

Dr. A. M. W. Downing, M.A., F.R.S.

The British Astronomical Association has lost two of its Past Presidents within a year—Mr. F. W. Levander on December 20th, 1916, and Dr. A. M. W. Downing, one of the founders of the Association and its second President, on December 8th, 1917.

Arthur Matthew Weld Downing was the younger son of Arthur Matthew Downing, Gentleman, of Co. Carlow, Ireland, and was born at Carlow on April 13th, 1850. He was educated first at Nutgrove, a well-known school at this time, near Rathfarnham, Co. Dublin, under Mr. Philip Jones. In November 1866, he entered Trinity College, Dublin, where his uncle Samuel Downing, was Professor of Engineering. He obtained

the scholarship in Science in 1871, in the winter of which year he graduated as B.A., becoming Master of Arts 10 years later. In 1893 the University granted him the honorary degree of Doctor of Science.

Shortly after Mr. Downing had completed his academic career in Dublin, Mr. James Carpenter, who collaborated with Nasmyth in the well-known book on the Moon, resigned his post of Assistant Astronomer at the Royal Observatory, Greenwich, and on 1873, January 17, Mr. Downing was appointed in his place by open competition. While at Greenwich he was placed in charge successively of the Library and Manuscripts, the Time Department, and the Circle Computations. In 1892, on the resignation of Dr. J. Russell Hind, he was appointed Superintendent of the *Nautical Almanac*, from which post he retired on attaining the age of 60. During his term as Superintendent he brought out the *Nautical Almanacs* for the years 1896 to 1912, and in the spring of 1896 represented England at the conference held in Paris by the Directors of the four great astronomical ephemerides produced by America, Britain, France, and Germany. Each of these four Directors nominated one colleague, and, in addition, two secretaries were appointed, one of whom was Prof. Bakhuyzen, elected for his knowledge of languages, as Dr. Downing afterwards expressed it to the Association: "That gentleman, who was Professor of Astronomy at Leyden, might boast that he could speak every language, even Dutch." The object of the conference was to adopt a uniform catalogue of standard stars for use in the different astronomical ephemerides, involving also the adoption of a uniform system of certain constants, such as those of precession, nutation, and aberration.

Dr. Downing became a Fellow of the Royal Astronomical Society in 1875, and in 1889 was elected one of the secretaries, and later a Vice-President. In 1896 he was elected a Fellow of the Royal Society, and to one or other of these Societies he contributed more than 50 papers, of which one of the most important was written in connection with Dr. Johnstone Stoney on the Perturbations suffered by the Leonid Meteors at their return in 1899; and the consequent failure of their display.

For the British Astronomical Association, in addition to his Presidential Addresses delivered in 1893 and 1894, Dr. Downing gave several short notes, two interesting and instructive papers, "How to Find Easter," in the third volume of the *Journal*, and "Where the Day Changes," in the tenth volume. He also edited the first of the eclipse volumes of the Association, that dealing with the observations of the eclipse of 1896, as seen from Vadsö, in Lapland, the expedition for which he organised. It was during his Presidency that the Association migrated from its first meeting-place in the picturesque hall of Barnard's Inn to its second home in University College, Gower Street.

But his services to the Association were much more extensive than were generally recognised, for he continually gave invaluable assistance to the successive editors of the *Journal* in writing notes, reviews, and other important notices, which appeared

without any indication of their origin. It was in the second year of his Presidency that he welcomed my appointment as editor, in 1894, in terms of which I have always kept a grateful remembrance. When I became editor again, in the spring of this year, he gave me the same kindly support, and when the late Mr. Levander's papers came into my hands I was touched to find how close and friendly had been the intercourse between the two men, to whose unobtrusive and almost silent labours the British Astronomical Association has owed so much.

I had myself experienced his unfailing kindness ever since the time when I first went to the Royal Observatory, Greenwich, in 1891, where he was still an Assistant, and when the late Miss Elizabeth Brown, Miss Everett, and myself were nominated for the Fellowship of the Royal Astronomical Society, in 1892, Mr. Downing was one of our principal supporters.

Since his retirement from the *Nautical Almanac* in 1910, Mr. Downing's attendance at the meetings of the astronomical societies became less and less frequent, due, no doubt, to occasional attacks of severe pain from the obscure disease of the heart which eventually brought about his death. During his last years these attacks became frequent and agonizing, but they were borne with much patience and were concealed, so far as possible, from his relatives. The end came very suddenly. On Saturday, December 8th, he went up to London alone to attend to some business, and on entering Mudie's Library, while waiting to exchange a book, he suddenly died. Mr. Gascoigne, the head sales manager, noticed that he seemed ill at his entrance, and hurried to his assistance, but he was already dead.

The funeral took place at the Golders Green Crematorium on Thursday, December 13th, and there were present his widow, Mrs. Downing, his only child, Mrs. Elliott, and her husband; Miss Christina Downing, one of his sisters, and Miss Moss, the daughter of another. The Royal Society was represented by Sir Frank Dyson; the Royal Astronomical Society by the Secretary, Dr. Crommelin; the Royal Societies' Club by Mr. E. G. Knobel; the *Nautical Almanac* by Mr. Doak; the Royal Observatory, Greenwich, by Mr. E. Walter Maunder; and the British Astronomical Association by the Rev. T. E. R. Phillips. Dr. Downing had but few near relatives besides those present at the service, and these were prevented by distance or ill-health from attending. Among these were his cousins, General Geoffrey Downing, of Greystones, Co. Wicklow; Colonel Henry Downing, of the Staff Colony, Tidworth; the Rev. Lorenzo Hartstonge-Weld, of Farnham; Dr. Elliott, of Oundle; the Rev. Canon Arthur W. Robinson, lately Dean of Westminster. His only brother, Mr. Samuel Downing, for some years head of an Engineering College at Calcutta, died several years ago.

A. S. D. MAUNDER.