hey that go down to the sea in ships” occupy a special place in the public consciousness, even for landlubbers who cannot tell a mainmast from a marsupial. The popular, timeless appeal of the sea is evident in poetry—Samuel T. Coleridge’s “Rime of the Ancient Mariner,” Henry Wadsworth Longfellow’s “Wreck of the Hesperus,” John Masefield’s “Sea Fever”—that many of us recall from high school and college. The great characters of maritime fiction—Jack Aubrey and Stephen Maturin, Horatio Hornblower, Billy Budd, Lord Ramage, Wolf Larsen, Captain Nemo—have fans all over the world. Moviegoers have flocked to theaters since the 1930s to see films like Mutiny on the Bounty, The Sea Hawk, They Were Expendable, Damn the Defiant, and Sink the Bismarck! Nonfiction accounts of epic voyages, great explorations, and disastrous shipwrecks have found ready publishers and eager readers alike since the sixteenth century. In today’s world most of us will never board an ocean-going vessel, but somehow we understand what Masefield felt when he wrote, “I must go down to the seas again, to the lonely sea and the sky, and all I ask is a tall ship, and a star to steer her by.” *

The Clements Library has a wonderful array of primary sources on early maritime history. Mr. Clements collected most of the great exploration narratives of the Age of Discovery, and we have filled in nearly all the blanks over the past eighty years. Our maritime collecting received a tremendous boost in the 1940s through acquisition of the library of Hubert S. Smith (1888–1946). Smith was a friend and neighbor of Mr. Clements in Bay City, and Mr. Clements’s mentorship was an important factor in Smith’s development of an exceptionally strong collection of books and manuscripts on maritime and naval history. When Mrs. Smith donated her late husband’s library to the Clements, our holdings of “books on exploration, naval tactics, shipbuilding, pirates, sea disasters, and, particularly, the life and career of Admiral Lord Nelson” skyrocketed. As WLCL Director John C. Dann wrote in the Fall-Winter 2004 Quarto, “After the Smith Collection gift we began . . . to think of ourselves as a library of naval and maritime materials specifically.” The gradual and impressive growth in our maritime resources is a fine example of the way a major in-kind donation can strengthen an outstanding research library and provide direction for its future growth.

This issue of The Quarto highlights the extraordinary maritime materials available here for students and scholars. From the Map Division, Brian Dunnigan writes about coastal profiles, while Mary Pedley details the complicated process for creating printed maritime maps to show rhumb lines, wind directions, multiple colors, and other details essential to navigation. Book Curator Emiko Hastings outlines the lasting influence some of the great titles of the 1650–1730 “Golden Age of Piracy” had on popular stories and legends of black-flag adventures on the high seas. JJ Jacobson looks at rum
as a staple of the sailor’s diet and Maxwell Wood’s campaign to eliminate it from the daily ration of the United States Navy. In Graphics, Clayton Lewis weaves a historical thread on Japanese-American maritime interaction from Commodore Matthew Perry’s 1853–54 expedition, through the emergence of Japan as a naval power in the 1905 Russo-Japanese War, to his father’s evocative September 1945 painting of the Nagato from the deck of the USS Shangri-La. In “Sick at Sea,” Barbara DeWolfe describes the prescription book that Dr. Amos A. Evans kept aboard USS Constitution in 1812–16, some 266 manuscript pages that detail diagnoses and treatments for some 7,000 cases ranging from diarrhea to gangrene. As always, our curatorial contributions skim the surface of deep water, offering readers of The Quarto a glimpse of what lies beneath—enough, we hope, to make some of you “full of longing for the secret of the sea” so you’ll visit the Library to see what else we have in this fascinating historical field.

*Yes, I know that the word “go” did not appear in the first printing of “Sea Fever,” but it is in The Collected Poems of John Masefield and most anthology versions of the poem. No need for Masefield fans to write to point out my error.*

— J. Kevin Graffagnino
Director

**PROFILING THE COASTS**

*If bound into Port Antonio, after making the Entrance, which may be discern’d 2 or 3 Leagues off at Sea, by Navy Island or the houses at Titchfield, steer right in for it, when abreast of the Folly Point. If you intend for the West Harbor steer over for the Fort, Takeing care to keep the Easternmost house in the Bay open of a little Rock laying off the Fort to avoid a Shoul of Coral Rocks laying off Navy Island.” So begin sailing directions for entering the harbors of Port Antonio on the north coast of Jamaica. These instructions, by Lieutenant Charles Knatchbull of the Royal Navy, are inset on his chart of the twin harbors as surveyed in 1770. They follow the style of a traditional navigational tool, the portolano, which dates back to the Middle Ages. The written directions of the portolano were often accompanied by a chart.

Knatchbull’s chart is wonderfully detailed, with soundings and notations about the nature of the bottom and the best anchorages. The land is mapped in similar detail showing land forms and architecture. The topography was of*
particular importance because it corresponds exactly with a third element of "A Plan of the Harbors of Port Antonio in the Island of Jamaica." Spanning the top of the chart is a realistic view of the coast and the mountains beyond. The natural and man-made features in this view line up exactly with the same points on the chart below it "when Navy Island bears South West 5 or 6 Miles Distance." In other words, Knatchbull’s view of the coast provides visual landmarks that correspond with those shown on the chart and described in the sailing directions. When used in concert with the chart and instructions, the view illustrated key points and hazards and made it much more likely that an arriving navigator would reach a safe anchorage with a minimum of difficulty.

Lieutenant Knatchbull’s view is only one of many examples of "coastal profiles" found in the Clements map collection — though it is probably the most detailed. Coastal profiles appeared in four places: in runters (or routiers) and other verbal sailing instructions, on manuscript and printed charts, in logbooks and journals, and bound into atlases. They were first employed by French, Spanish, and Flemish navigators as early as the late fifteenth and early sixteenth centuries. These profiles are remarkable for being made from on-site observation to provide a realistic image of the coast as seen from a ship.

Many of the profiles found in the Clements depict the rugged, mountainous islands of the West Indies or the gentler North American coast. Each bears an identification of the place and the direction of approach from which the profile would be recognized. In addition to providing points of reference to assist mariners entering a harbor, those drawn from greater distances were useful to navigators using dead reckoning on long voyages. They could verify their landfall by the distinctive appearance of an island or a section of mainland as depicted on a printed or manuscript coastal profile.

Profile drawings had uses other than finding an anchorage in a treacherous harbor or sighting a distant landfall. Sailors cruising inshore waters found them useful for determining their location. The Spanish were particularly good at producing "charts" in a style that is essentially a panoramic representation of a coastline and its most important landmarks. The best example in the Clements collection is the so-called Hacke or "buccaneer’s" atlas, the pages of which depict the entire Pacific coast of South America and part of North America as well. It is also one of the earliest examples of coastal profiling in the Library’s collection.

The Hacke atlas held by the Clements had its origins in the actions of a band of English freebooters that made its way from the Caribbean to the Pacific coast of the Americas in 1680. These vagabonds spent two years in what had long been uncontested Spanish waters. In addition to looting and amassing treasure, they captured a set of charts, which they carried back to England in 1682. There, William Hacke (or Hack) made eleven manuscript copies for influential Englishmen. The Clements example includes 184 beautifully colored maps showing coastal features, towns, harbors, and a few soundings.

The high quality of Lieutenant Knatchbull’s 1770 view of Port Antonio is a reflection of the level of his training. Although much of their work was not up to this quality, officers of the Royal Navy were encouraged to learn drawing, and it was a part of the curricula at the naval and military academies that began to appear in Britain and other parts of Europe during the eighteenth century. Some of the most striking and accurate coastal profiles were those of key points along the east coast of North America drawn by Lieutenant Joseph F.W. Des Barres (1722–1824) for some of the charts of his monumental Atlantic Neptune. Des Barres was an army officer, who had learned to draw during military service in Europe before obtaining a British commission during the Seven Years’ War. Examples of Des Barres’s coastal profiles and city views were printed and hand-colored for the Atlantic Neptune. They represent some of the most attractive coastal profiles in the Clements collection.

The great majority of profiles were drawn by less accomplished hands. It is not uncommon to find them sketched in pencil in working documents such as journals and logbooks. John Francis’s 1791 journal of a voyage of the brig Mercury provides an excellent example. The vessel sailed from New York in May, bound for the West Indies, where dozens of lofty volcanic islands provided convenient landmarks. Francis was a passenger, who spent some of his time sketching islands and recording details of their trade and population. His descriptions and drawings were probably made for future reference. Sketches 27 and 28, for example, are described as ‘The Islands of St Kitts & Nevis as they appear when the Mount of Nevis bears E & by N. & the Town of Basseterre in St Kitts bears NE & by E ½ E.” He recorded similar details for the others in the Windward chain.

Coastal profiles are useful bits of imagery that greatly complement maps and charts. In earlier times they aided mariners by identifying key landmarks that could be used to guide sailing vessels on a safe course in inshore waters or confirm a position when arriving from farther out at sea. Today they provide researchers with visual documentation of widely separated parts of the Americas.

— Brian Leigh Dunnigan
Associate Director & Curator of Maps
COLORING THE WINDS

The technique of printing maps in more than one color has roots in the earliest days of printing. The woodcut world map of 1511 by Bernardo Silvano, for example, was printed in black with red lettering used for the names of seas, regions, countries, major cities, and the winds. Cartographic historian David Woodward analyzed the methods used in its production, showing that the black ink block was printed first. All the names were stereotyped, that is, the typeface was set directly into the woodblock. Letters that were to be inked in red were left out of the block on the first printing and then added, slightly raised by shims, for the second printing in red.

Printing in a second color offered a practical technique to people making sea charts. The most time-consuming part of the engraving process was the work required for preparing the loxodrome or rhumb line network essential on such a chart.

A rhumb line is a representation of both a wind direction and the curve on a globe described by a ship that sails on a constant compass bearing that cuts across all the meridians (longitudes) at a constant angle. On a globe, or on any projection where the meridians come closer together as they near the poles, this line becomes a spiral as it nears the pole; on a Mercator projection the rhumbs are straight lines (this is the whole point of a Mercator projection in its original role as a sailing chart).

On a manuscript portolan chart, the compass directions, which are rhumbs, were usually distinguished by distinctive colors: black for the eight principal directions or winds (north, northeast, east, etc.); green for the eight half winds (north-northeast, east-north-east, etc.); red for the sixteen quarter winds (north by east, etc.). A system of line gradation was followed on a printed chart: thick black lines for the principal directions; dashed lines for the half directions.

Because there was not necessarily a need for a connection between the rhumb line network and the geography on the map, the Dutch hydrographer, Gerard van Keulen (1678–1727), early in the eighteenth century, had sheets pre-printed with the rhumb lines, on which he drew around five hundred manuscript maps. This was a great labor saving innovation.

Engraving rhumb lines on copperplate was painstaking, tedious work. It added considerably to the overall expense of map production because, in the words of French geographer and one-time employee of the Dépôt de la Marine, Philippe Buache (1700–73), “The engraving of the rhumbs demands a special type of labor in order to avoid the confusion and inconvenience of ordinary sea charts.” Buache was followed in his job at the Dépôt by Jacques-Nicolas Bellin (1703–72), who experimented with a van Keulen-style cost-cutting technique on some of the charts that formed the monumental Hydrographie Française. The atlas incorporated sea charts of most of the places in the world where the French Navy might sail in the latter half of the eighteenth century.

Bellin experimented by engraving rhumb lines on separate plates and printing sheets with only rhumb lines, sometimes in black, occasionally in red, and sometimes in green. By using registration marks or pin holes engraved on the plate, the copperplates with the geographical and marine detail on them could be aligned with the paper on which the rhumbs were printed for the final printing.

The maps from the Hydrographie Française on which the rhumbs have been printed from separate plates are quite rare, and charts on which the rhumb line network has been printed in color are very rare indeed. The color printing is sometimes mistaken by cataloguers for a manuscript addition, but if the researcher looks carefully, the registration marks and the imprint of two plates can often be made out on the paper.

The Clements has one copy of a Bellin chart printed in two colors. Published about 1758, it depicts the Lesser Antilles. The rhumb line network has been printed in green. This experiment, while it might have saved money, does not appear to have lasted very long. The charts on which this technique may be found were printed during the period from 1751 to 1760. It would appear that the time taken in first printing the colored rhumb lines, plus the careful registration required to fit the network within the neat line of the chart, may not have pleased the navy’s printers. The operation may also have proved more costly than anticipated.

Nonetheless, such early efforts to minimize costs, retain the interest of color, and use color separation were the harbingers of the color printing that so enriched cartography in the nineteenth century, when lithography made a whole new spectrum of color printing possible.

— Mary Sponberg Pedley
Assistant Curator of Maps
BUCCANEERS AND BURIED GOLD

During the seventeenth century, European men often jumped ship or left servitude to live independently on tropical Caribbean islands. They often smoked meat on a wooden frame called a “buccan,” giving rise to the term “buccaneer.” These French, English, Dutch, and Spanish adventurers sailed the Caribbean and the coasts of Central and South America from approximately 1650 to 1730, during what is known as the “Golden Age of Piracy.” They raided Spanish towns and captured merchant vessels at sea. Soldiers, rebels, and criminals also became buccaneers. Some were outright pirates, while others, called “privateers,” operated in wartime under the legal protection of a “letter of marque” (in effect a license) from a belligerent government.

Alexandre Olivier Exquemelin’s *Bucaniers of America* is one of the earliest and most famous printed accounts of the buccaneers of the West Indies. In 1666, Exquemelin sailed to Tortuga with the French West India Company as an indentured servant. After his contract was completed, he found work as a barber-surgeon aboard various buccaneer vessels, where he kept extensive journals of his experiences and observations. His eyewitness accounts of Henry Morgan, François Lolonois, Pierre le Grand, and other notorious buccaneers provide vivid details of their lives and exploits. In 1674, Exquemelin returned to Europe and settled down in Amsterdam to prepare his journals for publication. His book first appeared in Dutch under the title *De Americaensche Zee-Roovers* (Amsterdam, 1678). One of the classic accounts of seventeenth-century piracy, it became an instant success and remains in print today.

The Clements Library has the first edition of Exquemelin’s Spanish translation, *Piratas de la America* (Cologne, 1681), the first two English translations, *Bucaniers of America* and *History of the Bucaniers* (London, 1684), and the second French edition, *Histoire des Avanturiers* (Paris, 1688). The English and French translations did not come directly from the Dutch original but from the Spanish translation of 1681, which contained frequent mistranslations and added new material without attribution. Each translator made further alterations to the text in favor of his own countrymen. The English editions focused on privateer Henry Morgan (1635?–1688) as the central figure, while the French version made substantial revisions and enlargements, including new biographies of French pirates not found in Exquemelin’s original text.

In 1684, two rival London publishers, William Crooke and Thomas Malthus, produced the first English translations of Exquemelin’s book under slightly different titles. Crooke’s *Bucaniers of America*, the first to be published, contained a contradictory depiction of Henry Morgan as both a vicious pirate and an English hero. Malthus attacked these inconsistencies in his own publication, *The History of the Bucaniers*. He offered a corrected translation, which claimed to have fixed the errors of Crooke’s version with the assistance of many English gentlemen who had witnessed the events. Malthus used a mock-heroic depiction of Morgan to criticize English colonial activity. Crooke’s version was popular enough to warrant a second edition three months later, to which he added a second volume containing Basil Ringrose’s narrative of Captain Bartholomew Sharpe’s buccaneering voyage to the South Seas.

Amid the controversy over English piracy, Henry Morgan himself stepped in to defend his reputation. He filed a libel suit against Crooke and Malthus in 1685, in which his attorney claimed that the Morgan family “against all evil deeds, piracies, etc., had the greatest abhorrence and disgust.” A summary of the lawsuit in the *London Gazette* concluded that the books published by Crooke and Malthus “contained many False, Scandalous and Malitious Reflections on the Life and Actions of Sir Henry Morgan of Jamaica.” Morgan recovered £200 in damages from Malthus and accepted a printed apology and retraction from Crooke.

In Crooke’s “Advertisement to the Reader Concerning this Second Edition,” he mentioned that the full journal of Captain Barthomew Sharpe’s voyage would soon be published by “a worthy Gentleman of my acquaintance.” This was undoubtedly a reference to...
Philip Ayres (1638–1712), who produced *The Voyages and Adventures of Capt. Barth. Sharp and Others, in the South Sea* (London, 1684). In 1679, Sharpe set sail from Jamaica on a buccaneering cruise to the Pacific. The most notable event in his voyage occurred in 1681, off the coast of Ecuador, when his ship, *Trinity*, captured the Spanish vessel *El Santo Rosario* and recovered a remarkable volume of sea charts. An account by William Dick published in Crooke’s second edition of Exquemelin describes the capture: “In this Ship the Rosario we took also a great Book full of Sea-Charts and Maps, containing a very accurate and exact description of all the Ports, Soundings, Creeks, Rivers, Capes, and Coasts belonging to the South Sea, and all the Navigations usually performed by the Spaniards in that Ocean. . . . the Printing thereof is severely prohibited, lest other Nations should get into those Seas, and make use thereof.” The Spanish sailors attempted to throw the volume overboard but were prevented by one of Sharpe’s crewmen. This volume of manuscript charts was a rare prize, and Sharpe’s later acquittal on charges of piracy probably owed much to its capture.

After returning to England, Sharpe turned the maps over to William Hacke, a leading English mapmaker. Hacke produced fourteen copies, one of which was purchased by the Clements Library in 1979. The Hacke atlas, also known as the “Buccaneer’s Atlas,” includes 184 manuscript maps and extensive notes on landmarks and sailing hazards. There is even a mention of sunken Spanish treasure. In the waters off Panama, it is noted that “on this shoal was lost the Almirant of the King of Spain, in the year 1631, in which was vast treasure.”

In 1697, William Dampier (1652–1715) published a book that would eventually surpass Exquemelin’s *Bucaniers of America* in popularity. Dampier had a remarkable career as a pirate and explorer, becoming the first person to circumnavigate the world three times. He crewed with Captain Bartholomew Sharp and other buccaneers and privateers, eventually returning to England to publish his journals. Dampier’s *A New Voyage Round the World* (London, 1697) was a great success, reprinted three times in the first year, and served as a literary model for later English voyage accounts. Jonathan Swift (1667–1745) used the same format in his novel *Gulliver’s Travels* (1726), and Daniel Defoe (1661?–1731) drew on it as one of several sources for his *Robinson Crusoe* (1719) and other works.

In 1707, Dampier approached Woodes Rogers (d. 1732), an English sea captain and privateer, to lead a privateering expedition against the Spanish. On this voyage, Rogers’s vessel rescued the marooned sailor Alexander Selkirk, who served as an inspiration for Defoe’s *Robinson Crusoe* character. Rogers wrote up his experiences in *A Cruising Voyage Round the World* (London, 1712). Public fascination with Selkirk’s rescue contributed to the success of Rogers’s book.

One of the most influential works on the history of piracy is Charles Johnson’s *A General History of the Pyrates* (London, 1724). It is the key source for biographies of many of the most famous freebooters and has greatly shaped popular conceptions of piracy in works such as Robert Louis Stevenson’s *Treasure Island* (1883). It introduced many features now common in pirate literature, including pirates with missing legs or eyes, buried treasure, and the flag called the Jolly Roger. Edward Teach (alias Blackbeard), Calico Jack Rackham, Bartholomew Roberts, and the female pirates Anne Bonny and Mary Read are among the buccaneers included in the first edition. The Clements Library has the second edition, also published in 1724, with considerable additions. The name Charles Johnson is likely a pseudonym, since nothing is known of the author. Daniel Defoe has been suggested as the possible author as well as the former sailor and publisher Nathaniel Mist.

The Golden Age of Piracy could not last forever. After the end of the War of the Spanish Succession in 1713, England turned its navy against the pirates. By 1725, the campaign had largely succeeded. Captain Kidd, Blackbeard, and many others were dead. From that time on, piracy was confined to individual ships with a few men, not thousands of sailors capable of challenging empires.

— Emiko Hastings
Curator of Books

Edward Teach (d. 1718), the notorious Blackbeard, as depicted in an engraving from Charles Johnson’s *A General History of the Pyrates* (London, 1724).
Olly Jack Tar has been a popular stereotype of the sailor since at least the late eighteenth century. Jack was painted as bold, reckless, loyal to his shipmates, carefree, generous, and exceedingly fond of his rum. While the US Army did away with its spirit ration in the 1830s, it took the Navy until 1862 to separate Jack from his grog, and it was a hard-fought battle in Congress that made it so. Resolutions to deny the spirit ration to midshipmen had come before Congress as early as 1828, and resolutions to abolish it altogether as early as 1834.

Among the Clements Library’s temperance works is an 1849 pamphlet entitled A Few Practical Reflections on the Grog Ration of the U.S. Navy, By an Old Officer of That Service. There is no name on the pamphlet, but a nearly identical essay appears under the title “Practical Reflections Upon the Grog Ration of the U.S. Navy” in A Shoulder to the Wheel of Progress: Being Essays, Lectures and Miscellaneous upon Themes of the Day by Wm. Maxwell Wood, published in Buffalo in 1853.

Wood 1809-80) was a naval surgeon and author who served in the Mexican-American and Civil wars. He traveled widely as fleet surgeon to the Pacific and East Indies squadrons and published two travel books, which wander among descriptions of exotica, adventures, stories of shipboard life, and musings on human nature. He was also the first surgeon general of the US Navy, but his greater claim to fame is for having been the first to inform the Pacific Squadron’s Commodore John D. Sloat (1781–1867) that hostilities had begun between the United States and Mexico.

Wood was a man of strong opinions, especially concerning popular government and education, American democracy and character, and the functioning and reputation of the US Navy. He was extremely keen on naval reform; by 1853 (he tells us in A Shoulder to the Wheel) he had been writing on the topic for thirteen years—since about the time he achieved the rank of surgeon. In those thirteen years, Wood wrote no fewer than five pamphlets on the kind of naval institutions befitting a republic. He disapproved vociferously of the institutions and patterns the US Navy had inherited from the British Royal Navy, including class influence in appointing officers, promotion by seniority, resistance to innovation under the cloak of “Traditions of the Service,” and the leeway allowed officers in their treatment of ordinary sailors. Of this last he says, “Here is a broad latitude for the exercise of a capricious tyranny” and argues that, abetted by naval custom, it leads to such harsh treatment that it brings out the worst in the rank and file. Part of this injurious inheritance, and subsequent “devotion to animal indulgence and degrading vices” was the grog ration, for the abolition of which he argues vehemently in A Few Practical Reflections.

The spirit ration had been a fixture of the US Navy since its beginning in 1775 and appears in the 1794 Act to Provide a Naval Armament. The regulations allowed “Half a pint of rum per man every day, and discretionary allowance on extra duty and in time of engagement.” Subsequently, whisky was substituted for the rum, and one more important change was made: dilution of the spirits with water. In both the Royal Navy and the US Navy, the spirit ration came to be served diluted, to prevent the sailors saving up several
rations and drinking them all at once.

The most commonly accepted story is that grog takes its name from Royal Navy Vice Admiral Edward Vernon (1684–1757), known as “Old Grogham” for a grosgrain cloak he wore. In 1739 Vernon issued an order deploiring “the pernicious custom of the seamen drinking their allowance of rum in drams, and often at once.” He proposed to remedy this by mixing it with water, “which they that are good husbands may from the savings of their salt provisions and bread purchase sugar and limes to make more palatable to them.” That is to say, by making punch, which would spoil if kept, as would simple watered rum. Whether or not the sailors took Vernon’s culinary advice, the order was quite explicit: “the respective daily allowance . . . for all your officers and ship’s company” would be “every day mixed with the proportion of a quart of water to every half-pint of rum to be mixed in one scuttled butt kept for that purpose, and to be done upon deck, and in the presence of the Lieutenant of the watch.”

Serving out the grog was no light undertaking. Two Years and a Half in the Navy: or, Journal of a Cruise in the Mediterranean and Levant, on Board of the U.S. Frigate Constellation, in the years 1829, 1830, and 1831 by Enoch Cobb Wines (1806–79) explains the number of the ship’s company required for the ceremony on an American naval vessel. Holders would fetch the spirits from the “Spirit-Room” (all flames nearby being extinguished before it was opened) and water from the hold, under the direction of the sailing master and master’s mate, who were to account for the expenditure of stores. A drummer would then signal the hour, and the master’s mate would oversee the mixing and serving out of the grog, performed by a quartermaster. The whole business was under the supervision of the lieutenant on duty, who read out the sick list (furnished by the surgeon) and the list of punishments, which, between them, determined who would or would not get his grog.

The ceremony of the grog tub came to be a high point of many a sailor’s day. In Sketches of Naval Life, with Notices of Men, Manners and Scenery, on the Shores of the Mediterranean, in a Series of Letters from the Brandywine and Constitution Frigates (1829), author George Jones (1800–70), aboard as a schoolmaster for the midshipmen, reports, “This event is a stepping stone through the day . . . I suppose it is the first thing thought of in the morning; it is an agreeable point to look to, and it sweetens every intervening moment . . . And now [after the morning serving] they begin to think of noon, with the tub filled clear up to the brim: the minutes as it approaches, if they fly slowly, have glittering wings . . . [after the noon serving] They look now again to the evening, and at evening think of the pure stuff in the morning.”

This integration of drinking into the round of the day, dictated by tradition, sanctioned—indeed legislated—by the American government, is one of Wood’s chief complaints in A Few Practical Reflections. He accuses the government of making the men drunkards and then punishing them for drunken infractions under the illusion that Jack’s character is fixed and his habits inviolable, and binges and flogging are a necessary part of both: “A terrible responsibility rests upon those who, in the spirit of blind indulgence, cry ‘Give Jack his grog.’”

Like most temperance activists, Wood placed some reliance on logic, citing medical evidence that alcohol is damaging to the human body and statistics indicating that drinking is damaging to the body politic—specifically, in this case, to the efficiency of the navy. More dramatic, however, are his emotional appeals, decrying the dire moral consequences of drinking and the whole system’s discredit to the navy.

The latter argument is twofold.

First of all, the navy is the national institution most seen in foreign ports and, perforce, the nation’s representative. Wood takes it as an article of faith that America is to be the world’s shining example of democracy (and consequently of all virtues): when US sailors are observed in drunken brawls, being carried back to their ships in a stupor, or being bailed out of jail by their officers, it belies this vaunted moral superiority. Moreover, the drunkenness, disorder, and consequent degradation of sailors’ character taken for granted in the navy make it an unfit and unappealing profession for the young men of that democracy: “to their honor, many refuse to enter a service which inculcates vicious habits as part of its system, and requires the relinquishment of self-respect; and so long as these usages continue, we shall never have a Navy worthy of the Republic.”

Wood’s pamphlet offers us a snapshot of the midpoint in the long battle against the grog ration. The three decades it took to abolish the custom suggest that “the Traditions of the Service” remained a potent force in the antebellum US Navy. But ultimately, for the reinvented Union Navy of Gideon Welles, the temperance advocates had their way, and grog became what it is today, the stuff of nostalgia for the days of Jolly Jack Tar.

― JJ Jacobson
Curator for American Culinary History

“All their cares are drowned in grog.” Sailors lie in a “Dead Calm” following a drunken spree in this plate from Sailors on Shore by P.S. Duval (Philadelphia, 1835?).
motions still run high on Pearl Harbor Day as we honor those who fell in the unexpected attack of December 7, 1941. But it is important to remember that this act of war was not disconnected from events of the previous century. The Pacific ambitions of Japan were born, in no small part, in response to the humiliation of the United States Navy forcing diplomatic relations on the country in the 1850s. Commodore Matthew C. Perry’s squadron of modern steam warships, called “Black Ships” by the Japanese, awed and frightened the populace during its occupation of Edo Bay. To a culture with a long historical memory that values honor above all, this event still had deep resonance in 1941.

In the mid-nineteenth century, the societies of Japan and the United States could hardly have been more different. As the United States rapidly industrialized and expanded, Japan was slowly emerging from two centuries of self-imposed isolation. To protect their culture of ancient traditions and values from proselytizing Europeans, the ruling warrior government of Japan initiated a period of sakoku (seclusion), expelled all foreigners, and closed its borders in 1639. Only limited contact for trading was allowed, and all other interaction was forbidden, punishable by imprisonment or death. To minimize the risk of contact with foreigners at sea, ocean voyages were forbidden. The greatest threats to the ruling Tokugawa Shogunate were internal, so strong armies were essential, but there was virtually no navy, and few vessels were larger than those used for coastal fishing and trade. Economic and artistic culture flourished in this secure, insular society, but technological advancement occurred slowly. The culture of seafaring that developed elsewhere in the eighteenth and nineteenth centuries was non-existent in Japan during this era. Although isolated, Japanese society was not unaware of the outside world or the technical achievements taking place elsewhere. Stories told by castaways returning from far-off lands excited Japanese society in spite of attempts to suppress the news.

By the 1850s, the world view of Japan was beginning to broaden. At the same time, driven by the philosophy of Manifest Destiny, American economic growth exploded. New industrial technologies radically changed society. As the growing population flooded across the North American continent, the demand for natural resources skyrocketed. Lumber, coal, petroleum, and whale oil were in great demand and enormously profitable. Searching an ever-widening circle for valuable oil, the New England whaling fleet found itself combing the northern fisheries of the Pacific Ocean. Commercial partners were sought across the world along expanding American trade routes protected by an increasingly sophisticated navy. Rumors of coal deposits in Japan, the belief, promoted by Secretary of State Daniel Webster, that Japan was a “gift of providence . . . for the benefit of the human family,” along with sensationalized incidents of American vessels in distress being refused Japanese assistance made the establishment of a naval base there a priority of United States foreign policy.

The primary object of Commodore Perry’s mission of 1853–54 was to establish diplomatic relations, explore and survey Japanese waters, and develop contacts with other Asian nations. Perry carried a letter from President Millard Fillmore to the Emperor of Japan. Although written in friendly diplomatic style, the letter insisted on terms for trade and refueling harbors for American vessels and was backed by the guns of Perry’s ships. With great pomp and ceremony, the local officials of the Shogunate received Perry and his entourage of marines and accepted the letter from President Fillmore. Perry and his ships then steamed away after vowing to return for a reply.

All this was reported through Japanese visual culture. During sakoku, woodblock printmaking had been refined for greater detail and intricacies of color. These prints often reflected the public preoccupations of the day, from popular theatrical characters to national leaders and current events. Commodore Perry and American sailors were frequently portrayed, usually as crude but colorful barbarians. But the detailed documentation of Perry’s Black Ships by Japanese artists reveals an intense fascination. These prints eloquently state that Americans
may be boors, but we covet their ships. With a new urgency, the Shogunate pressed their Dutch trading partners for a steam warship (and training crew) to be quickly provided as a gift. Commissioned in 1855, the Dutch-built three-masted paddle-wheel schooner *Kankō Maru* became Japan’s first steam warship and the subject of immediate internal debate as to her purpose and control. Still overwhelmed by the technical superiority of the American navy and the lack of any other options, the Japanese signed the Treaty of Kanagawa when Perry returned in March of 1854. It addressed trade, diplomacy, and protection of the rights of foreigners in Japan. In its wake, the ruling Tokugawa Shogunate collapsed and the Meiji Empire was established in 1868. After centuries of isolation, Japan was now increasingly concerned about global positioning.

A clear understanding of the principles of “gunboat diplomacy” made building a navy an increasingly high priority. During the remainder of the century, the Imperial Japanese Navy would grow from virtual non-existence to a large and capable force. The Imperial Navy shrewdly employed European advisors, shipbuilders, and instructors to assemble a modern fleet. Its history is remarkable in that it transformed a nation with no seafaring or shipbuilding tradition into one of the top naval powers in the world. With the Meiji era, a focused, determined modernization program replaced the humiliation of the forced treaty of 1854. Japan’s navy successfully defeated China’s in the 1890s and the Russians in 1904-05. As the Russo-Japanese War commenced, the illustrated press of the United States watched closely. The popular *Frank Leslie’s Illustrated Newspaper* printed flattering articles about Japanese culture and refinement as it tracked the Russian Baltic Fleet slowly making its way toward Port Arthur and the Sea of Japan. The almost complete destruction of this Russian force at the Battle of Tsushima on May 27–28, 1905, left little doubt that Imperial Japan’s ambitions of a Pacific empire linked to maritime power were rapidly being realized.

President Theodore Roosevelt saw this ambition clearly, as in many ways he shared it. Roosevelt also perceived the global shift of the twentieth century when he stated in 1903 that “the Mediterranean era died with the discovery of America. The Atlantic era is now at the height of its development, and must soon exhaust the resources at its command; the Pacific era, destined to be the greatest of all, is just at its dawn.” Perhaps Roosevelt did not recognize that the lesson of Tsushima for Japan was that an enemy could be utterly demoralized by a decisive naval victory on a very large scale.

Roosevelt was instrumental in brokering a treaty of peace between Japan and Russia. In naval affairs, the President stressed parity between friendly nations. This theme was emphasized when, in 1908, he sent much of the US battle force—popularly dubbed the “Great White Fleet”—to Japan and then around the world. The popular success of the visit was celebrated in the thousands of souvenir photographic postcards produced in Japan showing American and Japanese unity. But it was apparent that the United States and Japan were increasingly naval rivals in the Pacific.

Although the demonstration of US maritime strength by the Great White Fleet may have postponed the collision

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This commemorative Japanese postcard features individual US warships of the “Great White Fleet.”
The Imperial Japanese Navy’s battleship Nagato was one of its few major vessels to survive World War II. Nagato was expended in the Bikini Atoll nuclear bomb tests of 1946 and is depicted here at Yokosuka in September 1945. Watercolor by William Lewis. Courtesy of the artist.
March 26th 1812. Mr. Adams, Boats w[ain] Convalescent from Fever of a Typhoid type. cont Decoct. Cinchon with wine.”

So begins the “The Daily Prescription Book on Board the Frigate Constitution,” kept by Amos A. Evans, ship’s surgeon, in 1812. This 266-page journal contains over 750 medical cases recorded from March through August, during which time Constitution engaged and destroyed HMS Guerriere. One can follow these cases, their symptoms, and treatments through more than 7,000 entries. For example, the illness of Mr. Adams, the boatswain, is recorded in seven entries from March 26 to April 2, when he returned to duty. A companion volume, titled “Daily Report of the Cases in the Navy Yard at Charleston,” covers only part of a month, August 7-16, 1813. Though the “Daily Report” is more detailed, the “Prescription Book” is a much more comprehensive record of medicines and treatments.

At first glance, the prescription book seems a rather dull accounting of a ship’s surgeon’s case load of about thirty sailors per day. Most entries are short and the treatments abbreviated. Seldom does one find an explanation of cases in such detail as to provide absorbing reading. However, in aggregate, the book is an excellent example of the medical practices and remedies of the day, with occasional side remarks that shed light on life aboard ship.

The prescription book is quite remarkable for several reasons. First, USS Constitution was one of the “super frigates” built at the end of the eighteenth century. Her hull was designed to carry 44 heavy guns that fired 24-pound shot rather than 18, thus making her more formidable than any British frigate of the time. Because the United States had no ships of the line, the navy used these super frigates to capture merchant ships and the less-well-armed British frigates. Constitution’s strong hull protected the sailors on board so that casualties were minimized. Second, the author, Amos Evans (1785–1848), was one of the finest naval surgeons of his day and later became known as the “Father of the Naval Medical Corps.” Third, the cases treated on board are an excellent record of medical practice, and naval medicine in particular, at this time. And fourth, the prescription book records the medical care of seven seamen wounded during Constitution’s defeat of Guerriere in what was her first encounter with a British warship after the war began.

USS Constitution was built in
Boston and launched on October 21, 1797, in compliance with the Act to Provide a Naval Armament of March 27, 1794, which authorized the construction of six frigates. The wooden-hulled, three-masted warship carried 44 guns when built but was outfitted with 55 at the beginning of the War of 1812. At the outset of hostilities, Constitution was one of only 14 commissioned US Navy warships ready for sea. Though in active service until 1855 and still in commission today, Constitution is most famous for her victories during the War of 1812 and for the nickname “Old Ironsides,” which she received during her battle with HMS Guerriere.

Constitution’s surgeon, Amos Alexander Evans, was born near Elkton, Maryland, in November 1785. He was educated at an academy in Newark, Delaware, and for three years studied medicine in Elkton with the physician George E. Mitchell, while also making frequent trips to Philadelphia to attend lectures delivered by the eminent physician Benjamin Rush. After his training with Mitchell, Evans was licensed to practice by the University of Maryland.

The US Navy appointed Evans assistant surgeon on September 1, 1808, and sent him to the Marine Hospital in New Orleans. An interlude as acting surgeon provided more pay and an opportunity for Evans to “gain much medical information,” especially as New Orleans was an entrepôt of immigrants, sailors, visitors, and migrant laborers—all potential carriers of diseases from other places. Three years spent in southern Louisiana provided Evans the ideal training for his career in medicine.

In March 1812, when the United States government was preparing for war with Britain, Captain Isaac Hull hired Evans as head surgeon on Constitution.

The responsibilities of a ship’s surgeon were specified by the navy. He was required to visit the sick at least twice a day, to consult with the captain daily, to be prepared at all times for engagement with the enemy, to keep a case book of information about his patients, and to be in charge of medical stores. As chief medical officer, Evans was responsible for the health of the crew, including the ordering and dispensing of medicines, maintaining sanitary conditions, and arranging food and spirits for the sick. For this purpose, he was given extra rations for sick quarters and was required to requisition supplies when necessary. The prescription book contains loose documents regarding the inventory and expenses of hospital stores. One is a four-page list of “Medicines etc. remaining on board the Frigate Constitution, 6th March 1813,” and two other documents are semi-monthly “Expenditure of Hospital Stores,” for 1815–1816.

The 1813 list of medicines and food used for treatment contains those commonly noted in the prescription book such as ipecac, pearl barley, tincture digitalis, gum Arabic, tincture myrrh, mustard, liquorice, oil[aeum] anisi, oil[aeum] ricini, tapioca, acid sulphuric, acid muriatic, corn meal, and palo cinchon. The inclusion of lime juice is perhaps why scurvy is mentioned only once in the book. The spirits listed are brandy, porter, wine, and port wine, and the “grog” often prescribed by Evans was a mixture of an alcoholic beverage and water or another liquid. Some of the non-medical items he used in his practice were blank books, writing paper, quills, tin cups, saucepans, paper pins, marble tiles, towels, flannel, copper...
scales, and tin basins. Lighting sources were candlesticks, glass reflecting lamps, and tin sconces. Dental equipment included teeth forceps, and one hawk’s bill (dental forceps). Surgery required instruments that came in cases labeled “amputating,” “pocket,” “surgical,” “dissecting,” “cupping,” and “trepanning.” The surgeon used trepanning tools to bore holes in skulls to relieve pressure on the brain. Vials, whalebone splints, a flesh brush, elastic and silver catheters, bed pans, pewter urinals, lancets, splints, and tourniquets are a sampling of other necessary supplies.

The case of Mr. Adams was fairly typical—Evans treated him with cinchona and wine to reduce his fever, and he returned to duty on April 2. Fevers such as his were common complaints, as were gastrointestinal problems like diarrhea and dysentery, venereal disease, and shipboard injuries. Diarrhea was treated with ipecac, rice, tapioca, and sago, and gonorrhea with laxatives and an application of lead acetate. The usual treatments, other than medicines and food, were bleeding, cupping, and purging, and the application of poultices. Sometimes sailors had severe illnesses or injuries, and if they did not improve under Evans’s care, he sent them to the hospital. Naval regulations stipulated that a report of a patient’s case history and treatment had to accompany him, and if the hospital surgeons determined that the patient could have been cured on board ship, the ship’s surgeon was fined $10 per patient.

One serious case that eventually required hospital care was that of Edward (sometimes Edmund) Fitzgibbon. On the evening of March 27, he fell off the royal yard of Gunboat No. 69 and “struck the vessel as he fell overboard.” Gunboats did not carry surgeons, so Fitzgibbon, stationed at Washington Navy Yard, was taken to Evans. He had a divided and bruised lower lip and a compound fracture and displacement of the os calcis (heel bone). His foot was considerably swollen. Evans gave him a cathartic and applied a splint to the leg and foot “in order to keep the foot from falling inward.” The next day, Fitzgibbon had a “quick pulse” and a fever and his foot was “considerably inflamed.” That evening he complained of pain and soreness in the abdomen. Evans applied poultices of flaxseed and Indian meal to the foot and a fomentation (warm compress or poultice) to the abdomen. On the 30th, Fitzgibbon still had a quick pulse and fever, and, though the swelling had receded on the foot, the discharge was “considerable & offensive & bloody.” Evans continued the poultices and fomentations. One of Fitzgibbon’s incisor teeth had broken and was “forced inward,” so Evans extracted it. He gave the sailor a diet of sago (a starch) and rice. By April 1, the fever had dropped, and the patient was in less pain. The surgeon continued the poultices until the 2nd, when he washed the wound with tincture of myrrh and brandy, and gave him cinchona with wine. But the wound “assumed a more unhealthy appearance” on the 3rd, and for the first time Evans noted gangrene. He washed the foot with a strong solution of tincture of myrrh and brandy again and treated the gangrene with nitric acid. The same treatments and nourishing diet continued for a few days until the 6th, when Evans sent him to the hospital. Though the entries for Fitzgibbon end on April 6, we know from pension records that he survived but was pensioned in August 1812; he received $48 per year until 1830.

The most severe cases were seamen wounded in battle. In August, Constitution set sail from the navy yard in Washington City for the Gulf of St. Lawrence to seize British merchant ships bound for Canada. On August 19, she encountered HMS Guerriere about 500 miles southeast of Newfoundland. Guerriere, commanded by Captain James Dacres (1788–1853), carried 49 guns to Constitution’s 55. Dacres fired the first broadside—two 18-pounders—
but the balls bounced off Constitution’s hull, prompting someone to remark that her sides were made of iron. Henceforth, she was known as “Old Ironsides.” Constitution’s return fire of 24-pound balls destroyed Guerrièrer’s mizzen mast, tore the sails, and damaged her hull. Constitution received light damage. The casualties on Constitution (7 dead, 7 wounded) were light compared to those on Guerrièr (15 killed, 62 wounded).

On August 20 Evans did not record information about the dead but did describe the wounds of the seven injured in the “action yesterday evening.” The worst cases were Lieutenant Charles Morris (1784–1856), the executive officer, and Richard Dunn, a seaman. Morris was shot in the abdomen with a musket ball that came out his back near the superior posterior spinous process. Evans treated him by applying a “simple dressing” and a warm cataplasm (poultice), and bled and purged him. The entries in the prescription book stop before the end of Morris’s treatment, but we know he lived and was promoted to captain for his service in that sea battle. The following year he was given command of USS Adams and later became navy commissioner. Richard Dunn suffered a severe compound fracture of the tibia above the ankle and extensive muscle damage, and Evans had to amputate the leg below the knee. When Constitution reached Boston on August 30, the wounded were transferred to the hospital in the navy yard.

Early nineteenth-century medicine is appalling to those of us who take for granted diagnostic medicine, MRIs, and organ transplants. But the treatment that sailors received on Constitution was the best care for the day, and Evans had good results. The prescription book seldom mentions the death of a sailor. Evans was as well trained a surgeon as one could find at that time, but he knew nothing about bacteria and viruses, and did not even have a thermometer. For the most part, doctors treated symptoms and not illnesses and had to heal the entire body medically and surgically. Evans’s expertise was recognized in 1815, when he became the First Surgeon of the Fleet—the first such position in the US Navy. One could perhaps say that a sailor’s assignment to Constitution was good fortune—he served on one of the best ships in the small US Navy (and in fact the world), had one of the best surgeons to care for his ailments, and had at his disposal a store of the best medicines and treatments available.

— Barbara DeV Wolfe
Curator of Manuscripts

WE HAVE LONG BEEN HOPING AND PLANNING TO RENOVATE AND EXPAND THE CLEMENTS LIBRARY’S BEAUTIFUL 1923 ALBERT KAHN-DESIGNED BUILDING. THAT DREAM WILL SOON BECOME A REALITY. ON NOVEMBER 15, 2012, THE UNIVERSITY OF MICHIGAN BOARD OF REGENTS GAVE FIRST APPROVAL TO A MAJOR RENOVATION PROJECT THAT WILL BRING THE LIBRARY INTO THE TWENTY-FIRST CENTURY.

This $16.8 million undertaking is funded by a $10 million allocation from the University of Michigan, a $6 million donation from a private foundation, and $800,000 from the Clements Library Associates Board of Governors. The foundation’s gift, the largest to the Library since William L. Clements’s 1922–23 donations, will pay for improvements to the building’s infrastructure and expansion of its work and collections space.

The donations are a vital element in paying for the total renovation cost. Design work is under way. Construction will follow in early 2014 and will take about eighteen months. We must empty the building of its contents and relocate to a facility on Ellsworth Road, where we will be open throughout construction to serve researchers.

This year marks the 90th anniversary of the Clements Library building, and we are excited that improvements will be made to its electrical, water, security, and air conditioning systems. Other changes will include a restored entrance, a state-of-the-art fire suppression system, and increased seating capacity for readers. A new underground annex will expand storage for part of the Clements collection.

At the same time, we will preserve the building’s exterior and distinctive interior spaces, including such notable features as the paneling, decorative plaster ceilings, and ornate customized woodwork in the Great Room and the Rare Book Room. These improvements will greatly enhance the quality of the library experience for students, scholars, and the general public.

On our return to the Kahn building in 2015, we invite you to visit this very special institution. I am sure you will agree with Augustine Birrell’s observation that “A great library easily begets affection, which may deepen into love.”

— Ann Rock
Director of Development

Colorfully distinctive signal flags enabled communication at sea by fleets of the eighteenth and nineteenth centuries. These examples, from the 1780 signal book of French admiral Charles Henri, Comte d’Estaing (1729–94), identify the direction of the wind.
**ANNOUNCEMENTS**

**JOYCE J. BONK**

We note, with sadness, the passing in Ann Arbor on June 9 of Joyce J. Bonk (1926–2012). Joyce joined the Clements Library staff in 1956 and served as assistant curator of books until her retirement in 1992.

**JOHN L. FOX**

John L. Fox, member of the Clements Library Associates Board of Governors, passed away September 14. Mr. Fox joined the board in 2001 and had a particular interest in books relating to the French and Indian War.

**EARHART CATALOGING GRANT**

Special thanks to the Earhart Foundation for awarding the Library a grant to fund a cataloger for one year. This temporary staff member will concentrate on increasing the number of electronic records accessible in Mirlyn for the Graphics and Map collections. We have requested support for a second year in hopes of continuing this work and significantly improving the accessibility of the holdings of those two divisions.

**UPTON FOUNDATION GRANT**

The Upton Foundation has once again assisted the Clements Library by providing a grant to digitize certain parts of the collection. We thank the Foundation for its support.

**STANFORD HONORS PEDLEY FOR EXCEPTIONAL TEACHING**

Clements Library Assistant Curator of Maps Mary Sponberg Pedley has been recognized as an exceptional teacher by Stanford University’s “Teacher Tribute Initiative.” Mary, who retired from Ann Arbor Public Schools in 2010, was nominated for this honor by Melanie Langa, her former student and a Clements volunteer, who entered Stanford in the fall.

**CALENDAR OF EVENTS**


**March 4, 2013 – May 31, 2013:** Exhibit at Clements Library: “Recent Acquisitions: Building on the Clements Collections.” Weekdays, 1:00–4:45 p.m.

**May 7, 2013:** Clements Library Associates Board of Governors Meeting, 10:00 a.m.

**May 19, 2013:** Antiquarian Book Fair. Proceeds benefit the Clements Library.

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**Clements Library Director**

J. Kevin Graffagnino

**Committee of Management**

Mary Sue Coleman, Chairman; Paul N. Courant; Robert N. Gordon; Martha S. Jones; J. Kevin Graffagnino, Secretary

**Clements Library Associates Board of Governors**

Peter N. Heydon, Chairman


Clements Library Associates share an interest in American history and a desire to ensure the continued growth of the Library’s collections. Funds received from Associate memberships are used to purchase historical materials. Annual Membership Contributions:

- Student $5, Donor $40, Associate $75, Patron $100, Fellow $250, Benefactor $500, Contributor $1000 and above.

Contributions are tax deductible in accordance with current federal and state law and may be made by check or credit card.

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