

In 1906, on the initiative of Gilbert Walker, then Director of Observatories in India, he was appointed assistant director of Kodaikanal Observatory under Michie Smith, whom he succeeded in 1911. He travelled out to India *via* the United States visiting a number of observatories and spending a month with Hale at Mt Wilson. In Kodaikanal he continued his work on prominences and with Mrs Evershed he published an important memoir on the distribution of prominences in latitude during the solar cycle. He greatly improved the quality of the instrumental equipment of the Observatory, designing and building a large spectrograph using a 5-inch grating by Michelson. His most striking discovery was that of radial motion in sunspots—accelerating motion outward in the reversing layer and inward in the higher chromosphere. It was for this work largely that he was elected to the Royal Society in 1915 and received the Gold Medal of the Royal Astronomical Society in 1918.

Other work carried out at Kodaikanal included spectrographic measures of solar rotation, photographs of Halley's comet showing the acceleration of matter in the tail and spectrograms showing the strong cyanogen bend at λ 3883 in the head; large scale spectra of Nova Aquilae 1918 were also obtained. With Royds he worked on the shifts to the red of iron lines in the solar spectrum at the centre of the disk and at the limb, examining the pressure in the reversing layer, and the relativity shift. His final conclusion was that the Einstein effect is present together with some additional cause affecting the wave-lengths at the limb. He spent seventeen months in Kashmir examining the seeing conditions and came to the conclusion, confirmed subsequently in New Zealand, that for solar definition high mountain sites or even hill-tops are less favourable than enclosed valleys and low-level plains.

On his retirement from Kodaikanal in 1923, with the award of a C.I.E. in recognition of his services, he established a private observatory at Ewhurst in Surrey and built a large spectroheliograph of special design and a spectrograph with a high-dispersion liquid prism. He continued to study the wave-lengths of H and K lines in prominences, giving values of the solar rotation at high levels in different latitudes and at different phases of the solar cycle. At Hale's request he measured a typical series of the Mt Wilson magnetic field spectra. He confirmed the displacements of the lines secured at Mt Wilson; failing, however, to get confirmation from a line that should have shown a greater magnetic effect, he decided that the displacements found at Mt Wilson were due to Doppler effect and that there was no evidence of a general magnetic field in these spectra.

Evershed continued at work until 1950 when he closed his observatory and presented some of his instruments to the Royal Greenwich Observatory at Herstmonceux. He married Miss Mary Acworth in 1906. She died in 1949. In 1950 he married Miss Margaret Randall, who survives him. There were no children. He was a founder member of the British Astronomical Association and director of the Sections of Solar Spectroscopy and later of Spectroscopy.

He was elected a Fellow of the Society in 1894.

F. J. M. STRATTON.

HECTOR COPLAND MACPHERSON was born in Edinburgh on 1888 April 1 and died there on 1956 May 19.

It was from his father, Mr Hector Macpherson—for many years editor of the *Edinburgh Evening News*—that he received much of his early education and derived his inspiration to write and lecture on astronomy. His first article was published when he was fourteen years old. It was entitled *Is Mars Inhabited?* and appeared in the weekly *North British Advertiser*. There followed in the same paper a long series of biographies under the title *Famous Astronomers*. Much research had to be done ; and the boy, Hector, having dealt with Huggins, Gill and others, wrote for information to Schiaparelli and was delighted to receive a detailed and courteous reply. Thus encouraged, he corresponded with thirty-two other continental and foreign astronomers; with some of whom he established lasting friendships. When the *North British Advertiser* articles were complete, and the author was still under seventeen, they were published in book form by Gall and Inglis under the title *Astronomers of To-day*.

He then had to think of a career ; and entering Edinburgh University he took his theological training at New College, where he collected many honours including the Cunningham Fellowship. In 1916 he was appointed minister of Loudon East Church, Newmilns, Ayrshire. He served for a period with the Y.M.C.A. in France in the First World War, and in 1921 took charge of the Guthrie Memorial Church, Edinburgh, where he preached for the next thirty-five years.

Macpherson soon established himself as a forceful preacher and became noted as a leader in Church youth and temperance work. His intellectual energies also expanded, and in 1922 he published an important history of the Covenanters movement—*The Covenanters under Persecution*—for which in the following year he was awarded the honorary degree of Ph.D. by Edinburgh University.

Notwithstanding the demands of his pastoral work, Dr Macpherson continued to write and lecture fluently on astronomy. In 1906 he had published the book *A Century's Progress in Astronomy*, which was followed by *Through the Depths of Space*, and by *The Romance of Modern Astronomy* (1911). In 1919 he had published a biography of Herschel in the *Pioneers of Progress* series and also *Practical Astronomy*. These were followed by *Modern Astronomy: its Rise and Progress* (1926)—which was perhaps his most successful work—*Modern Cosmologies* (1929), *Makers of Astronomy* (1933), the Church of Scotland booklet *The Heavens Declare* (1937) *Biographical Dictionary of Astronomers* (1940), *Guide to the Stars* (1943), and the revision of the latter (1953), which was the last published writing on his life-long hobby.

In the volumes of *The Observatory* for the years 1909–1940 will be found about a dozen of his articles—biographical studies of Herschel, Newcomb, Dunér and the Struve family, cosmological essays and reviews of work on nebulae. In this period he also contributed articles of similar scope to *Popular Astronomy*.

All his work was characterized by wide reading and careful historical research, and many of his books were based upon the lucid “popular” lectures which he delivered under the auspices of the Robert Cormack Committee of the Royal Society of Edinburgh and the David Elder foundation in Glasgow. He took a leading part in the foundation of the Edinburgh Astronomical Association (now the Astronomical Society of Edinburgh) and served as its President in the years 1926–1928 and 1952–1954.