

## CENTENARIES

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## Saunderson, Nicholas (1682-1739)

NICHOLAS SAUNDERSON, a blind British mathematician, was born at Thurston in Yorkshire, January 1682. He became blind from smallpox at the age of twelve months. In spite of it he attended the free school at Pennistone and learnt the rudiments of Greek and Latin. His father, who was an excise man, soon observed the predilection of his son for mathematics and taught him the elements of arithmetic. Two friends perceived the remarkable talent of this blind youth and taught him algebra and geometry. By the help of a retentive memory and the power of his genius, Saunderson discovered methods of investigating problems of considerable intricacy.

## AS PROFESSOR

He went to Cambridge in 1707 and began to teach mathematics at Christ's College. Newton's *Principia* was one of the books he taught and he had many students. The peculiar circumstance of his career brought him into friendship with Sir Isaac Newton and other prominent mathematicians. When the Lucasian professorship of mathematics fell vacant in 1711, Queen Anne conferred on him the degree of M.A. on the recommendation of Newton and this qualified him to be appointed to that chair. He used to lecture seven or eight hours a day. When George II visited the University in 1728, Saunderson was, by royal authority, made Doctor of Laws.

## HIS PUBLICATIONS

The lectures which he composed for class use were published posthumously. One was the *Elements of algebra*. It came out in two volumes in 1740. Another on fluxions including a commentary on Newton's *Principia* came out in 1756. The first book contains a description of a mechanical device invented by Saunderson to facilitate computation by the blind.

## A PSYCHOLOGICAL CURIO

Lord Chesterfield who had attended his lectures described him as a professor who had not the use of his own eyes, but taught others to use theirs. His sense of touch was so keen that he could distinguish "in a set of roman medals the genuine from the false, though they had . . . deceived a connoisseur who had judged by the eye". His ideas of the forms which plane or solid figures would assume in different perspectives were said to be remarkably correct. The remarkable achievement of this blind man stimulated a good deal of speculation along psychological lines. Dr. Reid devoted a portion of his *Inquiry into the human mind* to a discussion of Saunderson's powers. Burke also devoted about a page to him in discussing "words which do not raise images" in his *On the sublime and the beautiful*.

Saunderson died April 19, 1739,

## Wood, James (1760-1839)

JAMES WOOD, a British mathematician, was born at Turton in Lancashire December 14, 1760. His father, who was a weaver, himself taught arithmetic and algebra to his son. In 1778 he joined St. John's, Cambridge, as sizar. He steadily worked his way until he became a senior wrangler. He became master of his college in 1815 and Vice-Chancellor in 1816. He resided in the college for about sixty years and when he died he had bequeathed his library and about £50,000 to his college. A statue was erected in the anti-chapel.

## HIS PUBLICATIONS

Wood's works were for many years standard treatises. His *Elements of algebra* which came out in 1795, went through several editions and held the field for nearly a century. As late as 1892 an Indian edition of the same was published by P. Ghosh "Remodelled simplified . . . with numerous exercises, examples, and Calcutta, Bombay and Madras University examination papers". The *Principles of mechanics* (1796) was a popular text-book till late in the nineteenth century. So also was the case with his *Elements of optics* (1798). Wood was a fellow of the Royal Society and wrote a paper on the *Roots of equations* (1798) to its *Philosophical transactions*.

Wood died in college April 23, 1839.

## Burrill, Thomas Jonathan (1839-1916)

THOMAS JONATHAN BURRILL, an American botanist and microscopist, was born on a farm near Pittsfield, Mass., April 25, 1839. While still a child he was sent to work in a cotton mill. Later in 1862, he was sent to the Illinois State Normal School, where the museum of the State Natural Historical Society attracted his attention. The entomologist and the botanist of the museum took interest in him and guided him in his studies. He graduated in 1865 and three years later entered the staff of the University of Illinois.

## PUBLICATIONS

He soon conducted a natural history survey of the State and in 1869 he began a series of contributions to the learned organs of his State which he continued with vigour and precision right upto 1915, the articles numbering as many as eighty-two. He was for nearly half-a-century the moving spirit in all the natural history activities of Illinois.

## MICROSCOPY AND BACTERIOLOGY

Burrill was among the pioneers of microscopy in America. In 1877 he announced his suspicion that the terrible epidemic of "fire-blight" of pears was caused by bacteria, which had previously been supposed to cause disease only