

Sailing by the Book

A One-Act Play by Elizabeth L. Youmans



Based on chapter 24 of the biography *Carry On, Mr. Bowditch*

DRAMATIS PERSONAE

CAPTAIN BOWDITCH

WATSON

MR. DENNY

BILLY PARTEL, cabin boy

LUPE SANCHEZ

YOUNG COREY (Chad's grandson)

CHAD JENSON

3 CREW MEMBERS

COLLINS

2 NARRATORS

SETTING

On board the Putnam off the coast of Massachusetts on Christmas Day, 1803

SCENERY AND PROPS

ship with three masts and sails (hull made of cardboard and held up by wooden braces behind)

tall, violent waves made of cardboard (held up by wooden braces behind, located in front of ship)

paper snowflakes, hanging from the ceiling over the ship

spyglass

ship's wheel and compass at the helm (mid deck)

bell to sound for the changing of the crew

flashlights for the narrators

COSTUMES

18th century seaman's clothes. (See coloring pages in the Bowditch Teacher Guide.)

Introduction

NARRATOR 1: Welcome to our Old Salem Harborfest. Tonight we're going to bring you a taste of 18th century American sailing. In the Age of Sailing, many voyages around the world took 15 to 24 months. On board the schooners and square-riggers, the crew had a great deal of empty time, so the sailors read, learned scrimshaw, played games, and often sang songs.

NARRATOR 2: The sea shanties, however, were the work songs during this Age of Sailing. The rhythm of the songs served to synchronize the movements of the sailors as they toiled at repetitive tasks. Here is our version of an early 18th century song called "Cod Fish Shanty."

ALL: Dressed in their 19th century sailing costumes, sing all the verses of the sea shanty.

*Narrators with flashlights now move to the side of the ship
and read their scripts with animation.*

NARRATOR 1: Our one-act play, called "Sailing by the Book," is based on a scene from a biography we've been reading, called *Carry On, Mr. Bowditch*. It is an inspiring story of adventure and hardship by Jean Lee Latham about Nathaniel Bowditch, an early American mathematician and navigator from the New England seacoast town of Salem.

NARRATOR 2: Jean Lee Latham was a 20th century author who wrote a series of children's biographies about historical giants of invention and enterprise who overcame unusual obstacles and hardships. Everyone loved it so much that *Carry On, Mr. Bowditch* won the Newberry Award for children's literature in 1957.

NARRATOR 1: We learned that biography makes history come alive! Our period of history is from 1779 to 1803 in early America, from the time of the Revolutionary War through the founding and expansion of the new Republic. It was an era when sailing by dead reckoning on the high seas in little wooden ships was filled with dangers of all kinds.

NARRATOR 2: A well-written biography identifies character and illustrates qualities of character in action, which is very inspiring. We learned how young Nat Bowditch turned hardships, obstacles, losses, and disappointments into victories by his own determination and virtuous character.

NARRATOR 1: In order for you to understand our play, we need to take you back in time to Nat's childhood, when going to school was his favorite thing to do and numbers were his fascination. His biggest dream was to attend Harvard College, but that was dashed at the age of 10 when his mother died, followed not long after by his grandmother.

NARRATOR 1: His father had many children to raise, so he indentured Nat at the age of 12 in a 9-year apprenticeship. Young Nat found himself away from home for 9 long years working in a ship chandlery as a bookkeeper! For most indentured apprentices, this was like a prison sentence, but not for Nat. He decided to sail by ash breeze.

- NARRATOR 2: In the chandlery, Nat met many Salem sea captains, as well as learned men of the community, who influenced his thinking and provided him access to their scientific books. With his love of learning, Nat filled the lonely hours of each day reading and teaching himself algebra, calculus, and astronomy. And by the age of 16 he had written his own almanac!
- NARRATOR 1: When young Nat could not read the advanced scientific texts because they were in Latin, he taught himself Latin, using an English New Testament and a Latin New Testament! He created many notebooks to hold his studies and was soon learning all there was to know about 18th century navigation.
- NARRATOR 2: After his apprenticeship, Bowditch went to sea as a ship's clerk. On board, he continued to study and taught all the sailors how to sail by the stars. It wasn't long before he developed a new way of taking a lunar observation, which enabled sailors to more accurately determine their position on the high seas.
- NARRATOR 1: As Nat learned more and more about sailing by the stars, he found there were other dangers on board a ship besides the violent seas and the tempestuous weather systems.
He found errors in the tables of the book on navigation that every sea captain trusted. No wonder there were so many shipwrecks and so many sailors lost at sea! Nat found so many errors that he wrote his own book on navigation.
- NARRATOR 2: Bowditch was only 29 when his book was published! He wrote it in a language that every seaman could understand. All his tables were accurate and could be trusted. This book is still in publication today and used by every sailor in the U.S. Navy. They affectionately call it the "Seaman's Bible" or simply "Bowditch."
- NARRATOR 1: Even though Nat's new book was available, many seasoned sea captains were not convinced that you could trust a book of numbers to sail a ship. It would take time for celestial navigation to replace the old school of sailing by "dead reckoning." It would take proof.
- NARRATOR 2: On Nat's next voyage to the East Indies, he was the captain of the *Putnam*, a merchant ship built for the spice and pepper trade in the East Indies. It happened that on the return voyage he would have an opportunity to demonstrate that sailing by the book was the safest way to sail!
- NARRATOR 1: Our scene is on board the *Putnam* off the coast of Massachusetts. The 14-month voyage is drawing to a close. The return voyage saw long days and nights of battling the storms of the Atlantic from Cape Town, South Africa, to Cape Cod, New England. It had far exceeded the time Bowditch anticipated to be back in Salem.
- NARRATOR 2: It is Christmas Day, 1803, and the ship is caught in a violent northeastern storm. The sailors' clothes are wet, and their bodies are very cold. As the ship rolls and pitches in the high, crashing waves, the clouds darken, and the torrent of rain changes to sleet and snow. The men struggle with numb fingers to reef and loose the sails.

*Lights dim. Crew is standing on board the Putnam pulling in the sails.
Mr. Denny runs to the back of the ship to find Mr. Bowditch.*

MR. DENNY: *[Excitedly]* Captain Bowditch, the sleet and snow are letting up, but look at this fog! It's worse than the storm! I've seen fog in my day, sir, but . . . but this one . . .
[Denny shivers and shakes his head.]

Ring eight bells.

BOWDITCH: It's difficult to know whether it's morning or night. I can't see the foremast from here. *[Nat cups his hands to his head and looks toward the front of the ship, shaking his head.]*

Other sailors strain to see what lies before them.

COLLINS: If anything's there, we'll most likely find it when we hit it!

*The crew members mumble among themselves,
looking at each other with fear.*

Bowditch walks to the helm, where Jensen is steering.

BOWDITCH: Jensen, you have a steady hand on the wheel. Your wake is straight as a string!

COREY: *[With a frightened voice]* How does he know? Can't see our wake, can we? Can't see anything out there!

JENSEN: Maybe, sir, if we could see it.

BOWDITCH: Jensen, we don't have to see it to know that, do we? We just watch the compass and know. It's a simple matter of mathematics, isn't it?

*Bowditch returns to the rear of the ship.
The men start grumbling again.*

SANCHEZ: Three days with no sun, no moon, no stars to tell us where we are!

COLLINS: Getting thicker, too. *[Shakes head.]* I'd as soon play blindman's bluff on a cliff as sail through this fog.

WATSON: All right, maybe if we had sea room. But what do we know about where we are now?

COLLINS: Three days of zigging and zagging. Makes your muscles pull just thinking about it. Zig and zag . . . zig and zag . . . how can a body expect to know where we are?

SANCHEZ: We've had plenty of practice, most the way home. Ought to be used to it, maybe.

WATSON: We had sea room then. Sea room! But we were off Nantucket Shoals ten days ago!
[Loudly] Where are we now?

Little Billy looks terrified.

SANCHEZ: *[Gripping Billy's shoulder]* Easy lad, maybe the fog will lift soon!

*Ring three bells.
Dim the lights even more.*

PARTELL: Is it me, or is the fog getting thicker? Seems like ghosts is mannin' this ship! I can hear their voices, but I can't see 'em.

BOWDITCH: *[Returns to mid ship with Denny and his spyglass. Looks over the side of the ship through his spyglass.]*

COLLINS: *[Turns to Watson and speaks softly]* Somethin's up! The Captain's taking charge!

DENNY: Impossible to see anything, isn't it, sir?

BOWDITCH: If the fog lifts one half minute, we can see it. *[Nat is motionless, looking through his spyglass.]*

SANCHEZ: Captain's watching for something. You s'pose it's the lighthouse on Baker's Island?

WATSON: Baker's Island? Are you crazy? Think we'd get close enough to Baker's Island to see the light in this fog? We'll be up on the rocks before that happens! You've seen ships cracked up on Gales Ledge and Whaleback! . . . Baker's Island! . . . You're a crazy fool! We're nowhere near Baker's Island!

COREY: *[Mutters a prayer in a frightened voice.]*

BOWDITCH: That's it, Mr. Denny. Baker's Island! We're exactly on our course!

SANCHEZ: Praise God! Now we can anchor and sit it out till the fog lifts.

BOWDITCH: *[Loudly]* Two men in the chains, Mr. Denny, and keep heaving those leads! *[Moves to the side of Mr. Collins at the helm near the compass.]* West, by northwest!

DENNY: Aye, aye, sir! West, by northwest it is, sir!

Nat stays at the helm, looking at the compass and his watch.

CREW #1: By the deep ten.

CREW #2: And a quarter less four!

Collins grips the wheel harder and grimaces.

WATSON: It's shoaling! I bet it's shoaling . . . Oh, no!

BOWDITCH: *[Lifts his forefinger.]* Now, due west!

DENNY: Due west, it is, sir!

BOWDITCH: Now, west by north!

JENSEN: *[Swings the wheel hard, and steadies the ship on course, as he growls.]* West by north, it is, sir!

CREW #1: By the mark five.

CREW #2: And a half less five.

CREW #3: And a quarter less three.

BOWDITCH: *[Staring at his watch.]* Steady as you go, Jensen! Hold her steady!

CREW #1: And a half less three!

WATSON: I tell you it's shoaling! We're going aground! We'll be beaten to pieces!

BOWDITCH: Someone take Watson below deck! Now! *[Pause. One finger raised]* Southwest by south!

DENNY: Southwest by south, sir!

All the crew nervously looking over the deck.

BOWDITCH: Keep her steady, Collins! Keep her steady, we're almost there!

CREW #1: Land ho – 0 – 0! There's Derby Wharf.

BOWDITCH: Bring her in, Mr. Jensen! Bring her in to port and lower the anchor!

All the crew slap each other on the back and whistle and cheer!

NARRATOR 1: That concludes our time with the young Mr. Bowditch. He indeed, brought his ship safely into the Salem Harbor on Christmas night in time to wish his family a Merry Christmas! Everyone who heard about it was in shock! No one in Salem that night could believe such a thing was possible!

NARRATOR 2: Bowditch made history that night, all right. He executed one of the most daring feats in navigation by bringing his ship into Salem Harbor at the height of a violent northeastern storm and thick fog. It vindicated his skill as a master navigator and proved that sailing by the book was safe.

NARRATOR 1: Bowditch delighted to share with anyone who asked him, "It's a simple matter of mathematics!"

ALL: "It's a simple matter of mathematics!"

NARRATOR 2: Nathaniel Bowditch's dream was fulfilled by Harvard College. They awarded him two honorary degrees and elected him to a board of seven men who governed the university. Today, Bowditch is known as the father of modern navigation.

NARRATOR 1: He is an inspiring and amazing example of a self-determined man who achieved his full potential through virtuous character, perseverance, and self-education.

ALL: Lives of great men all remind us
We can make our lives sublime,
And departing, leave behind us
Footprints on the sands of time.

Let us, then, be up and doing,
With a heart for any fate;
Still achieving, still pursuing,
Learn to labor and to wait.

THE END