

“G. J. G.”, as he was affectionately known, not only encouraged astronomical studies by his many lectures and demonstrations, but also took an active part in observations with his own instruments (notably a fine 4-inch refractor by Dancer) and in addition acted as Honorary Curator of the Preston Municipal Observatory. This post he worthily held from 1910 until his sudden death on 1947 February 22.

During his Curatorship, he devoted an incalculable amount of time to the service of the public, willingly sacrificing his own interests in order to foster in others the enthusiasm which never deserted him. Despite the great demands made upon him for professional services (he specialized in hydraulic engineering and became an acknowledged expert) he was never too busy to help the novice, and but for this self-effacement would doubtless have attained more prominence in astronomical circles. As it was, he contributed several communications to our Society and also was in 1914 appointed a member of the Society's eclipse expedition to Hernösand, Sweden.

His most prominent work in astronomy, however, was the inception of the new municipal Jeremiah Horrocks Observatory, Preston, which was essentially his creation from the drawing of the plans to the performance of routine observations with the 8-inch refractor. Here, with characteristically neat illustrations, he gave lessons to numerous adults and school children and in doing so must have encouraged many to become life-long students of the science.

The pleasant recollections of his courteous manner, kindly teachings and the institutions he has left are memorials to a true amateur of science, whose exceptional talents enabled him to be also a fine musician and skilful artist.

His wife Annie (*née* Thomlinson) was a native of Bedford and taught for many years in the Girls' Modern School there. She died in November 1936. He is now survived by his daughter whose great loss is best realized by those privileged to have known him.

He was elected a Fellow of the Society on 1912 January 12.

F. HOLDEN.

ALGERNON CHARLES GIFFORD died at his home at Silverstream, Wellington, New Zealand, after a fairly long illness, on 1948 February 27. With his passing, New Zealand lost its most enthusiastic and inspiring astronomer, as well as the last of a strong team. Sommerville, 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 heartstrain through overloading, although this was not the cause of his death.

The name 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