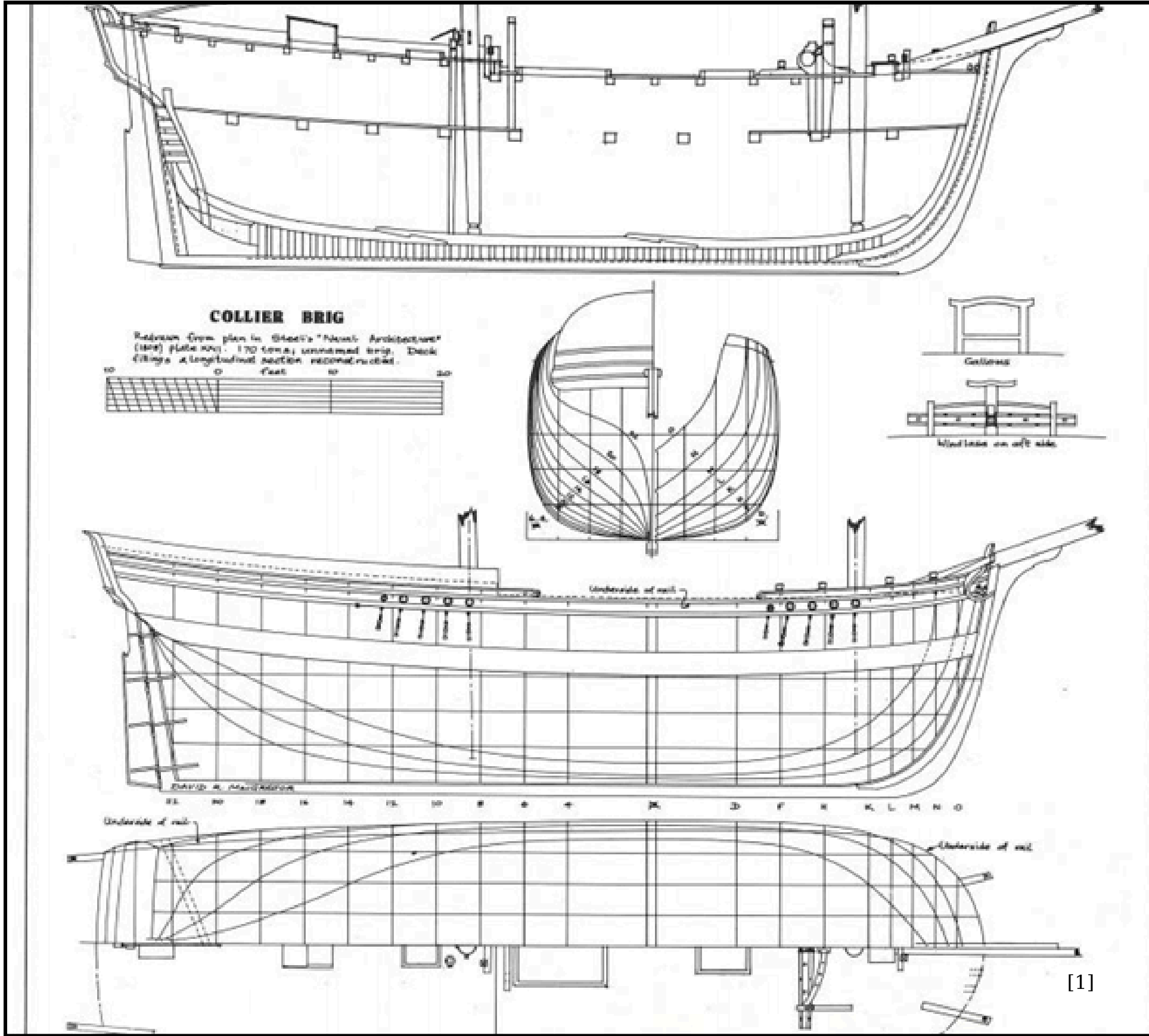


THE STIRLING CASTLE

BUILT FOR SPEED



Mike, what are the main design elements of a brig?

A brig is a type of sailing vessel defined by its rig: two masts which are both square rigged. Brigs originated in the second half of the 18th century and were a common type of smaller merchant vessel or warship from then until the latter part of the 19th century.

What kinds of materials were used?

Historically, most brigs were made of wood, although some later brigs were built with hulls and masts of steel or iron. A brig made of pine in the 19th century was designed to last for about twenty years (many lasted longer).

Was a brig a popular choice for a ship in the 1830's?

In the early 19th Century, the brig was a standard cargo ship. It was seen as "fast and well sailing" but required a large crew to handle it's rigging.

A heartfelt thank you to Karen, Mike, and the fantastic team at the Vaughan Evans Library for their continued enthusiasm and help exploring the SMSA's maritime history and the Stirling Castle.

If you'd like to learn more about your own maritime projects, don't hesitate to reach out to library@sea.museum for the Vaughan Evans Library.

As the SMSA celebrates it's 192nd Birthday, we ask the question, how did we get here?

Our story began in Scotland during 1831 when Reverend Henry Carmichael and 50 mechanics set sail for Australia on the Stirling Castle "During the long voyage of some four months, Carmichael arranged classes for these artisans...with the view to them forming the nucleus of a Mechanic's Institute when they arrived in the colony." [2]

The Stirling Castle was first launched in 1829, a vessel that five years after our mechanics' landed in Sydney would dramatically be wrecked on a passage from Sydney to Singapore and Manila, entangled with the infamous Eliza Fraser story.

SMSA Librarian, Sarka, was eager to delve deeper into the history of this vessel, and our colleagues at the Australian National Maritime Museum were the perfect starting point for our voyage of discovery.

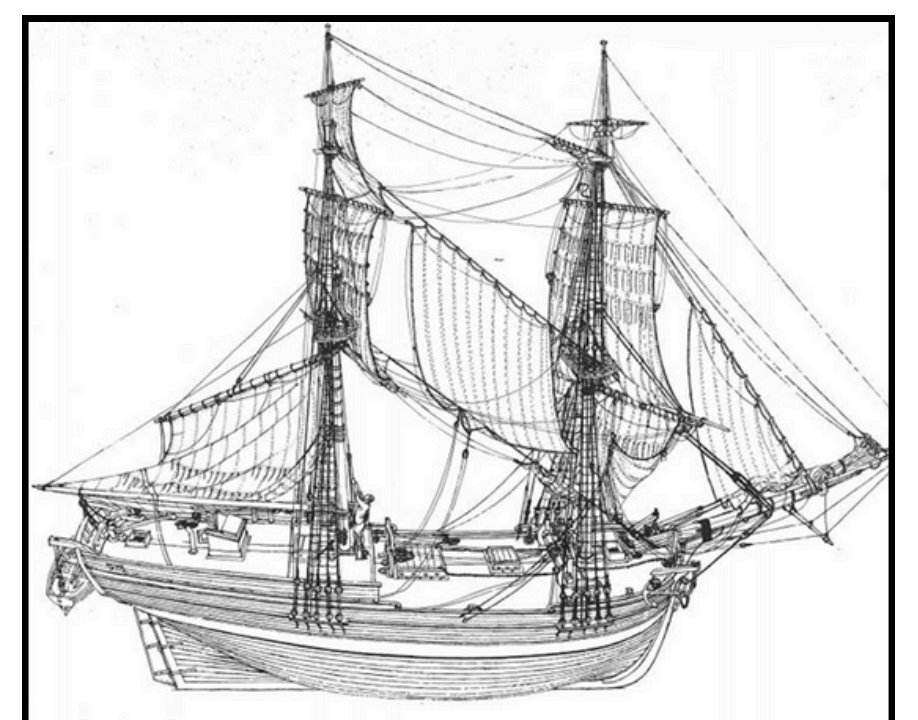
Library Research Coordinator, Karen welcomed us to the cosy Vaughan Evans Library, with tables filled with drawings, journals and textbooks carefully selected before our arrival. We were introduced to Mike, one of their dedicated Library Volunteers who generously shared his extensive knowledge, explaining firstly that the Stirling Castle was in fact a brig.

A brig is a two masted vessel, an example of a typical brig construction at the end of the eighteenth century can be seen in the drawing above. This diagram is a redrawing of a Collier Brig from David Steel's *Naval Architecture* (1805) [1]. The stern has an average height of 6ft, offering sufficient head height for some of the accommodation, however, at the forward end, where you would find the crews quarters, it was a tight squeeze at an uncomfortable maximum height of 4ft 9 inches.

Mike explained that brigs were built in 1000's of shipyards across Great Britain, Canada, America, Australia and Denmark. Due to their speed and maneuverability, brigs made great small war ships and were particularly popular amongst pirates.



[3]



[4]

[1] Collier Brig, sections and decks, unidentified and redrawn from David Steel's *Naval Architecture* (1805), plate XXII. Square Rig and Fore and Aft 1793-1815

[2] The Sydney Mechanics' School of Arts: A History, Garry Wotherspoon, page 12, original quote Roger Morris, Sydney Mechanics' School of Arts: Australia's Oldest School of Arts.

[3] Image taken at the Vaughan Evans Library at the Australian National Maritime Museum of research material.

[4] Drawing by T W Ward of a collier brig, Square Rig and Fore and Aft 1793-1815

THE STIRLING CASTLE

ALL ABOARD

In 1831, the *Stirling Castle*, a 350-ton brig, departed Greenock, Scotland, carrying 50 mechanics and their families on a journey to New South Wales. These passengers, recruited by Reverend John Dunmore Lang, were not just emigrating—they were handpicked to help build a new society.

Helping to lead the group was Reverend Henry Carmichael, a young educator with progressive ideas. During the voyage, Carmichael taught the mechanics aboard the ship, offering lessons in subjects such as mathematics and mechanics - turning part of the journey into a floating classroom. After arriving in the colony, he went on to found the Sydney Mechanics' School of Arts in 1833.



A TYPICAL DAY AT SEA

While personal diaries from the *Stirling Castle* are unavailable, we can reconstruct daily life aboard similar emigrant ships through sources like Roslyn Russell's *High Seas & High Teas* and journals from other voyages. For instance, Reverend John Jennings Smith's journal, written aboard the *Amelia Thompson* in 1839, offers insights into the experiences of passengers on long sea journeys.

Smith recorded daily reflections on the weather—describing shifting winds, sudden storms, and their effects on passengers' moods. He noted sightings of dolphins swimming alongside the ship and birds overhead, which offered passengers brief moments of wonder. To pass the time, Smith observed the social dynamics of those on board, often commenting on their personalities and interactions.

These glimpses into shipboard life provide valuable context for understanding what the mechanics and their families likely experienced during their own voyage on the *Stirling Castle*.

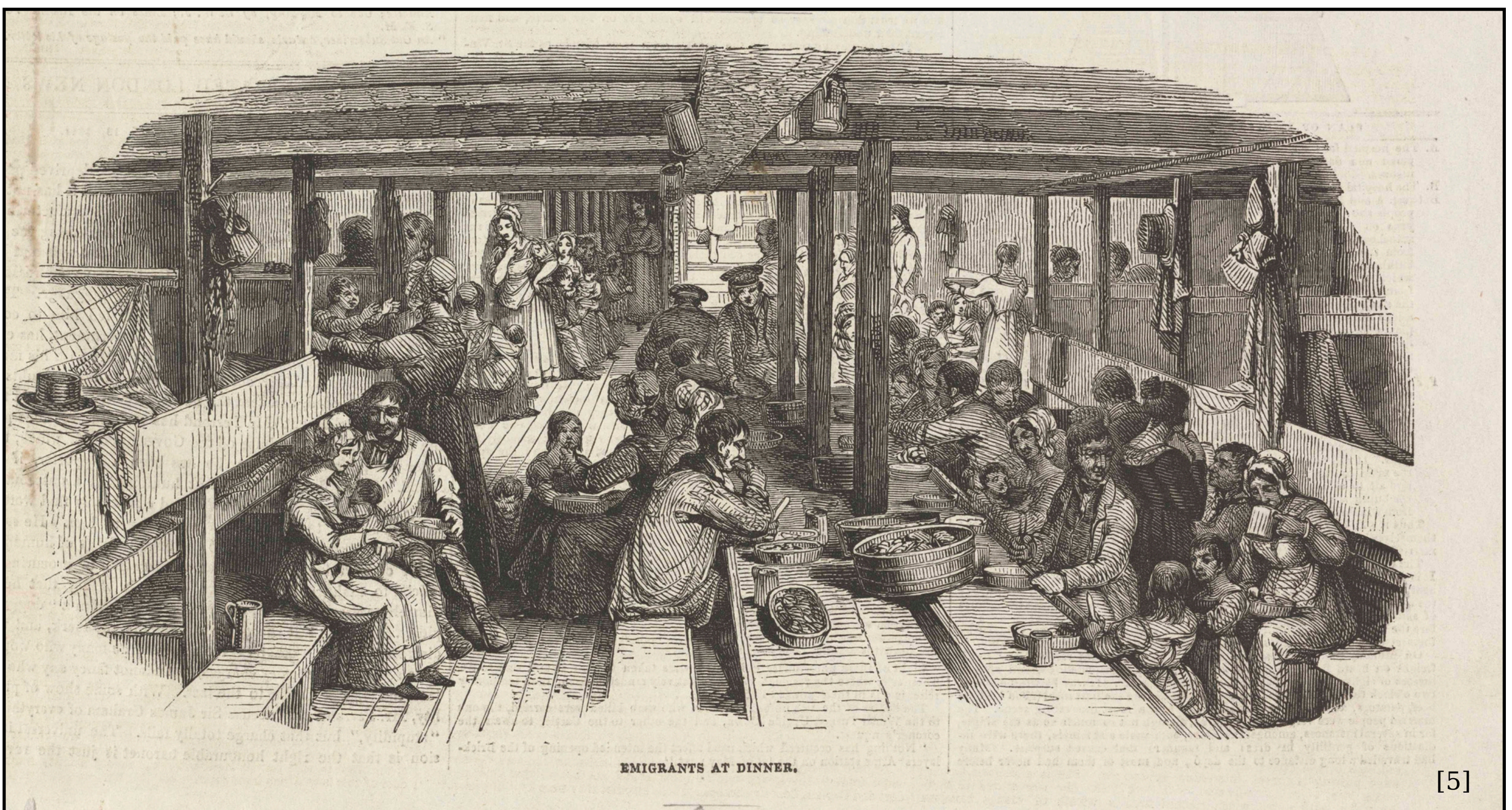
Meals were basic and repetitive: salted meat, ship's biscuit, and dried peas. Drinking water was strictly rationed.

[5] Image: Passengers Dining in Steerage Class, 1847. National Museum of Australia. (n.d.). Assisted migration introduced. Australia's Defining Moments Digital Classroom.

<https://digital-classroom.nma.gov.au/defining-moments/assisted-migration-introduced>
[6] Image: Section of the emigrant ship "Bourneuf" of Liverpool... showing the arrangement for government passengers to Australia. (1852, July 10). The Illustrated London News. Illustrated London News Historical Archive, 1842–2003.

[7] A view of Sydney, Australia from Pinchgut Island, featuring ships in the harbor and buildings along the shoreline. Art print by Augustus Earle, 1826.

[8] The City Of Sydney: The Story of its Growth—From its Foundation to the Present by John Arthur Barry (1902).



THE STIRLING CASTLE

DIVIDED SPACES: ORDER BELOW DECK

Life aboard the *Stirling Castle* was shaped not just by the sea, but by the physical layout of the ship itself. Like most brigs of the era, the vessel was divided into sections according to function, rank, and status.

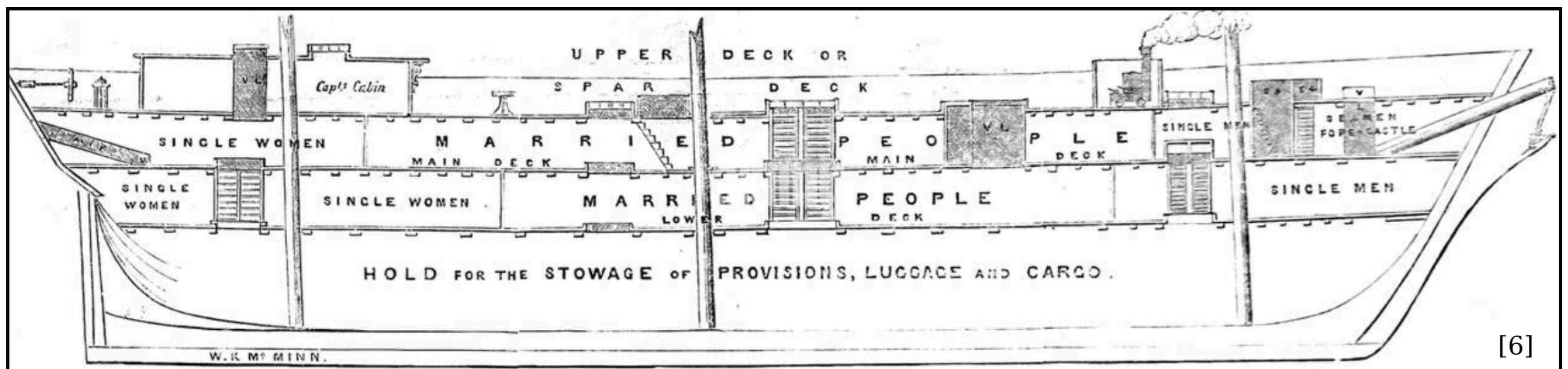
The lower deck housed the majority of passengers—mechanics, tradesmen, and their families - who slept in tightly packed communal quarters. Hammocks and narrow bunks were separated by crates, barrels, and makeshift partitions, offering little privacy.

At the aft (rear) of the ship, officers and any higher-ranking passengers had access to more comfortable accommodations, albeit still modest by modern standards. These cabins had slightly more headroom and better access to light and ventilation. In contrast, crew quarters were located toward the bow (front), where conditions were even more cramped.

Sanitation was rudimentary. According to Roslyn Russell in *High Seas & High Teas*, women and young children were usually given access to a basic toilet that emptied directly into the sea or was flushed with seawater.

For many passengers—especially those from rural backgrounds—this was a new and unfamiliar experience. Men were expected to relieve themselves over the side of the ship. With no toilet paper, passengers shared rags soaked in vinegar, which likely contributed to the spread of disease. While the *Stirling Castle* is not recorded as having suffered a major outbreak, most emigrant ships carried a surgeon and set aside space for a makeshift hospital as a precaution.

Life aboard was further challenged by infestations. As Russell notes, emigrant Janet Ronald recalled throwing books at rats on the *Invincible* in 1857—an experience likely shared by passengers on the *Stirling Castle*.



[6]

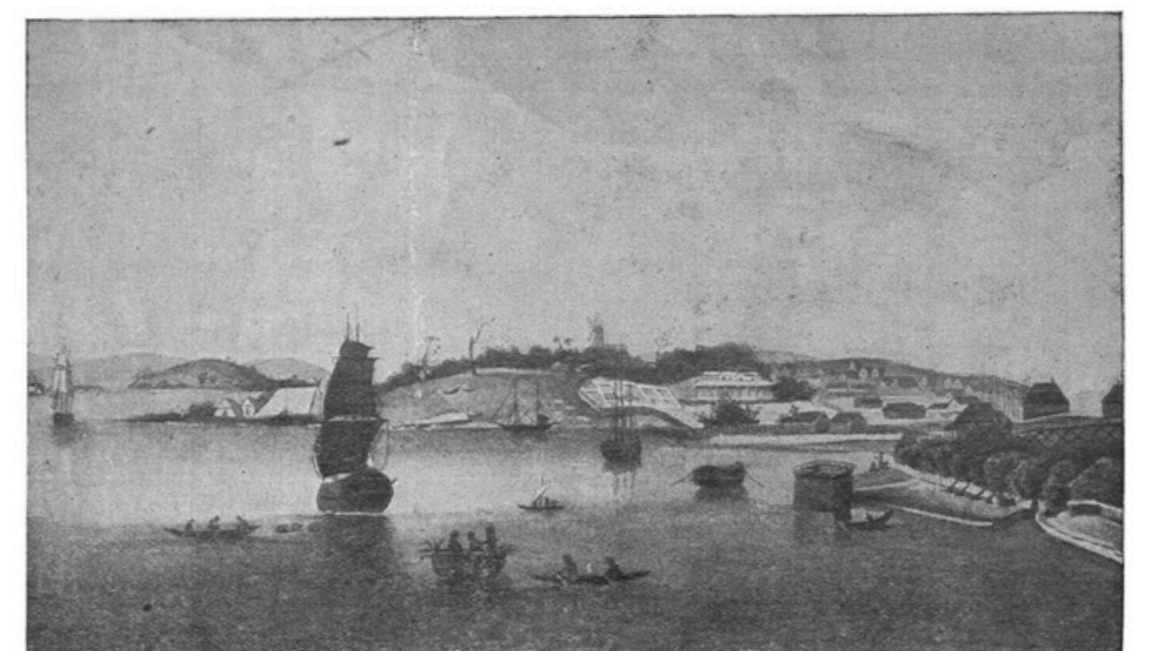
ARRIVAL IN NEW SOUTH WALES



[7]

After more than 100 days at sea, the *Stirling Castle* reached Sydney. Many of its passengers would go on to become settlers, builders, and educators.

Their journey was not just a migration, it was a cultural foundation.



SYDNEY IN 1806

[8]

- Russell, R. (2017). *High seas & high teas: Voyaging to Australia*. National Library of Australia. (Copy provided by the Australian National Maritime Museum.)
- Smith, J. J. (1830s). *The Journal of a voyage to Australia in the bark Amelia Thompson* [Manuscript]. Australian National Maritime Museum Archives. (Copy provided by the Australian National Maritime Museum.)
- Dunn, M. (2011). Carmichael, Henry. Dictionary of Sydney. Retrieved from: https://dictionaryofsydney.org/entry/carmichael_henry
- Wikipedia contributors. (n.d.). Stirling Castle (1829 brig). Wikipedia, The Free Encyclopedia. Retrieved May 7, 2025, from [https://en.wikipedia.org/wiki/Stirling_Castle_\(1829_brig\)](https://en.wikipedia.org/wiki/Stirling_Castle_(1829_brig))
- Lang, J. D. (1972). *Reminiscences of my life and times: Both in church and state in Australia for upwards of fifty years* (D. W. A. Baker, Ed.). Melbourne, Australia: William Heinemann Australia. (Original work published 1876)
- Shipping Intelligence. (1831, October 15). *The Sydney Gazette and New South Wales Advertiser* (NSW : 1803 - 1842), p. 2. Retrieved May 8, 2025, from <http://nla.gov.au/nla.news-article2203096>

THE STIRLING CASTLE

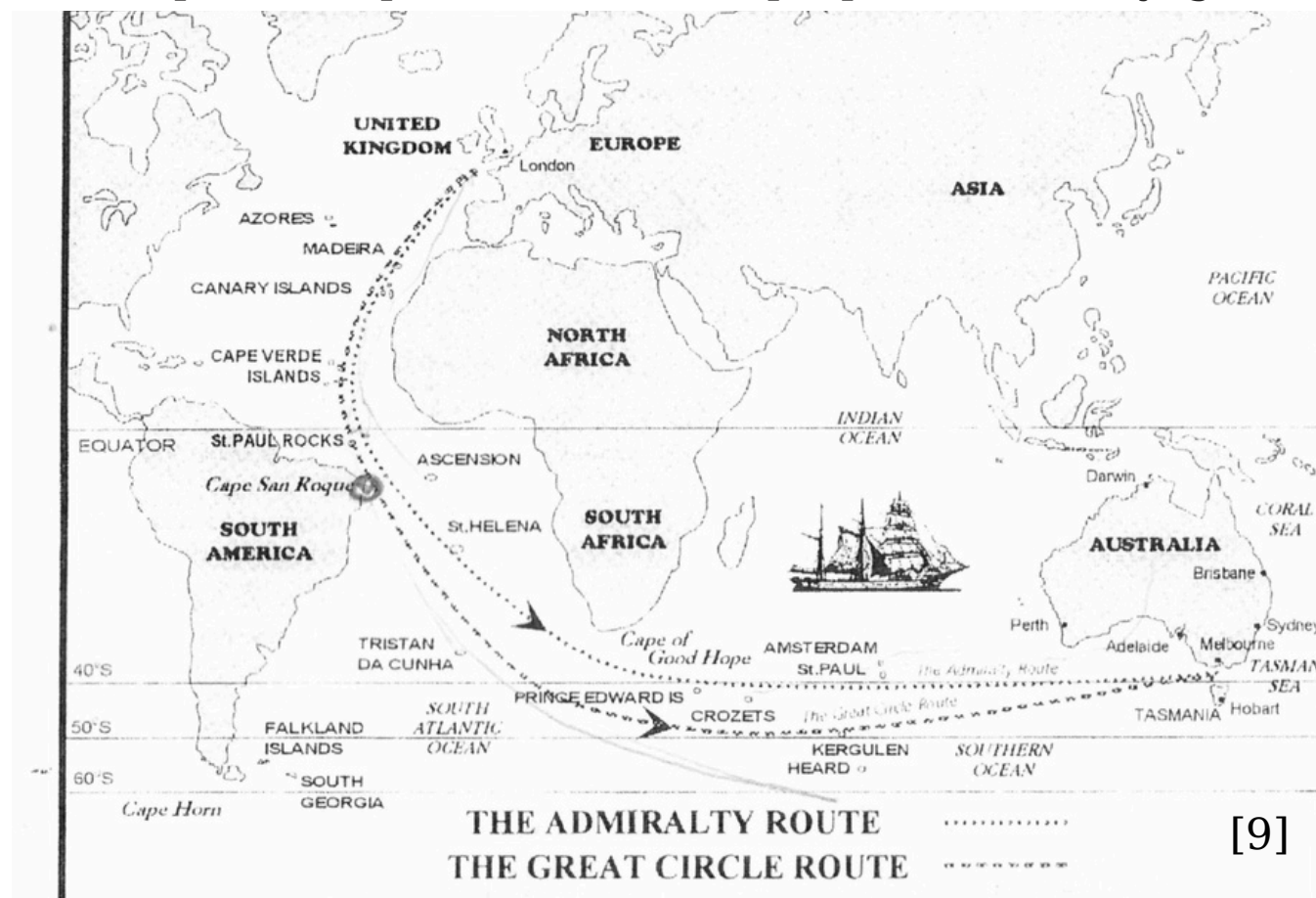
WHICH WAY TO NEW SOUTH WALES?

In the early 1800s, British ships bound for Australia faced a world of choices—and dangers. The route they took could determine not just the speed of the voyage, but whether they arrived at all.

By 1831, several well-established sailing paths had emerged. The decision of which to follow depended on the season, ship design, the captain's experience, and the purpose of the voyage.

That year, the *Stirling Castle* departed for New South Wales, navigating one of the most commonly recommended routes of the time: the **Admiralty Route**.

Some captains ventured as far south as they dared, skirting the icy winds and seas of the higher southern latitudes in pursuit of faster passage. But for most, the Admiralty Route offered a balance of predictability and safety.



From the English Channel, ships following this course sailed south past the Canary Islands, crossed the equator near West Africa, and rounded the Cape of Good Hope. From there, they caught the powerful Roaring Forties—westerly winds that swept them east across the Indian Ocean—before turning north toward the Australian coast.

Even this "safer" route was anything but easy. Crews endured months without sight of land, braved heavy seas in the southern latitudes, and lived with the constant threat of illness or disaster. The *Stirling Castle's* 1831 journey was largely uneventful in navigational terms—but tragedy still found its way aboard.

Just after arrival at Jervis Bay, 21-year-old Farquhard Campbell, a passenger from Ardmore, Scotland, fell from the ship's taffrail and died shortly thereafter. His death, reported in *The Sydney Gazette and New South Wales Advertiser* (1831), was a sobering reminder: even after landfall, the dangers of the voyage were never truly over.

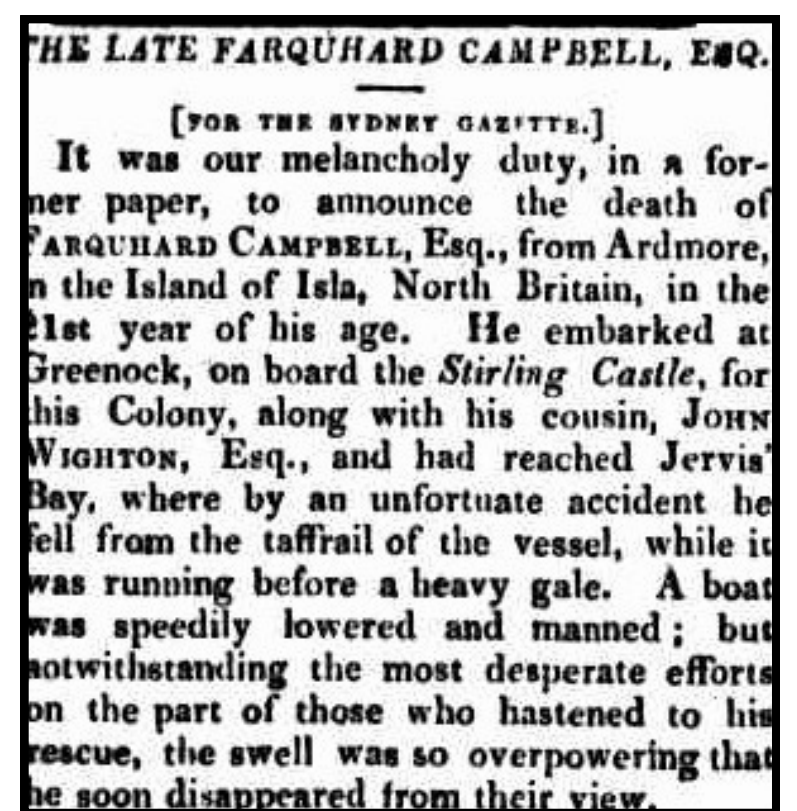
The *Stirling Castle* had departed from Greenock, Scotland, on June 1, 1831, under the command of Captain James Fraser—a seasoned mariner with prior experience in Australasian waters. Having previously sailed to Hobart and Sydney, Fraser likely chose the Admiralty Route for its reliability and familiarity. His leadership would have been crucial in managing the infamous Roaring Forties and the vast stretches of the Southern Ocean.

While this particular journey ended in safe arrival, Fraser's maritime career would later take a darker turn. In 1836, the *Stirling Castle* was wrecked on the Swain Reefs off the Queensland coast during a voyage to Singapore.

Fraser and his wife, Eliza, survived the wreck and made it ashore on K'gari (formerly Fraser Island), where they were captured by members of the Butchulla people. Fraser died in captivity; Eliza survived, and her story became one of colonial Australia's most sensational and contested survival narratives.

But back in 1831, with Fraser still at the helm, the *Stirling Castle* completed its four-month journey across the globe. The ship delivered its passengers to the distant shores of New South Wales, marking the beginning of new lives in a young and evolving colony. Their arrival was the result of endurance, seamanship—and no small measure of luck.

What awaited these settlers on land? We'll follow their first steps into colonial life and the challenges they faced upon arrival in New South Wales.



[10]



[11]

Images:

[9] Loney, J., & Stone, P. (1995). *The Australia run: Australian shipwrecks Volume Six*. Marine History Publications.

[10] THE LATE FARQUHARD CAMPBELL, E[?].Q. (1831, October 20). *The Sydney Gazette and New South Wales Advertiser* (NSW : 1803 - 1842), p. 3. Retrieved June 10, 2025, from <http://nla.gov.au/nla.news-article2203151>

[11] Edited Image: Travel Victoria. (2025). *Cape Otway Lightstation. View east along coast from top of lighthouse*. Retrieved June 10, 2025, from <https://www.travelvictoria.com.au/capeotway/photos/>

Sources:

Admiralty Route: Loney, J.K. (2000). *The Australia Run*, Marine History Publications, Benalla [Vic.]

Wikipedia contributors. (n.d.). *Stirling Castle (1829 brig)*. Wikipedia, The Free Encyclopedia. Retrieved May 7, 2025, from [https://en.wikipedia.org/wiki/Stirling_Castle_\(1829_brig\)](https://en.wikipedia.org/wiki/Stirling_Castle_(1829_brig))

Queensland Government. (n.d.). *K'gari (formerly Fraser Island)*. Retrieved 12 June 2025, from <https://www.nrm.qld.gov.au/land-property/initiatives/kgari/about>

LOSS OF THE STIRLING CASTLE. (1836, September 15). *The Colonist* (Sydney, NSW : 1835 - 1840), p. 6. Retrieved June 12, 2025, from <http://nla.gov.au/nla.news-article31718494>

THE STIRLING CASTLE

NEW LIVES IN A NEW LAND

After more than 100 days at sea, the *Stirling Castle* anchored in Sydney Cove. For the passengers, stepping ashore meant exchanging the cramped, salt-soaked world of the ship for the warm air of a bustling colonial port. In 1831, Sydney was a growing settlement of around 16,000 residents. Sandstone buildings were beginning to replace the earliest timber huts, hinting at a city taking shape.

The Scottish mechanics arrived as part of planned migration led by Reverend John Dunmore Lang. Rather than sending anonymous labourers, Lang selected skilled tradesmen with the goal of contributing to Sydney's public and cultural life. The colonial government supported the initiative by providing land and resources for his Australian College and Scots Church.

Carpenters, blacksmiths, and stonemasons quickly found work in a colony hungry for infrastructure. Many laboured in the sandstone quarries of The Rocks and Pyrmont, helping to shape the architectural character that still defines parts of Sydney today. To Lang and his supporters, these skilled tradesmen were more than just workers; they were regarded as essential contributors to the colony's growth and the development of its social and cultural institutions.

Religion and social structure were central to Lang's vision for preserving the moral fabric of the new colony. The Scots Church, established shortly after the group's arrival, was more than a place of worship—it served as a cultural anchor. He regarded such institutions as vital to maintaining Scottish identity and religious order in a morally precarious environment.

Sydney in the 1830s was a city of stark contrasts, with pubs and brothels crowding the backstreets. Lang and his allies—wealthy Scots and settler patrons—believed education, faith, and shared purpose could keep the mechanics from drifting into vice or anonymity.

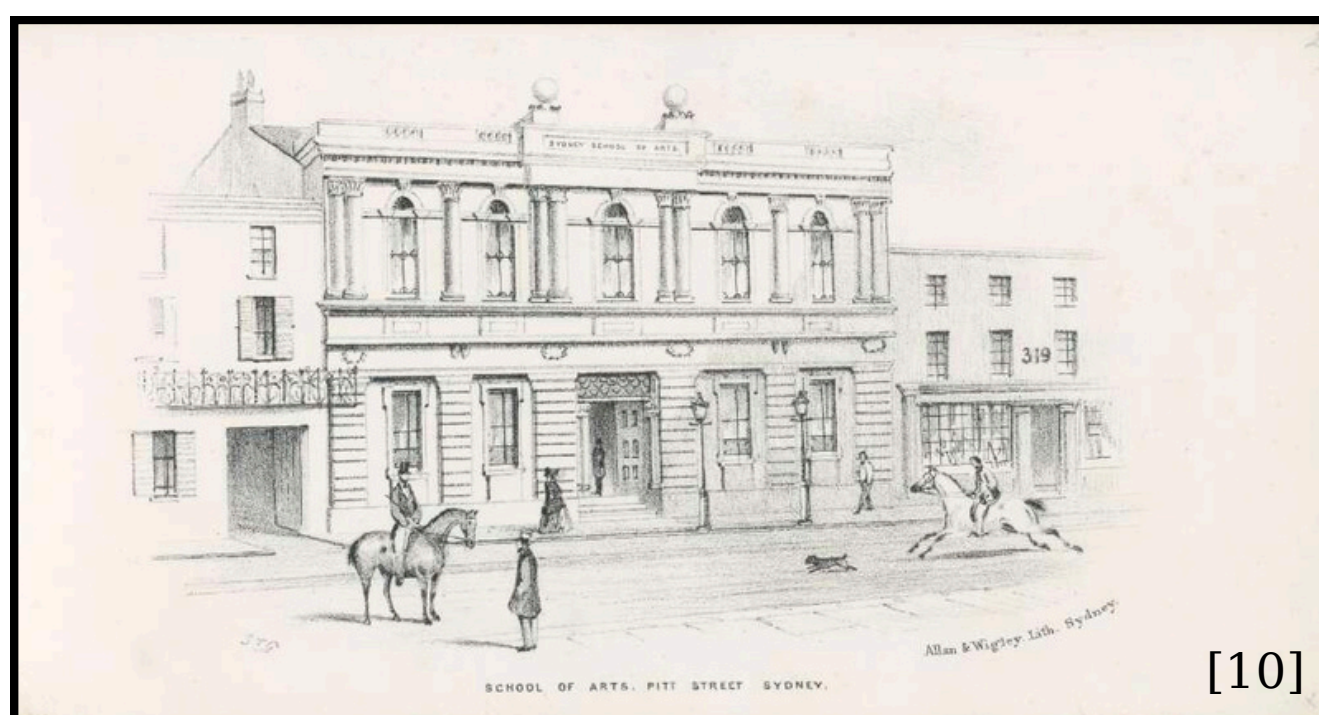
Life for the newcomers was not easy. Many lived in temporary shelters or boarded with local families. The climate was unfamiliar, and the working hours were long. Yet amid the hardship, the sense of purpose remained strong.

During the voyage, educator Henry Carmichael had offered evening lessons in arithmetic, geometry, and political economy. These shipboard classes directly influenced the establishment of the Sydney Mechanics' School of Arts (SMSA) in 1833, with many of the *Stirling Castle* men among its first members.

Some stayed in Sydney for life, becoming homeowners, small business operators, and community leaders. Others moved inland or disappeared into the broader working class, their names unknown but their craftsmanship still present in stone and timber.

Their legacy lives on not only in the city's buildings, but in the institutions they helped establish. The SMSA became a cornerstone of lifelong learning, its lectures, library, and courses serving generations of working Sydneysiders.

The Scots who stepped off the *Stirling Castle* didn't just arrive in Sydney - they helped build it.



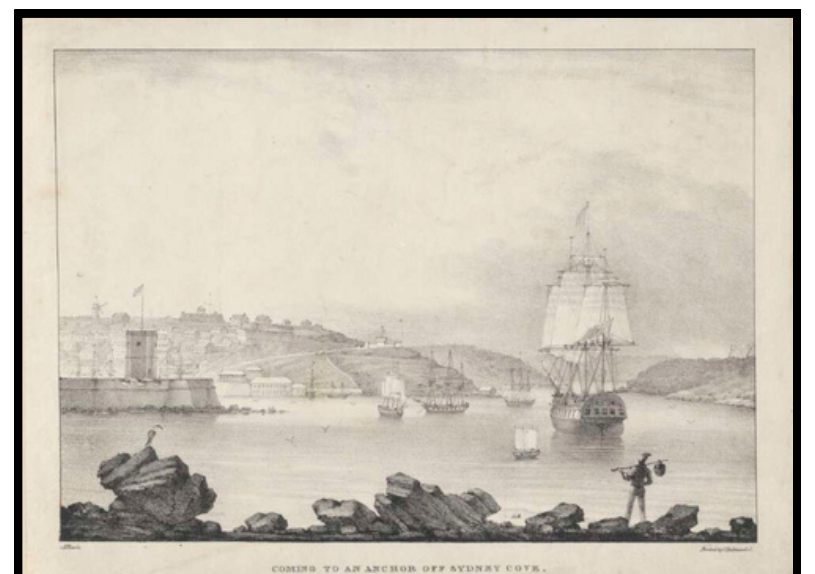
[10]

DID YOU KNOW?

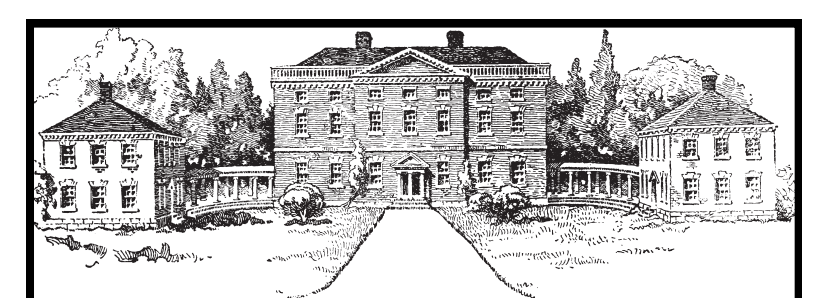
- When the *Stirling Castle* first arrived in Sydney Cove, it was briefly placed under quarantine after reports that measles were present on board. However it was soon confirmed there were no cases, and the passengers were allowed to disembark.
- During the voyage, Reverend John Dunmore Lang and several mechanics aboard the *Stirling Castle* made a formal pledge of sobriety, promising to abstain from alcohol except when necessary.



[9]



[11]



Images:

[9] View of Sydney Cove by Thomas Watling, c. 1800. Image courtesy of Mitchell Library, State Library of New South Wales.

[10] School of Arts, Pitt Street, Sydney 1856, by Samuel Thomas Gill. Image courtesy of National Library of Australia.

[11] Image: Coming to Anchor off Sydney Cove by Augustus Earle (c.1830). Image courtesy of National Library of Australia.

Sources:

Lang, J. D. (1877). *Reminiscences of My Life and Times, Both in Church and State in Australia, for Upwards of Fifty Years*. (Melbourne: Heinemann, 1972), especially Chapter V: "Immigration; and the Scotch Mechanics of 1831."

Dunn, M. (2011). *Carmichael, Henry*. Dictionary of Sydney. Retrieved from: https://dictionaryofsydney.org/entry/carmichael_henry

Dictionary of Sydney. (n.d.). *Sydney Mechanics' School of Arts*. Retrieved from https://dictionaryofsydney.org/entry/sydney_mechanics_school_of_arts

Lang, J. D. (1878). *The Fatal Mistake and Two Statements on the Scots Church, Sydney*. Sydney: [Library of Australian History facsimile edition, 1978].

ADVANCE AUSTRALIA Sydney Gazette. (1831, October 15). *The Sydney Gazette and New South Wales Advertiser (NSW : 1803 - 1842)*, p. 2. Retrieved August 12, 2025, from <http://nla.gov.au/nla.news-article2203083>

Lang, John Dunmore, 1799-1878 (1831). *Declaration made by Reverend John Dunmore Lang and others on board Stirling Castle, off Port Jackson, New South Wales, 13 October 1831, pledging themselves to abstain from the use of alcoholic spirits, except when necessary, 13 October 1831*. State Library of New South Wales.