

Mr. WARNER. Mr. President, I thank my colleague for those kind remarks. I return the same.

Mr. BYRD. I thank the Senator.

SENATOR PAT MOYNIHAN
PRESIDING

Mr. BYRD. Mr. President, I call attention to something that I have not seen in the Senate, now, in over 5 years. It has been 5 years since I saw a Democrat in that chair. But who better than the distinguished senior Senator from New York, PAT MOYNIHAN, to grace that chair. This is truly a record day. We will be celebrating Columbus Day on next Tuesday, but I am ready to start now because there sits Senator MOYNIHAN—in the chair.

Let me comment just a little further on that. Imagine our good Republican friends allowing a Democrat to sit in the Presiding Officer's chair. They trust him. I think it was with great grace that JESSE HELMS, the senior Senator from North Carolina, the State in which I was born and the State whose motto is "to be rather than to seem," that he chose PAT MOYNIHAN to preside over these last few minutes.

COLUMBUS DAY 1999

Mr. BYRD. Mr. President, many Americans are preparing to enjoy a three-day weekend. Most could tell you that their holiday was to honor Christopher Columbus, and a fair number might be able to recite "in fourteen hundred and ninety-two, Columbus sailed the ocean blue" on his way to discovering America. An even smaller number might be able to recount the ongoing controversy over just where along the continent Columbus first came to land. But few, I hazard to guess, can truly appreciate the magnitude of his great daring, though we all appreciate the bounty of his great mistake. Few may even realize that it is next Tuesday, October 12, that is the true anniversary of Christopher Columbus' discovery of the New World, some 507 years ago.

Oh, Columbus, that scion of Eratosthenes, that son of Ptolemy, that kin in spirit to Marco Polo, what fascinating history he built upon when first he set out on his great journey. Although he was surely a brave man, Columbus did not sail blindly off to the west not knowing whether he would drop off the edge, as some children's books might lead one to believe. No, Columbus had the wisdom of the ancients to guide him and the lure of another adventurer's tales to entice him. He had history, mathematics, and science as his guides and greed as his goad to whip him along his journey.

Long before Columbus' day, Eratosthenes, the ancient Greek scholar commonly called the Father of Geography, had determined with amazing accuracy the circumference of the earth. Born around 276 B.C. at a Greek colony in Cyrene, Libya, Eratosthenes

was educated at the academies in Athens and was appointed to run the Great Library at Alexandria, in what is now Egypt, in 240 B.C. During his time there, he wrote a comprehensive volume about the world, called "Geography," the first known coining of that word. Eratosthenes used known distances and geometry on a grand scale to calculate the circumference of the earth to within 100 miles of its true girth at the equator, 24,901 miles. His work was still available in Columbus' time.

A later Greek geographer, Posidonius, felt that Eratosthenes' circumference was too large and recalculated the figure at 18,000 miles, some 7,000 miles too short. What is interesting about this fact is that Christopher Columbus deliberately used Posidonius's shorter figure to convince his backers that he could quickly reach Asia by sailing west from Europe. It may not have been the first time that financial backers have been duped using doctored numbers, but I am confident that it has not been the last!

So, we know that Columbus knew the earth was round—no fear of falling off the edge—and that it was between 18,000 or 25,000 miles around at its midpoint—still a very long journey in either case for ships the size that Columbus sailed on. But what led him to think sailing west from Europe to Asia was feasible? For that, Columbus would have looked to a Roman scholar, Claudius Ptolemaeus, more commonly known as Ptolemy. Like Eratosthenes before him, Ptolemy, who lived from approximately 90 to 170 A.D., worked in the Great Library at Alexandria, from 127 to 150 A.D. Perhaps inspired by Eratosthenes' work, Ptolemy also published a scholarly work called "Geography," in addition to a volume on astronomy and geometry, and a work on astrology. Ptolemy's "Geography" consisted of eight volumes, and it introduced critical elements of map-making to the world. Ptolemy advanced the efforts of mapmakers in representing the spherical world on flat paper, in what are known as map projections. He is responsible for the now universal practice of placing north at the top of the map. Ptolemy also invented latitude and longitude—that is, he created a grid system to lay over the globe in order to chart locations. His volumes charted some eight thousand places around the world he knew, revealing for future generations a geographic knowledge of the Roman empire of the second century.

Like many ancient works, Ptolemy's "Geography" was lost for over a thousand years after it was first published. But in the early fifteenth century, his work was rediscovered, translated into Latin, and published in multiple editions. It would have been readily available to Christopher Columbus, who was influenced both by Ptolemy's erroneous shorter circumference of the earth and by his depiction of the Indian Ocean as a large inland sea, bordered

on the south by beguiling Terra Incognita, the unknown land. I think there can be few things more mysterious, more alluring, than an old map with large blank land masses labeled simply "terra incognita" or, on some medieval maps, by the phrase "here be dragons."

Marco Polo's fantastic tales of Cathay and the exotic spices and goods that he brought back to Italy sparked a huge appetite for such things, which only increased when the returning Crusaders opened the overland trade routes between Europe and the Orient. However, when Constantinople fell to the Turks in 1453, two years after Columbus was born, the overland spice routes between Europe and Asia were closed off. Every power in Europe was eager—eager—to reopen the very profitable trade, by land or by some unknown sea route. Seeking an eastern sea route, Bartholomeu Dias reached the Cape of Good Hope in Africa in 1488, and Vasco da Gama reached India in 1498, but the eastern voyages were long and perilous. Anyone who could find a shorter route would make a fortune for himself and his backers.

Columbus himself was born in Genoa in 1451 to Susanna Fontanarossa and Domenico Colombo, the eldest of their five children. Growing up in a major port city, Columbus would have learned a lot about the sea, in addition to hearing and reading the tales of riches beyond the horizon.

True to his adventurous inclinations, Christopher Columbus took to the sea. After an attack by the French at sea in the Strait of Gibraltar in 1476, the ship Columbus was sailing on was sunk, forcing him to swim to land in Portugal. Three years later, he married into the Portuguese aristocracy when he wed Felipa Perestrelo. The marriage resulted in one son, Diego, and an entrée into the financial backing of the Portuguese and Spanish nobility. In the simple history of Christopher Columbus that we may recall from elementary school, which was a long time ago for me, it was King Ferdinand and Queen Isabella of Spain who finally provided the ships, the fabled *Niña*, *Pinta*, and *Santa Maria*, in which Columbus set off on August 3, 1492, to discover the western shortcut to the fabled wealth of the Indies. At roughly 2 a.m. on October 12, 1492, after 71 grueling days at sea trusting in God, Eratosthenes, Ptolemy, and Polo, Columbus made landfall in what he believed was the Indies.

Columbus found no gold, silks, spices or valuable wood in his misnamed Indies, but he did bring tobacco back to Europe. After establishing a fort called Natividad, built of timbers from the wrecked *Santa Maria*, Columbus returned to Spain.

Columbus made three other journeys to his new-found land, which he named Hispaniola. His second voyage left Spain in September 1493 and returned to Spain in 1496 after establishing a more substantial colony. His third voyage led to his return to Spain in

chains, prisoner of the colonists who rose up against his bad management. Columbus was able to clear his name and made a fourth and final voyage to the New World before he died in Spain on May 20, 1506. The great irony, however, is that Christopher Columbus believing that he had discovered some untouched part of the Indies, or distant outpost of China, not a continent previously unknown to the Europeans. He had made a mistake, but what a glorious mistake it was! For us, it was a very fortunate mistake. Christopher Columbus had discovered what for Europeans was truly Terra Incognita, a new and unknown land, a treasury of natural riches that we, as his heirs, enjoy to this day.

I am glad that we celebrate this brave man. We celebrate a man who made a great gamble, a man who set off to seek a back door to the Far East by setting his sights west and trusting in ancient scholars. We celebrate a man who appreciated the romance of a traveler's tales and who sensed the riches and wonders that await the bold. We celebrate an imperfect man, a man who failed in his goal but who achieved much nonetheless. We celebrate a man whose daring, whose courage, who sheer persistence, moved history forward.

We talk about profiles in courage. These are profiles in political courage. Here was an intrepid man who perhaps could claim the greatest—or one of the greatest—profiles ever written on the record of humankind. Imagine him out there on the deep waters. He had no wireless telegraph; he had no radio; he had no weather forecasters. All he had was the compass. There were no ships in the area to rescue him if his ship sank. There was no way to hear back from home or to speak to those back home if he became ill. There was no helicopter to take him to the nearby hospital or to a sister ship. There he was, alone on the great blue waters.

Just imagine what courage he must have had, never knowing whether he would be able to return against the winds that were blowing from the east, no refrigerator in which to keep the hard tack. His son, Ferdinand, who accompanied him on his fourth journey, I believe it was, wrote that he, Ferdinand, had seen the sailors wait until after dark before they ate the hard tack so it would not be possible to see the maggots on the hard tack. No sanitation with respect to the water and the food was cooked in an open stove with wood on the decks of the small ship.

What intrepidity. But how fortunate we are today that there was a man who was so intrepid as to face down the mutinous crew and who persisted in his faith to say an oath.

Today we look forward to that weekend and to next Tuesday, which is actually the day, 507 years later, when Columbus made the great discovery. We will celebrate the life and the accomplishments of Christopher Columbus, the first European to see the low green land on the horizon that was North America.

I would like to close with the words of Joaquin Miller:

Behind him lay the gray Azores,
Behind the gates of Hercules!
Before him not the ghost of shores,
Before him only shoreless seas.
The good mate said: "Now must we pray,
For lo! The very stars are gone.
Brave Adm'rl, speak; what shall I say?"
"Why, say: 'Sail on! sail on! and on!'"
"My men grow mutinous day by day;
My men grow ghastly wan and weak."
The stout mate thought of home; a spray
Of salt wave washed his swarthy cheek.
"What shall I say, brave Admiral, say,
If we sight naught but seas at dawn?"
"Why you shall say at break of day,
Sail on! sail on! sail on! and on!"
They sailed and sailed, as winds might blow,
Until at last the blanched mate said:
"Why, now not even God would know
Should I and all my men fall dead.
These very winds forget their way.

For God from these dread seas is gone.
Now speak, brave Admiral; speak and say."
He said: "Sail on! sail on! and on!"

They sailed. They sailed. Then spake the mate:

"This mad sea shows his teeth tonight.

He curls his lip, he lies in wait,
With lifted teeth, as if to bite!

Brave Adm'rl, say but one good word:

What shall we do when hope is gone?"

The words leapt like a leaping sword:

"Sail on! sail on! sail on! and on!"

Then pale and worn, he kept his deck,
And peered through darkness. Ah, that night
Of all dark nights! And then a speck—
A light! a light! a light! a light!
It grew, a starlet flag unfurled.

It grew to be Time's burst of dawn.

He gained a world; he gave that world

It's grandest lesson: "On! sail on!"

The PRESIDING OFFICER. The Chair wishes to express the gratitude of the Senate to the revered senior Senator from West Virginia for his eloquent and moving address on this easily overlooked occasion.

Mr. BYRD. I thank the chair.

ADJOURNMENT UNTIL TUESDAY, OCTOBER 12, 1999

The PRESIDING OFFICER. The Senate, under the previous order, will stand adjourned until 9 a.m., Tuesday, October 12, 1999.

Thereupon, the Senate, at 6:05 p.m., adjourned until Tuesday, October 12, 1999, at 9 a.m.

NOMINATIONS

Executive nominations received by the Senate October 8, 1999:

DEPARTMENT OF STATE

ALAN PHILLIP LARSON, OF IOWA, TO BE UNDER SECRETARY OF STATE (ECONOMIC, BUSINESS AND AGRICULTURAL AFFAIRS), VICE STUART E. EIZENSTAT.
CAROL MOSELEY-BRAUN, OF ILLINOIS, TO BE AMBASSADOR EXTRAORDINARY AND PLENIPOTENTIARY OF THE UNITED STATES OF AMERICA TO NEW ZEALAND.

OFFICE OF PERSONNEL MANAGEMENT

AMY L. COMSTOCK, OF MARYLAND, TO BE DIRECTOR OF THE OFFICE OF GOVERNMENT ETHICS FOR A TERM OF FIVE YEARS, VICE STEPHEN D. POTTS.