OBITUARY.

The Council regret that they have to record the loss by death of the following Fellows and Associates during the past year :---

Fellows :---Arthur Berry. Scriven Bolton.

*John Browning. Ralph Hamilton Curtiss. Walter Geoffrey Duffield. Thomas Luther Evans. John A. Ferguson. John Granville Hawke. Patrick Henry Hepburn. George Innes. Sir Otto Jaffé. Bhawani Singh Bahadur of Jhalawar. Sir George Knibbs. Ernest F. J. Love. Percy Alexander MacMahon. Walter A. Mátos. Willie Venner Merrifield. S. Lynn Rhorer. Herbert W. T. Roberts. Alfred J. P. Shepherd. Robert Norton Stevens. Christopher Thwaites. Worcester Reed Warner. Associates :--- Marie Henri Andoyer.

Georges Lecointe.

ARTHUR BERRY, O.B.E., Vice-Provost of King's College, Cambridge, died on 1929 August 15 at Cambridge, following an operation. He was a son of Mr. Edward Berry of Croydon, and was first educated at the Whitgift Grammar School, University College School, and University College, London; he was then elected to a scholarship in King's College, Cambridge, where in 1885 he became senior wrangler, and in 1887 he won the second Smith's prize. He was elected to a Fellowship at King's College in 1886, and thereafter lived almost continuously at Cambridge. In 1902 July he married Miss Harriet Mary Johnson, who survived him only a few months. He was a University Extension lecturer for some years, and in 1924 was elected by the Fellows of King's as Vice-Provost. He is best known to astronomers by his excellent Short History of Astronomy, but he was also the author of many mathematical papers.

Berry was elected a Fellow of the Society on 1888 March 9. At the time of his death he was 66 years of age.

* Died 1925 December 15. Death not notified till 1929.

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SCRIVEN BOLTON, though not often seen at the Society's meetings, was widely known by repute in astronomical circles, and his death on 1929 Christmas Day removes from our midst one whose contributions were of a somewhat unusual kind. That day will have melancholy associations for the Society, for it saw the passing of three other prominent Fellows also. Bolton, who was unmarried, lived with his widowed mother and sisters at Bramley, Leeds, where he was engaged in business as an oil merchant. But his chief interest was astronomy, and in a field adjoining his home he provided himself with a wellequipped observatory, containing, among other instruments, an 18-inch reflector. Here he carried out a programme of observations which, during the last seven years, comprised chiefly the determination of the periods and spectral types of new variable stars, especially those in the regions of the Pleiades and Hyades clusters. Reports of his work were sent to the Society from time to time, and appeared in the annual reports.

Bolton is best known, however, for his astronomical drawings. He was on the staff of *The Illustrated London News* for fifteen years, and to this paper, as well as *The Graphic, The Sphere, Le Journal Astronomique de France*, and several American papers, he frequently contributed sketches illustrative of the objects, apparatus, etc., with which astronomers are concerned. He was a very skilful draughtsman, and received many awards for his work. He obtained a gold medal for his exhibit in the Science section of the Franco-British Exhibition in 1908, and a diploma for drawings of astronomical subjects at the Japan-British Exhibition, 1910. The Astronomical Society of Barcelona also presented him with a certificate. He was, in addition, a painter of some skill in pastel, and produced several musical works for private performance.

At the beginning of his last illness he had just completed the construction of a large reflector for his observatory. It was probably on account of the interruption of his observations by this work that he did not send his customary report to the Society during the last two years. He died in his early forties after an illness of three weeks. He had been a Fellow since 1905 May 12.

JOHN BROWNING, whose death, though occurring in 1925, has only during the past year come to the notice of the Society, was one of the oldest of our Fellows. Among his few seniors in membership was Robert Norton Stevens, elected a few months earlier (on 1865 January 13), who died on 1929 October 29, and of whose career we have unfortunately been unable to obtain particulars. Browning was a well-known figure in the scientific world 50 years ago, his skill in the construction of instruments, not so widely used then as now, bringing him into intimate relations with many of the leading scientific workers of the day. He contributed many papers to the *Monthly Notices*, notably a series on changes in the colour of Jupiter's equatorial belt, about 1870.

Browning appears to have been born early in 1835 in London, where his father, Mr. Spencer Browning, conducted a nautical instrument-