

OBITUARY

Walter F. Gale, F.R.A.S.

With the death of Mr. Walter F. Gale on 1945 June 1 the N.S.W. Branch of the B.A.A. lost its most influential and long-standing member.

Mr. Gale's interest in astronomy was first stimulated by his father, and in early childhood he gained an acquaintance with the constellations which developed with time into a truly remarkable knowledge of the heavenly bodies as seen by the naked eye and by the telescope. This was accompanied by an exceptional fund of information about their discoveries and the development of theories concerning them.

For over sixty years Mr. Gale had been a keen observer. In collaboration with Mr. R. T. A. Innes, who was then in Sydney, he measured double stars, including some not previously recorded. His observations of Mars extended over many oppositions, and he clearly remembered the changes in surface features from one appearance to the next. His work on this planet included the discovery of oases and the observation of the dispersion of great cloud masses. Mars was his favourite planet, but Jupiter and Saturn had their share of his attention.

Mr. Gale had a wide knowledge of instruments of all kinds. He often recalled the satisfaction gained from observations made in his youth with the aid of mirrors of his own figuring, and in subsequent years he made some fine mirrors of small focal ratio (as low as $f/4$) and up to 12 inches in diameter. He showed great ingenuity in developing simple but effective mountings; and not long ago he built a short-focus Newtonian reflector with which observations were made when sitting comfortably in a chair, holding the telescope tube between the knees. Mr. Gale knew the history and characteristics of practically every astronomical instrument in Australia, and could tell many anecdotes relating to them.

Mr. Gale not only knew astronomy but astronomers. He had many personal contacts with such men as Professor W. H. Pickering, Sir William Huggins, the brothers Henri, and particularly the Australians of earlier days such as H. C. Russell and John Tebbutt.

With the coming of astronomical photography Mr. Gale was quick to realise its potentialities, and with his elder son he took many beautiful photographs of the southern part of the Milky Way, in which he had a particular interest.

Mr. Gale took part in several total solar eclipse expeditions, one to Chile in 1893, one to Tasmania in 1910, and he led the B.A.A. party to Stanthorpe, Queensland, for the great eclipse of 1922 September 20.

Apart from his observations of Mars, perhaps Mr. Gale was best known to the outside world as a discoverer of comets. He independently discovered seven comets, three of which, 1894 *b*, 1912 *a* and 1927 *f*, bear his name. In earlier years he was a keen computer of comet paths, and he always retained vivid mental pictures of their orbits.

The N.S.W. Branch of the B.A.A. was founded in 1894 by Mr. Gale and a few of his associates. He acted as its first Honorary Secretary, and his close friend Mr. John Tebbutt was its first President. Later Mr. Gale held the office of President of the Branch on twenty-one occasions.

On 1943 May 24 a special general meeting of the Branch was called to do honour to Mr. Gale on the attainment of his fiftieth year in the Association. While he resided in Sydney he very rarely missed a meeting and was continuously a member of the committee.

* = in lat. 52° N., † = on 15th or mid-month.

Mr. Gale joined the parent body of the B.A.A. in December 1893 and was elected a Honorary Member in 1943. He became a Fellow of the Royal Astronomical Society in 1893 and was awarded its Jackson-Gwilt Medal in 1935. He was also honoured by awards of the Medal of the Donovan Astronomical Trust of Sydney in 1927 for the discovery of a comet, and again in 1934.

Mr. Gale assisted in the formation of the Solar Radiation Station at the Riverview College Observatory near Sydney. For twenty-eight years he was a member of the Board of Visitors of the Sydney Observatory and in recent years acted as Chairman.

Mr. Gale was an eloquent lecturer, and on very many occasions without any preparation he was able to hold his audience in wrapt attention. Other sciences also claimed some of his thoughts, and his human sympathies led him naturally to the study of many social problems. Until quite recently Mr. Gale was a trustee of the Public Library of Sydney, and was also a member of the Board of Directors of the Royal Prince Alfred Hospital. All these things he did apart from his profession, which was that of a banker and an executive.

Mr. Gale had often remarked that astronomers were a long-lived and vigorous race: he was himself a good example of this. He had always enjoyed excellent health, and in his eightieth year was active and energetic. His last few days were characteristic of his life. On the Wednesday, Mr. Gale attended the meeting of the N.S.W. Branch at Sydney Observatory and took his usual keen part in the discussion. On the Friday evening he followed his regular nightly custom of looking around the sky, but deciding that it was too cloudy for his customary binocular sweep he went inside. In ten minutes the end had come. He is survived by Mrs. Gale, two sons and four daughters.

When all this has been said, however, the memories which will remain most clearly in the minds of Mr. Gale's friends will be those of his personal qualities of helpfulness, enthusiasm, kindness, tolerance and understanding, for he earned the deepest regard of his many friends in all walks of life.