

astronomy and meet the requirements of an educated and inquiring age. Mr. Dunkin re-arranged and brought up to date a new edition of Dr. Lardner's *Handbook of Astronomy*, and wrote the well-known work, *The Midnight Sky*, which contains maps and diagrams, with the names of the principal stars visible from London for each month of the year, besides a general description of the heavenly bodies. He also wrote a book of obituary notices of astronomers, which contains twenty-four biographical sketches of astronomers, mostly written for the *Annual Report of the Royal Astronomical Society*. Besides these books, Mr. Dunkin contributed many miscellaneous papers to the *Leisure Hour* and other periodicals.

Mr. Dunkin enjoyed his well-earned pension for fourteen years, and died on 1898 November 26 at his residence, Kenwyn, Kidbrook Park Road, Blackheath, after a short illness. He married on 1848 April 4 Maria, eldest daughter of the late Samuel Joseph Hadlow, formerly a member of the Stock Exchange. His wife and an only son survive him.

Mr. Dunkin was a man who never affected to array himself with scientific qualifications which nature did not intend him to wear, but liked to describe himself as "a practical astronomer of forty years' standing," and as such he will be remembered.

W. G. T.

JOHN HIPPISELY, eldest son of the late Rev. Henry Hippisley, was born at Lamborne Place, Berkshire, 1804 October 29. He was educated at Rugby under Dr. Wooll, and at Oriel College, Oxford. He graduated in 1825, taking a second class in both classics and mathematics. He twice married; first in 1831 to Anne Elizabeth Clare, by whom he had three sons and two daughters, of which family three survive; and secondly in 1843 to Georgiana Dolphin, by whom he had two sons and two daughters, of which family also three survive.

Mr. Hippisley possessed considerable mechanical ability, and was devoted to astronomy. He built an observatory at Ston Easton Park, and constructed an excellent reflecting telescope there, casting and grinding its 9-inch speculum with his own hands, and making the body of the telescope, and also the driving-clock, himself. He also personally designed and constructed the machine by which he ground and figured his speculum, and made many other machines and models not so closely connected with astronomy. He was also an artist of much talent, and continued to paint in oils till quite recently. In *Mem. R.A.S.*, Vol. xxiii. p. 56, Lassell mentions an oil painting of the Orion Nebula, made by Mr. Hippisley under Lassell's superintendence from his original sketches. The painting was presented to the Society, and now hangs in the meeting room. It closely resembles the plate accompanying the paper referred to.

Early volumes of the *Monthly Notices* contain six papers from his pen. In vol. xiv. he describes a 'Remarkable Appearance of

the Shadow of Saturn' on the rings, giving an appearance as though the inner ring were raised above the outer ring. He mentions in this paper that his speculum had been lately refigured for him by Mr. Lassell. In a later paper he describes how he again so observed *Saturn* at Mr. Dawes' observatory; though Mr. Dawes and Mr. Lassell, who were present, could not confirm the observation. In 1856 Mr. Hhipisley records an observation of *Antares* as a double star, in the "half-hour after sunset," and an occultation of *Jupiter*; and relates how he reproduced the phenomenon known as "projection" of a bright star on the Moon's limb, by means of a mechanical model, showing it to be purely optical. In 1867 he published a rather more ambitious paper on the "Compatibility of the Retrograde Orbit of the November Meteors with the Nebular Theory," and this was his last contribution to our *Notices*.

He was elected a Fellow 1849 December 14, and at the beginning of this year was seventh in order of seniority of our Fellows. He was also a Fellow of the Royal Society. He died at his Bath residence 1898 April 4, in his 94th year, and was buried at Bathwick cemetery.

WILLIAM BENJAMIN HUTCHINSON was the only son of Richard Hutchinson, a consulting engineer in London. He was born in London in 1863, and died from the rupture of a cerebral blood-vessel at Southport, 1898 April 20, at the early age of thirty-five, leaving a widow, a son ten years old, and an infant daughter (since deceased). He was educated at Eton and became an engineer. In the early part of his life he spent some years travelling abroad, on one occasion taking part in an expedition across Central Africa. From 1884 to 1894 he resided at "The Observatory," Liversedge, Yorkshire; from 1894 to the time of his death at Southport.

In his observatory at Liversedge he had a 6-inch refractor by Grubb, and a $5\frac{1}{2}$ -inch and 3-inch transit by Cooke. He observed chiefly the Moon and *Saturn*. He was an expert in the construction and mechanism of astronomical instruments, including the grinding of mirrors and lenses.

He was elected a Fellow of this Society 1888 January 13. He was also a member of the Liverpool Astronomical Society, of which he was President in 1890-1891; and a member of various other learned societies. He married in 1887.

HENRY PERIGAL was born 1801 April 1. He was the eldest of six children, the youngest of whom, Mr. Frederick Perigal, is now in his 87th year. He came of a long-lived family, his father, who reached the age of 99 years, being one of thirteen children, nine of whom attained a great age. He traced his ancestry back to Sigurd the Dane, who in 908 made a successful raid on Normandy, assumed the name of Perigal, and settled in France. The English branch of the family sprang from Gideon Perigal