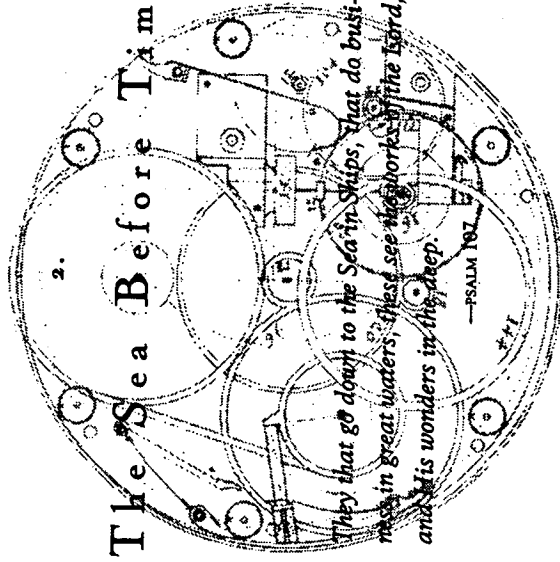


LONGITUDE

*The
True Story of a
Lone Genius
Who Solved
the Greatest
Scientific Problem
of His Time*

DAVA SOBEL

The Sea Before Time



Dirty weather," Admiral Sir Cloudsley Shovell called the fog that had dogged him twelve days at sea. Returning home victorious from Gibraltar after skirmishes with the French Mediterranean forces, Sir Cloudsley could not beat the heavy autumn overcast. Fearing the ships might founder on coastal rocks, the admiral summoned all his navigators to put their heads together.

The consensus opinion placed the English fleet safely west of Île d'Ouessant, an island outpost of the Brittany peninsula. But as the sailors continued north,

they discovered to their horror that they had misgauged their longitude near the Scilly Isles. These tiny islands, about twenty miles from the southwest tip of England, point to Land's End like a path of stepping-stones. And on that foggy night of October 22, 1707, the Scillies became unmarked tombstones for two thousand of Sir Clowdisley's troops.

The flagship, the *Association*, struck first. She sank within minutes, drowning all hands. Before the rest of the vessels could react to the obvious danger, two more ships, the *Eagle* and the *Romney*, pricked themselves on the rocks and went down like stones. In all, four of the five warships were lost.

Only two men washed ashore alive. One of them was Sir Clowdisley himself, who may have watched the fifty-seven years of his life flash before his eyes as the waves carried him home. Certainly he had time to reflect on the events of the previous twenty-four hours, when he made what must have been the worst mistake in judgment of his naval career. He had been approached by a sailor, a member of the *Association's* crew, who claimed to have kept his own reckoning of the fleet's location during the whole cloudy passage. Such subversive navigation by an inferior was forbidden in the Royal Navy, as the unnamed seaman well knew. However, the danger appeared so enormous, by his calculations, that he risked his neck to make his

concerns known to the officers. Admiral Shovell had the man hanged for mutiny on the spot.

No one was around to spit "I told you so!" into Sir Clowdisley's face as he nearly drowned. But as soon as the admiral collapsed on dry sand, a local woman combing the beach purportedly found his body and fell in love with the emerald ring on his finger. Between her desire and his depletion, she handily murdered him for it. Three decades later, on her deathbed, this same woman confessed the crime to her clergyman, producing the ring as proof of her guilt and contrition.

The demise of Sir Clowdisley's fleet capped a long saga of seafaring in the days before sailors could find their longitude. Page after page from this miserable history relates quintessential horror stories of death by scurvy and thirst, of ghosts in the rigging, and of landfalls in the form of shipwrecks, with hulls dashed on rocks and heaps of drowned corpses fouling the beaches. In literally hundreds of instances, a vessel's ignorance of her longitude led swiftly to her destruction.

Launched on a mix of bravery and greed, the sea captains of the fifteenth, sixteenth, and seventeenth centuries relied on "dead reckoning" to gauge their distance east or west of home port. The captain would throw a log overboard and observe how quickly the ship receded from this temporary guidepost. He