraged them in the best manner he could, representing the profits they were about to acquire, and adding that it was to no purpose to complain, having come so far, they had nothing to do but continue on to the Indies, till with the help of our Lord, they should arrive there.

Thursday, Oct. 11th. Steered WSW.; and encountered a heavier sea than they had met with before in the whole voyage. Saw pardelas and a green rush near the vessel. The crew of the *Pinta* saw a cane and a log; they also picked up a stick which appeared to have been carved with an iron tool, a piece of cane, a plant which grows on land, and a board. The crew of the *Nina* saw other signs of land, and a stalk loaded with roseberries. These signs encouraged them, and they all grew cheerful. Sailed this day till sunset, twenty-seven leagues.

### *A Light and Land!*

After sunset steered their original course W. and sailed twelve miles an hour till two hours after midnight, going ninety miles, which are twenty-two leagues and a half; and as the *Pinta* was the swiftest sailer, and kept ahead of the Admiral, she discovered land and made the signals which had been ordered. The land was first seen by a sailor called Rodrigo de Triana, although the Admiral at ten o'clock that evening standing on the quarter-deck saw a light, but so small a body that he could not affirm it to be land; calling to Pero Gutierrez, groom of the King's wardrobe, he told him he saw a light, and bid him look that way, which he did and saw it; he did the same to Rodrigo Sanchez of Segovia, whom the King and Queen had sent with the squadron as comptroller, but he was unable to see it from his situation. The Admiral again perceived it once or twice, appearing like the light of a wax candle moving up and down,

which some thought an indication of land. But the Admiral held it for certain that land was near; for which reason, after they had said the *Salve* which the seamen are accustomed to repeat and chant after their fashion, the Admiral directed them to keep a strict watch upon the fore-castle and look out diligently for land, and to him who should first discover it he promised a silken jacket, besides the reward which the King and Queen had offered, which was an annuity of ten thousand maravedis. At two o'clock in the morning, the land was discovered, at two leagues distance; they took in sail and remained under the square-sail lying to till day, which was Friday, when they found themselves near a small island, one of the Lucayos, called in the indian language Guanahani. Presently they descried people, naked, and the Admiral landed in the boat, which was armed, along with Martin Alonzo Pinzon, and Vincent Yanez his brother, captain of the *Nina*. The Admiral bore the royal standard, and the two captains each a banner of the Green Cross, which all the ships had carried; this contained the initials of the names of the King and Queen each side of the cross, and a crown over each letter. Arrived on shore, they saw trees very green, many streams of water, and diverse sorts of fruits. The Admiral called upon the two Captains, and the rest of the crew who landed, as also to Rodrigo de Escovedo notary of the fleet, and Rodrigo Sanchez, of Segovia, to bear witness that he before all others took possession (as in fact he did) of that island for the King and Queen his sovereigns, making the requisite declarations, which are more at large set down here in writing. Numbers of the people of the island straightway collected together. Here follow the precise words of the Admiral. "As I saw that they were very friendly to us, and perceived that they could be much more easily converted to our holy faith by gentle means than by force, I presented them with some red caps, and strings of beads to wear upon the neck, and many other trifles of small value, where-with they were much delighted, and became wonderfully attached to us.

I thought then, and still believe, that these were from the continent. It appears to me, that the people are ingenious, and would be good ser-

vants; and I am of opinion that they would very readily become Christians, as they appear to have no religion. They very quickly learn such words as are spoken to them. If it please our Lord, I intend at my return to carry home six of them to your Highnesses, that they may learn our language. I saw no beasts in the island, nor any sort of animals except parrots." These are the words of the Admiral.

**Christopher Columbus** was born in Genoa, Italy, in either 1446 or 1451. He died at Valladolid, Spain, May 20, 1506. His first experience as a sailor was gained at the age of 14. He studied astronomy, and geometry at the University of Pavia. In early manhood he was in business in Genoa. Beginning in 1474, he made several sea voyages, and on one of them, when he visited England, he seems to have made a further trip to Iceland. About 1479, or perhaps as early as 1474, Columbus began to consider the possibility of reaching India by sailing west across the ocean. In 1482 Columbus submitted to King John of Portugal his proposition for attempting the new all-water route to the East. After that king had treacherously used Columbus' information to send out an expedition of his own on the enterprise, Columbus turned to Ferdinand and Isabella, the sovereigns of Spain. There followed many negotiations and much intrigue. After ten years' delay, Columbus, on April 17, 1492, received his authorization from the King and Queen. The outcome of the first of his four voyages is well known. The second voyage was begun in September, 1493, for the purpose of colonizing the newly discovered islands. Difficulties followed, as was inevitable. Columbus returned to Spain in 1495, and two years later made his third voyage to the new world. It was on that trip that he touched at the mainland of South America at the mouth of the Orinoco River. During his absence, returned colonists who were dissatisfied with affairs in the new colony got the ear of the King, and Bobadilla was dispatched to supersede Columbus. Bobadilla seized Columbus and his two brothers and returned them to Spain in irons. But before they reached the court, public sympathy had turned in their favor, and Bobadilla was recalled. He perished in a hurricane on the return trip, which was considered divine punishment. Columbus, still with the patronage and aid of the sovereigns, set out on his fourth voyage in 1502, and was gone two years. He returned broken in health, to live only two years longer. Although the proud Admiral always kept with him the fetters in which he was sent home in disgrace from his second trip, "as memorials of the reward of his service," he remained on good terms with Ferdinand and Isabella all his life, and his titles of Admiral and Duke of Veragua are still held by his descendants.

*Science News-Letter, April 14, 1928*

The Chinese tree of heaven, the *Ailanthus*, grew in North America hundreds of thousands of years ago, as is shown by fossil specimens in Colorado.