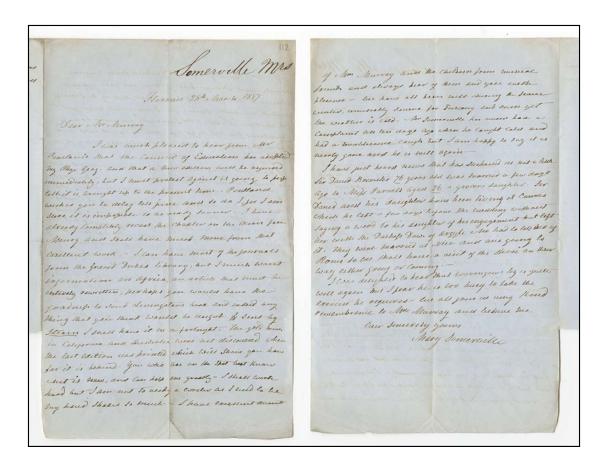
## Mary Somerville: Queen of Science

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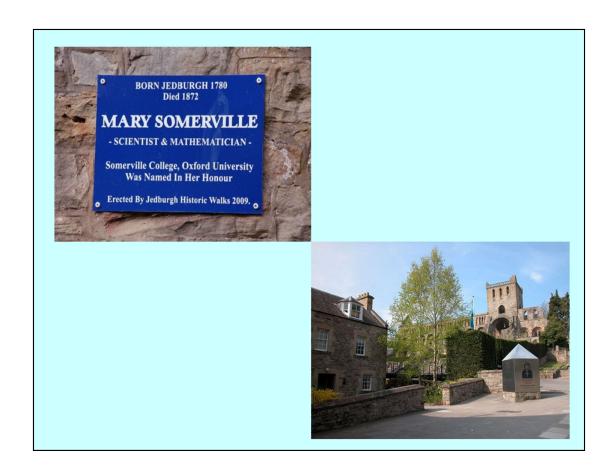




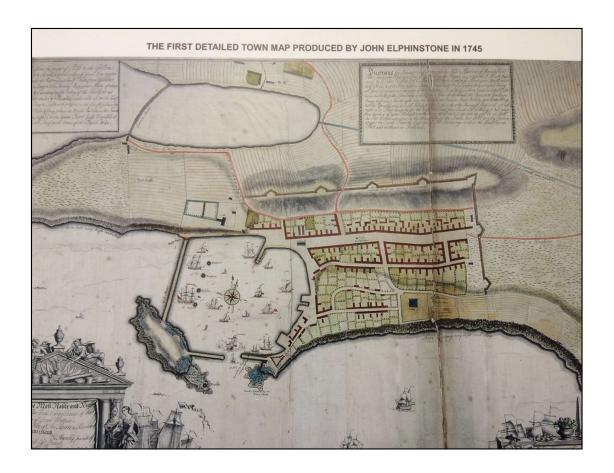
This is the first letter of Mary Somerville's that I saw, when I was the John Murray Archive Project Curator for the National Library of Scotland. The letter is mainly about the next edition of one of her books being worked on, and what is needed, as well as family news, but at the end it passes on news about Sir David Brewster's marriage – see next slide for an enlarged picture of that section.

Show just heart news that has surpaised us not a But Sir Faund Brewster 76 years old loss married a few days life of to Mile Parriet ages 26 a grocers daughter. Ser age to Mile Parriet ages 26 a grocers daughter. Ser aged and his doughter have been living at Caunes bauch he left a few days before the twenting wethout which he left a few days before the twenting wethout left laying a word to his saughter of his engagement but left laying a word to his saughter of his engagement but left laying a word to his saughter of his engagement but left laying a word to his saughter of his engagement but left laying a word to his saughter of his engagement but left laying well married at vice and are going to it. They were married at vice and are going to it. They were married at vice and are going to the Mone to the Shall bace a wirit of the Spore on their Mone to the Shall bace a wirit of the Spore on their way cether going or Coming.

News of David Brewster's marriage. It always makes me think of someone leaning on a garden fence, passing on some gossip!



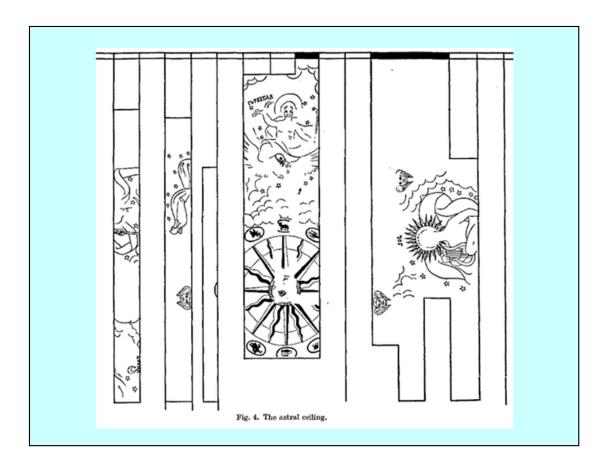
Mary was born on 26 December 1780 in the home of mother's sister in Jedburgh – her aunt also suckled her as a newborn as her own mother was too ill from childbirth. This aunt became her mother-in-law on her second marriage.



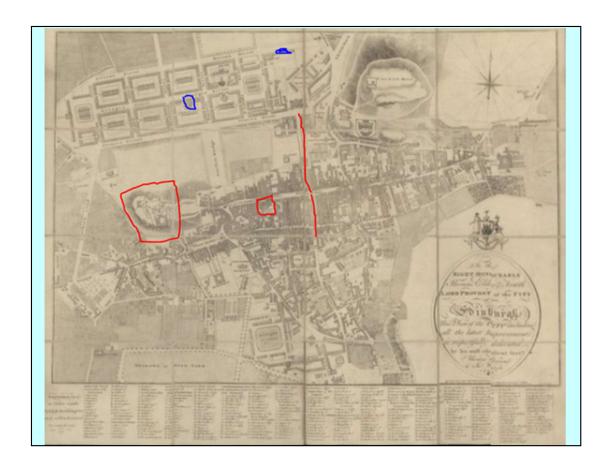
This is a map of Burntisland, 25 years before Mary was born. Nowadays Burntisland is dominated by the railway, so this shows the town that Mary knew.



This is the house in Burntisland that Mary grew up in – in the 1960s work by Fife Council revealed that in the room that was her bedroom, there was a second ceiling, with painted representation of the planets and stars.



This is a section of the ceiling Mary slept under, but without knowing it.

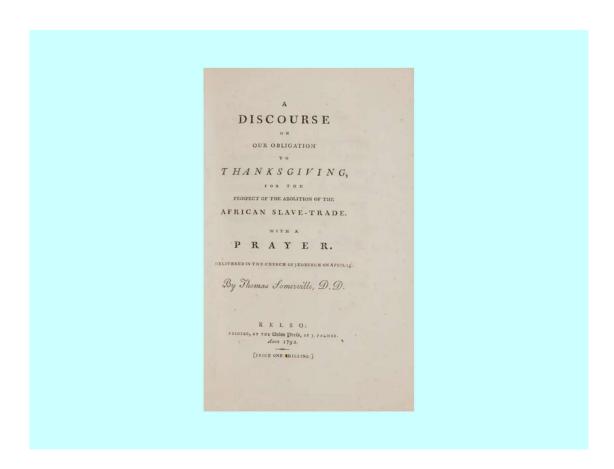


This map shows Edinburgh around 1793. The big red square is the castle, the small red square St Giles Cathedral, the red line the two bridges (north and south) – all in the old town. The blue square is the Assembly Rooms where Mary went dancing, and the blue line at the top is where Alexander Nasmyth had his painting class for ladies. These were both in the New Town – the Assembly Rooms opened in 1787.



**Music Party, East Cowes Castle** c.1835, JMW Turner. Information from Tate about this painting talks about how the woman at the piano might be Mary Somerville – she enjoyed playing the piano throughout her life.

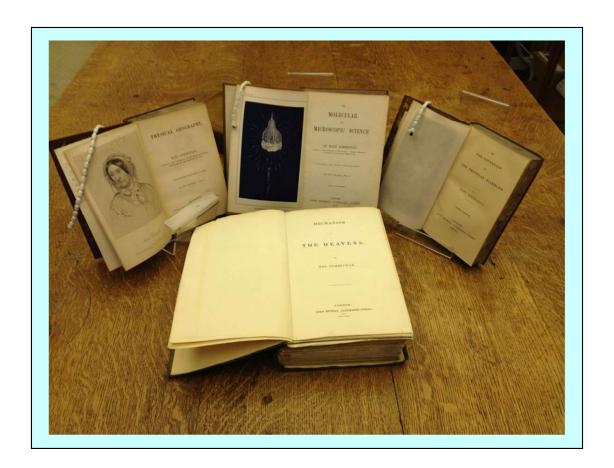
"This unfinished study shows a group of figures playing or languidly listening to music in an unidentified setting. It was for many years associated with the interiors of Petworth, but has more recently been linked with the Octagon Room at East Cowes Castle; Turner's hostess at Cowes was Mrs John Nash, who was an accomplished pianist. There is, however, a third possibility based on the fact that the central figure is based on a pencil sketch recorded during Turner's stay in Paris in 1832. That pencil sketch may be a hasty portrait of his acquaintance the famous scientist Mary Somerville, who was also a talented musician. If the setting is indeed French, the sparkle and light of the fabrics may perhaps be another attempt to evoke the shimmer of Watteau."



Mary's maternal uncle, Rev Dr Thomas Somerville, published a sermon he had given in 1792 – one of the first such pamphlets published. Perhaps it was discussing things like this with her uncle that made Mary decide to give up sugar in protest at the slave trade – as did her cousins and many of her acquaintances. It is believed that some 300,000 families had joined the boycott by the end of 1791.



The title of Mary's paper published in the Royal Society – the experiment it describes was about trying to find out which aspect of solar rays had magnetizing powers. This was also shown in the 2014 film 'Mr Turner', which this still is from, with Timothy Spall playing the artist and Lesley Mandeville playing Mary Somerville.



The four books Mary wrote (all but one of them went through several editions, updated by Mary)

- The Mechanism of the Heavens (1831)
- On the Connexion of the Physical Sciences (1834)
- Physical Geography (1848)
- Molecular and Microscopic Science (1869)



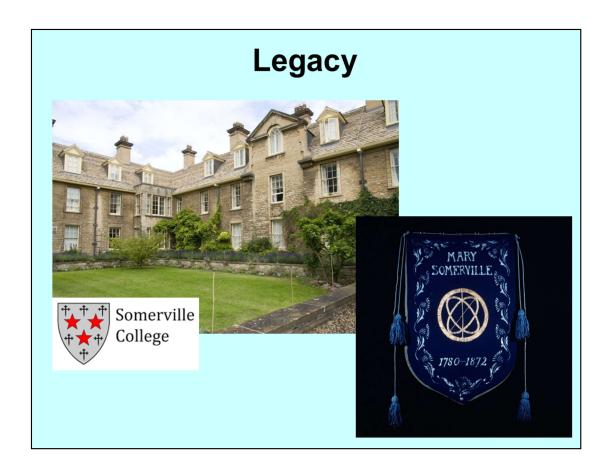
This is the microscope that Mary bought while in Edinburgh on a visit in 1844 – described to me as a starter kit. It is now in the History of Science Museum in Oxford. Mary was 63 at the time of purchase.



On 5<sup>th</sup> Feb 1852, Genoa, Mary wrote a letter to a Colonel Sykes, trying to save the life of an elephant. Unfortunately she was not successful and the Indian elephant, named Fritz, was put to death 8 Nov 1852.



Mary died 29 Nov 1872 and is buried in the English cemetery in Naples. This is not my photo – when I visited in February 2020 this is what I was trying to see but as the cemetery was closed I could only see her big toe!



The biggest legacy is surely Somerville College.

Her name was also well known enough during the fight for female suffrage in the UK for this magnificent banner to be created in the 1900s for one of their many processions.



Here you can see the Somerville crater on the eastern part of the moon, the Royal Bank of Scotland's £10 note, three recent fiction books that mention Mary, the actress who played Mary Somerville in the fantastic musical 'Scots', and the Institute of Physics Mary Somerville medal.