

OBITUARY.**Algernon Charles Gifford.**

ALGERNON CHARLES GIFFORD died at his home at Silverstream, Wellington, New Zealand, after a fairly long illness, on 27th February, 1948. With his passing, New Zealand lost its most enthusiastic and inspiring astronomer, as well as the last of a strong team. Somerville, as Professor of Mathematics, Adams, as Government Astronomer, Gifford, as the exponent of astrophysics, and Ward, as telescope maker and observer, combined to make a team which may well be said to have established whatever astronomical foundation this small country, just past the pioneering stage, possesses.

Gifford was born on Good Friday, 1861, in the ship *Zealandia*, somewhere off the Cape of Good Hope. His father, a Church of England minister, was on his way out to take charge of the parish of Waitaki. After receiving his primary education at Oamaru Grammar School he was sent back to England in 1876, where he attended Denstone College and gained a sizarship to St. John's College, Cambridge. Here he took his M.A. degree, and in 1880 graduated fourteenth Wrangler and won the Herschel Prize in astronomical mathematics.

Returning to New Zealand, his qualifications in science and mathematics placed him in those departments in the Waitaki High School (1883-89), Christ's College, Christchurch (1889-92), and Wellington College (1895-1927) where he was acting principal for a period. He came to be known all over the country with affection, as "Uncle Charlie"—a title of honour and respect. From 1927 to the time of his death, he spent a retirement filled to the brim with activity. As a gardener on a scale which would have deterred most young men, an amateur astronomer and with an extremely live interest on the question of the authorship of Shakespeare and economic questions of the day, he was never idle. He married the daughter of the late Hon. George Jones, proprietor of two South Island newspapers and remembered as the man who once challenged the Parliament of New Zealand. Besides his wife, he is survived by three sons and two daughters.

In his early days he was a keen geologist, pursuing his subject in the field and exerting himself in extensive explorations of little-known areas. Even at the age of 65 he climbed Mt. Ruapehu, and it was on one such trip that he suffered heart strain through overloading, although this was not the cause of his death.

The name of Gifford will always be linked with Bickerton, and the theory of partial impact for the origin of novae and the solar system should be labelled the Bickerton-Gifford Theory. Bickerton, with whom Gifford came in contact in Christchurch, supplied the general idea, and Gifford polished it to a state where it might receive some consideration. Gifford was by no means unaware of the failings of Bickerton, but he had an intense admiration for the old professor, and collected all his manuscripts, printed papers and documents. With an enthusiasm of almost religious fervour, Gifford would propound the partial-impact theory in such a manner that one felt, having known him, one also knew to some degree, Bickerton.

While at the present stage of astronomical knowledge one might not feel disposed to give the partial-impact theory of novae more than a passing notice of probability, the theory as applied to the origin of the solar system has not had the recognition or consideration it deserves. Rather provocatively, Gifford pointed out how Jeans initially considered collisions between stars to be so rare that they may be disregarded, and then later when dealing with the origin of the solar system, had a passing star coming so close to the sun that he acknowledged the limit was not much greater than the distance at which physical collision takes place. That insufficient notice has been taken of Gifford's work in this respect may be due in part to the fact that most of his work was written in semi-popular style, without mathematical analysis. Although not a practical observer, in the usual sense of the term, observational data were of the utmost importance to him, and he treated with scorn "the great show of mathematics" or the "manipulation of mathematical equations" to obtain results which to him seemed to have no physical meaning. Being of the classical science school, he himself could produce such remarkable results from elementary mathematics, that most of his audiences felt there must be a "catch" somewhere. Some unpublished papers, if worked up, may place his theory of the origin of the solar system on a firmer foundation.

He pushed all aspects of impact to their limit, even considering the impact of spirals. The meteoric theory of the origin of lunar craters found in him a staunch champion. His later work was concerned in studying and trying to explain Sulaiman's theories.

Because of the drift of astronomical thought in other directions, and the apparent neglect of his own work by astronomers, there is no doubt that Gifford at times felt lonely. His ideas began to take on the appearance of being unorthodox, and later he somewhat prided himself in being unorthodox, not only in astronomy, but also in his other hobbies of the authorship of Shakespeare and economic suggestions. Above all, he was a rugged individualist.

Apart from his theories and technical lectures to universities and scientific societies, Gifford will always be remembered in New Zealand as the great peer of popular writing and lecturing. When bound into booklet form, his newspaper articles, "In Starry Skies," make one of the finest elementary textbooks available, and it is a pity that they were not produced in proper book form after careful arrangement. As a lecturer he could be guaranteed to fill the largest halls in Wellington and keep his audience enthralled for two hours or more; and he would lecture anywhere, to schools, clubs, or the general public, no matter how inconvenient it might have been for him.

Algernon Charles Gifford was a member of all the major astronomical societies: The British Astronomical Association, the Astronomical Society of France, the Royal Astronomical Society of Canada, and the Astronomical Society of the Pacific. He was a past president of the Royal Astronomical Society of New Zealand and a pioneer of the Wellington Philosophical Society in its early years. He established the Wellington College Observatory, containing a 5-inch Zeiss refractor, and at one time had the title of Associate of the Dominion Observatory, Wellington,

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