

## Robert Grant Aitken

It is with deep regret that we record the death on Oct. 29 last of Dr. R. G. Aitken, Director Emeritus of the Lick Observatory—the grand old man of Double Star Astronomy.

Robert Grant Aitken was born at Jackson, California, on 1864 Dec. 31. Educated at Oakland High School and Williams College, Mass., he had at one time the intention of entering the ministry but he decided that he was better suited to a scientific career. After acting for a short time as a professor of Mathematics and Astronomy he seized the opportunity of joining the staff of the Lick Observatory in 1895. For forty years he worked at the Observatory passing through the grades of assistant astronomer, astronomer, assistant director and finally director 1930-1935.

Aitken was essentially an observer with the micrometer with which he became an expert. At first he did a good deal of miscellaneous observing with the 12-inch and 36-inch refractors. In 1899, however, he came to an arrangement with W. J. Hussey to make a survey for duplicity of all the stars in the Bonn Durchmusterung down to magnitude 9.0 and north of Dec.  $-22^{\circ}$ . This undertaking was to provide a sound basis for the statistical study of double stars. The two astronomers worked steadily for six years when Hussey left to take up an appointment elsewhere. The work was eventually completed in 1915 by Aitken alone to Dec.  $-22^{\circ}$  for 12 hours of R.A. and to Dec.  $-14^{\circ}$  for the other 12 hours for which observing conditions were difficult at a northern observatory. In all Aitken discovered 3105 double stars and Hussey 1327. More than half of these stars have a separation of less than 1" and most were under 5". The following table taken from Aitken's book "The Binary Stars" shows the number of double stars of separation under 1" discovered by leading observers.

William Herschel	...	12	Burnham	...	...	385
Wilhelm Struve	...	91	Hussey	...	...	674
Otto Struve	...	154	Aitken	...	...	1595

[Recently considerable numbers of close double stars have been discovered at Johannesburg and Bloemfontein.]

Aitken was not content with merely the discovery of new double stars but he made careful observations of them at three different epochs separated by intervals of 10 years, with additional measures of important stars discovered by himself and others. He had the pleasure of finding that a fairly large proportion of his stars showed orbital motion. In 1912 he computed the orbit of A 88 from his own observations alone, the companion having by that time completed a revolution since he discovered it in 1900. For this pair the separa-

tion of the components never exceeds  $0^{\circ}.17$ . As a result of the closeness of so many of the pairs discovered by Aitken it is safe to predict that before long it will be possible to compute orbits for more double stars discovered by Aitken than by any other observer, possibly by all earlier observers combined.

After the death of Prof. Doolittle in 1920 Aitken took over the preparation of a New General Catalogue of Double Stars on the lines of Burnham's General Catalogue. The new catalogue which includes double stars north of Dec.  $-30^{\circ}$  was published by the Carnegie Institution of Washington in 1932. Although Aitken rejected about 30% of the stars in Burnham's catalogue as too wide the new catalogue contained 17181 double stars compared with 13665 in Burnham's catalogue.

Aitken was a friend of amateur astronomers and devoted much of his time after he retired from the Lick Observatory to the Astronomical Society of the Pacific. The latest number of its publications show that he was on the Board of Directors, was Hon. Chairman of the Publications Committee and was on the committees for leaflets and lectures. He was an excellent lecturer as indicated by the following quotation from the address on the award of the Bruce Gold Medal to him:

"It is seldom that so distinguished a man of science has so remarkably the gift of making clear popular exposition of his subject, a gift that he has used unsparingly and self-effacingly in disseminating and diffusing astronomical lore. By public lectures and by articles in the public press he has interested and charmed countless thousands of laymen with authoritative, lucid and vivid presentations of the truths of our science."

It is unnecessary to record here the various honours which came to him. They included the Gold Medals of the R.A.S. and as already mentioned of the A.S.P. He made several trips to Europe and was well known to and greatly loved by our older astronomers. He had a long and happy married life. Mrs. Aitken died some years ago and although he was able to get about till recently in the neighbourhood of his home at Berkeley his physical powers had been failing for some time. He was always cheerful and looked forward hopefully to a future life. There were three sons and a daughter of the marriage.

Aitken will long be remembered by those who had the pleasure of knowing him. Long after that his observations will remain as a memorial to him.—

J. JACKSON.