

# The Man with the Stars in his eyes...



MC  
MAYES CREATIVE

JOHN COUCH ADAMS  
*and* THE DISCOVERY OF  
THE PLANET NEPTUNE

John Couch Adams was born on the 5th June 1819 at Lidcott Farm in Laneast, near Launceston in Cornwall.

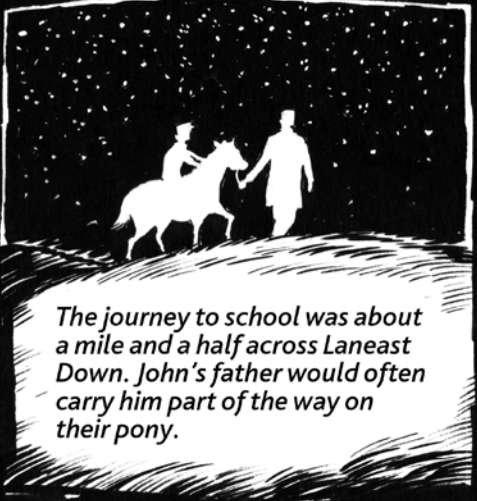


His father, Thomas was very active in the Wesleyan church at Tregear, and John would often sing psalms and hymns in the family home.



His first school was in the village of Laneast, with Mrs Anne Dawe.

John was a likeable boy, and Mrs Dawe was very fond of him



The journey to school was about a mile and a half across Laneast Down. John's father would often carry him part of the way on their pony.

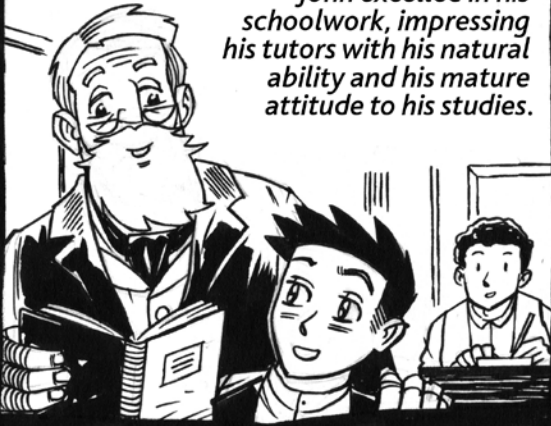
Later, John went with two of his brothers to a more ambitious school in Laneast run by Mr Sleep. He enjoyed his study, and worked hard at school and home, becoming skilled at maths and algebra.



These were happy care-free days, even when Mr Sleep caught them bathing in the river instead of being at lessons.



John excelled in his schoolwork, impressing his tutors with his natural ability and his mature attitude to his studies.



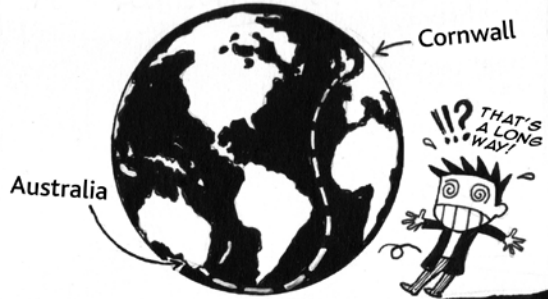
At the age of 12, he joined the college at Devonport, staying as a boarder with a relative, the Reverend John Couch Grylls



In his spare time, John would make small maps of the stars...



He was employed as a tutor to the sons of a Mr Foot, of Linkinghorne. The Foot family were moving to Australia, and wanted John to go with them.



But his parents wanted him to fulfil his potential by studying at the finest school in the land - Cambridge. John agreed and after borrowing money to arrange an exam, he passed with flying colours and won a scholarship to St Johns College, where he entered in October 1839.



Once John had taken his degree, he turned his attention to irregularities in the movement of the planet Uranus...



In 1820-21, Alexis Bouvard had tried to establish an accurate table of these movements, but comparison with earlier attempts showed unmistakable changes in the position of Uranus in relation to its predicted path...



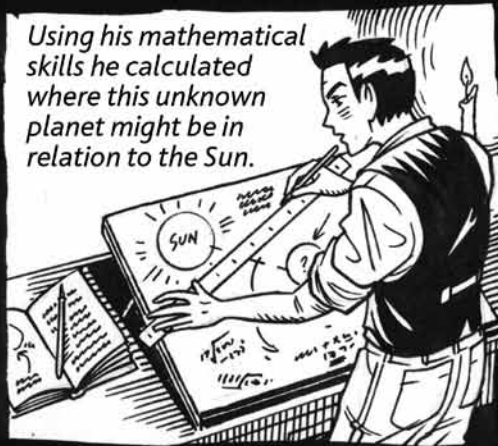
It was known that the movement of planets could be influenced by other planets...



...was there a mystery planet beyond Uranus that could be pulling it out of a regular orbit?

John felt sure this was the case, and set out to prove it!

Using his mathematical skills he calculated where this unknown planet might be in relation to the Sun.



In September 1845 he took his findings to Professor Challis at Cambridge, then in October he went to see the Royal Astronomer, Mr Airy, at Greenwich. Mr Airy was having dinner so rather than interrupt, John left his papers with a servant.



Early in November, Airy wrote back, with some queries about John's calculations.

Meanwhile, the Director of the Paris Observatory, Urbain Le Verrier, had also begun investigating the movement of Uranus...



Adams found letter-writing difficult, and contact between him and Airy stalled.

Over in France, Le Verrier was moving fast - he wrote to Airy with his own findings, after Airy had contacted him in response to a memoir Le Verrier had published in the science journal 'Comptes Rendu', seven months after Adams had released his own findings.



In July 1846, Airy wrote to Professor Challis at Cambridge asking him to undertake a search for the mystery planet in a specific location, based on the calculations of Adams and Le Verrier. He offered to send an assistant to speed up matters. Challis declined - **but the race to find the planet was on!**



Le Verrier publicly announced his prediction for the planet's location on 31st August - two days later Adams mailed his own prediction to the Observatory at Greenwich...

The Frenchman sent a letter to Johanne Galle at the Berlin Observatory on September 18th. It arrived five days later, and that same evening the planet was found by Galle and Heinrich D'Arrest, using the Berlin Fraunhofer Refractor.

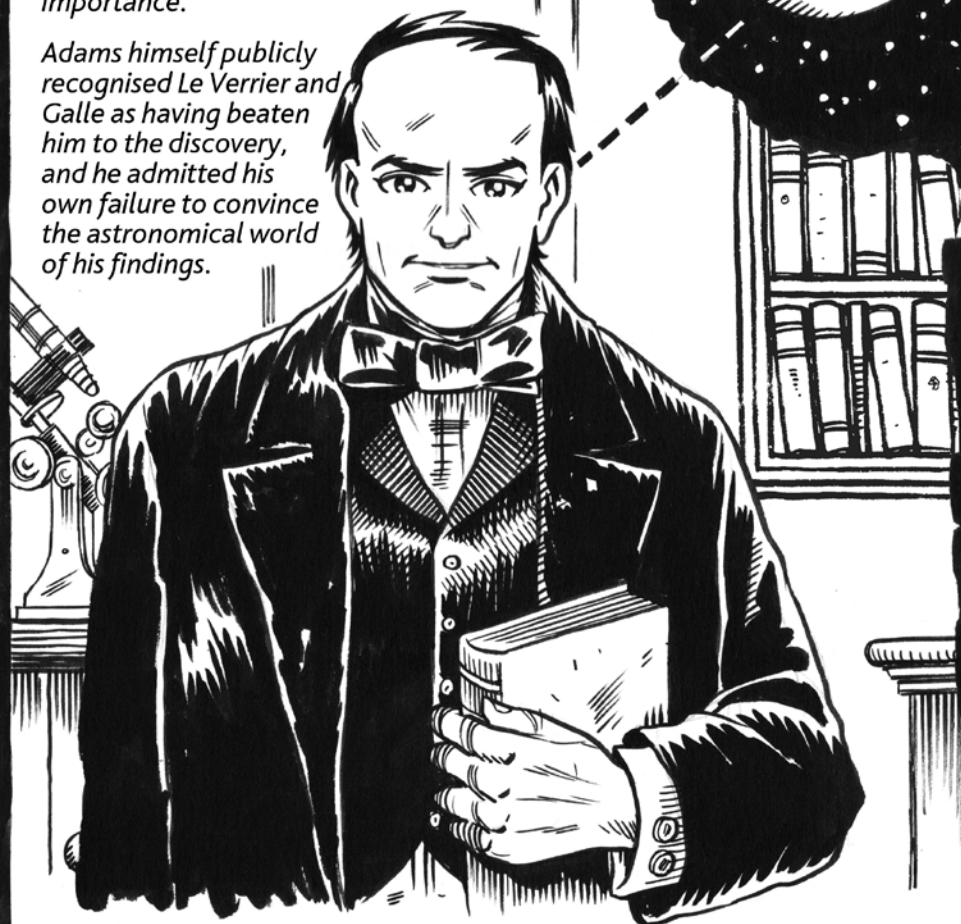
Le Verrier had won the race to find the new planet, which was christened **NEPTUNE**.



*But that wasn't the end of the story. After the discovery was announced in Paris on September 23rd, it became apparent that the planet had already been sighted in August, but Challis hadn't realised it due to his having out-of-date star maps!*

*Despite some debate between France and Britain, it became widely recognised as a joint discovery, and both astronomers were given equal importance.*

*Adams himself publicly recognised Le Verrier and Galle as having beaten him to the discovery, and he admitted his own failure to convince the astronomical world of his findings.*



*John went on to have a long and distinguished career in Science and Mathematics. He was elected twice as President of the Royal Astronomical Society, in 1851 and 1874.*

*He died on 21st January 1892, and was buried in Cambridge.*

John Couch Adams left a legacy of outstanding achievements in the field of astronomy, including charting definitive orbit for the Leonid cluster of meteors.

His life is commemorated by memorial plaques in Westminster Abbey and Truro Cathedral, and the outer-most ring of Neptune and an asteroid are named after him, as well as a crater on the moon!

A public institute was built in his honour by Passmore Edwards in Launceston.

*The young boy from Laneast who loved to gaze at the night sky, truly grew up to be a man with stars in his eyes.*

by KEITH SPARROW  
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Translated by Pol Hodge & Steve Harris

Further reading: 'Voyager in Time and Space' by H.M.Harrison  
(Book Guild Ltd)

With thanks to Ollie Oakenshield and Paul Drayton.

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