

Edward Duke

‘Decipherer’ of Stonehenge, Avebury, and Silbury Hill

Peter Maggs (4309)

Edward DUKE was a country cleric, a substantial landowner, and, at various times, a magistrate and Poor Law guardian. He was not beneficed, so he had no parish duties to fill his day. Since neither his Poor Law guardianship nor his activities on the bench were full-time jobs, he had both the leisure time and financial resource to pursue his researches. After a brief foray into archaeology, his interests concentrated mainly on the origins and significance of Stonehenge and similar ancient Wiltshire monuments

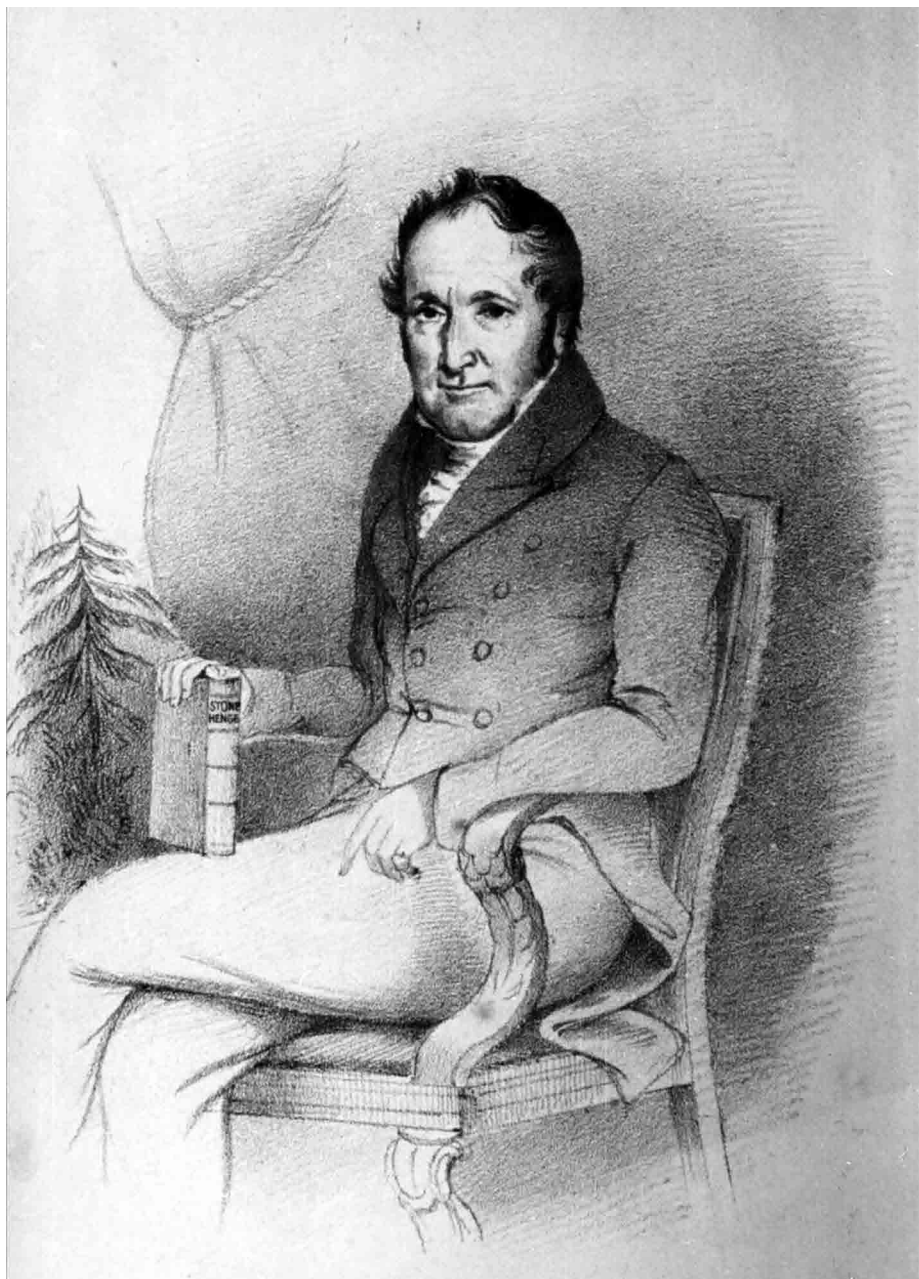
As the second son of the fourth son of a second son, DUKE's chances of the two family manors of Lake, and Salterton and Newtown, together with the substantial mansion of Lake House, coming his way should have been small (see Fig 1).¹ But when his father's cousin, Robert DUKE, died without issue, Edward's father, Edward Duke senior, became the next in line, his three elder brothers having predeceased him. Robert DUKE's marriage settlement allowed his wife Jane to enjoy the income from the land during her lifetime, so Edward DUKE senior was never able to benefit from the inheritance and died in 1797. Edward junior's elder brother, George, had died even before their

father, so the young Edward, aged 26, inherited the manors and house following Jane's death in 1805.

Edward DUKE was born in Hungerford in 1779, the second son of Edward DUKE and Fanny, née FIELD. They lived in a large house at No 26 High Street, Hungerford, where Edward DUKE senior practised as a surgeon. His wife, Fanny, was an heiress to property in Islington and in and around Hungerford. Edward junior was their fifth child and second son, and grew up with his elder brother George, and six sisters.

When George died in 1794, Edward became his father's heir. Three years later when Edward DUKE senior

This account of Edward Duke's theory of Stonehenge is extracted from my forthcoming book, Reverend Duke and the Amesbury Oliver, to be published by Mirli Books. The book narrates Mr Duke's extraordinary activities as an ex officio guardian of the Amesbury Union, as well as his time as a magistrate. For more information see www.mirlibooks.com



Edward Duke, circa 1846

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died, his son found himself, at the age of 18, not only owner of the house at Hungerford, but heir to the Duke family estates. Two years after that, he went up to Oxford to be provided with the education appropriate to his new status.

Duke graduated BA at Magdalen Hall, in 1803, and MA in 1807. He received Holy Orders and was subsequently a curate at Turkdean in Gloucester, and also in Salisbury. However, following his inheritance, he appears to have largely given up the active cure of souls. In 1806, now firmly ensconced in Lake House – close to Stonehenge – he became interested in the prehistory and archaeology of Wiltshire. Stimulated by some

archaeological successes excavating the Prophet Barrows on his land, Duke was elected a fellow of the Society of Antiquaries in 1807, and of the Linnean Society in 1810; he was

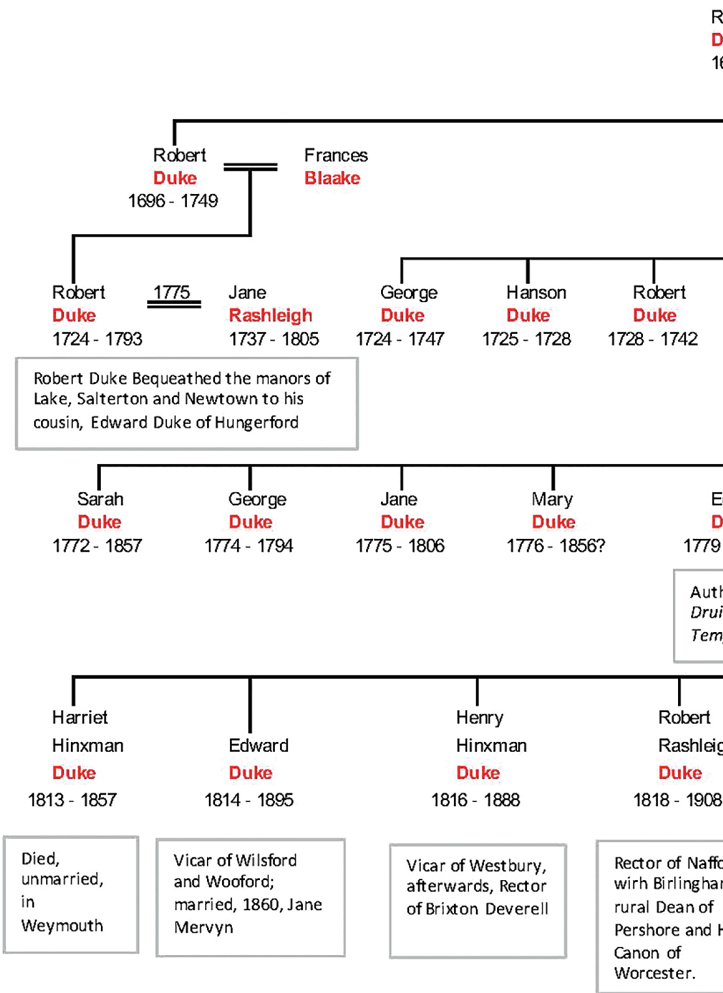
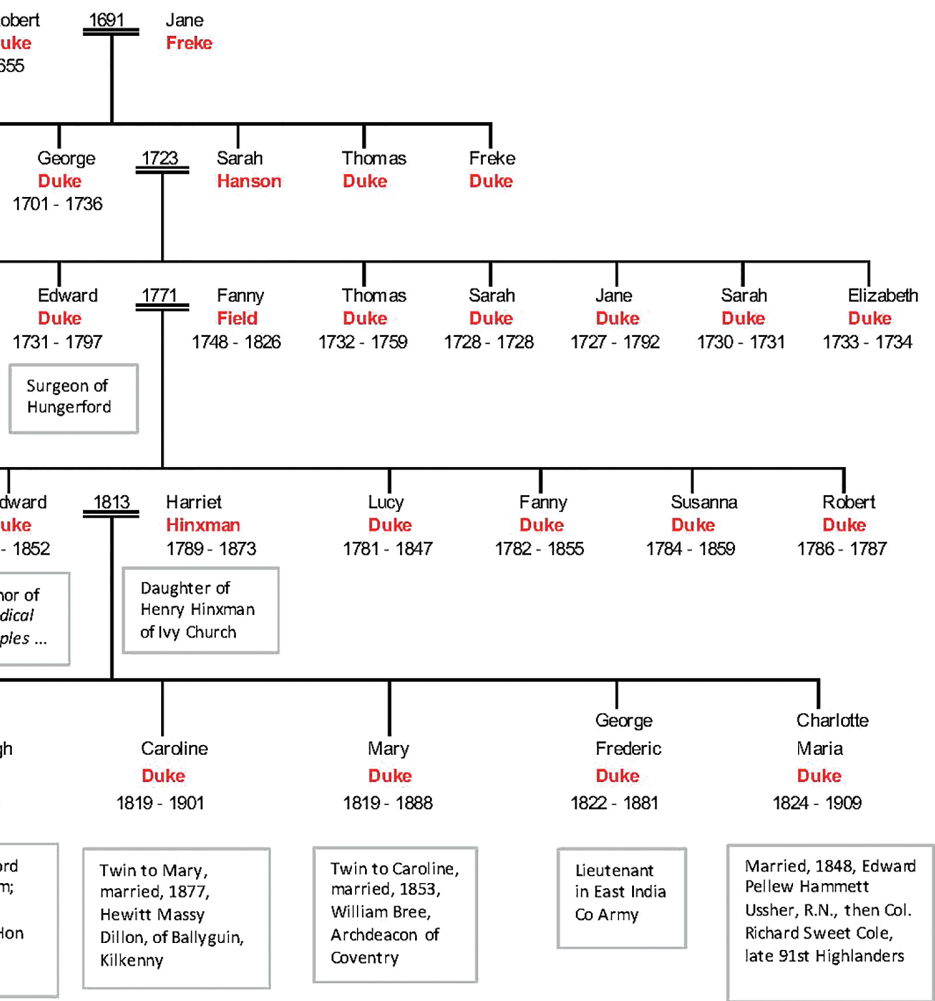


Figure 1



also a member of the Archaeological Institute of Great Britain and Ireland. In January 1813, Edward DUKE married Harriet HINXMAN. The ceremony

was conducted at Alderbury, Harriet's place of birth, by her father Henry HINXMAN, curate of Nunney in Somerset. Harriet produced eight children over the next eleven years.

When her father died in 1829, he left upwards of £17,000, around a third of which came to Harriet and the children. Now a well-established family man, Mr DUKE turned his attention to other matters. In 1816, he qualified as a magistrate, and eventually became an *ex-officio* guardian of the Amesbury Union.

DUKE started corresponding with the *Gentleman's Magazine* concerning the origins of Stonehenge and its relationship with the Druids. Virtually all that is known of the Druids at or before the time of the Romans in Britain, comes from the writings of that period – mainly Julius Caesar, Tacitus, and Pliny the Elder.

*The Druids were philosophers, teachers, judges, the repository of communal wisdoms about the natural world and the traditions of the people, and the mediators between humans and the gods.*²

They left no written records and almost no archaeological evidence, and since none of the ancient writers mentioned Stonehenge, there was nothing to connect it to the Druids. It was the antiquarian John AUBREY, writing in the 17th century, who first suggested that Stonehenge and Avebury predated the Romans. Since the Druids were known to have been in Britain before the Romans, the stone circles might have been their temples.³ William STUKELEY, in the 18th century, created a positive

Druidic industry; after STUKELEY, no one could doubt that the Druids had built Stonehenge and the stone circles at Avebury and elsewhere, and used them for their rituals.⁴

But there was a problem. The ancient writers had described the Druids as worshipping in ‘woods and groves’, but Stonehenge, Avebury, and other stone circles were always found in open country. This apparent conundrum was the basis of one of the debates that occupied the pages of the *Gentleman's Magazine*, and in which Mr DUKE enthusiastically participated.

Between February and August 1840, the *Salisbury and Winchester Journal* printed Mr DUKE's grand theory of Stonehenge in weekly parts. In an introductory note, he stated that a friend of his, the author of *The Barrow Diggers*, ‘lately published’, had requested him to bring the book to the notice of the public. However,

... prior to any remarks specially on it, I have found it necessary to offer a preliminary dissertation of some length...

This ‘preliminary dissertation’ occupied a column or so of the newspaper for the next 25 weeks. The editor dutifully headed each week's offering ‘The Barrow Diggers’. This was eventually dropped to be replaced with ‘Stonehenge’ when it became clear that Mr DUKE had entirely lost sight of the original reason for his

dissertation, and made no further mention of his friend's book.

There are some differences between what he wrote in the newspaper, and a book version, published six years later.⁵ The most significant was that in the newspaper he says that the Druids did *not* build Stonehenge, whereas in the book, they *did*, and he fails to say why he changed his mind, or even that he had changed it. However, the nub of his thesis was this: the Phoenicians had brought 'Chaldean' (Babylonian) astronomical knowledge to Britain, and the ancient Britons – be they Druids or no – using this knowledge had designed Avebury, Silbury Hill, Stonehenge, a stone circle at Winterbourne Bassett and several earthworks between, as a great stationary planetarium or orrery. Avebury was the temple of the sun and the moon – the twin smaller stone circles within the great circle representing those heavenly bodies⁶ – and the avenues represented the passage of the sun and moon through the ecliptic around Silbury Hill, which was the Earth. Various other monuments represented the planets on a '16 mile meridian', with Stonehenge, the most southerly point, designated as Saturn (see Fig 2).⁷ As justification for his theory, Mr DUKE declared:

...these planetary temples were all located at due distances from each other ...the relative proportions of those distances correspond

*with those of the present received system;*⁸ *...in three instances, the sites of these temples bear in their names at this day plain and indubitable record of their primitive dedication.*⁹

Mr DUKE noted with astonishment, that since the ratio of the diameters of the primary stone circle at Stonehenge to its surrounding ditch, was the same as that of Saturn to its rings, the ancients must have had telescopes and been able to observe that planet's rings...

A theory unifying, and to some extent explaining, the three great ancient structures in Wiltshire – Stonehenge, Avebury, and Silbury Hill – was one of the Holy Grails of British archaeology, and should have been met with universal interest and comment. And with notable exceptions, Mr DUKE's plan does show some correlation between their relative distances and those of their designated planets.

DUKE offered a wealth of classical and Biblical references, and etymological and numerical analysis to justify his theory, all of which would require a considerable scholar of those subjects to untangle. Considering just the astronomical alignments though, there are some major difficulties. The ancients had no idea of the relative distances of the planets – this was not established until the 17th century. Only their *order* from the Earth was known, and that had been worked

Figure 2

Mr Duke's 'Planetarium'

'Planet'	Designated 'Temple'	Distance and direction from Silbury Hill – miles north (N) or south (S) ^a	Actual average distance of planet from Earth normalised to that of Saturn = 16 ^b
Earth	Silbury Hill	---	---
Sun	Small circle at Avebury	1 (N)	1.7
Moon	Small circle at Avebury	1 (N)	0.004 ^c
Mercury	Long barrow at Walkers Hill	3 (S)	1.7
Venus	Stone circle at Winterbourne Bassett	4 (N)	1.7
Mars	Circular earthwork at Marden	6 (S)	2.5
Jupiter	Irregular earthwork at Casterly Camp	9 (S)	8.8
Saturn	Stonehenge	16 (S)	16.0

Notes:

a: From Duke's book; accurate to around 10% of the Ordnance Survey values

b: These distances were not given by Duke but are supplied by the present author; note that the average distances from Earth of Mercury and Venus are the same as Earth's distance from the sun. The units are derived by scaling the individual distances relative to that of Saturn, made arbitrarily 16 to allow comparison with Mr Duke's planetarium.

c: The moon is very much closer to Earth than the sun but also much smaller, so they appear to be the same size.

out by the Greeks, and possibly the Babylonians before them. The idea that Avebury with its twin circles represented the sun and the moon had been mooted by STUKELEY a hundred years earlier. But if the system really was *designed*, why was the brightest planet, Venus, represented by a rough stone circle at Winterbourne Bassett, when the second brightest planet, Jupiter was a minor and irregular shaped earthwork at Casterly Camp? And how could a long barrow on Walker Hill represent Mercury, when these three ‘monuments’ are each of an entirely different character?

There are many other objections too numerous to consider here, but two can be mentioned. Mr DUKE wrote:

In the fourteenth century arose up Copernicus, the author of the system now generally embraced, but which, as I believe, is not yet established on the surest grounds [author's emphasis].

To suggest that Copernicus’ heliocentric theory of the solar system was ‘not yet established on the surest grounds’, given the state of knowledge of astronomy in the mid-19th century, is absurd and inexplicable, and betrays Mr DUKE’s very tenuous grip on that subject. But the most obvious strain on credibility is his notion that Stonehenge represented Saturn, complete with its rings, which the ancients had observed with telescopes.

To support his theory, DUKE quoted

Strabo, 1st century AD, who had written: ‘Vapours produce the same effect as the tubes in magnifying objects [of vision] by diffraction’.¹⁰ The implication is that Strabo was describing a telescope. Intriguingly, there is much evidence that lenses were known to the Greeks and even earlier civilizations. Lenses fabricated from rock-crystal dating to 1,400 BC were discovered at Knossos in Crete, and the British Museum contains a similar lens found in the ruins of the palace at Nimrud dating to around 750BC. Aristophanes, c 420BC, referred to a lens or burning glass in his play *The Clouds*.

Since a telescope can be constructed simply by using two lenses separated by a distance, and given that lenses did exist at the time of the Babylonians, it is not impossible that rudimentary telescopes *could* have been known at the time Stonehenge was built. However, when the pioneer of telescopic astronomical observation, Galileo, turned his telescope towards Saturn, he was puzzled by what he saw. The planet appeared to have ‘ears’. It was not until several decades later, in 1655, that the true nature of the rings was suggested by Huygens. Galileo’s major discovery was that Jupiter had four moons; had the ancients possessed telescopes capable of seeing Saturn’s rings, they would have been able to observe the far more obvious moons of Jupiter.

That would have required considerable changes to their astronomy, and could hardly have failed to alter the celebration of Jupiter in their religion, and its representation in Mr Duke's planetarium. Had he known a little more astronomy, he would have realised that.

There were a few short reviews of DUKE's 1846 book, but the *Christian Remembrancer*¹¹ published an eleven-page excoriating and quite merciless analysis by William MASKELL.¹² He wrote:

It has seldom been our unhappy fate to wade through a book, in the pages of which we could find less instruction of any kind, or a larger number of the most puerile absurdities.

MASKELL dismissed the book as 'twaddle', commenting: 'It is a curious fact that lunatics will never believe that they are insane.' He attacked DUKE for his lack of authorities and his absurd arguments, he mocked him for his style and for comparing himself favourably with Colt HOARE¹³ and STUKELEY, and he ridiculed his lack of knowledge of astronomy. His theory of the Druids observing Saturn with a telescope was, he said, the book's 'crowning absurdity'.

Edward DUKE had one more foray into print; the December 1849 edition of the *Gentleman's Magazine* published his *Theory of Stonehenge*, complete with two full-page illustrations

of the monument. The note contained a numerological analysis of the stones, and an explanation of how this related to the divisions of a circle and various astronomical cycles. Even so, he continued to make foolish claims:

It is, I think, indisputable that the Druids divided the circumference of the globe into 360 degrees ...

The Babylonians divided the circle into 360 degrees and Pliny had written that the Druids did possess some knowledge of astronomy. Whether they also divided the circle into 360 degrees is certainly not indisputable since they left no written records. Mr DUKE had confused documented knowledge of the Babylonians, with his highly conjectured view of the Druids. Even after the intellectual drubbing he had received from the *Christian Remembrancer*, he was still making wild and inaccurate statements. There was no response in the journal to his piece.

History has been somewhat kinder to Mr DUKE than he probably deserved. The *Dictionary of National Biography* describes him as an 'antiquary', a title that his accomplishments hardly warrant. His book is sometimes referenced in works on Stonehenge, mainly to illustrate the lunatic theories that can result from attempts to understand that most enigmatic of ancient monuments.

Endnotes

- 1 'An Account of the Family of Duke, of Lake', *Wiltshire Notes and Queries*, March 1915, p 193 et seq
- 2 *Druids, A Very Short Introduction*, Barry Cunliffe, Oxford University Press, 2010
- 3 Avebury was formally known as 'Abury'.
- 4 For example, *Stonehenge, A Temple Restored to the British Druids*, Stukeley, London, 1740
- 5 *The Druidical Temples of the County of Wilts*, Edward Duke, London, John Russell Smith, 1846
- 6 Many stones at Avebury have been lost, but reconstructions by Stukeley and others indicate a pair of smaller stone circles, side by side, within the great stone circle.
- 7 Confusingly, Duke also designated Stonehenge a temple of the sun...
- 8 Duke's 'planetarium' was the correct order of planets, but with the Earth at the centre – which is hardly the 'present received system', where the planets revolve around the sun. He did not give the relative proportions of the actual solar system for comparison. He also failed to mention the difficulty of reconciling planetary distances where the sun is in the centre, with those where the Earth was in the centre.
- 9 This 'indubitable record' appears to consist of a translation of Abiri (Abury) in Hebrew and Arabic as 'Mighty Ones', an earthwork at the village of Marden = 'Mars Den', assigned to the planet Mars, and Knap Hill – adjacent to Walkers hill, the 'Temple of Mercury' – Knap = Kneph, 'the Egyptian name for Mercury...'
- 10 *Strabo*, Vol 1. P 369. Edit. Siebenkees. Lips. 1796, quoted in *Origins*, Vol 2, Sir William Drummond, Valpy, 1825
- 11 *The Christian Remembrancer*, Vol XII, July-December 1846, pp 467-477
- 12 Catalogue of the British Library
- 13 The notable antiquary, author, and owner of Stourhead

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