

## Submission to the Jules Verne Forum

### Why Birkenhead Fascinated Jules Verne

By John Lamb

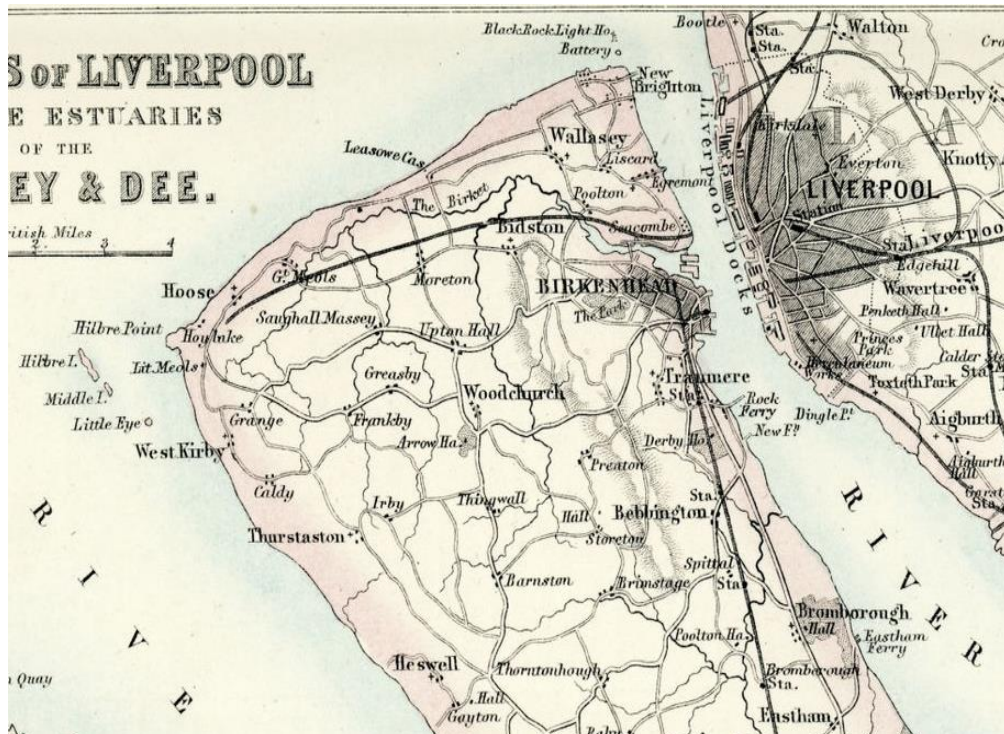


Fig 1. Birkenhead and the Wirral Peninsula in 1859, the time of Jules Verne's first visit.

#### Introduction

It has long been my claim (Lamb 2019) that the town of Birkenhead and the surrounding Wirral peninsula are the complex literary template for several of Jules Verne's most famous novels, namely *Journey to the Centre of the Earth* (1864), *20,000 Leagues Under the Seas* (1870), *The Mysterious Island* (1873) and *The Floating Island* (1895). These claims were outlined in the summer 2025 edition of the *International Review of Science Fiction* and reproduced in full on the Jules Verne Forum on April 2<sup>nd</sup>, 2025. The findings were supported by editor Paul March Russell who helped write the article, as well as Liverpool University Curator of Science Fiction Thomas Dillon and several other local authors and historians.

The posting of the article on the Jules Verne forum received over 100 views, (hopefully not all mine) however there was no feedback from members of the forum itself. William Butcher has suggested that to encourage feedback it may be useful to explain ‘Why did Verne choose Birkenhead in particular, rather than for instance Truro, Macau or Lincoln?’ This is a very fair question, and in this article, I will detail the places, events and personalities that attracted Jules Verne, the ‘Father of Science Fiction’, to Birkenhead, a small town lying opposite the Port of Liverpool in the northwest of England, and how the town is referenced throughout Jules Verne’s writings, both directly and indirectly.

After gaining his Law degree in 1849 Jules Verne joined the Theatre-Lyrique in Paris as a writer and producer of plays. He must have been very adept at storing, recycling and modifying the same stage scenery for use in different theatrical productions year after year. My article in *The International Journal of Science Fiction* (Lamb 2025) showed how Verne ‘recycled’ just one of his ‘Birkenhead stage sets’, that of Bidston Lighthouse, across three novels - *Journey to the Centre of the Earth* (1864), *The Mysterious Island* (1873) and *The Floating Island* (1895). In a follow up article to be posted on the Jules Verne Forum in August, I will catalogue how Verne used over 60 locations in Birkenhead as his ‘stage sets’ to form a ‘three-dimensional matrix’ of places to drive the entire plot line of his *Mysterious Island*. It is a four-dimensional matrix if you include Birkenhead’s historic events over time.

### **The Literary Background - Birkenhead in the known literature of Jules Verne.**

Jules Verne refers directly to Birkenhead and its Laird’s shipyard, in eight of his series of 64 novels known as the ‘*Voyages Extraordinaires*’. Verne did not venture outside France until in 1859, when, at the age of 31 he arrived in Liverpool onboard the ship *Hamburg* and the next day took the ferry to Birkenhead (*Backwards to Britain* 1859). Verne visited Birkenhead for a

second time in March 1867 from where he sailed on Isambard Kingdom Brunel's *Great Eastern* to New York and used the experience as the basis for his romantic adventure *A Floating City* (1870).

Verne later stated in the Strand Magazine (1895)

*'The town which I know best in England is Liverpool, and as I stayed there for some time with friends, I had a good opportunity of studying it, especially the docks and the Mersey'.*

This statement *I stayed there for some time with friends* is at odds with Verne's known movements of having spent just one night in Liverpool in 1859 and six nights in 1867. Seven days in total can hardly be described as 'some time'.

In addition, his staying with 'friends' (plural) rules out his sole companion Aristide Hignard on his 1859 visit to Liverpool and the sole companion of his brother Paul in 1867. So, who were the Liverpool/Birkenhead based friends of Jules Verne? Why are they not known to us? The revealed identity of these people may explain a great deal about what is to follow and will be the subject of a future article in answering William Butcher's second question, "Where did Verne find all the information which you claim he reproduced in his books?".

Jules Verne saw Birkenhead as a suburb of Liverpool and the first adventure in the *Voyages Extraordinaires* starts in Birkenhead with *The Adventures of Captain Hatteras* (1864). Six of Verne's fictional ships were manufactured in Birkenhead, the most notable being Captain Nemo's legendary submarine, the *Nautilus* in *20,000 Leagues Under the Sea* (1870) where the steel sheets of the double hull (i.e. over 80% of the whole submarine superstructure) are manufactured at '*Lairds of Liverpool*' before being shipped off in secret to Captain Nemo's desert island.

Verne would refer to Birkenhead or its Lairds shipyard at regular intervals throughout his forty-five-year writing career, and his own words show great affection for the town, calling it

a 'veritable suburb' with the ships built there being described as 'wonderful' a 'masterpiece' and a 'credit to the town of Birkenhead'. The novels mentioning Birkenhead and / or its Lairds shipyard are as follows.

*Backwards to Britain (1859)*

*The Adventures of Captain Hatteras (1864)*

*Twenty Thousand Leagues Under the Sea (1870)*

*A Floating City (1870)*

*The Adventures of Three Englishmen and Three Russians in South Africa. (1872)*

*Survivors of the Chancellor (1874)*

*An Antarctic Mystery (1897)*

*Traveling Scholarships (1903)*

The full transcripts of the relevant Birkenhead texts are given in **Appendix A**.

It is noticeable that the 'peak' Birkenhead years are from 1859 to 1874 when Verne was also at his peak both artistically and commercially.

The placing within the above list of the three novels that use Birkenhead as a literary template, may be relevant. Apart from the Birkenhead inspired *Journey to the Centre of the Earth*, the only other novel Verne wrote in 1864 (*The Adventures of Captain Hatteras*) really does start in Birkenhead. Verne's Birkenhead inspired *The Mysterious Island* (1873) is contemporaneous with two novels (*The Adventures of Three Englishmen...* and *Survivors of the Chancellor*) where the ships central to both novels are built in Birkenhead. While the Birkenhead built ship *Halbrane* in *An Antarctic Mystery* (1897) is written shortly after Verne's Birkenhead inspired *The Floating Island* (1895).

## **War, Peace, Technology and Adventure - What attracted Jules Verne to Birkenhead?**

For those that don't know Birkenhead, the town sits toward the mouth of the River Mersey on its western bank (see figure 1). Although its origins lie in the Anglo-Saxon period, and from the 12<sup>th</sup> century A.D. it hosted a Benedictine priory, Birkenhead remained a small agrarian settlement until the early 19<sup>th</sup> century.

Whereas its opposing neighbour, Liverpool, had already expanded dramatically, due to trade and industrialisation, Birkenhead was sheltered by the river until the late 1810's when, first, a ferry service and then a paddle steamer linked the two sides. Thereafter the town grew rapidly to become an icon of innovation. Although the term 'technological sublime' stems from the work of the American historian, Leo Marx, and refers specifically to the expansion of the Frontier via the construction of railroads, bridges, factories, telegraphy and the emerging towns and cities (Marx 1964), it can equally be applied to Birkenhead, such was its transformation and cultural influence.

The rise of Birkenhead was emblematic of the colossal changes driven by the Industrial Revolution. In 1818, when the land surveyor and future civil engineer Thomas Brassey established his business in Birkenhead, it was little more than a hamlet. But forty years later, in the same year as Verne's first visit, Frederick Law Olmsted, the designer of Central Park, New York wrote that Birkenhead *seems to me to be the only town I ever saw that has been really built at all in accordance with the advanced science, taste and enterprising spirit that are supposed to distinguish the nineteenth century* (Olmsted 1851). Indeed, future British Prime Minister Benjamin Disraeli would compare Birkenhead to a new Damascus. (*The New Crusade* 1847).

Birkenhead's Lairds shipbuilders, founded by William Laird and his son John in 1828, were world pioneers in iron ship construction. In 1832, William Laird's youngest son, the abolitionist Macgregor Laird had designed the world's first ocean going iron ship the *Alburkah* for an expedition up the Niger River, described by Jules Verne in *Great Explorers of the Nineteenth Century* (1881). In 1834 Lairds built the *John Randolph*, the first iron ship to appear in the Americas, and in 1838 Macgregor Laird's *Sirius* was the first iron steamship to cross the Atlantic Ocean under its own power (Fletcher 1910).

At the same time though, as Birkenhead was at the forefront of technological modernity, it was also inadvertently a contributor to new theories of Earth's geological past. Dinosaur footprints, found at Brassey's quarry at Storeton in Birkenhead in 1838 caused a sensation amongst paleontologists and were eventually displayed in the foyer of the Natural History Museum in London after its opening in 1881.

Prior to that a life size replica of the 'Birkenhead Dinosaur' had on the insistence of the paleontologist Richard Owen (the man who invented the word 'dinosaur') been cast in concrete to form part of the Dinosaur Court unveiled at the Crystal Palace Park at Sydenham, London in 1854. Positioned overlooking an ichthyosaur, a plesiosaur and a pterodactyl, this sequence, according to M. Schroeder 2019 in his *Cryptanalysis in Classical Literature*, was subsequently copied in the illustration for Verne's *A Journey to the Centre of the Earth*.

William Butcher lists Verne's pre 1864 visits to Britain as Liverpool, Scotland and Sydenham respectively (Butcher 2001) and then elaborates (Butcher 2006) *At some stage in the mid 1860's, he visited Crystal Palace, rebuilt in Sydenham, and marveled at the new cryptographic techniques.* As we shall see there is certainly a Birkenhead cryptographic link in *Journey to the Centre of the Earth* connected to the name of Verne's fictional Icelandic explorer Arne Saknussemm.

Birkenhead Park, the World's first public park was completed in 1847 and would be described in detail by the American author and Birkenhead resident Nathaniel Hawthorne (1853), it became Olmsted's model for Central Park, New York. In his glowing description of the young girls in the park on the *The Floating Island* (1895) Jules Verne would, almost word for word, satirize Hawthorne's 1853 *English Notebooks* and its disparaging description of young girls, local climate and class structures in Birkenhead Park. (Lamb 2019 and **Appendix B**).

In 1847, the Irish abolitionist Daniel O'Connell would lie in state in Birkenhead with thousands of his Catholic supporters filing past his coffin (O'Kelly 1947). O'Connell's portrait would later adorn the cabin wall of Captain Nemo's *Nautilus* in *20,000 Leagues Under the Seas*.

In the late 1840's the enclosure of the natural tidal inlet of Wallasey Pool on the northern boundary of Birkenhead, created the world's largest enclosed dock. The engineer Thomas Brassey diverted the River Birkett around the new dock system through a mile long and ten feet wide tunnel called The Great Culvert. A feat of engineering that, as we shall see, would not go unnoticed by Jules Verne.

In 1853 the name Birkenhead became synonymous with the bravery and heroism that was seen as symbolic of the expansion of the British Empire. The Lairds built troop carrier HMS *Birkenhead* struck a reef off South Africa and sank with the loss of most of the troops onboard who had stood to attention as women and children were loaded into the lifeboats. The phrase 'Women and Children First' became synonymous with chivalry and to this day is known as 'The Birkenhead Drill' – a drill used by Jules Verne as the New Hebridean natives attack the town hall in Verne's Birkenhead inspired *The Floating Island* (1895) and by Rudyard Kipling in his poem *Soldier an' Sailor too* (1896).

By the 1850's Birkenhead had become the worldwide manufacturing headquarters to Thomas Brassey, the greatest international engineer of the 19<sup>th</sup> century and an employer of over 80,000 workers worldwide (Wouters et al 2018).

Brassey had been encouraged to venture into railway construction by George Stephenson (of Stephenson's Rocket fame) when they met at Storeton Quarry Birkenhead.

Amongst Brassey's many global achievements he had built three quarters of France's railways and in 1856 had been awarded the Legion d'honneur by the French Emperor Napoleon III.

Jules Verne would pay a backhanded compliment to Brassey's company following the Liverpool segment in his *Backwards to Britain* (1859) for swiftly ending the 1853 siege of Sebastopol and relieving French and British troops.

*'The British are, with the Americans, the world's leading mechanics. They shrink from no hurdle and when a new idea occurs to them, think up the machine to carry it out. In short, where engineering is concerned, they can achieve anything. It is not surprising that during the Crimean War a serious company was set up, with substantial capital, to tender for the siege of Sebastopol, offering to take the town within an agreed period of time, past which it would pay millions in compensation for every day that elapsed. New machines would have been built to carry out this project, which would certainly have achieved a speedier result, with less loss of life than traditional warfare. But could there be any glory in a war reduced to a company transaction?'*

**Jules Verne *Backwards to Britain* (1859)**

In 1853 the abolitionists James and William Wilson set up their Price's Candle Works at Bromborough Pool, just south of Birkenhead. Prices were the world's biggest candle producer, and the Prices logo was one of their candles burning through a rope tying a slave to his 'master'.

Both James and William Wilson are referred to as characters in the part Liverpool based 1849 novel *Mary Barton* by Elizabeth Gaskell (a former Birkenhead resident) while according to Nancy Henry (2018) fellow abolitionist John Cropper's name is purposely given to William Wilson's ship in the novel

Elizabeth Gaskell was a friend of William and James Wilson and she toured their factory in the presence of the abolitionist author Harriet Beecher Stowe (the author of *Uncle Tom's Cabin*) in 1853 while Stowe was staying at the house of John Cropper. The visit was at the behest of Verne's favourite author Charles Dickens (Kate Teltscher 2012).

Jules Verne would also pay tribute to the Birkenhead abolitionists William and James Wilson by having Cyrus Smith copy their exact patent for making Birkenhead stearine candles, using seal fat, rather than palm oil, in *The Mysterious Island*. (See **Appendix C**). Bromborough Pool, (the site of Prices factory, has a major role as Port Balloon in Verne's *Mysterious Island*)

The fact that two authors with known Birkenhead connections (Gaskell and Verne) are both paying secret tributes in literature to the abolitionists William and James Wilson, may be relevant when I attempt to answer William Butcher's second question of 'Where did Verne find all the information which you claim he reproduced in his books?'

In 1857 the American entrepreneur Cyrus Field secured investment in Birkenhead for the world's first transatlantic cable (Pickering 1935). The cable was designed and half the length manufactured in Birkenhead under the joint research of the engineer Fleeming Jenkin in Birkenhead and his lifelong business partner William Thompson (later Lord Kelvin) in Glasgow. At Birkenhead, Fleeming Jenkin (later the academic mentor and friend of Robert Louis Stevenson) became the world's leading researcher into the insulating properties of the gutta percha coating on submarine cables and later invented 'telpherage' - the cable car.

According to Skrabec (2022) Jules Verne would later find the properties of gutta-percha a perfect fit for many of his stories. Jules Verne would lament the fate of the 1857 Birkenhead built cable in *20,000 Leagues Under the Seas* stating *it stopped working after transmitting about 400 telegrams*. Telegraphic cables would feature in many of Verne's novels, including the Birkenhead inspired *The Floating Island* (1895) where the town's main high street of Third Avenue (in reality, Birkenhead's main third avenue of Argyle St) is deserted due to everyone shopping by a teleautograph connected to the mainland via oceanic cables.

In 1858, Birkenhead's Thomas Brassey financed the completion of Isambard Kingdom Brunel's *Great Eastern* (Stacey 2005). The *Great Eastern* was financed from Birkenhead, sailed from Birkenhead (with Jules Verne on board in 1867), was refurbished by Lairds in Birkenhead for Napoleon III's Great Paris Exposition of 1867, and ultimately scrapped in Birkenhead – the ship was Jules Verne's lifelong passion and its 'wave line' hull design is claimed to have inspired Verne's design for the *Nautilus* (Ferreiro and Pollara 2017).

From being the subject of Verne's novel *A Floating City*, the successor to the *Great Eastern* also reappears as the *Leviathan IV* in Verne's *Paris in the 20th Century* (1863) docking in the new *Paris seaport*, which according to Verne had been constructed at Grenelle. Verne writes *the last century's Great Eastern would not have been worthy to be her launch*.

*In Paris in the 20<sup>th</sup> Century* (1863) Verne describes Grenelle using very similar phraseology to his description of Liverpool Docks from 1859's *Backwards to Britain*. Verne describes Grenelle as *something like Liverpool in the heart of France* with similar *granite quays* (see **Appendix D** for a direct comparison).

The point here is that if Verne can recycle his description of Liverpool Docks in *Backwards to Britain* (1859) and transport it 100 years into the future to *Paris in the 20<sup>th</sup> Century* (1863) then he can also recycle his description of Liverpool Docks and, as we shall see later, transfer it to the Pacific Ocean on his *Mysterious Island* (1873).

Verne stated in *Paris in the 20<sup>th</sup> Century* that in 1863 *a company was authorized to create plans* (this is factually correct) for a seaport and *sixty five years later, the State returned to the notion* – giving Verne's projected start date as 1928.

In real life, Verne's *Paris seaport* was finally constructed on the River Seine just a few miles downstream from Grenelle, at Gennevilliers. Work started on the first two docks in... 1928 (Communaute Portuaire website 2025).

In 1963, exactly one hundred years after Verne penned *Paris in the 20<sup>th</sup> Century*, the new Sea Port of Gennevilliers was twinned with... Birkenhead.

In 1858 the explorer David Livingstone left Birkenhead, bound for the Zambezi River with the Laird's built steel hull sections of the river steamer *Ma Robert* on board his ship *Pearl*. As the world's first galvanised steel vessel, Jules Verne's fictional mouthpiece of Colonel Everest would hail the *Ma Robert* as a 'masterpiece' from Lairds Birkenhead shipyard in *The Adventures of Three Englishmen and Three Russians in South Africa* (1872).

In 1859 the same year as Jules Verne's first documented visit to Birkenhead, the wildly eccentric American George Francis Train was also in the town building Europe's first street tramway. In 1870 George Francis Train, became the first person to travel around the world in 80 days. Train would state that *Jules Verne, two years later, wrote fiction of my fact* (Train 1902). Train's street railway from the Woodside Ferry terminal to the grand entrance of Birkenhead Park is replicated in Verne's Birkenhead inspired *The Floating Island* (1895).

Verne would describe his 1859 arrival into the Port of Liverpool in his *Backwards to Britain* and according to William Butcher (1989) his meticulous description of Liverpool Docks, at the time, the largest seaport in the world, was reworked several times by the author.

In *Mysterious Island* (1874) the colonists board the *Bonadventure* to circumnavigate the island, this creates a problem for an author who is basing an island on a peninsula adjacent to Liverpool. Verne solves the problem by ingeniously 'skin grafting' on to the 'missing' side of the island a superb metaphorical description of Liverpool Docks based on his own literal description from *Backwards to Britain* (1859) and *A Floating City* (1870) (**See Appendix D**). Verne calls this the most *sinister* part of Mysterious Island and urban comparisons abound.

*...a strange character without equivalent perhaps in any corner of the world...composed of blocks of rock of all dimensions, from twenty feet to three hundred feet in height, and of all forms, cylindrical as if made on a lathe, prismatic like steeples, pyramidal like obelisks, and conical like a factory smokestacks...Here, bridges thrown from one rock to another ... large excavations ... sharp corners, pyramids, and arches such as no gothic cathedral ever had...this grandiose coast which extended for a distance of eight to nine miles...*

**Jules Verne *The Mysterious Island* (1874)**

In describing this ‘sinister’ coastline, Verne hides references to Liverpool’s role in the transatlantic slave trade which were far greater even than his hometown of Nantes and are written to empathise with the character of the freed black slave Neb.

... “*We’re in the shark’s mouth,*” Neb then noted, making allusion to the shape of the gulf.

“*All the way into the mouth, my brave Neb,*” replied Herbert, “*but you’re not afraid that it will close on us, are you?*”

“*No, Mr. Herbert,*” answered Neb, *but nevertheless this gulf doesn’t please me much! It has a wicked look...*

...*One could truly say that the worthy negro did not feel at ease in this enormous jaw...*

#### **Jules Verne *The Mysterious Island* (1874)**

Verne’s 1859 first visit to Birkenhead allows us to consider what the mid-19<sup>th</sup> century Wirral landscape had to offer to Jules Verne to inspire his storytelling (see figure 1). Let us take one example, the inspiration for the landscape of *The Mysterious Island* (1873).

One can almost imagine Verne visiting a Liverpool public house and trying to coax stories from sailors about desert islands, only to be met with the abrupt retort ‘Why don’t you just cross the river to the Wirral Peninsula and write about that...it’s just like a desert island!’

In 1859, except for the small growing settlement of Birkenhead, this is exactly what Wirral looked like. Birkenhead’s 10-metre tidal range (incidentally the same as *Mysterious Island*), was one of the highest in the world and hindered communication until the era of steamboats.

North of Birkenhead were wild sandhills (Verne’s ‘Downs’), to the west, Bidston Hill and its lighthouse (Verne’s volcano Mount Franklin), to the north the recently enclosed Wallasey

tidal Pool had created Wallasey Docks (Lake Grant) to the south was Tranmere Pool (The Mercy River) and further south Bromborough Pool (Port Balloon). Further to the west lay the waterfalls on the Arrowe Brook (The Falls River).

To the southwest lay Storeton Woods and quarry (the Forest to the Far West) where George Stephenson had persuaded Thomas Brassey to become a railway engineer. On the far side of the Peninsula was the rocky tidal Hilbre Island (the tidal Safety Islet) with its seal colony off the north end (the seal hunt). Also, on Hilbre Island was the Lady's Cave (Dakkar's Grotto) connected to the mainland by a submarine telegraph cable constructed by the Mersey Dock Estate, (Nemo's cable). To the northeast lay the small watering place of New Brighton with its Wormhole Cave (The Chimneys and the interior of Granite House). The sheer variety of landscapes on this small peninsula would not only create Verne's Mysterious Island but double up as the novel's starting point with Woodside ferry terminal becoming the Richmond omnibus terminal and Birkenhead's Hamilton Square becoming 'The Great Square of Richmond' (in real life there is no great square in Richmond Virginia).

All these real places on the Wirral and their Mysterious Island counterparts would share the same compass direction, distance and height relative to one another as Verne created his three-dimensional matrix of places.

Verne would not have to worry about where he put every location in Mysterious Island relative to one another as the island was based on a real place – Birkenhead and the Wirral Peninsula. Not only did this help Verne make his description of *The Mysterious Island* seem more realistic, but it also stimulated some amusingly bizarre (but ultimately suspenseful) plot lines, such as the elderly Captain Nemo, just a few nights before he died, getting up from his sick bed and single handedly laying a three-mile telegraphic cable to a cave, (Dakkar's Grotto), home of the submarine *Nautilus* just so he could tell the castaways to 'follow the

new wire'. Incidentally Nemo dies at exactly One O'clock and presumably the Birkenhead One O'clock gun goes 'boom' in his honour.

Returning to the area's history, Birkenhead's Royal Mersey Yacht Club also had a close links with two of Jules Verne's known sponsors, firstly the Paris based newspaper magnate James Gordon Bennett and secondly the Emperor Napoleon III of France who was a full life member of the Birkenhead yacht club.

Bennett, the owner of the *New York Herald* had his superyacht *Namouna* designed by Birkenhead Royal Mersey Yacht Club member St Clare John Byrne. Bennett was a literary sponsor of both Mark Twain and Jules Verne and had won the world's first transatlantic yacht race in 1866 in the yacht *Henrietta*. He later celebrated at a ball given by the Royal Mersey Yacht Club of Birkenhead (Harpers Weekly 1867).

Bennett's *New York Herald* appears prominently in Verne's *20,000 Leagues Under the Sea* while according to Volker Dehs (2020) Gordon Bennett is the model for the fictional *New York Herald* newspaper reporter Gideon Spillett, in Verne's 1874 sequel novel *The Mysterious Island* set of course in a metaphorical Birkenhead and Wirral.

In Jules Verne's *Around the World in Eighty Days* (1872) Phileas Fogg would race to Liverpool aboard the *Henrietta* presumably as a further homage to Bennett's 1866 yachting skills. In 1871 Gordon Bennett successfully sponsored the reporter Henry Morton Stanley's expedition to 'find' the explorer David Livingstone. Jules Verne would feature Bennett, Livingstone and Stanley together with the *New York Herald* in a lengthy passage in his antislavery novel *Dick Sand, a Captain at Fifteen* (1878).

In 1885 Gordon Bennett also commissioned Jules Verne / Michel Verne to write the short story *The World in 2889* (1889) (Evans 1995). Bennett shared Jules Verne's love of telegraphic cables having laid two of his own privately across the Atlantic in. Bennett's caricature from his own magazine *Vanity Fayre* depicts Bennett sitting beneath his newspaper and a telegraphic cable, alongside a prominent signature 'Nemo'.



**Fig 2. Gordon Bennet as portrayed in his own magazine Vanity Fair, November 1884.**

Gordon Bennett's name lives on today as a sign of incredulity in the English language.

Jules Verne's fascination with the American Civil War (1861-65) is well documented (Butcher 2006) and the conflict provides the continuous themed backdrop to *From the Earth to the Moon* (1865), *The Blockade Runners* (1865), *The Mysterious Island* (1873) and *North and South* (1885).

It should be noted that the first shots of the American Civil War were financed from Birkenhead, the most famous warship of the Civil War was manufactured in Birkenhead, the United States eventually threatened war with Britain due to events in Birkenhead, the only land-based American Civil War historic site outside the Americas is in Birkenhead, and the American Civil War officially ended in Birkenhead.

In April 1861, the American Civil War broke out with some of the first shots fired using a cannon donated by Charles Kuhn Prioleau (*Charleston Press* 1861), a member of the Royal Mersey Yacht Club of Birkenhead.

Prioleau was later heavily involved in bankrolling a Confederate Navy and the construction of the warship CSS *Alabama* from the intriguingly named (I hope to some Verne scholars) *Nautilus House* in Liverpool, the Head Quarters of the Southern Confederacy in Europe.

Other members of the Royal Mersey Yacht Club of Birkenhead included its patron Queen Victoria, her son, Edward Prince of Wales, French Emperor and Verne sponsor, Napoleon III, the world's richest man Cornelius Vanderbilt and his two grandsons, Frederick and William Kissemeier Vanderbilt.

Additional members included Prime Minister's son Lord Derby (whose family had previously been literary sponsors of William Shakespeare), shipbuilder John Laird, Thomas Brassey, Thomas Ismay (founder of the White Star Line of *Titanic* fame), and Captain Charles Judkins the real-life captain of the Cunard flagship *Scotia* – the first major ship attacked by Captain Nemo's *Nautilus* in Jules Verne's *20,000 Leagues Under the Seas*.

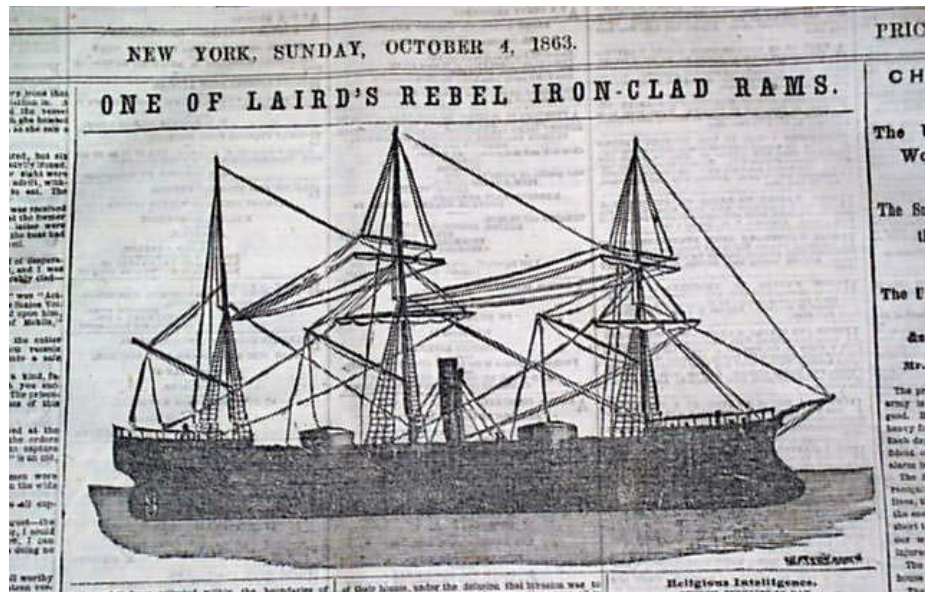
In July 1862, the hull of the Confederate warship CSS *Alabama* was constructed in secret at Lairds shipyard of Birkenhead and subsequently fitted with armaments on the remote island of Terceira in the Azores.

The construction of the CSS *Alabama* was masterminded by James Dunwoody Bulloch, the uncle of the future President Theodore Roosevelt.

In a two-year ‘pirate’ cruise across three oceans and 75,000 miles (20,000 Leagues) the CSS *Alabama* proceeded to hunt down and burn over 60 Union merchant ships and sink one United States warship, the intriguingly named (again I hope to some Verne scholars) USS *Hatteras*. Royal Mersey Yacht Club of Birkenhead member Cornelius Vanderbilt donated his own ship the USS *Vanderbilt* to Abraham Lincoln to catch the *Alabama* akin to Captain Nemo’s *Nautilus* being chased round the seas by the ship *Abraham Lincoln* in *20,000 Leagues Under the Seas*.

To compound the activities of the CSS *Alabama*, in 1863 James Dunwoody Bulloch and Laird’s shipyard completed two ironclad ram warships for the Confederate Navy in Birkenhead, their mission was the ramming of the Union’s wooden warships and the breaking of the naval blockade of the southern states before turning their formidable guns on New York itself.

The ‘modus operandi’ of the Laird Rams would not be lost in the writings of Jules Verne. Captain Nemo’s *Nautilus* would be vessel combining the adventures of the CSS *Alabama*, the tactics of a Laird Ram and a Captain whose alter ego was Raphael Semmes.



**Fig 3. Hysteria whipped up in the American Press regarding the ‘Birkenhead Rams’**

The threat of the Laird Rams set America into panic, American Assistant Secretary of the Navy Gustavus Fox stated, ‘*we have no defence against them*’ and ‘*it is a matter of life and death*’ while American Ambassador Charles Francis Adams stated that if the so-called *Laird Rams* left Birkenhead, then ‘*This is War*’.

Abraham Lincoln’s cabinet discussed the idea of sending a naval squadron to Birkenhead to destroy the rams. Gustavus Fox eventually paid \$5,000 to have the ships secretly blown up in Birkenhead (Stephen Fox 2007) however the rams were eventually impounded by the British Government and war averted.

In Verne’s *20,000 Leagues Under the Seas* the largely Birkenhead built *Nautilus* would use its own formidable ram against the *Scotia* and sink shipping across three oceans and its adventures would have over 100 links with the Birkenhead built CSS *Alabama* (Lamb 2019), of which I present the following as a small selection.

Both the *Alabama* and the *Nautilus* were mainly built in Birkenhead and finished on a desert island. Both the *Alabama*'s Captain Raphael Semmes and Captain Nemo were gifted natural historians.

Nemo's motto was *Mobilis in Mobile* while Raphael Semmes was from Mobile, Alabama.

Semmes was branded a pirate by Abraham Lincoln, who put a bounty on Semmes's head, and Semmes was chased around the seas by Admiral David Farragut of the US Navy. Nemo, conversely, was branded a pirate by Captain Farragut of the US Navy, who put a bounty on Nemo's head, and Nemo was chased around the seas by the ship *Abraham Lincoln*.

Both Semmes and Nemo encounter an imaginary island, sail through a patch of white water, encounter fake Havana cigars, mention coral mausoleums, shelter in an extinct volcanic island, and have their final battle off Cherbourg. Semmes had a portrait of the Confederate President, Jefferson Davis, in his cabin while Nemo had a portrait of the Union President, Abraham Lincoln, in his cabin.

The CSS *Alabama* was finally sunk off Cherbourg by the USS *Kearsarge* on 19<sup>th</sup> June 1864. The ship's captain Raphael Semmes was rescued from the waters of the English Channel by the yacht *Deerhound* of the Royal Mersey Yacht Club of Birkenhead. Semmes was picked out of the water by Henry Adams, the son of the Bidston Lighthouse keeper of Birkenhead and whisked off to Southampton to a heroes' welcome.

In the summer edition of the *International Review of Science Fiction* (Lamb 2025) I detailed how Bidston Lighthouse and Observatory became Verne's recycled stage set for the mountain Scartaris and the volcano Snaefells in *Journey to the Centre of the Earth* (1864), the volcano Mount Franklin in *The Mysterious Island* (1874) and for the observatory and tower in *The Floating Island* (1895).

Raphael Semmes later disappeared alone in Paris for two weeks on a forged passport supplied by the Confederate sympathiser, the Reverend Francis Tremlett, the supposed custodian of Semmes's memoirs (Stephen Fox 2007). Tremlett was also a member of the Royal Mersey Yacht Club of Birkenhead. It is my contention that Semmes's memoirs were at this time handed over to the author Jules Verne to become the literary template for *20,000 Leagues Under the Seas*.

The Father of Modern Oceanography Mathew Fontaine Maury, a friend of John Laird was a lodger at Francis Tremlett's house at this time and may have acted as an advisor on the novel. Maury is praised in both *20,000 Leagues Under the Seas* and Semmes's *Memoirs of Service Afloat During the War Between the States*, both released around the same time of March 1869 (Lamb 2019).

The *Deerhound* incident caused another major diplomatic row between Britain and the United States with American Secretary of State William Seward claiming that 'valuables' accumulated by Semmes in his 'piratical career' had been offloaded on to the Birkenhead bound *Deerhound* and that President Lincoln expected to be kept fully informed of events. Semmes eventually escaped back to America to serve in General Lee's army, where he was visited by Irish M.P. Thomas Connolly and described as *Hard as Flint*.

In March 1869 Jules Verne would write a somewhat cryptic note to his publisher Jules Hetzel about the origins of Captain Nemo and include a carefully veiled link to the pro slavery Raphael Semmes's and his later army career with the Confederate General Lee.

*'His nationality needs to be kept vague, together with the causes which cast him onto his strange existence. In addition, the incident of the Alabama or a false Alabama is*

*unacceptable and inexplicable, if Nemo wanted to take revenge on the slavers, he only had to serve in Grant's army, and everything was settled.*' (Butcher 2019)

Jules Verne would later reference Semmes directly in his Civil War novel *North and South* mentioning Semmes's previous command, that of the CSS *Sumter*, a vessel later converted to the blockade runner CSS *Gibraltar* at Wallasey Docks (Lake Grant in *Mysterious Island*).

*The naval events which caused so much stir were the appearance of the Sumter and her famous Captain Semmes;*

#### ***North Against South* by Jules Verne (1887)**

Immediately after the end of the American Civil War, the family of the Confederate officer Mathew Fontaine Maury, the world's leading oceanographer, came to live in exile in Birkenhead (Corbin 2013). Maury had invented an electric submarine mine referred to as a 'torpedo' that was responsible for inflicting huge losses on Unionist shipping in the American Civil War. Maury's adversary, the Head of the United States Navy Admiral David Farragut (the inspiration for Captain Farragut of the ship *Abraham Lincoln* in *20,000 Leagues Under the Seas*) would famously cry 'Damn the torpedoes' during the Battle of Mobile Bay in 1864.

In *20,000 Leagues Under the Seas* Maury's work on ocean currents would be praised by Captain Nemo and his Civil War downfall commented upon by both Professor Aronnax and Raphael Semmes in Semmes's *Memoirs of Service Afloat During the War Between the States* (1869).

In Verne's sequel novel *The Mysterious Island* Captain Nemo would blow up the invading pirate ship using a submarine torpedo of the type invented by Matthew Fontaine Maury.

Verne would write “*So this torpedo explained the underwater explosion. Cyrus Smith, who during the War of the Union had had occasion to experiment with these terrible engines of destruction, was not mistaken*”.

On November 6<sup>th</sup>, 1865, the last surrender of the American Civil War took place in Birkenhead, England (Baldwin and Powers 2008) with the final taking down of the Confederate flag and surrender of the warship CSS *Shenandoah*. The *Shenandoah* had continued to sink Unionist whaling ships off Alaska for three months after the land war had ended. In fear of being tried as ‘pirates’, the ship, navigated by Irvine Bulloch, the uncle of the future President Theodore Roosevelt, sailed nonstop from Alaska to surrender at Tranmere Sloyne, Birkenhead (*Liverpool Mercury* 1865).

Jules Verne would appear to combine Maury’s torpedo and the final real life ‘pirate’ capitulation of the Confederacy at Birkenhead to inspire the fictional pirate capitulation at the hands of Captain Nemo in his Birkenhead based novel *Mysterious Island*.

Several of the *Shenandoah*’s pirate crew absconded to Birkenhead market for provisions (including Roosevelt’s Uncle, Irvine Bulloch) after she docked and this may have inspired the story of the several pirates who escaped from the pirate ship explosion in *Mysterious Island*.

Today Birkenhead Dock Number 4, the construction site of the CSS *Alabama* is one of only two designated American Civil War historic sites outside the Americas, the other is the final resting place of the CSS *Alabama* off Cherbourg (Civil War Preservation Trust 2006).

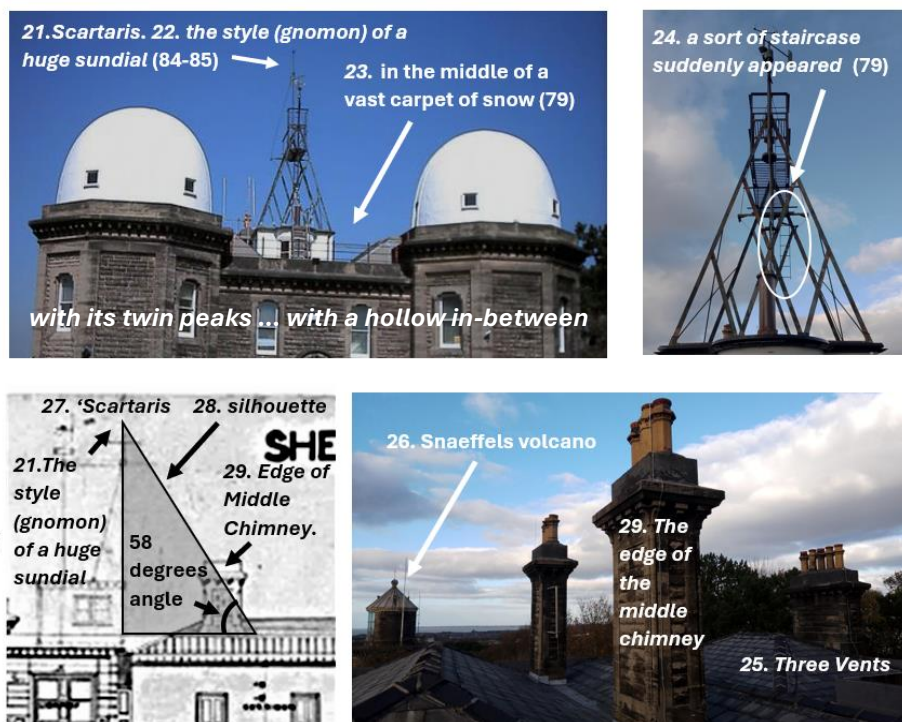
In the same year that the American Civil War finally ended in Birkenhead, the cable entrepreneur Cyrus Field obtained investment for a second Transatlantic Cable, this time from Birkenhead's Thomas Brassey (Gordon 2002). Jules Verne would write *The audacious Cyrus Field, the promoter of the enterprise, who was risking his entire fortune, launched a new subscription. It was immediately snapped up* (Jules Verne *20,000 Leagues Under the Seas* 1870).

Birkenhead's Thomas Brassey purchased *the Great Eastern* and converted it into a cable layer which laid the second successful Transatlantic cable in 1866. Brassey formed the 'Telegraph Construction and Maintenance Company' (TELCON) with two other partners, Messrs Gooch and Barber.

In *20,000 Leagues Under the Seas* Captain Nemo's *Nautilus* would follow the *Great Eastern's* cable on the ocean floor and Jules Verne would write *The enterprise had succeeded, and in its first telegram, young America sent old Europe wise words which are so rarely understood: Glory to God in the highest, and on earth peace, good will towards men.*

In 1866 the Bidston Observatory was completed on Bidston Hill overlooking Birkenhead based on plans drawn up in 1864. It contained two telescopic domes, one that observed comets and another that determined time from the stars. Until 1969, an electric signal would be sent by cable from the Observatory to the riverside One O'clock Gun allowing ships to set their onboard chronometers.

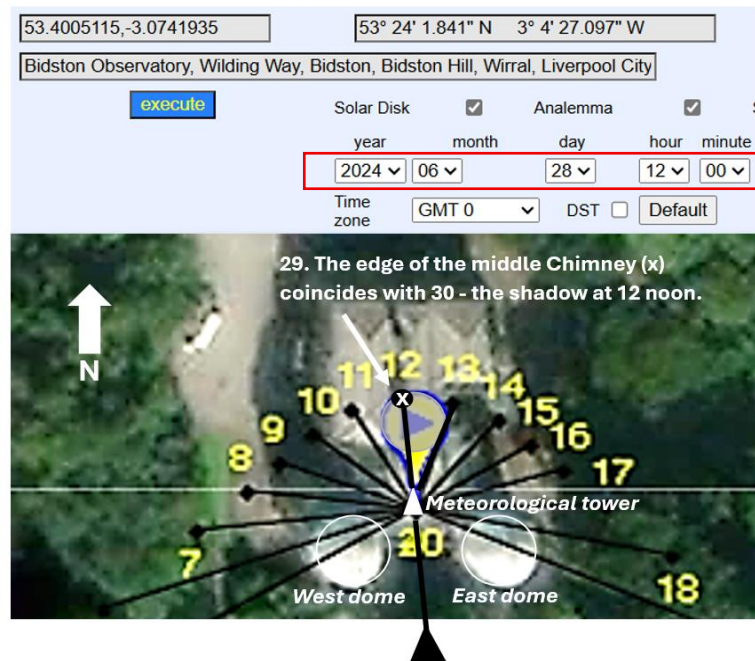
In common with Verne's own words describing the Icelandic mountain Scartaris and the volcano Snaeffels in *Journey to the Centre of the Earth* (1864) Bidston Observatory roof would also (like Scartaris) have a *gnomen of a giant sundial* (a triangular meteorological tower surmounted with a pole at the summit) lie between *twin peaks* (two observatory domes) a *staircase suddenly appeared* (metal ladder starting six feet in mid air giving access to the meteorological tower), and *three chimneys* (on the observatory roof) see figure 4 below.



**Figure 4. Features on the Roof of Bidston Observatory, Birkenhead matching the text from *Journey to the Centre of the Earth* (1864) – Scartaris, Snaeffels and three chimneys.**

Verne states the shadow from Scartaris, (the shadow cast by the top pole of the Bidston meteorological tower) at *midday on 28<sup>th</sup> June ...kissed the edge of the middle chimney.*

According to the Sunearthtools website (which can project the shadow from any place on the earth's surface at a given time and date). At 12 noon on 28<sup>th</sup> June 2024 (see figure 5 below) the shadow from the top pole of the meteorological tower at Bidston Observatory, does indeed touch the edge of the middle chimney.



**Fig 5. The shadow from the meteorological tower of Bidston Observatory (Scartaris) hitting the middle chimney (x) at 12 noon on 28<sup>th</sup> June 2024 as described in *Journey to the Ventre of the Earth* (1864) (Sunearthtools.com)**

One unique feature of Bidston Observatory is the ‘acoustic moat’ surrounding the building. According to Joyce Scoffield in her history of Bidston Observatory, ‘a deep trench known as the moat, surrounded the whole building to insulate the telescopes from the vibration caused by the movement of traffic’ (Scoffield 2006: 95).

Verne would write in *Journey to the Centre of the Earth* (1864) after reaching the bottom of the perpendicular chimney. ‘Have you ever spent a more peaceful night in our house on Königstrasse? No noise of cartwheels, no cries from the market, no yelling boatmen!’

As a side note, in 1944 the unique acoustic properties of Birkenhead's Bidston Observatory cellar were used to house the tidal gauges that decided the date of the D-Day landings as June 6<sup>th</sup> 1944. A cellar uniquely inspirational to Jules Verne would therefore later give the world (and his beloved France) the date of its freedom.

All this shows an unbelievable level of local and contemporary scientific knowledge at Verne's disposal. It could not be sourced via scientific periodicals alone... the timescales are too short and condensed. Instead Verne most likely accessed information by either seeing the detailed architects drawings of Bidston Observatory prior to construction or even talking to the designers themselves ...in other words the Birkenhead and Liverpool 'friends' that he 'spent some time' with.

In the *Mysterious Island* (1873), Verne makes Cyrus Smith work out the latitude of the island using a shadow stick and a complex formula. Verne's concocting a shadow cast by a meteorological tower as hitting a chimney at noon on 28<sup>th</sup> June for Scartaris is quite simple in comparison... but utter, utter genius.

In *Journey to the Centre of the Earth*, the spectre of the 'Birkenhead Pirate' the captain of the CSS *Alabama* Raphael Semmes would rise again in the cipher contained in the name of the Icelandic explorer Arne Saknussemm.

95% of surnames in Iceland end in 'sson' not 'Semm' and Verne's fictional Icelandic explorer, the first man to reach the Centre of the Earth is a clear coded derivation of the name Raphael Semmes.

  
Arne Saknussemm ..... Move the es to the end to give...

  
Arn aknusemmes

Arna knus **semmes** ..... read the last two words of the cryptogram backwards to give

**Semmes** sunk arna

Arna is Icelandic for the ‘Powerful Eagle’ – the symbol of the United States.

**Semmes sunk the powerful eagle**

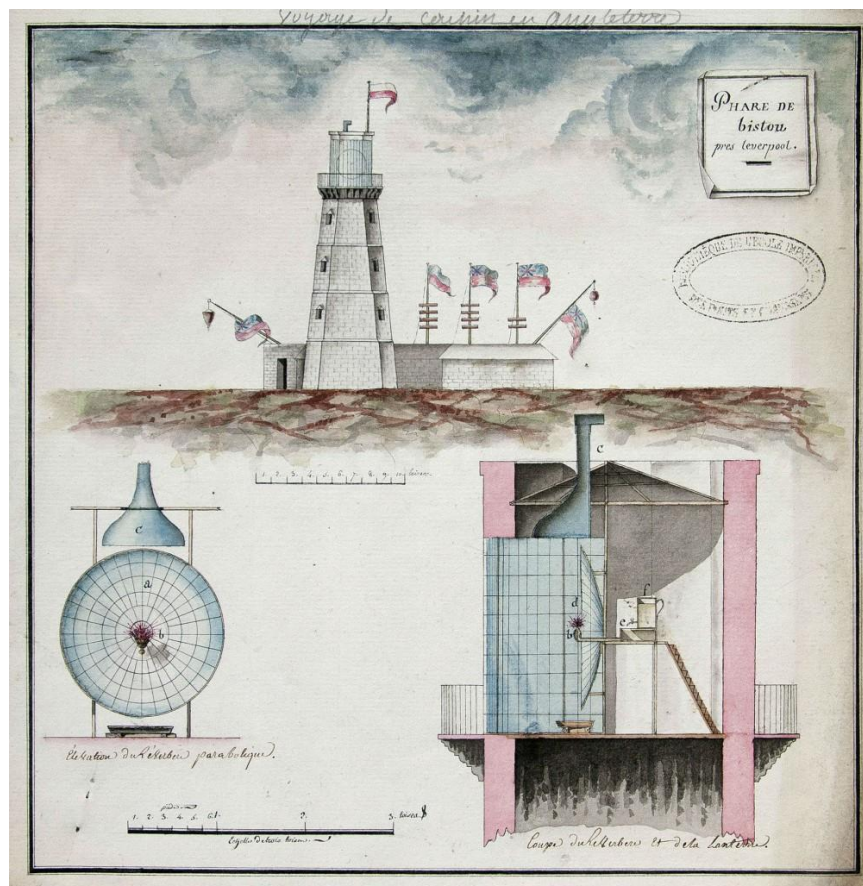
...all from an author who apparently could not speak English.

(Ken Lamb 2025)

Jules Verne will give a similar coded reference to the Birkenhead Pirate Raphael Semmes as he pops up fairly predictably as Captain Bloomsbury in *Around the Moon* (1869) and this will be explained in a future article.

Bidston Lighthouse, originally constructed in 1771 and rebuilt in 1873, was itself a technological innovation due to its pioneering use of a huge parabolic reflector, designed by its architect, the Liverpool dockmaster William Hutchinson and was the subject of a study by

the French engineer Joseph Cachin in 1785 and now in the Paris Library. To Jules Verne its magnificent, fixed light beam, at the time, probably the most powerful light beam of any lighthouse in the world, would become the volcano Snaefells in *Journey to the Centre of the Earth* (1864) and Mount Franklin in *The Mysterious Island* (1874) (Lamb 2025).



**Figure 6 Bidston Lighthouse as drawn by Joseph Calchin (Paris Library)**

Jules Verne would revisit Birkenhead in 1867 sailing on Brunel's *Great Eastern* to New York in the company of Cyrus West Field. Today the completion of the first successful transatlantic cable is seen as the start of the 'Victorian Internet' (Standage 1999).

According to Verne scholar William Butcher (2001), Cyrus Field is the inspiration for the engineer Cyrus Smith in Verne's *Mysterious Island*. In a letter to Henri Pène du Bois on 17th

July 1887, Jules Verne would send regards to Cyrus Field and Gordon Bennett, so referencing in just one sentence, two of his six major character inspirations on *The Mysterious Island* (i.e. the characters of Cyrus Smith and Gideon Spillet).

*I shall be very glad if I may one day meet with Mr. G. Bennett, and if you are in touch with Mr. Cyrus Field, please remind him that I had the advantage of traveling with him on the Great Eastern on her crossing from Liverpool to New York in 1867.*

**Jules Verne letter to Henri Pène du Bois 17th July 1887.**

Cyrus Field's business partner, Birkenhead's Thomas Brassey is also the part model for Cyrus Smith. Brassey's engineering achievements in Birkenhead and the Wirral Peninsula become Cyrus Smith's fictional engineering accomplishments on *The Mysterious Island*.

Hence Brassey's first bridge over the Arrowe Brook at Saughall Massie (1829) becomes Smith's bridge across Red Creek, Brassey's bridge across Tranmere Pool (1839) becomes the bridge across the Mercy River (itself Verne's mischievous pun on the Mersey River), Brassey's straight A41 new Chester Road to Bromborough Pool becomes the straight road to Port Balloon, Brassey's Great Culvert Sewer, (entering the Mersey at engineer Jesse Hartley's granite sea wall, complete with vertical iron ladder) becomes Granite House, complete with a vertical ladder. The Great Culvert Sewer also plays the role of the tunnel and stream *Hansbach* in Verne's *Journey to the Centre of the Earth* (1864).

In 1871 the United States was embroiled in a bitter compensation row with the British Government over the damage incurred by Confederate warships built in British shipyards such as the Birkenhead built CSS *Alabama*.

In *A Floating City* (1870) Jules Verne would write as the *Great Eastern* left Birkenhead

*‘Captain Semmes, Minister of War, has made the South compensate for its ravages in Alabama.’*

In 1872, Britain finally agreed to pay the United States \$15million compensation in a settlement of the so-called ‘Alabama Claims’. Jules Verne would commemorate the event in *Around the World in Eighty Days*. (1874) by writing.

*The boasted “tour of the world” was talked about, disputed, argued with as much warmth as if the subject were another Alabama Claim. Some took sides with Phileas Fogg...*

*...I wouldn’t be surprised if they weren’t still discussing the Alabama Claim, although it’s been settled.’ ‘Possibly,’ was all that Mr Fogg said’.*

**(Jules Verne *Around the World in Eighty Days*. 1874).**

The ‘Alabama Rooms’ in Geneva Town Hall today celebrate the first example of international arbitration to settle a dispute between two countries, with a portrait of the ‘Birkenhead Pirate’ Raphael Semmes looming large over a ship’s model of the CSS *Alabama*.

The activities of the Birkenhead built CSS *Alabama* resulted directly in the Hague Convention, the formation of the League of Nations and ultimately the United Nations (Greenberg et al 2011). After President Ulysses S Grant ratified the ‘Alabama Claims’, it was agreed that a state of ‘perpetual friendship’ would exist between Great Britain and the United States.



**Fig 7. The Alabama Rooms in Geneva with Raphael Semmes portrait bottom left and CSS *Alabama* ship's model to the right.**

The Historian WH Brands (2012) stated the settling of the *Alabama Claims* paved the way for ‘*the most important and enduring alliance in modern world history.*’

Apart from being the catalyst for the formation of the United Nations and ‘The Special Relationship’ between Britain and the United States, Birkenhead’s final contribution to international brotherhood and world peace would in fact come three years after Jules Verne’s death. In 1908, Lord Baden Powell, perhaps, just like Jules Verne, having been inspired by Birkenhead’s contribution to technology, exploration, adventure, and both war and the peace in the 19<sup>th</sup> century, would specifically choose Birkenhead to inaugurate his Boy Adventure Scout Movement. The plaque is still on display in Birkenhead and reads.

*In this hall The Boy Scout Movement was publicly inaugurated by Lieut General Sir Robert S.S. Baden-Powell KCB on January 24<sup>th</sup> 1908. This tablet was unveiled by The Chief Scout Sir R.S.S. Baden Powell KCB on April 25<sup>th</sup> 1910.*



**Fig 8. Baden Powell Memorial Plaque, Birkenhead.**

One author would agree with Frederick Law Olmsted, Disraeli Jules Verne, Robert Baden Powell and indeed with the United Nations in Geneva, about Birkenhead's contribution to the 'advanced science' and 'enterprising spirit' that 'distinguished the nineteenth century'.

While at the White House in Washington, the author would meet President Theodore Roosevelt, a man who wrote to Jules Verne telling him he had read all his books (Butcher 2006), a man whose sheer personality had been indelibly forged by his Uncle James Dunwoody Bulloch, the brainchild behind the Birkenhead built CSS *Alabama*, and also his

uncle Irvine Bulloch who served on the CSS *Alabama* and fired the last shots before being sunk by the USS *Kearsarge* on 19<sup>th</sup> June 1864 (Roosevelt 1906).

The author would write;

*Birkenhead or Milan or London or Calcutta, a huge extension of human power and the scale of human operations. This growth was elaborated in the physical and chemical laboratories and the industrial experiments of the eighteenth and early nineteenth century and chiefly in Europe.*

The name of the author was H.G. Wells and his book was *The Future in America*. (1906).

It is quite remarkable that Jules Verne compares the growth of America in *Mysterious Island* metaphorically to Birkenhead throughout the novel, while H.G. Wells compares the growth of America literally to Birkenhead. Both Verne and Wells hide Birkenhead in a list of places.

To both Jules Verne and H.G. Wells, Birkenhead, was indeed ‘a huge extension of human power’ and to Jules Verne, at least worthy of driving the plot lines of *Journey to the Centre of the Earth* (1864), *20,000 Leagues Under the Seas* (1869), *The Mysterious Island* (1873) and *The Floating Island* (1895).

One final author will join the fray and, again, use Birkenhead and particularly Bidston Hill, its lighthouse and its observatory, as a literary template in a novel (see Appendix F) that author, in his biography of his great friend Fleeming Jenkin who designed the Atlantic cable in Birkenhead, would compare Birkenhead to a desert island... and would write of Jenkin...

*By Tuesday morning he was at work again, fitting out cable ships at Birkenhead... But perhaps for what we may call private fame, there is no life like that of the engineer: who is a great man in out of the way places, by the dockside or on the desert island*

The author's name is Robert Louis Stevenson, and the novel set in Birkenhead and neighbouring Wallasey is *Treasure Island*. (Appendix F)

I would find the gravestone of Robert Louis Stevenson's cousin, his biographer and fellow south sea island resident Sir Graham Balfour, face down, not in Upolu in Western Samoa where he lived with Stevenson, but in the mud at Bidston Hill Birkenhead, even though Sir Graham Balfour had never lived in Birkenhead.

Sir Graham Balfour would be buried within yards of the three landmarks of Bidston Windmill, Bidston Observatory and Bidston Lighthouse, and these three buildings would play the *three tall trees on Spyglass Hill* in Stevenson's *Treasure Island* and point to Captain Flint's missing treasure.



**Fig 9. The gravestone (restored) of Robert Louis Stevenson's cousin, found by the author at Flaybrick Cemetery, Bidston Hill, Birkenhead.**

## **Conclusion**

William Butcher asked me the question ‘Why did Verne choose Birkenhead in particular, rather than for instance Truro, Macau or Lincoln? None of those other places were adjacent to Liverpool, the world’s greatest seaport of the 19<sup>th</sup> century, and for thirty years between 1860 and 1890, the second largest metropolis in the United Kingdom and truly the ‘Second City of Empire’.

Birkenhead grew on the slipstream of Liverpool and therefore punched well above its weight for any other comparable town of 50,000 people, whether it be Truro, Macau or Lincoln. But Birkenhead had one thing that Liverpool didn’t ...it had space, space to innovate, space to build large ships, space to build the largest dock in the world, railways, bridges, telegraphic cables and perhaps most importantly of all, it had the space to free up the human imagination.

William Butcher’s second question is more problematic ‘Where did Verne find all the information which you claim he reproduced in his books?’ In many ways, I think the answer is only partly explained in the text of this article...with the Lairds, the Maurys, the Brasseys, the ‘friends’ who Verne may have stayed with in Liverpool ‘for some time’. However, I feel that in answering the complexities of that question it will require a separate article.

As we shall see in my next posting on the Jules Verne Forum, it is in Verne’s *Mysterious Island*, that he creates a multiracial harmonious ‘mini-America’ on the aptly named Lincoln Island in the middle of the Pacific and models it, with the height of irony on the town of Birkenhead - the very town which gave Abraham Lincoln so much angst in the American Civil War, the town Lincoln once considered destroying and the very town in which that terrible war ended.

Such is the genius of Jules Verne. Some may dismiss this article as a simple listing of ‘coincidences’ and ‘looking for causation where causation does not exist’ and so I defer to Robert Louis Stevenson in his introduction to *Treasure Island*. As Verne and later Robert Louis Stevenson are actively giving clues.

*If sailor tales to sailor tunes,  
Storm and adventure, heat and cold,  
If schooners, islands, and maroons,  
And buccaneers, and buried gold,  
And all the old romance, retold  
Exactly in the ancient way,  
Can please, as me they pleased of old,  
The wiser youngsters of today:*

*—So be it, and fall on! If not,  
If studious youth no longer crave,  
His ancient appetites forgot,  
Kingston, or Ballantyne the brave,  
Or Cooper of the wood and wave:  
So be it, also! And may I  
And all my pirates share the grave  
Where these and their creations lie!*

**Robert Louis Stevenson 1850- 1894**

**John Lamb 1<sup>st</sup> July 2025.**

## APPENDIX A

### Full References to Birkenhead / Lairds shipyard in the writings of Jules Verne.

*After a long walk, which enabled the two friends to discover all these extraordinary sights without pausing to dwell on details, they reached a floating wharf on iron rafts which rose and fell with the tide, making it easier to reach and leave the Birkenhead ferries.*

*The steamboats used for this crossing are equipped with rudders at both the helm and the bow: by using them alternately, the ferryman does not need to manoeuvre and thus saves precious minutes. The boats are always crowded with passengers and, although the crossing lasts barely ten minutes, every ferry is equipped with a compass, since fog is common on the river and can blot out the opposite shore.*

*With Jonathan in tow, Jacques jumped into one and for the modest price of one penny they crossed over to Birkenhead. People of all social ranks crowded on deck. There was no distinction between first class and second-class seats. Tradesmen, fishwives and workers sat side by side without bothering their neighbours: any distinction would have wounded the British sense of equality.*

*Jonathan found himself sitting next to a poor girl with an empty basket who was returning to Birkenhead at the end of her day's work. The sweet pretty features of her worn face were moving to behold: her head sunk on her bosom, her crossed bare feet, the apathy of her careless posture, all betrayed a hopeless resignation.*

*Jonathan entered into conversation with the poor girl and learned that her mother had died on giving birth to a fifth child and that her father had abandoned the distressed family. Being the eldest sister. She had four children to bring up. Until now she had succeeded not in feeding them, but in delaying the time when they would starve to death. She told Jonathan of*

*her sufferings with dry eyes where tears had long since ceased to flow. Nothing was more depressing than this story, which is the fate of so many Liverpool workers.*

*Jonathan gave the girl a few coins and her only surprise seemed to be that a foreigner should take an interest in her. On reaching the landing-stage, she soon disappeared, without looking back. What a grim fate awaited that girl!*

*A life of misery if she concentrated on doing her duty, of shame if she heeded the advice of her dangerous charms.*

**Jules Verne. *Backwards to Britain* (1859)**

*The rumours built up over the last three months were still enough to keep the Liverpudlian tongues wagging...*

*...The brig had been built in Birkenhead, a veritable suburb on the left bank of the Mersey, linked to the port by the ceaseless to and fro of the steamboats...*

*Little but little, the brig had taken shape in the shipyard, with her qualities of strength and elegance impressing the experts. Not a day passed that Shandon did not visit Birkenhead...*

*...The day of departure, 5 April, arrived. Soon the Forward was out of the docks, and, directed by a Liverpool pilot, whose small cutter followed at a distance, it found the current of the Mersey. The two topsails, the foresail, and the brigantine were quickly hoisted, and, under this sail, the Forward, worthy of its name, after rounding the headland of Birkenhead, headed at full speed into the Irish Sea...*

*... Thus, on the Nautilus, which was lying at anchor near her, a group of sailors were trying to make out the probable destination of the Forward.*

**Jules Verne. *The Adventures of Captain Hatteras* (Abridged) (1864)**

*“But how could you construct this wonderful Nautilus in secret?”*

*‘Each separate portion M. Arronax was brought from different parts of the globe. The keel was forged at Creusot, the shaft of the screw at Penn and Co’s, London, the iron plates of her hull at Laird’s of Liverpool, the screw itself at Scott’s at Glasgow. The reservoirs were made at Cail & Co at Paris, the engine by Krupp in Prussia, its beak in Motola’s workshop in Sweden, its mathematical instruments by Hart Brothers of New York; etc and each of these people had my orders under different names.’ I set up my workshops on a small desert island in the middle of the ocean. There with my workmen, that is my good companions whom I instructed and trained, I completed our Nautilus’*

**Jules Verne. *Twenty Thousand Leagues Under the Sea* (1869)**

*First of all, the anchor had to be raised. ‘The Great Eastern’ swung round with the tide; all was now clear, and Captain Anderson was obliged to choose this moment to set sail, for the width of the ‘Great Eastern did not allow of her turning round in the Mersey...*

*A quarter past one sounded from the Birkenhead clock-towers, the moment of departure could not be deferred, if it was intended to make use of the tide... The greater part of the passengers on the poop were gazing at the double landscape of Liverpool and Birkenhead, studded with manufactory chimneys...*

*It was not long before the ‘Great Eastern’ was opposite the Liverpool Landing-stages. There were thousands of spectators on both the Liverpool and Birkenhead sides, and boats laden with sight-seers swarmed on the Mersey. Our last salutation reached us from the platform of the lighthouse and the walls of the bastion.*

**Jules Verne. *A Floating City* (Abridged) (1871)**

*"This vessel is a masterpiece from Leard and Co's manufactory in Liverpool.*

**Jules Verne. *The Adventures of Three Englishmen and Three Russians in South Africa.* (1872)**

*The "Chancellor" is a fine square-rigged three-master, of 900 tons burden, and belongs to the wealthy Liverpool firm of Laird Brothers.*

**Jules Verne. *Survivors of the Chancellor* (1874)**

*Solidly built, copper-bottomed ...the Halbrane was a credit to the ship-yards of Birkenhead.*

**Jules Verne. *An Antarctic Mystery* (1897)**

*The Alert was three years old, built in Birkenhead in the yards of Simpson and Company.*

**Jules Verne. *Traveling Scholarships* (1903)**

## APPENDIX B

### Jules Verne Satirizes Nathaniel Hawthorne's English Notebooks

*Yesterday afternoon J and I went to Birkenhead Park, which I have already described. **It so happened there was a large school spending its holiday there; a school of girls of the lower classes, to the number of a hundred and fifty, who disported themselves on the green under the direction of the schoolmistress and of an old gentleman. It struck me, as it always has, to observe how the lower orders of this country indicate their birth and station by their aspect and features. In America there would be a good deal of grace and beauty among a hundred and fifty children and budding girls, belonging to whatever rank of life. But here they had most universally a plebian look, - stubbed, sturdy figures, round, coarse faces, snub-noses, - the most evident specimens of the brown bread of human nature. They looked wholesome and good enough, and fit to sustain their rough share of life, but it would have been impossible to make a lady out of any one of them.***

***Climate, no doubt, has much to do with diffusing a slender elegance over American young womanhood; but something perhaps is also due to the circumstances of classes not being kept apart as they are here.***

**Nathaniel Hawthorne *English Notebooks* (1853).**

*At this time the park was crowded. **From the tower it looked like an immense basket of flowers.** The people were crowding in, grown men and young folks, none of those little fops which are the shame of the great cities of Europe, but strong well-built adults. Women and **girls, most of them in pale straw-coloured dresses, the hue preferred in the torrid zone,** leading little lap dogs in silk coats with chains laced with gold. Here and there these people*

were following the sandy paths, capriciously winding among the lawns. Some were reclining on the cushions of electric cars, others were seated on benches sheltered by the trees. Farther off young gentlemen were playing tennis, and cricket, and golf, and also polo, mounted on spirited ponies. **Groups of children – American children of astonishing exuberance, among whom originality is so precocious, particularly in the case of the girls – were playing on the grass.**

Great rejoicings took place in the park, where the sporting events were brought off with great enthusiasm. **The different classes associated together.**

**Jules Verne *The Floating Island* (1895)**

## APPENDIX C

### Jules Verne copies the 'Birkenhead Candle Patent' in paying tribute to the Birkenhead abolitionists William and James Wilson.

*In 1830 William Wilson created Edward Price and Co. and purchased the patent for the separation of coconut fats. George Wilson devised a process for cleaning palm oil with **sulfuric acid** and a new cheap source of fat was available. They develop this technology for use in candle making, to produce a harder, pure white **fat** known as **stearine**.*

*The by-products of **saponification** included **glycerine**. George Wilson manufactured and promoted this by-product. By 1864 a new method of ejecting candle from **moulds** using **compressed air** pushed candle production to 14 tons a day.*

*By 1870 it was being used as a treatment for burns and skin disease, as a food preservative, an additive to paints, a photographic emulsion, a suspension for vaccines and as a base for **soaps**. George Wilson was elected a Fellow of the Royal Society for his pioneering development of **glycerine**. Another by-product, a liquid fat called **oleine**, could be used as a light lubricating oil.*

#### Prices Candles - Wikipedia (abridged).

*Cyrus Smith needed only **sulfuric acid**. Heating this acid with the neutral fatty material, such as seal's fat, would enable him to isolate the **glycerin**; then from this new mixture it would be easy to separate the **olein**, the margarin, and the **stearin** using boiling water. But in order to simplify the operation, he preferred to **saponify** the **fat** by means of lime. He thereby obtained a sort of calcareous **soap**, easy to decompose with the **sulfuric acid**, which precipitated as sulphate of lime, freeing the fatty acids.*

*Of these three acids, **olein**, margarin, and **stearin**, the first, being liquid, was **expelled by pressure**. As for the other two, they formed the very substance which would be used for molding the candles.*

*The wicks, after several attempts, were made of vegetable fibres and, soaked in the liquified substance, they formed real **stearin** candles, **molded** by hand, lacking only whiteness and polish.*

**Jules Verne – *The Mysterious Island* (1874).**

## APPENDIX D

**Jules Verne uses his own description of Liverpool Docks from *Backwards to Britain* (1859) and *A Floating City* (1871) to create the 'missing' coast of The Mysterious Island.**

*'The entrance to the Port is impressive. .... To the right lies the point of Birkenhead, the cannon of its fort commanding the whole roadstead. Liverpool harbour occupies the whole estuary, and from the Irish Sea, it stretches inland from the river for some seven or eight miles.'*.. The 'Hamburg' was already steaming past granite walls where large black lettering spelled out the names of **Liverpool's immense docks, unequalled in the whole world...**

*'The true magnitude of Liverpool, which until then had seemed a town like any other, became apparent at the harbour. Its wet docks represent a Herculean achievement that is impossible to visualise, spreading out, double, triple even, over more than a league.*

**Jules Verne *Backwards to Britain* (1859) (abridged)**

*The greater part of the passengers on the poop were gazing at the double landscape of **Liverpool and Birkenhead, studded with manufactory chimneys.***

**Jules Verne *A Floating City* (1871)**

*Its tortured topography seemed to indicate sudden crystallization of the basalt while it was still molten in geological times. Piled up in a frightening way, it would have scared the colonists if they had first been thrown on this part of the island. From the summit of Mount Franklin, they had not been able to recognize **the deeply sinister aspect of this coast** because*

*they were too high; but, now seen from the sea, this shore presented a strange character without equivalent perhaps in any corner of the world.*

*The Bonadventure sailed a half mile along the coast. It was composed of blocks of rock of all dimensions, from twenty feet to three hundred feet in height, and of all forms, cylindrical as if made on a lathe, prismatic like steeples, pyramidal like obelisks, and conical like a factory smokestacks. Icebergs in the polar sea could not have been thrown together in more frightful confusion.*

*Here, bridges thrown from one rock to another, their arches arranged like the nave of a cathedral into whose depths the eye could not penetrate; in one place, there were large excavations whose vaults presented a monumental aspect; in another, a conglomeration of sharp corners, pyramids, and arches such as no gothic cathedral ever had.*

*All the caprices of Nature, still more varied than those of the imagination, were arranged along this grandiose coast which extended for a distance of eight to nine miles...*

*... "We're in the shark's mouth," Neb then noted, making allusion to the shape of the gulf.*

*"All the way into the mouth, my brave Neb," replied Herbert, "but you're not afraid that it will close on us, are you?"*

*"No, Mr. Herbert," answered Neb, but nevertheless this gulf doesn't please me much! It has a wicked look...*

*...One could truly say that the worthy negro did not feel at ease in this enormous jaw...*

**Jules Verne *The Mysterious Island* (1874)**

## Appendix E

### Jules Verne's Description of Liverpool Docks (in full) compared to the description of the Paris Seaport in Paris in the 20<sup>th</sup> Century.

*'The entrance to the Port is impressive. On the left stands a row of huge buildings displaying the English passion for order, and a great many lights illuminate that part of the coast. To the right lies the point of Birkenhead, the cannon of its fort commanding the whole roadstead. Liverpool harbour occupies the whole estuary, and from the Irish Sea, it stretches inland from the river for some seven or eight miles.'*

*The 'Hamburg' was already steaming past **granite walls** where large black lettering spelled out the names of **Liverpool's immense docks, unequalled in the whole world. On reaching Victoria Tower**, which guards the main harbour entrance, the ship dropped anchor in the middle of the river: the state of the tide made it impossible to enter the docks.*

*'The true magnitude of Liverpool, which until then had seemed a town like any other, became apparent at the harbour. **Its wet docks represent a Herculean achievement that is impossible to visualise**, spreading out, double, triple even, over more than a league. How they open one into the next is such a mystery that not even Ariadne's thread could guide a stranger out of such a liquid labyrinth. Ships are berthed so close that their mass blots out the water, ships of all sizes shapes and shores: American clippers built on a huge scale, whose superstructures could hold a nation; stout Dutch galliots. Invariably spruced and bright under their tarry varnish; slender steamers whose long ornate prows curve along the quaysides; three masters whose tonnage would put first class frigates in the shade; sailing lists pinned to colourful boards at their sterns of a thousand ships; delightful poetic names embossed in gold letters,*

names borrowed from the legendary lands of India and the East Indies, the gulfs, straits and rivers of America and the South Seas; **flags from all the globes nations floating in the mist, challenging the uniform grey with their gaudy colours.**

*In the holds there are mounds of bales bursting with **coffee, sugar, cotton**, stacks of logwood and mahogany, samples of every single colonial produce, all filling the air with exotic aromas; an army of workers most of them wearing black hats and large aprons fastened round the waist; coaches sliding along rails that crisscross in intricate loops; **weird machinery designed for specific tasks** – grabs, crane, a whole mechanical menagerie in perpetual motion, lifting bales, sacks and crates all bulging with goods; and, in the very heart of this bustling anthill, the whistling of steam. The chug and rattle of tramp steamers, the screeching of chains, the hammering of caulkers against a ships side, coaches thundering on **swing bridges**, hooves clattering on plates of metal, the swish of water as ships bump against each other, and the wind whistling through **the forests of masts** to the muffled breathing of the incoming tide – such are the sights and sounds of these docks that contain a whole sea, such the activity, the rhythm, the sounds – in a word, the life – of the Port of Liverpool.’*

**Backwards to Britain, Jules Verne (1859).**

*Already the capital seemed likely to become something like a **Liverpool** in the heart of France, a long series of canals and wet docks dug in the vast plains of Grenelle and Issy could accommodate a thousand high-tonnage vessels. **In this Herculean task**, industry seemed to have achieved the extreme limits of the impossible...The commercial waterways were connected by **cantilever bridges operated at fixed hours by means of the Catacomb Company’s compressed-air machines**... certainly it was a magnificent spectacle, these **steamers of all sizes and nationalities whose flags spread their thousand colours on the***

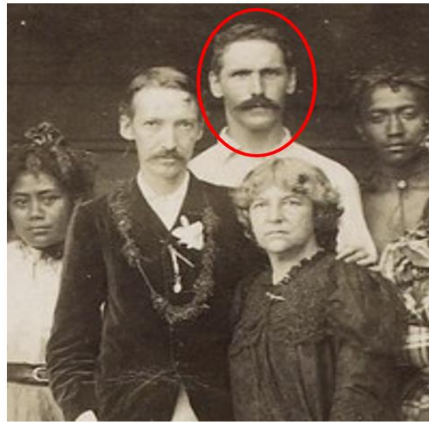
breeze, huge wharfs, enormous warehouses protected the merchandise which was unloaded by means of **the most ingenious machines**; some prepared packing materials, others weighed them, some labeled them, still others stowed them on board; ships towed by locomotives slid along the granite walls; bales of **cotton** and wool, sacks of **sugar** and **coffee**, crates of **tea**, all **the products of the four corners of the world** were heaped up in towering mountains of commerce; many coloured panels announced the ships departing for every point of the globe, and all the languages of the earth were spoken in **this Port de Grenelle, the busiest in the world.**

The sight of this vast basin from the heights of Arcueil or Meudon was really splendid; as far as the eye could see extended **a forest of flag studded masts; a tide signal tower stood at the entrance to the port**, while at the rear an electric lighthouse, no longer much used, rose into the sky to a height of 152 meters. This was the highest monument in the world, and its lights could be seen forty leagues away from the tower of Rouen Cathedral. The entire spectacle deserved to be admired.

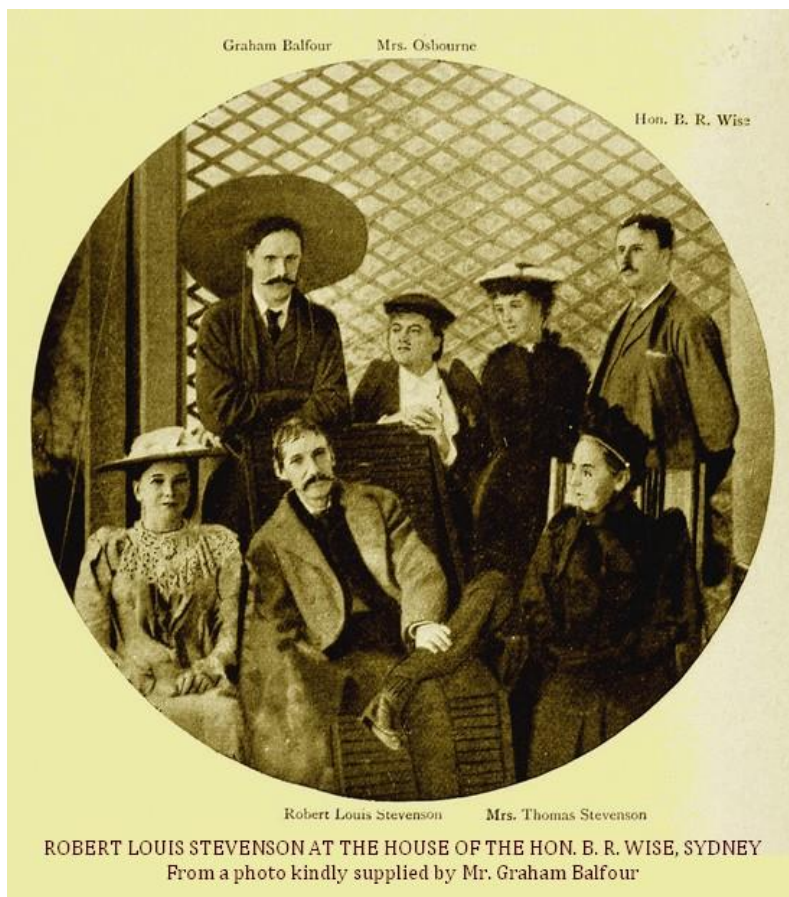
## Appendix F

# Bidston Hill and Robert Louis Stevenson's Treasure Island (1881).

In 1890 Robert Louis Stevenson moved to Upolu, an island in Western Samoa.

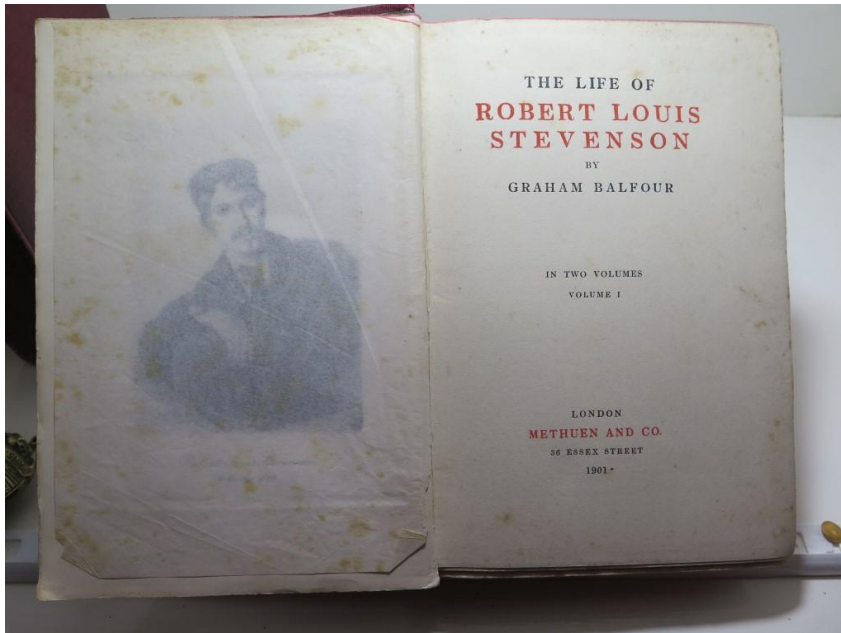


He was joined by his cousin and biographer Sir Graham Balfour.



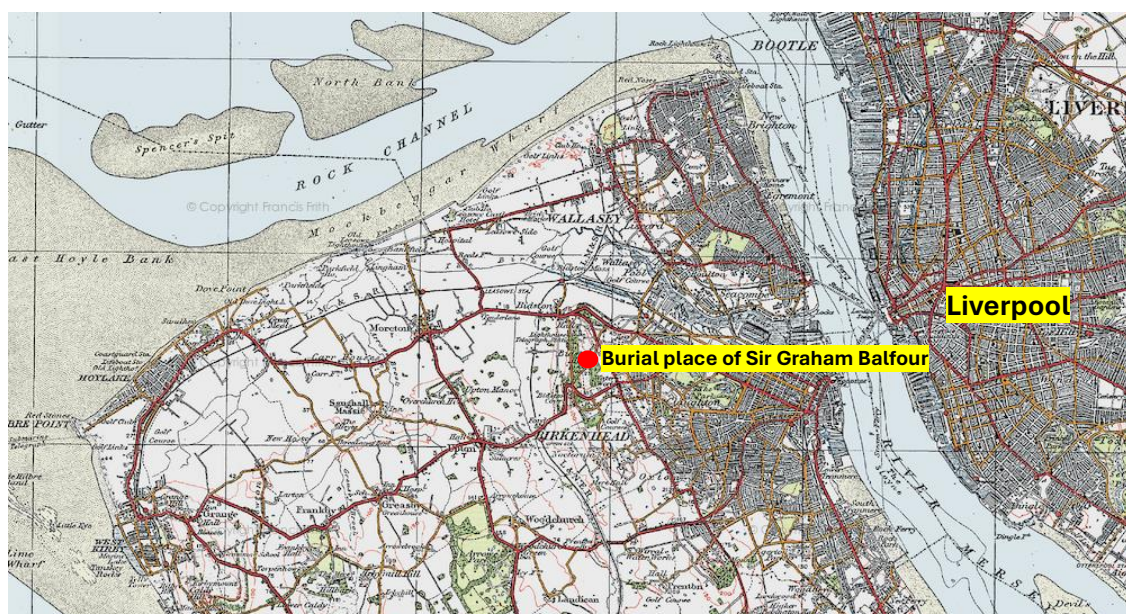
ROBERT LOUIS STEVENSON AT THE HOUSE OF THE HON. B. R. WISE, SYDNEY  
From a photo kindly supplied by Mr. Graham Balfour

**Balfour would write Robert Louis Stevenson's Official Biography in 1901.**



Sir Graham Balfour died in 1929 and despite being born in London and living in Staffordshire, strangely enough his express request was to be buried in his wife's home town of Birkenhead. His wife died in 1958 and is buried with him.

Sir Graham Balfour is buried at Flaybrick Cemetery on the flank of Bidston Hill, Birkenhead. Bidston Hill plays Spy-glass Hill in Stevenson's 1883 classic novel *Treasure Island* (see later).



Indeed, Balfour's grave is just 350 yards away from Bidston Windmill which 'plays' the first of the 'three tall trees' in Robert Louis Stevenson's *Treasure Island*.



I found the gravestone face down in the mud. The gravestone has been restored to an upright position thanks to help from the family of Sir Graham Balfour, The Friends of Flaybrick Memorial Gardens, The Robert Louis Stevenson Society and local Birkenhead people.

The inscription reads.

*And so. He bringeth them unto  
the haven where they would be.*

## Bidston Hill, Birkenhead ‘plays’ Spy-glass Hill on Treasure Island.

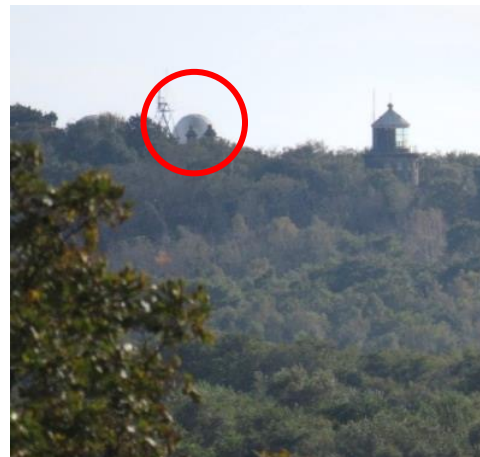
It is upon Bidston Hill, Birkenhead that Robert Louis Stevenson will complete probably the greatest metaphorical description in world literature as he consciously gives the reader clues that Spy-glass Hill on *Treasure Island* is actually Bidston Hill, Birkenhead. Here are the relevant final clues / quotes taken directly from the novel *Treasure Island*, as Stevenson proves a master of the metaphorical craft.

*Silver, as he sat, took certain bearings with his compass.*

*Sheer above us rose the Spy-glass, here dotted with single pines, there black with precipices.*

Robert Louis Stevenson *Treasure Island* (1883).

The dome of Bidston Observatory (*The Spy-glass*) on Bidston Hill, Birkenhead.

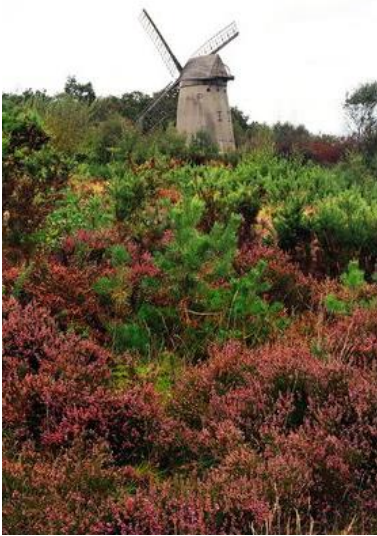


*“There are three ‘tall trees’” said he, “about in the right line from Skeleton Island. ‘Spy-glass shoulder,’*



Bidston Hill, Birkenhead – the ‘*Spy-glass shoulder*’ with ‘*the three tall trees*’.

*I take it, means that lower p'int there. It's child's play to find the stuff now. I've half a mind to dine first."*



*The first of the tall trees was reached, and by the bearings proved the wrong one.*

**Bidston Windmill... *the first of the tall trees.***

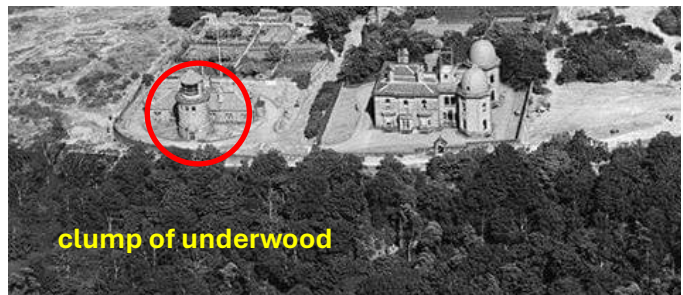
*So with the second*



**Bidston Observatory... the second tall tree**

*The third rose nearly two hundred feet into the air above a clump of underwood ...*

**Bidston Lighthouse... the third tall tree *above a clump of underwood***



*... a giant of a vegetable, with a red column...*

like the red sandstone column of Bidston Lighthouse.



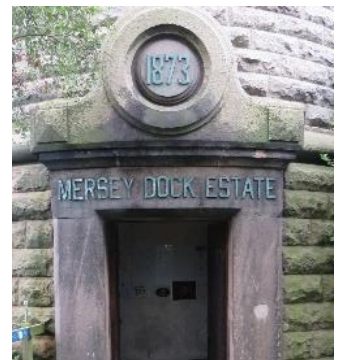
*... as big as a cottage...*

like the lighthouse keeper's cottage



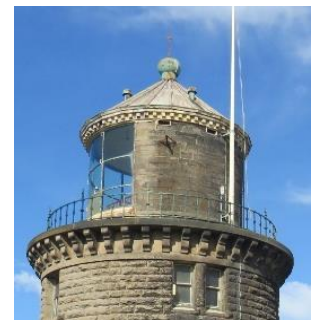
*and a wide shadow around in which a company could have manoeuvred*

Like the Mersey Docks and Harbour Company who built Bidston lighthouse and of course were a company dedicated to 'manoeuvring' ships in and out of the Port of Liverpool. Robert Louis Stevenson's own grandfather wrote in detail about Bidston Lighthouse.



*It was conspicuous far to sea both on the east and west*

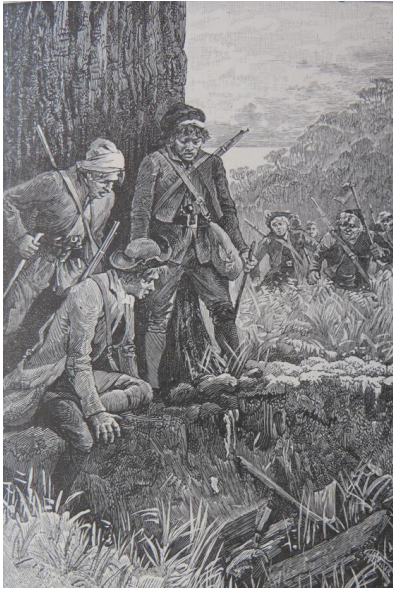
Bidston lighthouse is a fixed 'half-light' and is indeed conspicuous far to sea both on the east and the west.



*and might have been entered as a sailing mark upon the chart.*

Like the mariner's chart showing Bidston lighthouse as the main sailing mark and light into the Port of Liverpool.





*Before us was a great excavation, not very recent, for the sides had fallen in and grass had sprouted on the bottom. In this were the shaft of a pick broken in two and the boards of several packing-cases strewn around. On one of these boards I saw, branded with a hot iron, the name Walrus—the name of Flint's ship.*

At the foot of Bidston Lighthouse (the third tall tree).

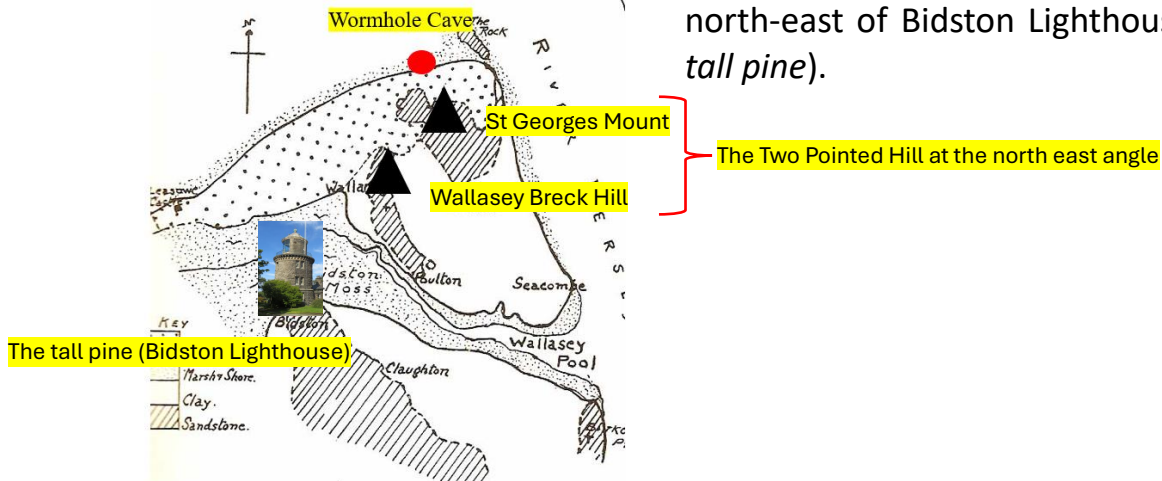
*All was clear to probation. The cache had been found and rifled; the seven hundred thousand pounds were gone!*

*Ben, in his long, lonely wanderings about the island, had found the skeleton—it was he that had rifled it; he had found the treasure; he had dug it up (it was the shaft of his pick-axe that lay broken in the excavation); **he had carried it on his back, in many weary journeys, from the foot of the tall pine to a cave he had on the two-pointed hill at the north-east angle of the island, and there it had lain stored in safety since two months before the arrival of the Hispaniola.***

**Robert Louis Stevenson *Treasure Island* (1883).**

Ben had found the treasure; he had dug it up, he had carried it on his back, in many weary journeys, from the foot of the tall pine (represented by Bidston lighthouse) to a cave (represented by Wormhole Cave) he had on the two pointed hill (Wallasey Breck and St Georges Mount) at the north east angle of the Wirral Peninsula, and there it had lain stored in safety.

The cave can only be Wormhole Cave in New Brighton. The only cave to the north-east of Bidston Lighthouse (*the tall pine*).



*When the doctor had wormed this secret from him on the afternoon of the attack, and when next morning he saw the anchorage deserted, he had gone to Silver, given him the chart, which was now useless—given him the stores, for Ben Gunn's cave was well supplied with goats' meat salted by himself.*

Robert Louis Stevenson *Treasure Island* (1883).

When the doctor had wormed this secret from him Robert Louis Stevenson has now confirmed that Ben Gunn moved the treasure to **Wormhole Cave** New Brighton, with its salt encrusted walls



The site of Wormhole Cave today, landlocked behind the New Brighton Championship Mini Golf.



The walls of Wormhole Cave – encrusted with salt from Ben Gunn's salted goat.

The full transcript of my dissection of Treasure Island can be found here...

[40.-Robert-Louis-Stevenson-sets-his-classic-novel-Treasure-Island-in-Birkenhead\\_compressed.pdf](http://40.-Robert-Louis-Stevenson-sets-his-classic-novel-Treasure-Island-in-Birkenhead_compressed.pdf) ([julesverneandtheheroesofbirkenhead.co.uk](http://julesverneandtheheroesofbirkenhead.co.uk))

## Bibliography

- (Baldwin and Powers 2008) *Last Flag Down*. Crown
- Butcher William (2001) *The Mysterious Island* Notes p367.
- Butcher William (2001) *Jules Verne The Definitive Biography* Thunder's Mouth Press. p302
- WH Brands (2012) *The Man Who Saved the Union*. Doubleday
- (Butcher 2019). *20,000 Leagues Under the Seas*. Oxford University Press. p399 and pxxvi.
- (Cachin 1785). [The French Visitor - Bidston Lighthouse](#)
- Charleston Press (1861) *The Battle of Fort Sumter*. Evans and Cogswell.
- Corbin Diana Fontaine. *A Life of Matthew Fontaine Maury*. Ch vi. Read Books Ltd.
- Dehs Volker (2020) *Jules Verne the First Important Interview*. Verniana Jan 22.
- Disraeli Benjamin *The New Crusade* 1847 Henry Colburn Publisher ch5 p77
- Evans Arthur B. 1995. *The "New" Jules Verne* De Pauw University.
- Fletcher R.A. (1910) *Steam-Ships: The Story of their Development to the Present Day*. p138
- Fox Stephen (2007) *Wolf of the Deep*. Vintage Civil War Library ch9 p199
- Ferreiro and Pollara (2017). *Physics Today*. Volume 7 Issue 70.
- Gordon John Steele (2002) ch X p169 *A Thread Across the Ocean*. Harper
- Greenberg et al. (2011). *International Commercial Arbitration*. Cambridge Uni Press p6
- Harpers Weekly January 19<sup>th</sup> 1867
- Hawthorne Nathaniel *English Notebooks* (1870). p70-71 Riverside Press.

Henry Nancy (2018) *Women, Literature and Finance in Modern Britain*

Kipling Rudyard *Soldier an' Sailor too* (1896).

Lamb John *Jules Verne and the Heroes of Birkenhead website* (2019)

Lamb (2025) *International Review of Science Fiction*

Marx, Leo. 1964. *The Machine in the Garden: Technology and the Pastoral Ideal in America.*

New York: Oxford University Press. Olmsted Frederick Law 1851 *The Horticulturist* p227

(O'Kelly John Joseph (1947) O'Connell calling. Kerryman.

(Pickering 1935). [Pickering Family History - Cheshire UK](#) Salina Journal.

Parker Bruce. (2011) *The Tide Predictions for D-Day. Physics Today* Volume 64 Issue 9

Ray R.D. *First Global Observations of Third Degree Ocean Tides. Science* vol 6 Iss 48 2020

Roosevelt (1906) *Speech at Bulloch Hall.*

Schroeder M.C. (2019). *Cryptanalysis in Classical Literature. Berwick Public Library - Dr. M.*

[Schroeder 2019-03-19](#)

(M. Scoffield (2006) *Bidston Observatory*

Semmes R. *Memoirs of Service Afloat During the War Between the States* (1869)

(Seward William (1864). *Library of Congress. July 8<sup>th</sup> 1864.*

(Skrabec Quentin 2022) *Jules Verne's use of Civil War Technology. Vulcan* 10 p45-77

(Stacey 2005) *Thomas Brassey. The Greatest Railway Builder in the World. Stacey*

*International. p27.*

(Standage 1999). *The Victorian Internet. P89*

Stevenson R. L. *Memoir of Fleeming Jenkin* (1887). Charles Scribner. Appendix p277

Teltscher Kate (2012). *Palace of Palms: Tropical Dreams and the Making of Kew*

Train (1902) *My Life in Many States and in Foreign Lands*. Preface p ix. D. Appleton.

Verne Jules *Great Explorers of the Nineteenth Century* (1881) Sampson and Low p145

Wells H.G. (1906) *The Future in America*. Harper Brothers. p68

(Wouters et al 2018) *Building Knowledge Constructing Histories*. CRC Press p2387

Strand Magazine (1895) *Jules Verne at Home* Marie A Belloc.

### **Jules Verne Novels cited**

*The Adventures of Captain Hatterass* (1864)

*A Journey to the Centre of the Earth* (1864)

*20,000 Leagues Under the Seas* (1870)

*A Floating City* (1871)

*Around the World in Eighty Days* (1872)

*The Adventures of Three Englishmen and Three Russians in South Africa* (1872).

*The Mysterious Island* (1873)

*Robur the Conqueror* (1886)

### **Websites**

Communaute Portuaire website 2025

The Website *Sunearthtools*

*Liverpool Mercury* 1865 7<sup>th</sup> November 1865 quoted from Wikipedia.

Civil War Preservation Trust 2006