

OBITUARY

Sir Harold Spencer Jones, K.B.E., F.R.S.

HAROLD SPENCER JONES was born in Kensington on March 29, 1890, and died there on November 3, 1960. He was educated at the Latymer Upper School, Hammersmith, and at Jesus College, Cambridge, where he was a wrangler and Smith's Prizeman and also obtained first-class honours in Part 2 of the Natural Sciences Tripos. He was elected a Fellow of his College in 1914, but a year before this he was appointed chief assistant at the Royal Observatory at Greenwich.

In 1923 he was appointed His Majesty's Astronomer at the Royal Observatory of the Cape of Good Hope. He directed this Observatory with great vigour for ten years, and interested himself personally in both the spectroscopic work, contributing full-scale studies of Nova Pictoris and of Procyon as a double star, and also the astronomical work, investigating the constant of aberration, the mass of Venus and the Moon's motion. He took the important decision to resume the Cape programme of parallax determinations, which had been set aside in favour of spectroscopic work. He, however, left the Cape before this programme was completed, and it was finished by his successor as H.M. Astronomer, John Jackson.

In 1933 Sir Frank Dyson retired from the position of Astronomer Royal, and Spencer Jones succeeded him, being the tenth person to hold the office since the appointment of Flamsteed in 1675. His major work during his first years at Greenwich was the reduction of observations made on the minor planet Eros, with the end in view of securing an improved value of the solar parallax. Eros made a close approach to the Earth in 1901, the minimum distance on this occasion being 30,000,000 miles. Observations of its position were reduced by A. R. Hinks, who found a solar parallax of $8.807'' \pm 0.0027''$ from photographic measures and $8.806'' \pm 0.004''$ from micrometer measures. However, it was realized that Eros would make a much closer approach to the Earth in 1931 (minimum distance 16,200,000 miles), and in 1928 the International Astronomical Union set up a commission with Spencer Jones as president to organize observations on a world-wide scale in the forthcoming favourable opposition. The circumstances of the opposition favoured observatories in the southern hemisphere, and in fact a great part of the weight of the determination came from observations at the Cape, which Spencer Jones was then directing. Spencer Jones's reduction and discussion of the work was not published until 1941; he obtained the value $8.790'' \pm 0.001''$, a result which differed substantially from that of Hinks. Spencer Jones was an authority on the consequential changes in the inter-related constants of the solar system and discussed the adjustment of them with great thoroughness.

In addition to his interest in the solar parallax, Spencer Jones took a deep interest in latitude variation and in the accurate determination of time, and he ultimately replaced Dyson's Shortt clocks with quartz clocks and commissioned a newly designed photographic zenith tube to determine both latitude variation, formerly determined with the Cookson floating telescope, and time, determined with a small reversible transit telescope. The photographic zenith tube was not brought into use until after

Spencer Jones's retirement in 1955; but the quartz clocks operated for many years under his direction, and he had the satisfaction of detecting with them variations in the rate of rotation of the Earth. This has important consequences on apparent motion of bodies in the solar system, which was a topic that Spencer Jones had already studied at the Cape.

Perhaps as a result of his service at the Cape, Spencer Jones was led to the view that Greenwich had become permanently unsuitable for astronomical observation, by reason of atmospheric pollution and the development of street lighting. He therefore set about persuading the Admiralty that it was necessary to move the Royal Observatory from Greenwich to a country site. Approval was obtained in 1946, and Herstmonceux Castle, with its associated estate of 372 acres, was purchased by the Admiralty: but the actual move proceeded somewhat slowly, the first stage taking place in 1948 and the move being incomplete when Spencer Jones retired in 1955. He, however, secured the building of premises outside the Castle such as to make the Royal Greenwich Observatory much better equipped than it had ever been at Greenwich and Abinger (the magnetic sub-station, at which a great deal of the time service was located), and the night sky at Herstmonceux has proved greatly superior to that of Greenwich.

Spencer Jones also realized that the want of a large modern telescope had had a crippling effect on British astrophysics, and he led the astronomical profession in representing to the Royal Society, the Admiralty and ultimately the Treasury, that a large telescope should be built. Approval was given for the building of a 98-in. reflecting telescope, to be called the Isaac Newton telescope, and to be set up in the grounds at Herstmonceux. The diameter of 98 in. was occasioned by the gift of a 'Pyrex' blank of that size by the McGregor Fund in the United States, a blank which had been made at the time of the casting of the blank for the 200-in. reflector. Again Spencer Jones did not continue in office long enough to see the result of this move, and in fact the project was delayed for a number of reasons. It is now expected that the telescope will be put into commission in 1966.

Spencer Jones was the recipient of many honours. He was created a knight in 1943 and K.B.E. in 1955. He received the Gold Medal of the Royal Astronomical Society in 1943 and a Royal Medal of the Royal Society in the same year. He was highly esteemed in international circles, and was president of the International Astronomical Union from 1945 until 1948, and he held all the offices in the Royal Astronomical Society, being president from 1937 until 1939 and foreign secretary at the time of his death. He became secretary-general of the International Council of Scientific Unions in his retirement. His interest in horology was recognized by his being made president of the British Horological Institute, and he received its Gold Medal in 1948; and he was twice master of the Clockmakers' Company—in 1949 and 1954. Perhaps his most important service to British astronomy consisted in his moving the Royal Observatory to the country and equipping it to take on an entirely new lease of life, and as such he occupies a distinguished position among the Astronomers Royal.

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