The flywheel method would be used to change the attutide of a ship which was not spinning but was pointing in an undesirable direction.

The official intimation that milk will not be the only beverage aboard the space-ship should have a salutary effect in upholding the morale of passengers and crew, and no doubt this important information will materially assist in expediting the first trip.—M. DAVIDSON.

OBITUARY

Maurice Anderson Ainslie

Maurice Anderson Ainslie, youngest son of the late Archdeacon A. C. Ainslie, of Langport, Somerset, was born on 1869 October 4. He was educated at Marlborough and at Caius College, Cambridge, where he took his degree, with honours in Mathematics and Natural Science, in 1891. He decided to adopt teaching as a profession and became an assistant master at Derby School, and later taught at Giggleswick. But he was not altogether happy in this work, and in 1894 joined the Instructional Branch of the Royal Navy as an Instructor Lieutenant. After serving with the Mediterranean, Channel and Cruiser squadrons and at various shore stations, including the Royal Naval College, Greenwich, he retired in 1922 with the rank of Instructor Captain. He died at Wallisdown, Bournemouth, on 1951 January 19.

Ainslie's interest in astronomy dated from his schooldays, when he had the use of a 4-inch Cooke refractor belonging to Marlborough College. With this instrument and a copy of Webb's "Celestial Objects" he acquired a good general knowledge of the heavens and of the art of observing. While at Cambridge he had occasional opportunities of observing with the old Northumberland telescope, and at Giggleswick too a refractor of moderate size was available for his use: but on entering the Naval service he found himself without an adequate instrument and determined to make a reflector for himself. Always keenly interested in practical optics he soon mastered the technique of grinding, polishing and figuring, and it was not long before he produced a nine-inch mirror of excellent figure. This he mounted, in a square wooden tube, on an altazimuth stand that had belonged to an old 6½-inch Calver. His immediate aim was now accomplished, and, unlike some other amateur constructors, he was content to settle down to serious work with the instrument he had made. In fact he never made another mirror, though he was always ready to help and advise others who wished to make their own telescopes; and this he did over a long period of years, both by personal correspondence and by a series of practical articles and letters contributed to the *English Mechanic*. Apart from these last he published little of an astronomical nature outside the pages of our *Journal* and *Memoirs*; but two of the chapters written by him for "Splendour of the Heavens"—on "The Amateur at Work" and "Astronomy in Navigation"—must have been read with profit by amateurs in all parts of the world.

His own observational work was chiefly on the planets. He had an accurate eye, and although he made no pretence of being a finished draughtsman, his work was always sound and trustworthy. In particular his systematic obser-

vations of Jupiter, his favourite planet, formed a substantial and valued contribution to the work of the Section concerned. His most outstanding planetary observation was that of the passage of Saturn's outermost ring over a 7th magnitude star on 1917 February 14. Like the discovery of Uranus, the observation was in a sense a lucky accident; but the really lucky thing was that in each case the accident happened to one who was capable of taking full advantage of it; nor will it be contended that a really assiduous observer does not deserve such an occasional stroke of good fortune. It was not inappropriate that in later years the Council twice appointed Ainslie Director of the Saturn Section.

Ainslie always had a great affection for our Association and was a most regular attendant at its meetings. He was an excellent speaker and his contributions to the discussions were always lucid and informative. He was unfeignedly gratified by his election to the Presidency in 1928, and during his term of office delivered two noteworthy addresses on the optics of the telescope. But perhaps his most permanent memorial in the Association is the Methods of Observation Section, the inauguration of which in 1917, under the name of the Instruments Section, was mainly due to his initiative. He was appointed its first Director and held this position until 1932. His wide knowledge of optics and his long experience as an observer were now put to the best possible use on behalf of the members. He was an indefatigable correspondent and soon developed the Section into what it is to-day—a general enquiry bureau dealing with all matters relating to the design, adjustment and use of telescopes and astronomical apparatus of all kinds.

During the later years of his life Ainslie suffered much from arthritis, and this tended increasingly to impede his movements and to make it difficult for him to carry on his observations. His own nine-inch mirror ("William", as he affectionately called it, after the great Herschel) was now unusable owing to the complete decay of its tube and mounting, and he observed instead with an instrument of his own design in which, by means of a plane mirror and a prism, the great focal length of an $8\frac{1}{2}$-inch object glass, acquired from a friend, was made available in a telescope of compact form, equatorially mounted. This he called his "refracto-reflector" or "catadioptric tube". "William" he bequeathed to the Association.

Outside the B.A.A. he had many activities, astronomical and otherwise. He was an acknowledged authority on the optics of the microscope and his contributions on this subject to the pages of the *English Mechanic* in the earlier years of the century must have been of the greatest value and interest to his brother microscopists. He served for some years on the Councils of the Royal Microscopical Society and the Photo-micrographic Society, and was President of the latter in 1920. In the later part of his retirement, when he was living in Hampshire, he was Chairman of the Astronomical Section of the Bournemouth Natural Science Society. Occasionally he gave astronomical lectures under the auspices of the Oxford University Extension Lectures Committee, and many will remember his broadcast talks, especially those which he gave in the Children's Hour. In the much earlier days of radio, during and even before the first World War, he took a keen practical interest in the technicalities of the subject and spent much time on cloudy evenings in the construction of crystal and valve sets. He was for a time a member of the Council of the Radio Society of Great Britain.

Ainslie's accomplishments were not all of a scientific nature. At Marlborough and Caius he had distinguished himself at tennis and Rugby football and had shot at Bisley for both school and University. He was always fond of good music and had a fine bass voice, which had not lost its power when, at the age of 64, he played the title role in a performance of Omar Khayyam at Capetown, while on a visit to one of his daughters.

"Impressive" is, perhaps the word which most aptly describes Ainslie's appearance and personality. Above the average height he was built on massive lines and seemed somehow to dominate any gathering at which he was present. His manner was nearly always bluff and genial and his great frame was often to be seen convulsed with laughter, for he had a very strong sense of humour. By nature gregarious, he was the most sociable of men, and frankly enjoyed the pleasures of good food and good company; and to him good company meant that of his brother amateurs. On certain subjects he held very definite views, in the expression of which he was apt to be rather outspoken and on occasion his beard seemed to bristle and his usually jovial countenance would assume a decidedly formidable expression. But there was nevertheless something simple and child-like in his character which was attractive to his friends, who could appreciate his point of view and make allowances for what a stranger might have taken for mere prejudice; for he was above everything wholehearted and sincere in all his actions and opinions. By his death Amateur Astronomy has lost one who was in every sense an outstanding figure.

Ainslie ,who had been a Fellow of the Royal Astronomical Society for nearly 58 years, was elected a member of our Association on 1906 May 23. He leaves a widow and two married daughters. Of his two sons, the elder died in childhood and the younger, who served in the R.A.F. during the Second World War, was lost in action over Germany.—W.H.S.

ARTICLE

An Amateur's Coronagraph

(Translation of article in *l'Astronomie*, 1951 March; published with the permission of Mme. G. Camille Flammarion, Editor).

The extremely great technical difficulties which had to be overcome by M. B. Lyot in order to produce his coronograph are such as might discourage any amateur desiring to construct this still scarce instrument.

They have, however, not discouraged our fellow members MM. G. and R. Porret of Créteil (Seine) who, after numerous unproductive trials, have gradually perfected their instrument and finally have succeeded, first in seeing, then in photographing, the prominences, the corona itself being impossible in the Parisian atmosphere.

This perseverance, without any doubt, deserved to be rewarded, and we congratulate our skilful colleagues on their success.

They have been good enough to communicate to us some details of their apparatus.