
Off the Beat

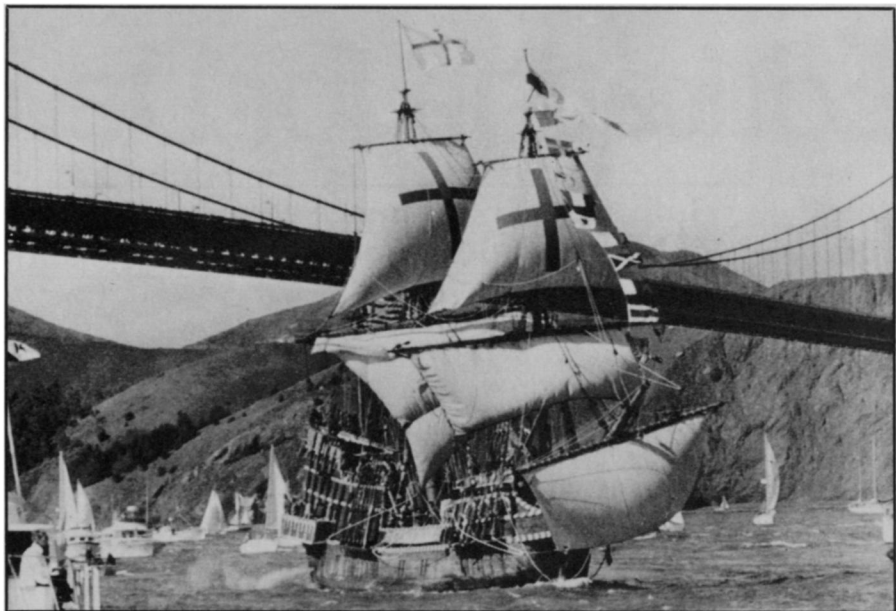
Drake and the bay: Facts or legends

The recent ceremonial entry of a replica of Sir Francis Drake's famous vessel, the *Golden Hind*, into San Francisco Bay, where it will be anchored as a tourist attraction, brings to the fore once-again the oft-aired controversy over whether Drake could have discovered the bay in the summer of 1579 during his epochal circumnavigation of the earth.

The dispute has produced more than its share of heat and emotion over the years and would not be worth mentioning again were it not for availability of a recent and valuable contribution to the subject by that eminent (and eminently readable) historian of the seas, Samuel Eliot Morison. Morison, twice winner of the Pulitzer Prize for his works on Columbus and John Paul Jones and an octogenarian Harvard emeritus professor, combines impeccable credentials as a scholar and a salty no-nonsense writing style with an insatiable curiosity to follow the routes of the maritime explorers himself. The result is a series of fascinating and authoritative chronicles of early exploration.

His latest work, *The European Discovery of America: The Southern Voyages* (Oxford, 1974), completes his two-volume set on the European discovery of the New World begun with publication of *The Northern Voyages* in 1971. In researching the chapter in *The Southern Voyages* on Drake in California, Morison in May 1973 sailed along the California coast to compare descriptions in the three contemporary accounts of Drake's voyage with his own observations.

He concludes, with the majority of scholars and against a vocal minority, that the bay where Drake spent the five weeks from June 17 until July 23, 1579, careening and repairing the leaky *Golden Hind* was not San Francisco Bay and not Bodega Bay but indeed what is now called Drake's Bay, 36 miles north



Golden Hind II sails through Golden Gate. Its predecessor probably didn't.

of the Golden Gate, just south of Point Reyes.

Morison considers all five lines of data available from the contemporary accounts, including the latitude, 38 degrees N., exactly that of Point Reyes. The determining factor leading to his conclusion that Drake's Bay is the correct site are the conspicuous white cliffs, the highest along the coast, closely resembling, Morison notes, those on the English Channel. This closely fits Drake's description of "white banks and cliffs, which lie toward the sea," and which reminded Drake of England's south coast and moved him to name the area Nova Albion, after the Greek name for England.

That Drake could have passed along the coast without seeing the Golden Gate, is something, Morison notes, that "no mariner who knows the California coast will find . . . surprising." The lay of the land is such that the hills of Oakland and Berkeley blend with those in the foreground to appear as one continuous mass. Fog frequently obscures the entrance. The next important voyage after Drake missed it, and "the annual Manila galleons returning to Acapulco passed along this coast, within sight of the shore, for two hundred years, without ever seeing the Golden Gate." Morison recounts the long history up to modern times of vessels

missing it. "Almost any seaman with experience of this coast will think it preposterous that Drake could have seen this entrance. And that Drake could have entered this gorgeous bay, one of the world's finest, without describing it, is incredible." San Francisco Bay was finally discovered by a Spanish overland expedition in 1769.

What then of the famous "Plate of Brass," discovered in the 1930's on a hill overlooking the bay and bearing an inscription like that known to have been left by Drake at the site of his five-week stay? It is now prominently displayed near the entrance to the Bancroft Library, Berkeley. Nonsense! snorts Morison. He agrees with a long line of experts that it's a fraud. He recounts the evidence to that effect, including metallurgical analysis and verification that its lettering and language are not of the Elizabethan period. He describes additional, unpublished, notes and correspondence of scholars furnished Morison by the Huntington Library that further debunk the find.

"In my opinion," concludes Morison, "the plate is a hoax perpetrated by some collegiate joker who knew little about Drake except what he had heard . . . and read. . . 'Drake's Plate of Brass' is as successful a hoax as the Piltdown Man or the Kensington Rune Stone."

—Kendrick Frazier

. . . Science Education

science education more generally. By anticipating technologies to come, educators can better plan what subjects should be taught now, and the results of a UNESCO study of technological priorities in Africa produced some surprising new ideas. African experts, for example, feel that the helium-filled airship offers great promise in hauling heavy loads to inaccessible portions of

their vast continent. Other feasible new technologies for which planning and education should already begin include satellite telecommunications, solar energy, use of native herbs for pharmaceuticals and applied genetics for crop augmentation. To help facilitate the educational process, the experts called for increased use of mass media for education in the home.

Just as an educated elite can either

help or hurt the government of a developing country, creation of technical expertise throughout the developing world can both challenge and aid the technological position of Western countries—depending on whether both sides choose to adapt and cooperate. The hope is that a well-coordinated program of science education involving international and regional cooperation will help assure future cooperation. □