

refractor by Grubb. He was elected a Fellow of the Royal Astronomical Society on the 10th of April 1896, and was also a member of the British Astronomical Association. He contributed to the *Monthly Notices* of April 1898 a paper on the "Zodiacal Light," and in the same year sent letters to the *Journal* of the British Astronomical Association and to the *Observatory* on the Zodiacal Light and Gegenschein. He also sent to the British Astronomical Association papers on sun-spots, on *Saturn's* rings, and drawings of *Jupiter*.

Mr. Anderson married in 1891 Margaret, daughter of Robert Christie, of Ballymena. He died in Jamaica on the 28th of March 1904, leaving a widow and one son.

THE REV. JOHN MACKENZIE BACON was born on the 19th of June 1846 at Lambourne, Woodlands, Berks. He was the son of the Rev. John Bacon and great-grandson of John Bacon, R.A., the sculptor. He studied at Trinity College, Cambridge, but failure in health obliged him to take an *Ægrotat* degree in 1870. He was ordained the same year, but never held a living or undertook other than temporary clerical duty.

Ill health compelled him to leave the tutorial work he had undertaken at Cambridge, and in 1876 he went to Coldash, Newbury, where he lived ever since, engaging in scientific studies and social schemes for the benefit of his poorer neighbours, founding local institutions of all kinds and spending his time freely in the service of others. Mr. Bacon was much interested in astronomy, and took part in three eclipse expeditions of the British Astronomical Association to Vadsö in 1896; to Buxar, India, in 1898; and to Wadesborough, North Carolina, in 1900—on the two latter occasions being director of the expedition.

He had long been fond of ballooning, and in 1898 he first embarked seriously on scientific *aéronautics*; since then he made many voyages, undertaking experiments in acoustics, meteorology, and kindred subjects. He met with many adventures, nearly losing his life in an attempt to observe from a balloon the *Leonid* meteor shower of November 1899. In November 1902 he crossed the Irish Channel in a balloon (the second time that this feat had been accomplished), and succeeded in taking a photograph of the sea bottom from a height of 600 feet.

He was the author of two works, *By Land and Sky* and *The Dominion of the Air*, besides many scientific and other papers in periodicals. He was also well known as a popular scientific lecturer.

He was elected a Fellow of the Society on the 10th of February 1888.

Mr. Bacon was twice married: first, in 1871, to Gertrude, daughter of the Rev. C. J. Myers; and secondly, in 1903, to Stella, daughter of Colonel T. B. H. Valintine, of Goodwood. He leaves three children. He died after a comparatively short illness on the 26th of December 1904.

REGINALD BUSHELL was born on 18th of August 1842 at Aigburth, near Liverpool. He was the second son of Mr. Christopher Bushell, a well-known member of the Liverpool Dock Board. Mr. Bushell was in business in Liverpool for many years, and was a member of the Mersey Docks and Harbour Board for seventeen years. He was a director of the Liverpool Overhead Railway and of the Sea Insurance Company. Mr. Bushell was interested in education, and was intimately connected with the Liverpool University from its foundation. He was a member of the Liverpool Council of Education and of other educational bodies in Lancashire and Cheshire, and was a justice of the peace for Cheshire. Mr. Bushell's scientific interests were meteorology and horology. He became, through his interest in clocks, an expert mechanician, and designed and executed several turret clocks which performed extremely well. In order to determine time he made himself a practised meridian observer. He was elected a Fellow of the Royal Astronomical Society on the 12th of May 1871.

Mr. Bushell died suddenly on the 11th of November 1904, at his residence at Hinderton Lodge, Neston, Cheshire, and leaves a widow, two sons, and one daughter.

EDWARD CROSSLEY was born in 1841. He was educated at private schools, and for a short time at Owens College, Manchester. In his sixteenth year he entered business in the firm of Messrs. John Crossley & Sons, carpet manufacturers, Halifax, the heads of which were his father and two uncles. He ceased to take an active share of the work of this firm when he was returned to Parliament for the Sowerby Division in 1885 to 1892. His Parliamentary work soon came to an end owing to indifferent health. Till his death he was chairman of the directors of the firm of John Crossley & Sons.

From boyhood he had a taste for astronomy, and, beginning with a 3-inch telescope, he went on to a 7-inch equatorial. In 1868 he built an observatory about 18 feet square, with a dome, in a space behind his house on the edge of the town. Here in 1869 Mr. J. Gledhill joined him. In 1872 Mr. Crossley built a house about two miles south of Halifax; and at the west side of the house the present observatory was built, with equatorial and meridian instruments. The equatorial was of 9-inch aperture by Cooke of York, and was fitted with driving clock, micrometers, and other apparatus. The meridian instrument was a $3\frac{1}{2}$ -inch transit circle by Cooke; in another room he had a small equatorial at one time, then a 7-inch equatorial, and afterwards a $4\frac{1}{2}$ -inch (new triple-glass) equatorial by Messrs. T. Cooke & Sons. With these instruments measures of double stars and observations of planetary phenomena, occultations of stars by the Moon, &c., were made. Mr. Crossley was also much interested in the measurement of base lines. He devised some ingenious measuring-rods, set up a measuring