



Jules Verne and the Heroes of Birkenhead.

Part 21

Playing Cyrus Harding in Jules Verne's Mysterious Island are the Real-Life Business Partners Thomas Brassey of Birkenhead and the American Cable Entrepreneur, Cyrus West Field.



The Engineer Cyrus Harding

UBI FIDES IBI LUX ET ROBUR



Part 21.

Playing the Engineer Cyrus Harding in Mysterious Island are Real Life Business Partners Thomas Brassey of Birkenhead and the American Cable Entrepreneur Cyrus West Field.

Thomas Brassey of Birkenhead (1805-70).

- THE GREATEST CIVIL ENGINEER OF THE NINETEENTH CENTURY–
- BUILT THREE QUARTERS OF FRANCE’S RAILWAYS–
- CONSTRUCTED A RAILWAY TO SUPPLY THE SIEGE OF SEBASTOPOL–
- AWARDED LEGION D’HONNEUR BY NAPOLEON III–
- FINANCED THE COMPLETION OF BRUNEL’S SS GREAT EASTERN–
- RAISED FINANCE FOR THE 1867 TRANSATLANTIC CABLE–
- FINANCED CONVERSION OF THE SS GREAT EASTERN TO A CABLE LAYER–
- BUSINESS PARTNER OF CYRUS FIELD–
- BUILT FIRST ROAD BRIDGE ACROSS ARROWE BROOK (RED CREEK) –
- CONSTRUCTED THEA41 ‘NEW CHESTER ROAD’ (ROAD TO PORT BALLOON) –
- CONSTRUCTED A BRIDGE ACROSS TRANMERE POOL (MERCY BRIDGE) –
- BUILT THE STORETON TRAMWAY (ROAD TO THE FAR WEST) –
- CONSTRUCTED BIRKENHEAD’S GREAT CULVERT SEWER (GRANITE HOUSE) –
- BASED AT CANADA WORKS AT WALLASEY POOL (LAKE GRANT) –

Thomas Brassey (1805-1870) was the greatest civil engineer and railway builder of the Victorian Age. He was born in Buerton, Cheshire and came to live in Birkenhead in 1826.

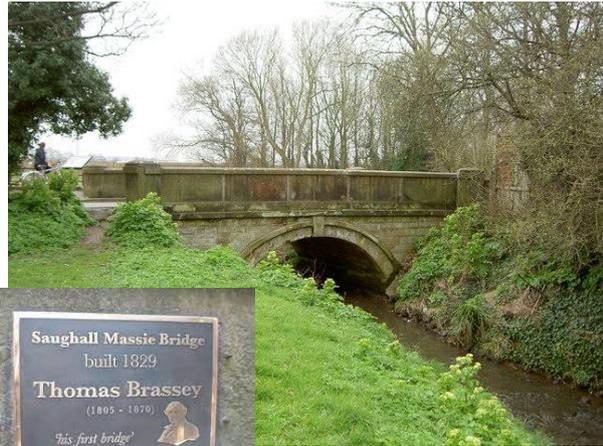
In the 1830’s Brassey built a brickworks and lime kilns at Wallasey Pool (Lake Grant in Jules Verne’s Mysterious Island).

Thomas Brassey (1805-1870)



In 1829 Brassey completed his first ever construction contract - a new bridge across the Arrow Brooke, a tributary of Birkenhead's River Birket.

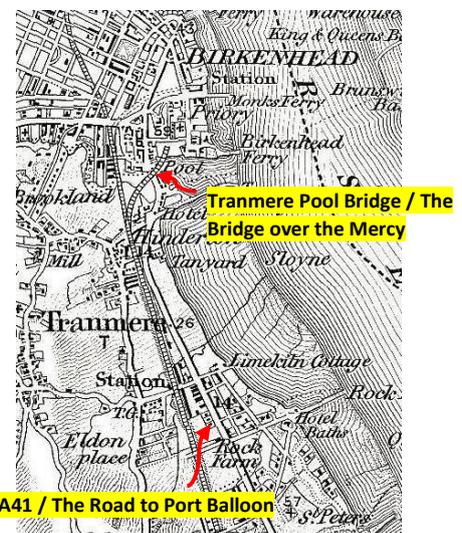
In *Mysterious Island*, Cyrus Harding also builds a bridge across Red Creek (the River Birket).



Thomas Brassey's first bridge.

After training as a surveyor, Brassey's first major engineering scheme was the construction in 1833 of a four mile stretch of the 'New Chester Road' (A41) from Birkenhead to Bromborough Pool, the scheme included building a new road bridge over Tranmere Pool (a tidal inlet to the south of Birkenhead).

Brassey's modern methods of surveying and construction allowed the road to be built in a dead straight line (right).



Brassey's 'New Chester Road' running south of Birkenhead.

Brassey's Bridge across Tranmere Pool (The Mercy River) would become Cyrus Harding's 'Bridge Across the Mercy' in Jules Verne's *Mysterious Island* while his straight A41 road to Bromborough Pool would become 'The Road to Port Balloon' and Pencroft would say

"Bah! It's not more than three miles from Granite House, and we have a fine straight road to take us there."



In 1828 the world-famous engineer George Stephenson visited Brassey at Brassey's quarry at Storeton, near Birkenhead.

The Penkridge viaduct

Stephenson suggested that Brassey involve himself in building railways and his first venture was the building of the Penkrudge Viaduct, in 1837.

Closer to home, Brassey used a gravity tramway through Storeton Woods, near Birkenhead to transport sandstone from Storeton quarry to the quayside at Bromborough Pool on the River Mersey.

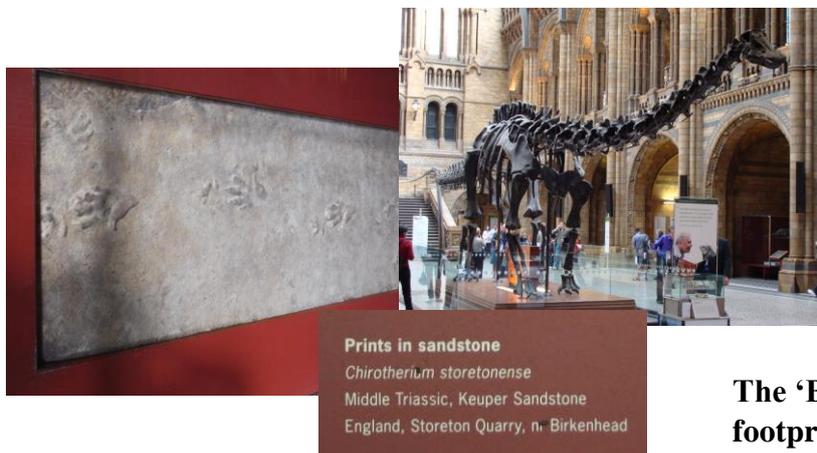


Remains of Brassey's tramway at Storeton Woods near Birkenhead.

Storeton Woods would become *The Woods of the Far West* in Jules Verne's *Mysterious Island*, while Brassey's Tramway, would form part of the *Road to the Far West*.

In 1838 Brassey's Quarry became world famous with the discovery of 'dinosaur' footprints some 50 feet below the surface.

The footprints were catalogued by the geologist John Cunningham of Arrow Hall (*The Falls River* in *Mysterious Island*), Birkenhead and described as 'remarkable' by Sir Charles Lyell, the father of modern geology.



The 'Birkenhead Dinosaur' footprints in the Natural History Museum, London.

Such was the importance attached to the footprints that the finest example was mounted in the entrance foyer of the Natural History Museum in London and later given pride of place next to 'Dippy the Diplodocus'.

The reader will later make their own up as to whether the Birkenhead dinosaurs will reappear in Jules Verne's classic science fiction novel – *Journey to the Centre of the Earth*.



Thomas Brassey was instrumental in building another masterpiece in stone - the Great Culvert sewer at Birkenhead in 1844.

The Great Culvert is the main drainage / sewer tunnel diverting the River Birket around the Birkenhead Docks system.

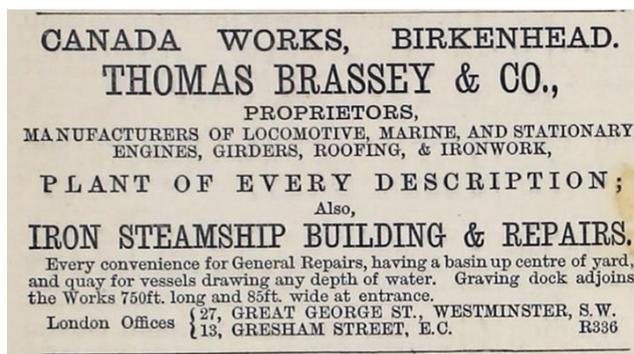
The entrance to the Great Culvert,

The Great Culvert tunnel operated as Birkenhead's main sewer outlet until the 1990's and the sewer entrance is still visible at low tide today lying directly beneath the modern ventilation shaft of the Birkenhead Mersey Road Tunnel.

Thomas Brassey's Great Culvert and its access ladder play the role of Granite House in Jules Verne's *Mysterious Island*.

Brassey also helped finance the sophisticated new Birkenhead docks system which enclosed the tidal inlet known as Wallasey Pool behind a dock wall and gates. Wallasey Pool is otherwise known as *Lake Grant* in *Mysterious Island*.

Thomas Brassey's sewer expertise was by no means confined to Birkenhead, he also worked with Sir Joseph Bazalgette on the construction of London's new sewage system.



In 1853 Thomas Brassey opened up his much larger Canada Works at Wallasey Pool, to the north of Birkenhead. He built a massive works to construct materials for the Grand Trunk Railway in Canada including the Victoria Bridge over the St. Lawrence River. Brassey's company also built 55 steam locomotives for this railway.

Thomas Brassey became a hero in France when in 1854 he came to the rescue of the British and French forces in the Crimean War. In 1854 the Black Sea Port of Sebastopol was being besieged by an Anglo-French army in danger of perishing in the harsh Russian Winter. Brassey and his partners, Peto and Betts suggested a prefabricated railway line to keep troops supplied with armaments, buildings, tents and provisions.

Brassey oversaw the shipping out of the equipment out to the Crimea Peninsula. Despite freezing temperatures, the 56km long line was completed in just seven weeks. The siege was maintained, and Sebastopol finally fell in September 1855 – within months Russia sued for peace.



Unloading the railway at Balaklava by Peto, Brassey and Betts (P.B&B) 1855.

Jules Verne would pay a direct but ultimately pacifist tribute to Brassey in his book '*Backwards to Britain*' (1859), it would not be Verne's last tribute to the engineer.

'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)

Jules Verne's tribute to Thomas Brassey in *Mysterious Island* would be more tongue in cheek when referring to Cyrus Harding as....

a first-class engineer, to whom the Government had confided, during the war, the direction of the railways, which were so important at that time. A true northerner

Jules Verne, *Mysterious Island* (1875)

Yes ... a 'true northerner' from Birkenhead.

In 1857 Thomas Brassey also gave financial help to Isambard Kingdom Brunel to complete the largest ship in the world - SS *The Great Eastern* – a ship that as we have seen would be forever linked with both Jules Verne and the town of Birkenhead. Thomas Brassey was also a member of the Royal Mersey Yacht Club of Tranmere, Birkenhead.

A list of Brassey's astonishing engineering achievements include:

He built three quarters of all the 19th century railways in France, one third of all Britain's Victorian railways, one twentieth of the world's railways including: Barcelona and Mataro Railway, Central Italian Railway, Warsaw and Terespol Railway, Central Australian Railway, Dehli Railway and the Mauritius Railway.



Birkenhead's Thomas Brassey more than any other person supported Cyrus Field in laying the successful 1866 Transatlantic telegraph cable across the Atlantic. It is Brassey's historical contribution to the development of the transatlantic cable, his historical contribution to the development of Birkenhead and indeed his historical contribution to the French nation that will greatly influence the writings of Jules Verne. **The *Great Eastern* as a cable layer in 1866.**

Having lived in France while supervising the construction of the country's railways, Brassey was in many ways a Francophile and he greatly appreciated the country, its culture and its art.

By 1865 he had started construction on a huge French chateau mansion on a ridge at Catsfield in Sussex.



Normanhurst Court, Catsfield, Sussex.

Before 'Normanhurst Court' could be completed in 1870, Brassey was diagnosed with cancer, he continued to work and after taking to his bed, many of his most loyal navvies travelled on foot to Normanhurst to stand vigil and give thanks.

Thomas Brassey died on December 8th, 1870. He is buried at Catsfield churchyard and his estate worth an astonishing £5,200,000 was divided amongst his three sons.

At one-point Brassey had employed over eighty thousand workers around the world, he had a reputation for treating his workers with dignity and compassion, as Jules Verne would say of Cyrus Harding in *Mysterious Island*;

He was one of those engineers who began by handling the hammer and pickaxe, like generals who first act as common soldiers.

Jules Verne, *Mysterious Island* (1875)

Thomas Brassey's son, also called Thomas, the 1st Earl Brassey (1836–1918) would also have come to the attention of Jules Verne.

As a prominent member of the Royal Mersey Yacht Club at Tranmere, Birkenhead, Brassey served in two governments under the Prime Ministership of William Ewart Gladstone.

He was also Lord in Waiting to Queen Victoria, the Royal Mersey Yacht Club's long-standing patron since 1844.

'Around the World' – Sir Thomas Brassey (1836–1918) pictured in Gordon Bennett's magazine 'Vanity Fayre'.



Between July 1876 and May 1877 Thomas Brassey Junior and his wife Anna Brassey also achieved worldwide fame when sailing his St Clare John Byrne designed and Wallasey built vessel *Sunbeam*, he became the first person in history to circumnavigate the globe in his own private Yacht.



The senior Thomas Brassey has one last connection to the stories of Jules Verne. In 1839, his firm at Canada Works, Birkenhead, supplied over a million bricks for the building of the new Customs House at the port of Liverpool.

On the 20th December 1872, the same Customs House building received a prisoner who had been arrested that afternoon at the Liverpool Landing Stage. The prisoner had travelled across the Atlantic on the steamship '*Henrietta*', his lover, the widow of the Rajah of Bundelkund stood vigil under the Customs House portico.

Liverpool Customs House Portico (1839-1948)

At thirty-three minutes past two that afternoon, the doors of the Custom House swung open and the prisoner was released, he proceeded to punch a detective in the face and then catch a cab to Liverpool's Lime Street station.

Phileas Fogg was in a hurry as he had just nine and a quarter hours to get to London and complete his '*Around the World in Eighty Days*'.

Also Playing the Part of the Engineer Cyrus Harding in Jules Verne's *Mysterious Island* is...

Cyrus West Field (1819-92)

–THE MAN WHO UNITED TWO CONTINENTS–

–BUSINESS PARTNER OF THOMAS BRASSEY OF BIRKENHEAD–

–GAINED INVESTMENT FOR FIRST ATLANTIC CABLE IN BIRKENHEAD–

–GAINED INVESTMENT FOR SECOND ATLANTIC CABLE IN BIRKENHEAD–

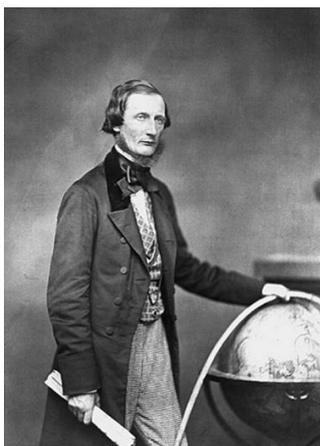
–WORKED WITH MATHEW FONTAINE MAURY AND SAMUEL MORSE—

–WORKED WITH FLEEMING JENKIN AND LORD KELVIN–

–SAILED WITH JULES VERNE FROM BIRKENHEAD TO NEW YORK–

–CORRESPONDED WITH JULES VERNE–

Cyrus West Field was born in Stockbridge, Massachusetts on November 30th, 1819. He left school at 15 and became a junior partner in a firm of paper dealers. Field set up the mercantile firm of Cyrus W. Field and Co. and its success was so great he was able to retire from the firm at the age of 33 to pursue his dream of laying the first submarine telegraphic cable across the Atlantic.



In 1857 Field's first attempt to raise money had failed so he journeyed to England to raise funds for his gigantic cable project. Both the American and British governments had already refused financial aid. Despite his best-efforts Cyrus Field could not find investors confident enough to fund his new cable.

Cyrus West Field (1818 -1892)

He was preparing to sail for home the next day, his project abandoned, when he was invited to dinner at the home of Charles William Harrison Pickering at Montebello, St Georges Mount, New Brighton Wirral. Pickering secured investment within one week.



Charles William Harrison Pickering was made managing director of the cable company, he was also a member of the Royal Mersey Yacht Club at Tranmere, Birkenhead.

Montebellow, St Georges Mount, New Brighton

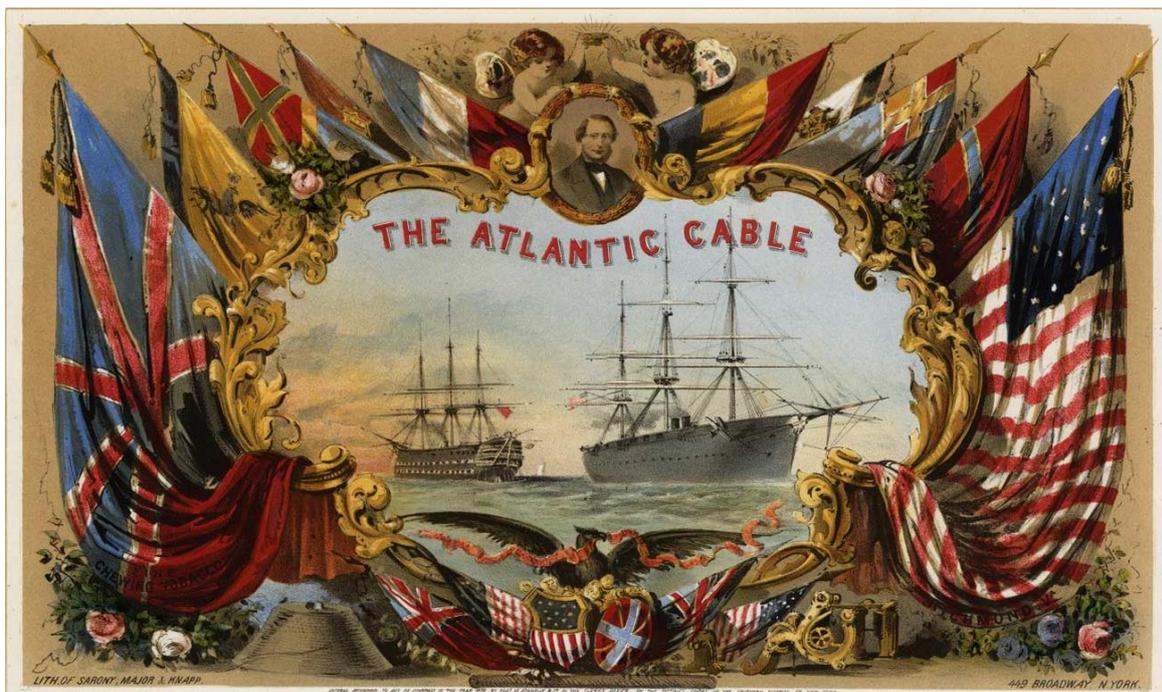
Pickering was instrumental in attracting the cable company RS Newall of Gateshead to set up a factory in Birkenhead to manufacture one half of Cyrus Field's 1858 cable.

The Birkenhead factory was at the forefront of telegraphic research under their gifted research engineer Fleeming Jenkin.



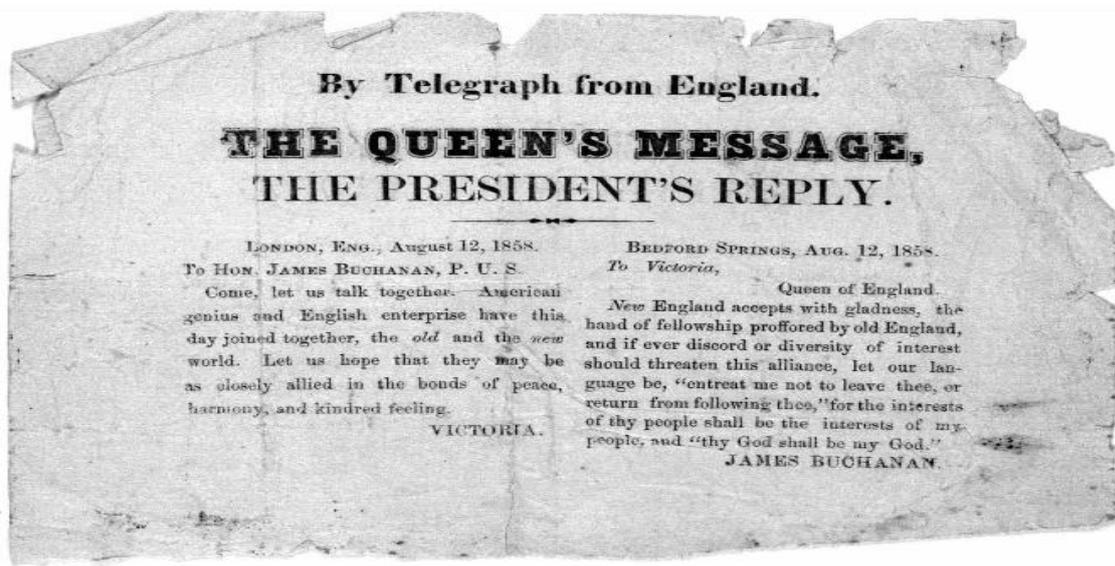
Fleeming Jenkin 1833-85

The American Government converted the warship 'Niagara' into a cable layer, and it commenced laying the Birkenhead half of the cable from Newfoundland to the middle of the Atlantic. The British Government used the ship 'Agamemnon' starting at Valencia, Ireland, the two ships met in mid ocean on August 5th 1858 and the cables spliced them together and lowered them to the bottom of the Atlantic.

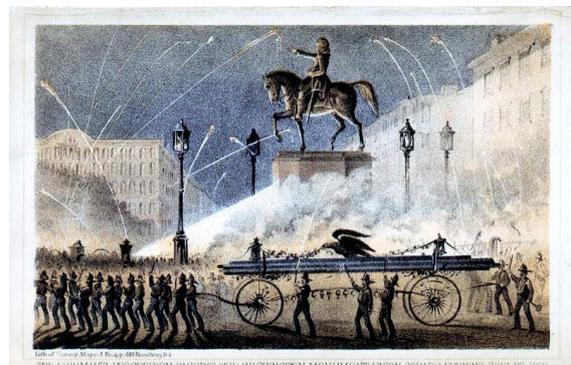
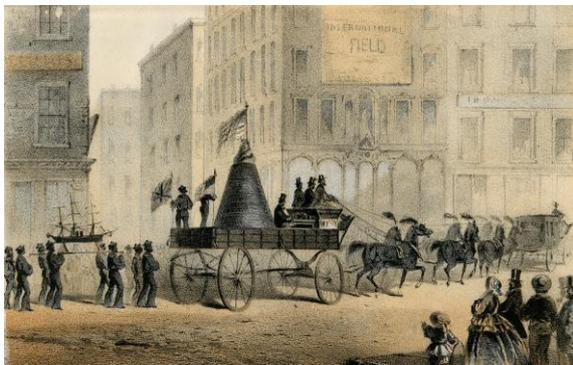


The First Transatlantic Cable and Cyrus West Field (1818 -1892)

Cyrus Field was a showman and arranged for Queen Victoria to send the first transatlantic message to President James Buchanan amid great celebrations on both sides of the Atlantic.



Cable celebration parades were held in all the major American Cities from San Francisco, to New York.



The New York 'Cable Carnival' of 1st September 1858.

Unfortunately, after sending just 366 messages the cable failed and it would be another eight years before Cyrus Field would in partnership with Thomas Brassey, lay another cable across the Atlantic.

When Cyrus Field failed in his first three attempts, Thomas Brassey of Birkenhead was eager to renew the work despite the public having lost confidence in the scheme. In 1864 Brassey stepped in to raise the necessary capital to purchase the 'Great Eastern', he formed the 'Telegraph Construction and Maintenance Company' (TELCON) with two other partners, Messrs Gooch and Barber.

Thomas Brassey would purchase the largest ship in the world, Isambard Kingdom Brunel's *Great Eastern* to help Cyrus Field in his endeavours.

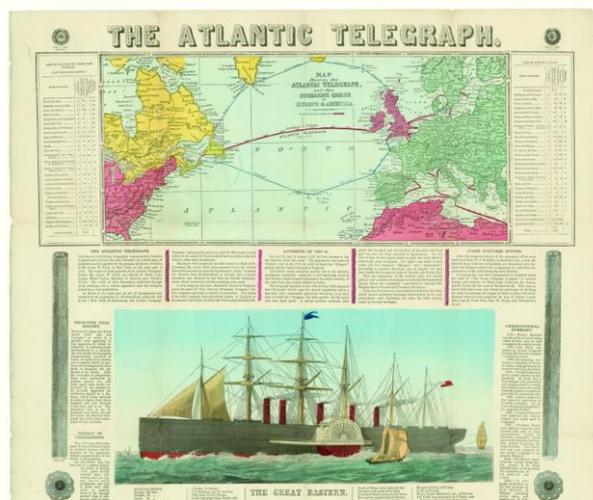
Cyrus Field would say of Thomas Brassey of Birkenhead;

The words spoken by Mr. Brassey in the latter part of January, "Let the Electric Telegraph be laid between England and America" encouraged us all and made us believe we should succeed in raising the necessary capital, and I then went to work to find nine other Thomas Brasseys.

Cyrus Field 15th April 1864.

Cyrus Field would also praise Brassey's securing of the *Great Eastern* for his enterprise;

From this day to the 31st of December, 1865, we are to have the use of that magnificent vessel; and, if the cable be not successfully laid, we shall not have to pay a single shilling for the use of her.



The SS *Great Eastern* had many of her salons and rooms ripped out and replaced with large tanks to hold the new cable. After the failure of the first attempt to lay the Atlantic cable in 1865, the *Great Eastern* returned to the task the following year.

The *Great Eastern* as a cable layer.

On Friday, July 27, 1866 the *Great Eastern* finally reached the port of Heart's Content in Newfoundland. 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.

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

The successful laying of the Atlantic cable by the SS *Great Eastern* did much to heal the rift between the United States and Great Britain after the bitterness and division of the American Civil War, most of that bitterness and division had been due to the clandestine building of Confederate warships such as the CSS *Alabama* in Birkenhead.



The 1866 Atlantic Cable marked the symbolic start of the ‘Special Relationship’ between Great Britain and the United States – a relationship that endures to this day.

The Eighth Wonder of The World (1866)

In the novel *Mysterious Island* the Birkenhead engineer Thomas Brassey and Cyrus West Field would reunite to ‘play’ the character of the engineer Cyrus Harding.

Cyrus Harding would manufacture his own homemade electrical batteries and construct a telegraphic cable on *Lincoln Island*.

The cable would run from Granite House to the corral near Mount Franklin, so emulating the real telegraphic cable that connected the Birkenhead One O’clock gun at Woodside to Bidston Hill.

Cyrus Harding makes electrical batteries for his telegraph.



Later in the novel that cable would be extended westwards to a cave and lead the engineer Cyrus Harding to Dakkar’s Grotto – the last resting place of Captain Nemo and the *Nautilus*.

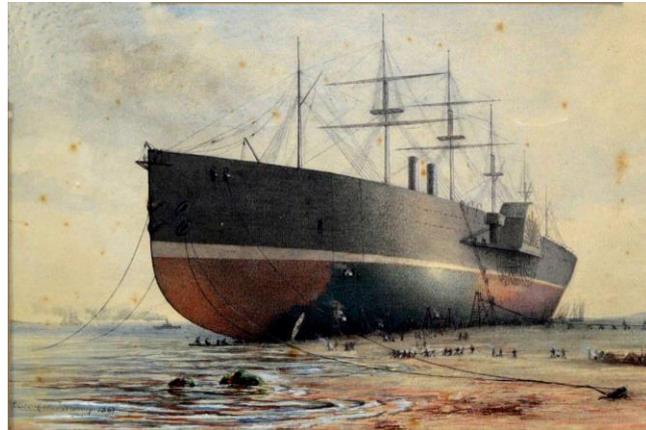
The cable to Dakkar’s Grotto.



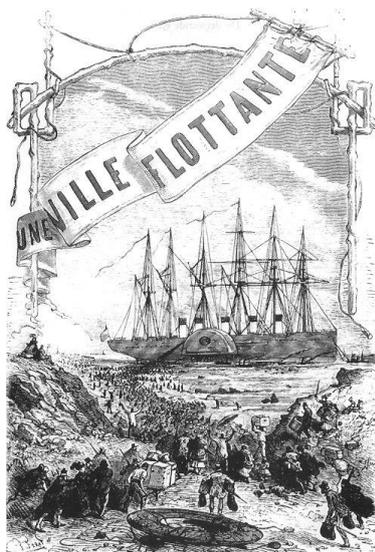
Dakkar’s Grotto - The Lady’s Cave on Hilbre Island

After laying Cyrus Field's cable, in 1867 the *Great Eastern* was converted back into a passenger liner at New Ferry Beach, Birkenhead.

The work was carried out by Lairds shipyard for the French Government of Napoleon III in order to bring American delegates to the Great Paris Exposition of 1867.



The Great Eastern Beached at New Ferry, Birkenhead (1867)



There would be one special guest joining the engineer Cyrus Field on board the ship at Tranmere Sloyne, Birkenhead on the way to America and that would be the great French author, Jules Verne.

As we have seen, Verne would write about his experiences in his novel *The Floating City* (1871) and maintain correspondence with Cyrus Field for several years.

The SS *Great Eastern* as depicted at New Ferry Birkenhead. *Une Ville Flotante (The Floating City)* by Jules Verne (1871).

Jules Verne would write to Henri Pène du Bois in 1887.

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.

Unwittingly or not, Thomas Brassey and Cyrus West Field would both join Jules Verne's travelling band of Shakespearean players and make the role of Cyrus Harding their own on his *Mysterious Island*.

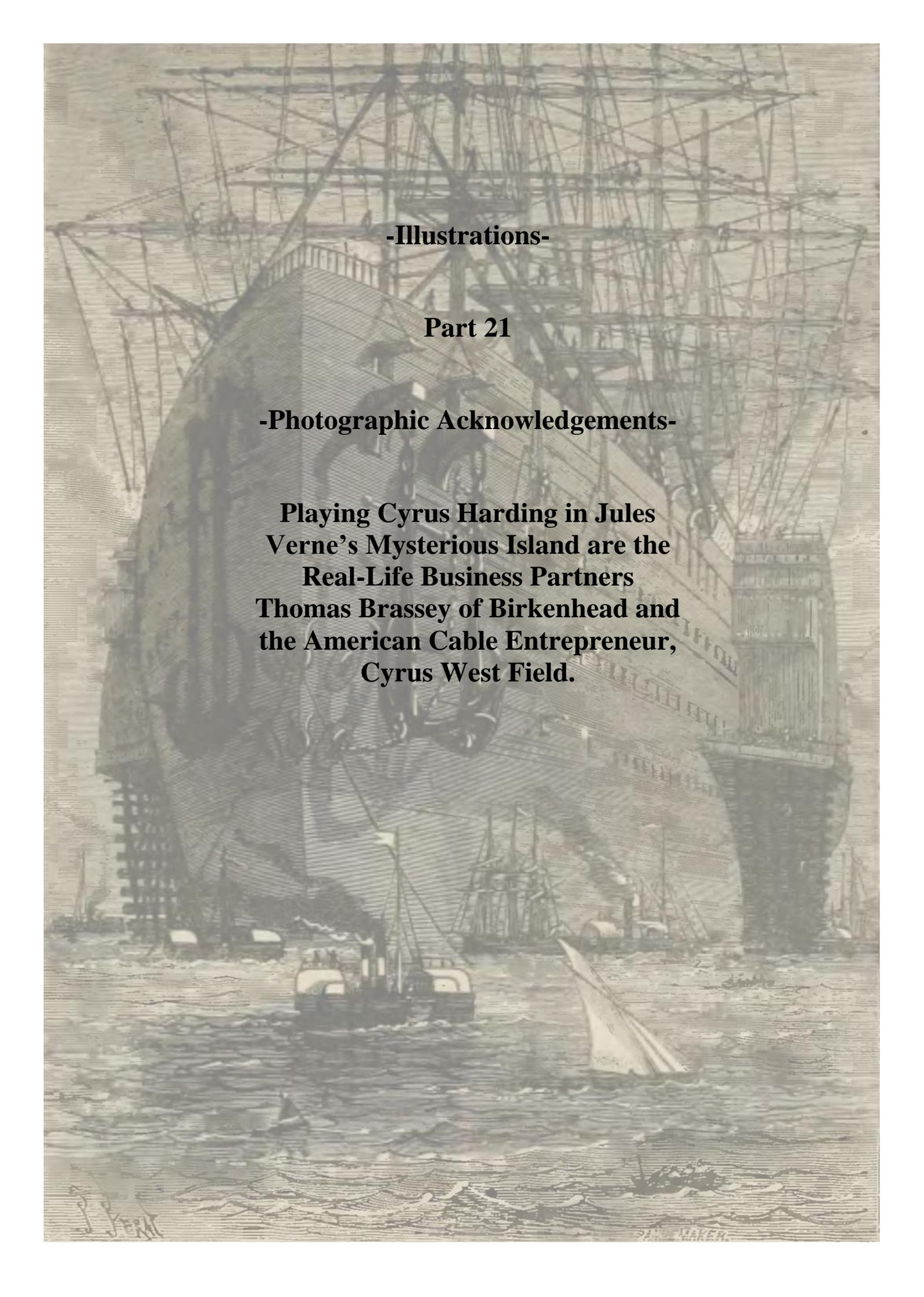
However, as we shall see it will take many 'actors' to play the complex and tortured soul of Captain Nemo.

What link existed between these heroic souls and the soul of Captain Nemo? Could I finally solve the mystery of his existence by this collection of portraits?

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

Next on Jules Verne and the Heroes of Birkenhead.

22. Captain Nemo in Popular Culture. .



-Illustrations-

Part 21

-Photographic Acknowledgements-

**Playing Cyrus Harding in Jules
Verne's Mysterious Island are the
Real-Life Business Partners
Thomas Brassey of Birkenhead and
the American Cable Entrepreneur,
Cyrus West Field.**

Page	Photograph Acknowledgement	Page	Photograph Acknowledgement
1a	TRIXES Large French Flag	5c	Grace's Guide
1b	Pending	6a	Lookandlearn.com
1c	Talbot Flags	7a	Whgroup.org
1d	Heraldry-wiki.com	7b	Lost Heritage
1e	Pending	8a	Google Arts and Culture
1f	Talbot Flags	8b	Facebook.com
1g	Historic Society of Lancashire and Cheshire.	9a	Atlantic-cable.com
1h	Flag and Bunting Store	10a	Pickeringhistory.com
1i	pond5.com	10b	Alchetron.com
1j	VectorStock	10c	Bruceb Consulting
1k	shutterstock.com	11a	loc.gov
1l	Wikiwand.com	11b	Atlasobscura.com
1m	Barnet Scouts	11c	Atlantic-cable.com
2a	artuk.org	12a	Atlantic-cable.com
3a	Geography.org.uk	13a	Incollect
3b	Saughallmassey.org	13b	Wikisource – La Bibliotheque Libre
3c	Wirralmapreproductions Ordnance Survey	13c	John Lamb
3d	Staffordshire Past Track	13d	Liverpool Echo
4a	John Lamb	14a	Artwarefineart.com
4b	Natural History Museum London	14b	Wikisource – La Bibliotheque Libre
4c	Natural History Museum London	15	-
4d	Natural History Museum London	16	Wikisource – La Bibliotheque Libre
5a	John Lamb	17	-
5b	John Lamb		