Bliss, Nathaniel

(1700-1764)

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- https://doi.org/10.1093/ref:odnb/2653
- Published in print: 23 September 2004Published online: 23 September 2004

Bliss, Nathaniel (1700–1764), astronomer, was born on 28 November 1700, the son of Nathaniel Bliss, a clothier, of Bisley, Gloucestershire. He matriculated at Pembroke College, Oxford, in 1716, and graduated BA on 27 June 1720 and MA in 1723. He married shortly thereafter Elizabeth, the daughter of Thomas Hillman of Painswick and an eminent Oxford scholar; of their very numerous offspring, four survived him. He became rector of St Ebbe's, Oxford, in 1736.

Bliss attended James Bradley's lectures in the Old Ashmolean, and on the death of Edmond Halley his application for

the Savilian professorship of geometry was supported by George Parker, second earl of Macclesfield, Martin Folkes, Bradley, and the professors of astronomy at Oxford and Cambridge, William Jones and Robert Smith. He was duly appointed on 18 February 1742 and was elected a fellow of the Royal Society the following May. A notice for his lectures advertised courses in arithmetic, algebra, and plane and spherical trigonometry, with the use of logarithms and surveying instruments. He accepted between six and ten students in each class; they had to attend three times a week, for not less than one hour daily. He charged 2 guineas for each course, which lasted about three months, another half guinea being payable for every month the course lasted thereafter. At this time Bliss established the fourth observatory in Oxford, fixing his instruments to a part of the city wall, which extended from his official house to the north-west angle of New College cloisters. His meridian mark was on the buildings of All Souls College. He sent Bradley his observations of Jupiter's satellites in 1742, and, despite the illness of his wife and several of his children at that time, data on a comet seen at the end of December 1743.

Bliss was a frequent guest of and scientific assistant to Macclesfield, who had established his own observatory at Shirburn Castle. On 12 February 1745 Bliss wrote asking Macclesfield to attempt a meridian observation of the brilliant comet then approaching the sun, which he did on two days at the end of the month. Bliss often assisted Bradley at Greenwich, and, Bradley being unwell, Bliss undertook the observations for the transit of Venus on 6 June 1761.

When Bradley died in 1762, Bliss applied successfully for the post of astronomer royal, to which he was appointed on 26 August 1762. With Thomas Hornsby and Antony Shepherd, then the professors of astronomy at Oxford and Cambridge respectively, he examined the instruments which Nevil Maskelyne and Charles Green took to St Helena for their longitude observations in 1763–4. He sent the Royal Society an account of Eustacio Zanotti's observations of the transit of 1761 as seen from Bologna, and of his own observation of an annular eclipse visible at Greenwich on 1 April 1764. He died suddenly, probably at Greenwich, on 2 September 1764, and was buried two days later at St Margaret's Church, Lee, in Kent.

Bliss died intestate and, the Greenwich observations being regarded as his widow's property, the Royal Society purchased them for 50 guineas. They were published long after his death, as a supplement to those of Bradley, in 1805. Mrs Bliss remained in Oxford, from where she issued a notice on 20 May 1765 announcing that the electrical experiments for the entertainment of ladies and others, given by Hornsby, would take place on 21 May in the Schools Tower, the tickets being priced at half a crown.

Sources

- G. L'E. Turner, 'The physical sciences', Hist. U. Oxf. 5: 18th-cent. Oxf., 659–81
- R. T. Gunther, Early science in Oxford, 2: Astronomy , OHS, 78 (1923), 86–7
- R. T. Gunther, Early science in Oxford, 11: Oxford colleges and their men of science (1937), 275–7
- Miscellaneous works and correspondence of the Rev. James Bradley, ed. [S. P. Rigaud] (1832), 58, 426–7,
 431
- Lady's Magazine (1764), 144
- *GM*, 1st ser., 34 (1764), 450
- *GM*, 1st ser., 32 (1762), 343
- *N&Q*, 6th ser., 11 (1885), 235
 BL, Add. MS 35587, fol. 18*r*
- BL, MS 38199, fol. 42*r*
- private information (2004)
 parish register (burial), St Margaret's, Lee, 4 Sept 1764

Archives

• CUL, papers

Likenesses

• sketch, repro. in Gunther, Early science in Oxford, 11